

Les enquêtes auprès des migrants

Bibliographie thématique

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Problématique

L'objectif de cette bibliographie est de recenser les enquêtes menées auprès des populations immigrées et migrantes. L'identification de ces enquêtes a été réalisée à partir d'une recherche bibliographique conduite sur différentes bases de données : base documentaire de l'Irdes, banque de données en santé publique (BDSP), Medline... sur la période : 2000-2022. Deux catégories d'enquêtes ont été distinguées : les enquêtes menées spécifiquement auprès des migrants ou immigrés et les enquêtes en population générale ayant des modules et des questionnaires sur les populations étrangères. Pour chaque enquête, les études les plus récentes ont été retenues dans la bibliographie.

Une liste des principaux projets européens et internationaux ainsi qu'une sélection de revues de littérature portant sur la thématique des migrants terminent cette bibliographie.

Ce recensement ne prétend pas à l'exhaustivité.

Une bibliographie spécifique sur [la santé et l'accès aux soins des migrants](#) est consultable sur le site de l'Irdes.

Quelques rappels terminologiques¹

Le terme « **immigré** » (*Immigrant and emigrant*) désigne une personne ayant vécu à l'étranger et résidant désormais en France, terme utilisé notamment en santé publique.

Un étranger (*Foreigner*) est une personne qui n'a pas la nationalité du pays où il vit, terme utilisé par les autorités de police et les associations de soutien juridique. L'expression "étranger malade" correspond à la transposition administrative du droit au séjour pour raison médicale.

Un exilé (*Exiled person*) est une personne contrainte de vivre hors de son pays d'origine, terme évoquant notamment les conséquences psychologiques des migrations forcées. **Un demandeur d'asile** (*Asylum seeker*) est une personne ayant demandé le statut de réfugié au titre de la Convention de Genève de 1951.

Un réfugié (*Refugee*) est une personne ayant obtenu le statut de réfugié ou la protection subsidiaire accordés par l'OFPPRA (Office français de protection des réfugiés et apatrides) ou la Commission des recours des réfugiés.

Un sans-papiers ou clandestin (*Undocumented immigrant, illegal immigrant, unauthorized immigrant, irregular migrant*) est un étranger en séjour irrégulier, termes destinés par leurs utilisateurs à souligner le caractère légitime (attaches en France du "sans-papiers") ou illégitime (situation irrégulière du "clandestin") de la présence de la personne.

¹ Définition adoptée par le Haut Conseil à l'Intégration et repris par [l'Insee](#) pour le recensement démographique.

Enquêtes menées en France

TABLEAU RECAPITULATIF DES ENQUETES

Les liens sur les intitulés des enquêtes pointent sur les sites des enquêtes.

Intitulés des enquêtes	Dates
Baromètre santé	2010 , 2017
Constances	2012-2015
Étude longitudinale depuis l'Enfance (ELFE)	2011, 2013-2017
Enquête ANRS Parcours	2012-2013
Enquête Conditions de vie des ménages	1987
Enquête Permanence accès soins – Hôtel Dieu Paris	
Enquête nationale confidentielle sur les morts maternelles (ENCMM)	2007-2012
Enquête sur les personnes défavorisées	1988, 1989, 1990, 1991, 1996-1997, 1999-2000
Enquête santé et soins médicaux (ESSM)	1991-1992
Enquête auprès des hospitalisés	1991
Enquête Passage à la retraite des immigrés (PRI)	2002-2003
Enquête Histoire de vie (HDV)	2003
Enquête santé mentale en population générale (SMPG)	1999-2003
Enquête Entred	2007
Enquête nationale Conditions de vie et risques psychosociaux	2016
Enquête DSAFHIR – Samu social Ile-de-France	2017
Enquête SHARE (Survey of Health Aging and Retirement in Europe)	2004-
Enquête Santé Soins et Protection Sociale (ESPS)	2000, 2002, 2004, 2006, 2008, 2010
Enquête Trajectoires et Origines (TEO)	2008, 2019-2020
Intitulés des enquêtes	Dates
EpiCov – Enquête nationale sur l'épidémie de Covid	2020

European Union Survey on Income and Living Conditions (SILC)	2011
Enquête EHIS : European Health Interview Survey	2019
Enquête Premiers pas : accès aux soins des personnes étrangères sans titre de séjour	2018-2019
Comède	1986 et suivantes
Médecins du Monde - Observatoire de l'accès aux soins - Mission France	2006 et suivantes
Precavir	2007-2015
Aide médicale d'état (Enquête Drees/Ile-de-France)	2007
Projet migratoire et soins différenciés en périnatalité : effets des biais implicites (BIP) – Inserm, Epopée, ANR Cohorte PreCARE, EPIMOMS et Enquête Nationale Périnatale	

BIBLIOGRAPHIE

Amad, A., et al. (2013). "Increased prevalence of psychiatric disorders among third-generation migrants: Resultats from the French Mental Health in General Population Survey;." *Schizophrenia* **147**(193-195).

Andro, A., Scodellaro, C., Eberhard, M., et al. (2019). "Parcours migratoire, violences déclarées et santé perçue des femmes migrantes hébergées en hôtel en Île-de-France. Enquête Dsafhir." *Bull Epidemiol Hebd*(17-18): 334-341.

La « mise à l'abri » à l'hôtel est une forme particulièrement précaire d'hébergement d'urgence. Les femmes migrantes hébergées à l'hôtel cumulent des facteurs de vulnérabilité face aux violences. Ce contexte a un effet délétère sur leur état de santé et renforce leurs difficultés d'accès aux soins de santé. L'enquête Droits, santé et accès aux soins des femmes hébergées immigrées et réfugiées en Île-de-France (Dsafhir), menée auprès de 469 femmes migrantes vivant à l'hôtel en 2017, permet notamment de décrire l'état de santé perçu de ces femmes et la diversité des formes de violence qu'elles ont subies (physiques, psychologiques, sexuelles, économiques et administratives), les liens qui les unissent (ou les unissaient) aux auteurs des violences (conjoint, membre de la famille, représentant de l'autorité, etc.), ainsi que la temporalité des actes incriminés (violences survenant avant la migration, pendant le trajet migratoire, en France). En mobilisant les données quantitatives (n=469) et qualitatives (n=30) de cette enquête, cet article décrit les états de santé et les violences auxquelles ont été exposées les femmes migrantes mises à l'abri en les caractérisant (types de violence, lien avec l'auteur) et en les plaçant dans la temporalité des parcours migratoires. Les violences sexuelles font l'objet d'une attention spécifique. Les résultats montrent que ces femmes sont particulièrement exposées au fait de subir des violences au cours de leur vie. Les grandes enquêtes statistiques sur les violences, parce qu'elles interrogent des répondants dans des « ménages ordinaires », sous-représentent largement cette population de femmes marginalisées. En outre, elles sont

rarement prises en charge, sur le plan médico-psycho-social, alors que ces expériences ont un impact négatif avéré sur leur état de santé.

Antabe, R. et Rivenbark, J. G. (2020). "Discrimination in healthcare as a barrier to care: experiences of socially disadvantaged populations in France from a nationally representative survey." J Immigr Minor Health **20**(1): 31.

BACKGROUND: People in socially disadvantaged groups face a myriad of challenges to their health. Discrimination, based on group status such as gender, immigration generation, race/ethnicity, or religion, are a well-documented health challenge. However, less is known about experiences of discrimination specifically within healthcare settings, and how it may act as a barrier to healthcare. **METHODS:** Using data from a nationally representative survey of France (N = 21,761) with an oversample of immigrants, we examine rates of reported discrimination in healthcare settings, rates of foregoing healthcare, and whether discrimination could explain disparities in foregoing care across social groups. **RESULTS:** Rates of both reporting discrimination within healthcare and reporting foregone care in the past 12 months were generally highest among women, immigrants from Africa or Overseas France, and Muslims. For all of these groups, experiences of discrimination potentially explained significant proportions of their disparity in foregone care (Percent disparity in foregone care explained for: women = 17%, second-generation immigrants = 8%, Overseas France = 13%, North Africa = 22%, Sub-Saharan Africa = 32%, Muslims = 26%). Rates of foregone care were also higher for those of mixed origin and people who reported "Other Religion", but foregone healthcare was not associated with discrimination for those groups. **CONCLUSIONS:** Experiences of discrimination within the healthcare setting may present a barrier to healthcare for people that are socially disadvantaged due to gender, immigration, race/ethnicity, or religion. Researchers and policymakers should consider barriers to healthcare that lie within the healthcare experience itself as potential intervention targets.

Attias-Donfut, C. et Tessier, P. (2005). "Santé et vieillissement des immigrés." Retraite Et Societe(46): 89-129, tabl., graph.
<http://www.cairn.info/revue-retraite-et-societe-2005-3-page-89.htm>

[BDSP. Notice produite par FNG xwR0x3dJ. Diffusion soumise à autorisation]. L'étude sur la santé des immigrés âgés, présentée ici, est fondée sur les données de l'enquête "Passage à la retraite des immigrés", réalisée par la CNAV, avec la collaboration de l'INSEE en 2002-2003. L'objectif de l'article est double. Les déterminants de la santé des enquêtés sont analysés afin de mettre en évidence le rôle éventuel de facteurs spécifiques au phénomène migratoire, à savoir la durée de résidence en France et la région d'émigration. Dans un second temps, les besoins évalués à partir de déficiences de santé sont confrontés aux aides reçues de la part de l'entourage ou de l'aide professionnel.

Azria, E. (2021). "Recherche sur les discriminations dans le cadre du soin, quelles perceptions des professionnels soignants ? Projet migratoire et soins différenciés en périnatalité : effets des biais implicites (BIP). ." Fe Facto(25): 24-30.

Beauchemin, C., Ichou, M. et Simon, P. (2022). "Familles immigrées : le niveau d'éducation progresse sur trois générations mais les inégalités sociales persistent." Population & Societes(602): 4.

<https://www.ined.fr/fr/publications/editions/population-et-societes/familles-immigrees-le-niveau-d-education-progresse-sur-trois-generations-mais-les-inegalites-sociales-persistent/>

Le niveau d'éducation augmente d'une génération à l'autre ; progresse-t-il autant dans les familles issues de l'immigration que dans les autres ? Cette étude examine la question en s'appuyant sur la deuxième édition de l'enquête Trajectoires et Origines (TeO2) et analyse les différences de progression au sein des familles selon leur origine géographique et le sexe des enfants.

Bellot, C. (2008). Enquête sur les immigrés vieillissants. Paris Comité National des Retraites et Personnes Agées: 31.

http://travail-emploi.gouv.fr/IMG/pdf/SYNTHESE_NATIONALE_24_MARS_2008_POUR_SITE_INTERNET_SANS_ANNEXES.pdf

Cette enquête fait suite à la commande de la Direction Générale de l'Action Sociale (DGAS) qui souhaitait que les Comités Départementaux des Retraités et Personnes Agées (CODERPA) soient interrogés par le Comité National des Retraités et Personnes Agées (CNRPA) pour connaître les actions menées localement par les départements en faveur des immigrés vieillissants. Ce terme d'immigrés vieillissants recouvre les personnes nées étrangères à l'étranger, vivant en France principalement en foyer de travailleurs migrants ou en habitat diffus, en situation régulière et issues des vagues d'immigration de travail des trente dernières années. Une enquête en deux parties : la première vise une meilleure connaissance de cette population, la deuxième porte sur les objectifs ou actions du schéma gérontologique ou du schéma départemental des établissements et services sociaux et médico-sociaux.

Berchet, C. (2013). "Le recours aux soins en France : une analyse des mécanismes qui génèrent les inégalités de recours aux soins liées à l'immigration." *Rev Epidemiol Sante Publique* **61**(3): 209-213, tabl.

À partir des données de l'Enquête sur la santé et la protection sociale (ESPS) réalisée en 2006 et 2008, cette étude s'intéresse aux disparités de recours aux soins entre la population immigrée et la population française. Nous cherchons à mettre en évidence les mécanismes qui génèrent les inégalités de recours aux soins liées à l'immigration en utilisant des techniques de décomposition non linéaire. Les résultats des estimations montrent que les immigrés présentent, à besoins de santé équivalents, un plus faible recours aux médecins généralistes et spécialistes que la population française. L'application des techniques de décomposition non linéaire révèle que la majeure partie du différentiel de recours aux soins entre les immigrés et les Français est liée à une différence de distribution des caractéristiques observables entre les deux populations. En particulier, les inégalités de recours aux généralistes semblent être en premier lieu expliquées par la plus faible couverture santé des immigrés, tandis que leur niveau d'études et de revenu sont les principaux facteurs générant les inégalités de recours aux spécialistes.

Berchet, C. et Jusot, F. (2010). "Inégalités de santé liées à l'immigration et capital social : une analyse en décomposition." *Revue D'economie Publique*(24-25): 73-100.

Cet article étudie la contribution du capital social à l'explication des différences d'état de santé entre la population immigrée et la population native en France à partir des données de l'Enquête santé protection sociale (ESPS) menée en 2006 et 2008. L'utilisation de la méthode de décomposition proposée par Fairlie montre que 38,7 % des différences d'état de santé entre les deux populations sont liées à une différence de distribution des caractéristiques observables. Alors que l'âge contribue négativement aux disparités de santé, les résultats indiquent que le capital social présente la contribution la plus importante (53,9 %) devant le revenu (42,5 %) et la Profession et catégorie socioprofessionnelle (PCS) (16 %).

Berchet, C. et Jusot, F. (2010). "L'état de santé des migrants de première et de seconde génération en France. Une analyse selon le genre et l'origine." *Revue Economique* 61(6): 1075-1098.

À partir de l'enquête française Santé Protection Sociale menée en 2006, cette étude analyse les inégalités de santé liées à la migration. Les résultats suggèrent des disparités d'état de santé entre la population immigrée et la population française particulièrement marquées chez les émigrés d'Afrique du Nord. L'ampleur de ces inégalités est plus élevée chez les immigrés de première génération que chez les immigrés de seconde génération. Elles sont également plus notables chez les femmes que les hommes. Le mauvais état de santé des hommes immigrés est principalement expliqué par leur situation économique et sociale, leur intégration sociale et par leur hygiène de vie, alors que chez les femmes la migration constitue un risque spécifique.

Boisguerin, B. (2011). "Insertion socio-professionnelle, état de santé et recours aux soins des bénéficiaires de l'AME : le rôle des réseaux d'entraide." *Dossiers Solidarite Et Sante (Drees)*(19): 14.

[BDSP. Notice produite par MIN-SANTE 7mAR0xEq. Diffusion soumise à autorisation]. Fin 2010, 230 000 personnes bénéficient de l'aide médicale d'État (AME), un dispositif permettant de prendre en charge les dépenses de santé des étrangers en situation irrégulière. À partir d'une enquête réalisée en 2007 par la DREES, cette étude se penche sur le soutien éventuellement mobilisable par cette population, selon la provenance de l'aide (familiale, amicale, associative, sociale) et sa nature (matérielle ou financière, pour trouver un logement, du travail, effectuer des démarches). Il s'agit également d'observer si ce réseau d'entraide a une influence sur les conditions de logement, l'insertion professionnelle et l'état de santé perçu. Le réseau d'entraide sur lequel peuvent s'appuyer les bénéficiaires de l'AME conditionne directement leurs modalités d'existence : en particulier, l'insertion dans un réseau familial et amical améliore les conditions de logement et facilite l'accès à l'emploi. L'état de santé des bénéficiaires de l'AME apparaît également lié à leur capacité à mobiliser un soutien : deux personnes sur dix se déclarent en mauvaise santé et quatre sur dix indiquent souffrir d'une ou plusieurs maladies chroniques. Ce sentiment est renforcé chez les personnes qui ne peuvent s'appuyer sur la famille ou les amis. Enfin, les bénéficiaires de l'AME recourent davantage aux soins quand ils peuvent être épaulés à la fois par l'entourage familial et le milieu associatif pour effectuer des démarches et formalités.

Boisguerin, B. et Haury, B. (2008). "Les bénéficiaires de l'AME en contact avec le système de soins." *Etudes Et Resultats (Drees)*(645): 8, tabl., graph.

[BDSP. Notice produite par MIN-SANTE mAIR0x9J. Diffusion soumise à autorisation]. L'enquête effectuée au premier trimestre 2007 en Île-de-France fournit des éléments de connaissance sur les conditions d'existence, l'état de santé et le recours aux soins des bénéficiaires de l'aide

médicale de l'État (AME) en contact avec le système de soins. Il s'agit d'une population composée à 70% de jeunes adultes âgés de 20 à 39 ans, ayant un niveau scolaire élevé et dont la majorité réside en France depuis moins de cinq ans. Soumis à des conditions d'existence précaires, les bénéficiaires de l'AME sont nombreux à percevoir leur état de santé comme dégradé.

Chappuis, M., Laurence, S., Durand, E., et al. (2017). "Alimentation et risques pour la santé des personnes migrantes en situation de précarité : une enquête multicentrique dans sept Centres d'accueil, de soins et d'orientation de Médecins du Monde France, 2014." Bulletin Epidemiologique Hebdomadaire(19-20): 415-422.

[BDSP. Notice produite par SANTE-PUBLIQUE-FRANCE R0xI8s9D. Diffusion soumise à autorisation]. Introduction : les programmes de Médecins du Monde (MdM) accueillent des personnes précaires en difficulté d'accès aux soins et aux droits à la santé. Il s'agit en grande majorité des ressortissants étrangers (primo-arrivants comme résidents). Les équipes constatent depuis peu une augmentation du nombre de patients ayant une alimentation insuffisante et déstructurée, mais aussi des demandes d'aide alimentaire. Matériel et méthodes : une enquête a été menée auprès des populations rencontrées dans sept Centres d'accueil, de soins et d'orientation (Caso) de MdM en France afin de documenter leur accès à l'alimentation, leurs pratiques alimentaires et leur état de santé en fonction de leur statut socioéconomique. Un questionnaire a été proposé à toute personne se présentant dans ces centres, en amont de la consultation médicale où étaient recueillies les mesures anthropométriques et les pathologies. Trois cent quarante-six personnes ont été incluses dans l'enquête, dont 335 ressortissants étrangers. Résultats : plus de 78,5% des personnes enquêtées appartenaient à un foyer vivant en situation d'insécurité alimentaire pour raisons financières. En moyenne, les personnes déclaraient dépenser 2,5 EUR par personne et par jour pour se nourrir. Le nombre moyen de repas pris au cours des 24 heures précédant l'enquête était de 2,2, et 45,9% ont déclaré n'avoir pas mangé une journée entière au moins une fois au cours du mois. Les personnes rencontrées connaissaient peu les dispositifs d'aide : seules 42% avaient eu recours au moins une fois à des structures d'aide alimentaire le mois précédant l'enquête. Concernant leur état nutritionnel, 2,6% étaient en situation de maigreur, 34,1% en surpoids et 18,7% obèses. Discussion-conclusion : les résultats de cette enquête révèlent tout l'intérêt de développer des prises en charge et des circuits d'alimentation accessibles et favorables à la santé de telles populations. Il convient également d'adapter des actions de prévention et de promotion de la santé pour toucher les plus précaires et les migrants, et d'agir sur les déterminants sous-jacents de la malnutrition (accès au logement, aide financière, conditions de séjour.).

Chauvin, P., et al. (2005). Santé et recours aux soins des populations vulnérables. Questions en santé publique. Paris INSERM: 325 , tabl., graph.

Cet ouvrage est le fruit de séminaires mensuels organisés depuis 2002 par le réseau multidisciplinaire de recherche en santé publique SIRS-IdF (Santé, inégalités et ruptures sociales en Ile-de-France), coordonné par l'équipe de recherche sur les déterminants sociaux de la santé et du recours aux soins de l'INSERM (U707). Il rassemble les meilleures contributions sur la santé et le recours aux soins des populations vulnérables sous l'aspect des déterminants sociaux. Des thèmes précis sont abordés, tels la santé des personnes sans domicile fixe, le recours aux soins

des personnes infectées par le VIH ou encore les violences conjugales et la souffrance particulière des adolescents.

Cognet, M., Hamel, C. et Moisy, M. (2012). "Santé des migrants en France, l'effet des discriminations liées à l'origine et au sexe." Revue européenne des migrations internationales **28**(2): 11-34.

Comède (2017). Rapport 2017 du COMEDE : activité 2016. Kremlin Bicêtre Comité médical pour les exilés: 55, tabl., graph.

Dans un contexte de crise de la protection des exilés, les actions du Comède ont poursuivi leur progression en 2016 dans l'ensemble des dispositifs (augmentation globale soit +15%. Au total, l'équipe du Comède a effectué 18 100 consultations et appels téléphoniques pour 6 365 personnes, et développé ses activités de formation et publications destinées aux acteurs et décideurs. Ce rapport décrit et analyse l'ensemble de leurs activités pour 2016. Comède (2013). La santé des exilés : rapport d'activité et d'observation 2012. Le Kremlin Bicêtre Comité médical pour les exilés: 92 , tabl., graph.

Comme chaque année depuis plus de 30 ans, le Comité médical pour les exilés (Comede) analyse les statistiques d'accueil des patients accueillis dans ces centres de santé : description des populations, état de santé, accès aux soins et accès aux droits.

Comède (2015). Migrants/étrangers en situation précaire : soins et accompagnement. Guide pour les professionnels. Saint Denis INPES ; Le Kremlin-Bicêtre Comède: 544.

L'édition 2015 du guide du Comède (Comité pour la santé des exilés) comporte 70 articles classés en 19 chapitres. Le guide propose des réponses aux problèmes de santé des exilés, migrants et étrangers en situation précaire, à partir de l'expérience quotidienne de l'équipe du Comité. L'ouvrage tente de proposer des réponses aux problèmes de santé les plus fréquents des personnes concernées. Face à une demande souvent associée de soutien, de soins, d'accès aux soins et de conseil juridique, la connaissance des aspects médicaux, psychologiques, sociaux et administratifs de leur parcours est déterminante dans les soins et l'accompagnement proposés. Destiné à favoriser une approche pluridisciplinaire, ce guide est composé de quatre parties principales - repères, droits et soutien, accès aux soins, soins et prévention - dont les informations théoriques et pratiques sont complémentaires. Cette nouvelle édition fait suite aux éditions 2003, 2005 et 2008 et 2013 (mise à jour partielle en version informatique). Le guide comprend un index, une liste de sigles, des définitions (demandeur d'asile, étranger, exilé, immigré, migrant, réfugié, ressortissant de pays tiers, clandestin, etc.) et des bibliographies pour chaque sujet traité (exil et santé, interprétariat professionnel, accès au soin dans le pays d'origine, asile et immigration, etc.).

Cong, H. Q., et al. (1992). Recours aux soins et morbidité des défavorisés 1988-1989-1990 : l'expérience de six centres associatifs de soins gratuits. Rapport CreDES. Paris CreDES : 63 , tabl., graph.

Analyse des caractéristiques de 5575 patients ayant consulté pour la première fois en 1990 dans six centres de soins gratuits à Paris, Marseille, Lille, Lyon appartenant à l'association R.E.M.E.D.E. et à M.S.F. (Médecin sans frontière - Mission Solidarité France). Réalisé par une équipe regroupant des chercheurs, des médecins et des travailleurs sociaux, ce travail prolonge deux

observations effectuées en 1988 et 1989. Il fait une étude des patients par nationalité, statut, niveau de scolarité, âge et sexe.

Crampe-Casnabet, C., Franck, J. E., Ringa, V., et al. (2019). "Role of obesity in differences in cervical cancer screening rates by migration history. The CONSTANCES survey." *Cancer Epidemiol* **58**: 98-103.

BACKGROUND: Immigrant women often have lower cervical cancer screening (CCS) rates, tend to have a higher body mass index (BMI) and may be more vulnerable to BMI-related stigmatization. Our aim was to assess the role of BMI in differences in CCS rates by migration history. **METHODS:** Analyses were based on the 2012-2015 inclusion data (n = 27,226) for the population-based CONSTANCES cohort, including detailed, self-reported information on demographics and socioeconomic characteristics, migration history, health behaviours, health, and health care use. Measured BMI (underweight (<18.5), normal-weight (18.5-25), overweight (25-30), obese (>30)) was collected. Poisson regression models with robust variance were conducted to assess the contribution of BMI to differences in CCS rates by migration history, and analyses stratified by BMI were done. Multiple imputations were performed. **RESULTS:** The CCS rates ranged from 87% among French-born women with two French parents to 86% among French-born women with at least one parent of foreign origin, 82% among naturalized immigrants and 74% among non-naturalized immigrants. After adjusting for covariates, non-naturalized immigrants showed an 11% (95% CI: 8%-14%) lower CCS rate than French-born women with two French parents. Adjusting for BMI did not change the estimates. When stratifying by BMI category, non-naturalized immigrants showed an 11% (7%-14%) lower CCS rate than French-born with two French parents when normal weight, a 9% (2%-16%) lower CCS rate when overweight, and an 18% (5%-30%) lower CCS rate when obese. **CONCLUSION:** Migration history and BMI jointly impact CCS rates. They were lower among all non-naturalized immigrants, particularly those who were obese.

Delbecchi, G., Rouleau favre, F. et Vescovacci, K. (2007). "Comede : des consultations pour promouvoir la santé des exilés." *La Santé de l'homme*(392): 32-33.

Le centre de santé du Comède a assuré, en 2006, près de 15 000 consultations pour des patients de quatre-vingt-dix nationalités, en majorité des exilés fuyant leur pays d'origine. Des consultations médicales, infirmières ou sociales délivrées, pour 30 % d'entre elles, en langues étrangères à l'aide d'interprètes professionnels. Une consultation d'éducation thérapeutique accueille les personnes atteintes de maladie chronique. Mais de nombreuses difficultés entravent l'accès aux soins.

Desgrees-Dulou, A. et Lert, F. (2017). *Parcours de vie et santé des Africains immigrés en France*, Paris : Editions de la Découverte

Pourquoi et comment l'infection VIH percute-t-elle la vie des immigrés d'Afrique subsaharienne en France ? Première étude quantitative d'ampleur menée par des chercheurs et des associations au sein de cette population particulièrement touchée par le virus, l'enquête ANRS Parcours a retracé en 2012-2013 les trajectoires migratoires, sociales, administratives et de santé de ces immigrés. Elle met en relief les difficultés d'installation, les bouleversements familiaux et professionnels à l'arrivée en France, et leurs conséquences en termes de santé.

Desgrees Du Lou, A. (2018). "Migrations et santé : des (nouvelles) questions de santé publique au coeur des enjeux sociétaux." Questions De Sante Publique(34): 8 , tab., graph., fig.

Les migrations constituent un des moteurs majeurs des dynamiques des populations. Elles sont pourtant encore trop peu étudiées sous l'angle de la santé publique, bien que celle-ci s'intéresse à tout ce qui est en lien avec le bien-être et la santé des populations. En France, cela vient en partie de notre modèle d'intégration républicaine, qui ne distingue pas les individus ou les groupes selon des critères d'origine ethnique ou de religion. Cependant, certaines maladies comme le VIH/sida ont montré qu'il pouvait être nécessaire de prendre en compte l'origine des personnes pour améliorer la prévention et l'accès aux soins. Améliorer l'accueil et la prise en charge des immigrés dans le système de santé français passe en effet par une meilleure connaissance de leurs besoins spécifiques.

Despres, C., Lombraïl, P. et Gagnayre, R. (2017). Des pratiques médicales et dentaires, entre différenciation et discrimination : une analyse de discours de médecins et dentistes. Paris Défenseur des Droits ; Paris Fonds CMU: 248 , tab., graph., fig.

http://www.defenseurdesdroits.fr/sites/default/files/atoms/files/2017_03_27_rapport_final_medecins_et_patients_precaires.pdf

Cette recherche répond à une demande du Fonds de financement de la CMU et du Défenseur des Droits. Elle visait à analyser le refus de soins à l'égard des bénéficiaires de la CMU, de l'ACS et de l'AME et plus largement, à explorer d'autres formes de discrimination à l'encontre de Patients, qui vivent des situations de pauvreté et/ou de précarité. En effet, la discrimination peut s'exprimer sous des formes multiples, parfois plus insidieuses, dissimulées sous des formes variables de prise en charge, le refus de soins n'en étant que la forme la plus extrême et la plus visible. Elle a été réalisée au sein du laboratoire LEPS de l'université Paris XIII.

Hourgnon, P., Guillaume, S., Jusot, F., et al. (2019). "Étudier l'accès à l'Aide médicale de l'État des personnes sans titre de séjour. L'enquête Premiers pas." Questions D'economie De La Sante (Irdes)(244): 8.

<https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/244-etudier-l-acces-a-l-aide-medicale-de-l-etat-des-personnes-sans-titre-de-sejour.pdf>

L'Aide médicale de l'État (AME), l'assurance maladie destinée aux personnes étrangères en situation irrégulière en France, reste très mal connue. Quelles sont les caractéristiques sociales, économiques et sanitaires des personnes étrangères en situation irrégulière bénéficiant de l'AME ? Qui sont celles qui ne recourent pas au dispositif ? Pour quelles raisons ? Quels sont les recours aux soins et à l'assurance santé des personnes étrangères en situation irrégulière ? L'AME permet-elle à ses assurés d'accéder aux services de santé ? Les récents débats portant sur une possible réforme de l'AME n'ont pu s'appuyer que sur des informations éparpillées et incomplètes. L'enquête Premier pas vise à apporter de premières réponses à ces questions. Elle a été menée en 2019 auprès de 1 223 étrangers sans titre de séjour dans 63 lieux et structures, à Paris intra-muros et dans l'agglomération de Bordeaux. Après une description du protocole, de l'organisation de la collecte et du bilan statistique de l'enquête, nous présentons la structure de l'échantillon. Ce deuxième Questions d'économie de la santé sur l'accès à l'AME des personnes étrangères en situation irrégulière à partir de l'enquête Premiers pas s'inscrit dans une série. Le premier revenait sur l'histoire des droits de cette population en France et dressait un état des

lieux des connaissances et ignorances concernant le dispositif de l'AME. Le troisième sera consacré à l'analyse de l'accès à l'AME.

Dourgnon, P., et al. (2008). "La santé perçue des immigrés en France. Une exploitation de l'Enquête décennale santé 2002-2003." *Questions D'economie De La Sante (Irdes)*(133): 1-6.

<http://www.irdes.fr/Publications/Qes/Qes133.pdf>

Selon les données de l'enquête décennale santé menée par l'INSEE en 2002- 2003, les personnes d'origine étrangère vivant en France se déclarent en moins bon état de santé que les Français nés en France. Les conditions socioéconomiques dégradées de ces populations expliquent en partie leur plus mauvaise santé perçue. Mais on observe également des différences d'état de santé selon les pays d'origine, liées au niveau de développement de ces derniers. Ainsi, les personnes originaires des pays les plus riches déclarent un meilleur état de santé que les personnes originaires des pays de niveau de développement moyen, suggérant un effet à long terme de la situation sociale et sanitaire du pays de naissance sur l'état de santé. Les personnes originaires des pays les plus pauvres déclarent également un meilleur état de santé que les personnes originaires des pays de niveau de développement moyen, ce qui peut s'expliquer par une sélection à la migration plus marquée dans ces pays. Enfin, il ne semble pas y avoir de différence d'état de santé entre les immigrés étrangers et ceux ayant été naturalisés.

Dourgnon, P., Jusot, F., Marsaudon, A., et al. (2022). "Non, l'Aide médicale d'État n'encourage pas les migrations pour raisons de santé." *De Facto*(31): 30-33.

<https://www.icmigrations.cnrs.fr/wp-content/uploads/2022/03/DF31-Dourgnon-et-al.pdf>

L'AME est une assurance publique donnant accès aux étrangers en situation irrégulière (ESI) à la plupart des services de santé sans restes à charge. Elle suscite des débats clivants. Un argument fréquemment soulevé par ses opposants est que « les sans-papiers viennent en France pour profiter du système de santé ». Les résultats de l'enquête Premiers Pas, réalisée en 2019 auprès d'un échantillon représentatif d'ESI montrent une tout autre réalité. Tout d'abord, seuls 9,5 % d'entre eux évoquent la santé comme motif de venue en France. De plus, seuls 51 % des ESI éligibles sont couverts par l'AME. Le principal facteur explicatif du recours à l'AME n'est pas l'état de santé ni le motif de venue en France, mais la durée de séjour sur le territoire. Si l'accès à l'AME est croissant avec la durée de séjour, même après 5 ans en France, 34,6 % des ESI restent non couverts.

Dourgnon, P., et al. (2009). Etat de santé et recours aux soins des populations immigrées en France. Rapport final : Volume 1 : Etat de santé des populations immigrées en France. Paris Irdes : 156, tabl.

Cette recherche a été réalisée dans le cadre de l'appel à projets de recherche DREES/MIRE « Analyses secondaires de l'enquête décennale de l'Insee sur la santé et les soins médicaux ». Cette analyse repose sur des analyses descriptives et multi variées de l'état de santé d'une part et du recours aux services de santé d'autre part selon le statut migratoire : personne de nationalité française née en France, personne de nationalité française née à l'étranger, personne de nationalité étrangère. Le rapport final de cette étude est présenté en deux volumes, l'un consacré à l'état de santé et le deuxième au recours aux soins. Ce premier volume rassemble des réalisations sur l'état de santé des immigrés en France.

Dourgnon, P., et al. (2009). Etat de santé et recours aux soins des populations immigrées en France. Rapport final : Volume 2 : Recours aux soins des populations immigrées en France. Paris Irdes : 65 , tabl.

Cette recherche a été réalisée dans le cadre de l'appel à projets de recherche DREES / MIRE « Analyses secondaires de l'enquête décennale de l'Insee sur la santé et les soins médicaux ». Cette analyse repose sur des analyses descriptives et multi varié de l'état de santé d'une part et du recours aux services de santé d'autre part selon le statut migratoire : personne de nationalité française née en France, personne de nationalité française née à l'étranger, personne de nationalité étrangère. Le rapport final de cette étude est présenté en deux volumes, l'un consacré à l'état de santé et le deuxième au recours aux soins. Ce second volume rassemble des réalisations sur le recours aux soins des immigrés en France.

Drouot, N., Tomasino, A., Pauti, M. D., et al. (2012). "L'accès aux soins des migrants en situation précaire, à partir des données de l'Observatoire de Médecins du Monde : constats en 2010 et tendances principales depuis 2000." *Bull Epidemiol Hebd*(2-3-4): 41-44.

Médecins du Monde (MdM) agit en France dans 30 villes et mène 103 programmes de promotion de la santé en centres fixes ou unités mobiles, auprès de populations fragiles en difficulté d'accès à la prévention et aux soins. Pour décrire le profil des publics reçus, témoigner des obstacles à l'accès aux soins et en mesurer les évolutions, MdM a mis en place, depuis 2000, un Observatoire de l'accès aux soins. Les centres fixes utilisent à cet effet un recueil de données commun renseigné pour chaque personne rencontrée. En 2010, les centres ont accueilli 28 160 personnes, et des données ont été recueillies pour 21 710 d'entre elles. Il y avait 92 % d'étrangers et 12 % de mineurs. Leur profil socioéconomique est marqué par l'absence ou la précarité du logement, la grande faiblesse des ressources et une situation administrative précaire. Les trois-quarts peuvent en théorie disposer d'une couverture maladie, dont la moitié de l'Aide médicale de l'État (AME) réservée aux étrangers en situation irrégulière. Parmi les obstacles à l'accès aux soins principalement repérés : une méconnaissance des droits, la barrière linguistique, des difficultés administratives, des difficultés financières mais aussi la peur des arrestations. L'analyse des données met en évidence les besoins de suivi médical, alors qu'il s'agit de personnes dépourvues de couverture maladie. Les mineurs et les femmes enceintes ne sont pas épargnés. La complexité des dispositifs administratifs limitent l'accès aux soins. Aussi, dans un objectif de simplification, une fusion de l'AME et la CMU (Couverture maladie universelle) en un seul dispositif pour toutes les personnes résidant sur le territoire et vivant sous le seuil de pauvreté, a été proposée. Mais certaines politiques de sécurité et de lutte contre l'immigration clandestine, par la peur des arrestations qu'elles engendrent, éloignent les personnes des structures de santé et entravent le travail de prévention, de réduction des risques et d'accès aux soins. Ces contradictions devraient être levées dans l'intérêt individuel des personnes et collectif de santé publique.(R.A.)

El-Khoury Lesueur, F., Sutter-Dallay, A. L., Panico, L., et al. (2018). "The perinatal health of immigrant women in France: a nationally representative study." *Int J Public Health* **63**(9): 1027-1036.

OBJECTIVES: Despite the healthy migrant effect, immigrants and descendants of immigrants face health challenges and socio-economic difficulties. The objective of this study is to examine the perinatal health of women of migrant origin. METHODS: The nationwide French ELFE (Etude Longitudinale Française Depuis l'Enfance) birth cohort study recruited approximately 18,000

women. We studied pre-pregnancy BMI, gestational diabetes mellitus (GDM), as well as tobacco, and alcohol consumption during pregnancy according to migrant status and region of origin. RESULTS: Women from North Africa and Turkey had a higher risk of pre-pregnancy overweight and GDM, while women from Eastern Europe and Asia had a lower risk of pre-pregnancy overweight and obesity, but a higher risk of GDM compared to non-immigrants. Women from Sub-Saharan Africa had a higher risk of being overweight or obese pre-pregnancy. Compared to non-immigrants, immigrants-but not descendants of immigrants-had lower levels of tobacco smoking, while descendants of immigrants were less likely to drink alcohol during pregnancy. CONCLUSIONS: Pregnant women of migrant origin have particular health needs and should benefit from a medical follow-up which addresses those needs.

El-Khoury, F., Sutter-Dallay, A. L., Panico, L., et al. (2018). "Women's mental health in the perinatal period according to migrant status: the French representative ELFE birth cohort." Eur J Public Health **28**(3): 458-463.

Background: Mental health problems in the perinatal period are common. We examined associations between different categories of migrant status and region of origin in relation to mental health during pregnancy and at 2 months post-partum. Methods: We analyzed data from the French nationally representative Etude Longitudinale Française depuis l'Enfance birth cohort (n = 17 988). Migrant status was divided into five categories: 'majority population', 'descendants with one migrant parent', 'descendants with two migrant parents', 'naturalized migrant' and 'non-naturalized migrant women'. Multivariate logistic regression models were implemented to examine associations between migrant status and mental health outcomes: persistent psychological difficulties during pregnancy as well as mother's depression and poor self-reported health at 2 months post-partum. Results: After adjusting for covariates, migrant status was not associated with psychological difficulties during pregnancy. Descendants of migrants had comparable mental health to the majority population. Non-naturalized migrant women were more likely to experience depression (odd's ratio (OR)= 1.66, 95%confidence interval (CI): 1.27, 2.20) and poor self-reported health (OR = 1.45, 95%CI: 1.06, 1.98) during the post-partum period. The region of origin was associated with post-partum health independently of migrant status, such that women from Africa and Turkey were most likely to have depression or poor self-rated health. Conclusion: First, but not second, generation migrant women appear to have high levels of mental health difficulties during the post-partum period. Women from North Africa, Sub-Saharan Africa, and Turkey have higher levels of distress than those from other regions. In particular, non-naturalized migrant appear to be a vulnerable group; they may disproportionately face stressors that increase their risk for post-partum depressive symptoms.

Eslier, M., Deneux-Tharoux, C., Sauvegrain, P., et al. (2020). "Association between Migrant Women's Legal Status and Prenatal Care Utilization in the PreCARE Cohort." Int J Environ Res Public Health **17**(19).

Barriers to access to prenatal care may partially explain the higher risk of adverse pregnancy outcomes among migrants compared with native-born women in Europe. Our aim was to assess the association between women's legal status and inadequate prenatal care utilization (PCU) in France, where access to healthcare is supposed to be universal. The study population was extracted from the PreCARE prospective cohort (N = 10,419). The associations between women's legal status and a composite outcome variable of inadequate PCU were assessed with multivariate logistic regressions. The proportion of women born in sub-Saharan Africa (SSA) was

higher among the undocumented than that of other migrants. All groups of migrant women had a higher risk of inadequate PCU (31.6% for legal migrants with European nationalities, 40.3% for other legal migrants, and 52.0% for undocumented migrants) than French-born women (26.4%). The adjusted odds ratio (aOR) for inadequate PCU for undocumented migrants compared with that for French-born women was 2.58 (95% confidence interval 2.16-3.07) overall, and this association was similar for migrant women born in SSA (aOR 2.95, 2.28-3.82) and those born elsewhere (aOR 2.37, 1.89-2.97). Regardless of the maternal place of birth, undocumented migrant status is associated with a higher risk of inadequate PCU.

Fosse, S. et Fago-Campana, A. (2012). "Prévalence du diabète, état de santé et recours aux soins des personnes diabétiques originaires d'un pays du Maghreb et résidant en France métropolitaine." Bulletin Epidemiologique Hebdomadaire(2-3-4): 35-36.

Gosselin, A. (2019). "Santé des immigrés : quand les difficultés d'installation détériorent l'état de santé. Exemple de la population immigrée d'Afrique subsaharienne." Sepidemio.

<https://soepidemio.com/2019/09/11/sante-des-immigres-quand-les-difficultes-dinstallation-deteriorent-letat-de-sante-exemple-de-la-population-immigree-dafrique-subsaharienne/>

Alors que l'accueil des réfugiés devient un enjeu crucial en Europe depuis la dite « crise migratoire » de l'été 2015, le processus d'installation des immigrés est peu renseigné, notamment parce qu'on manque de données longitudinales sur cette question. Les études disponibles portent soit sur la thématique de l'intégration sur le marché du travail ou sur des sous-groupes de population (par exemple bénéficiaires d'un titre de séjour, cf. par exemple l'enquête ELIPA). A partir des données de l'enquête ANRS Parcours, nous avons pu observer le processus d'installation

Fosse-Edorh, S., Fagot-Campagna, A., Detournay, B., et al. (2014). "Type 2 diabetes prevalence, health status and quality of care among the North African immigrant population living in France." Diabetes Metab **40**(2): 143-150.

AIM: This report is an overview of type 2 diabetes (DT2) in the North African immigrant population living in France. METHODS: Data were collected in two separate cross-sectional national surveys. DT2 prevalence was estimated using a population-based survey involving 13 959 people aged ≥ 45 years (EDS), while health status and quality of care were evaluated using a sample of 3894 DT2 patients (ENTRED). RESULTS: Prevalence of DT2 and obesity was 14.0% [CI 95%: 9.9; 18.0] and 20.5% [15.7; 25.3], respectively, in participants born in North Africa (BNA) and 7.5% [7.0; 8.0] and 15.8% [14.7; 16.8], respectively, in those born in France (BIF). DT2 was associated with region of birth in women after adjusting for age, body mass index and income or occupation, but not after adjusting for education level. In men, DT2 was not associated with region of birth. BNA and BIF patients with diabetes frequently benefited from free medical coverage (88% vs. 84%, respectively), although BNA diabetic patients visited a general practitioner less frequently than BIF (8.5 vs. 9.0 visits/year, respectively). The percentage of BNA vs. BIF diabetes patients tested three times a year for HbA1c was lower (39% vs. 44%), while HbA1c was higher in BNA vs. BIF diabetics ($> 8\%$: 30% vs. 15%). Ophthalmological complications were also more frequent in BNA vs. BIF patients with diabetes (25% vs. 18%, respectively). CONCLUSION: The greater prevalence of DT2 in BNA women and the poorer glycaemic control

observed in the BNA population overall both probably contribute to disparity in diabetes mortality compared with BIF diabetics, a fact that has been observed in previous studies.

Gosselin, A., Malroux, I., Desprat, D., et al. (2022). "Prévalence des risques psychosociaux au travail et santé mentale parmi les immigrés et descendants d'immigrés : résultats de l'enquête nationale Conditions de Travail-Risques psychosociaux 2016." *Bulletin Epidemiologique Hebdomadaire (Beh)*(7): 141-149.

http://beh.santepubliquefrance.fr/beh/2022/7/2022_7_2.html

Peu d'études se sont penchées sur les risques psychosociaux parmi les immigrés et les descendants d'immigrés et leur association avec la santé mentale. Notre étude a pour objectif: 1) de décrire la prévalence de deux indicateurs qui recouvrent les dimensions d'exigence psychologique, de latitude décisionnelle et d'isolement au travail: le job strain (tension au travail: faible latitude/forte demande) et l'iso-strain (combinaison d'une situation de job strain et d'un faible soutien social) selon le statut migratoire et modéliser la probabilité d'être exposé ; 2) vérifier que les associations entre le job strain, l'iso-strain et l'anxiété sont similaires pour tous les groupes (immigrés, descendants d'immigrés)

Gosselin, A. (2018). "[Residence permit for medical reasons: An obstacle to permanent residence status. Results of the ANRS Parcours Study]." *Sante Publique* **30**(2): 197-201.

OBJECTIVES: Various associations in France have denounced for a long time the difficulties encountered by foreigners with a residence permit for medical reasons to access permanent residence status (10-year resident's card or French nationality). The objective of this study was to determine whether there is a real discrimination towards foreigners with a residence permit for medical reasons, with all other things being equal. METHODS: This study was based on data from the retrospective quantitative ANRS Parcours survey, conducted in 2012-2013 among 1,705 Sub-Saharan immigrants with HIV/AIDS or Hepatitis B in Ile-de-France. This life-event survey reconstructed the immigrant's permit history. Discrete time logistic models were then used to model the factors associated with obtaining a permanent residence permit and the impact of a residence permit for medical reasons on this probability. Control variables were used to take into account the level of education, the reason for arrival in France, the period of arrival, the duration of stay. RESULTS: A residence permit for medical reasons has a negative impact on access to permanent residence status (aOR between 0.15 and 0.27 across subgroups, $P < 0.01$). Additionally, the time required to obtain permanent residence status has increased since 2005 compared to before 1996 for all foreigners participating in the survey. CONCLUSIONS: The results of this study suggest discrimination towards people with a residence permit for medical reasons in terms of access to permanent residence status, thereby placing their access to health care at stake.

Gosselin, A., Desgrees du Lou, A., Lelievre, E., et al. (2018). "Understanding Settlement Pathways of African Immigrants in France Through a Capability Approach: Do Pre-migratory Characteristics Matter?" *Eur J Popul* **34**(5): 849-871.

With the increase in asylum-related immigration since 2015, understanding how immigrants settle in a new country is at the centre of social and political debate in European countries. The objective of this study is to determine whether the necessary time to settle for Sub-Saharan

Africa immigrants in France depends more on pre-migratory characteristics or on the structural features of the host society. Taking a capability approach, we define settlement as the acquisition of three basic resources: a personal dwelling, a legal permit of a least 1 year and paid work. We use data from the PARCOURS survey, a life-event history survey conducted from 2012 to 2013 that collected 513 life histories of Sub-Saharan African immigrants living in France. Situations regarding housing, legal status and activity were documented year by year since the arrival of the respondent. We use a Kaplan-Meier analysis and chronograms to describe the time needed for settlement, first for each resource (personal dwelling, legal permit and paid work) and then for the combined indicator of settlement. Discrete-time logistic regressions are used to model the determinants of this settlement process. Overall, women and men require 6 and 7 years (medians), respectively, to acquire basic resources in France. This represents a strikingly long period of time in which immigrants lack basic security. The settlement process varies according to gender, but very few sociodemographic factors influence settlement dynamics. Therefore, the length of the settlement process may be due to structural features of the host society.

Guardia, D., Salleron, J., Roelandt, J. L., et al. (2017). "[Prevalence of psychiatric and substance use disorders among three generations of migrants: Results from French population cohort]." *Encephale* 43(5): 435-443.

INTRODUCTION: Mental health of migrant populations has become a major public health issue since these populations more often suffer from mental health problems than host populations. The influence of the migration process on the emergence of these disorders and its impact on future generations is uncertain. This study provides an estimate of the prevalence of mental disorders among three generations of migration. METHOD: The study was conducted in the general population by the French Collaborating Center of the World Health Organization, in France, on a sample of 37,063 people aged 18 and older. The subjects interviewed were selected by a quota sampling method and, thus, were representative of the general population in the 47 study sites in France. This method develops a sample of subjects with the same characteristics as the general population on predefined issues, such as age, sex, educational level and socioprofessional category. The designation of migrant status was based on the country of birth of the subject, the subject's parents and the subject's grandparents. We defined a migrant as first generation (a subject born abroad; n=1911), second generation (at least one parent born abroad; n=4147), or third generation (at least one grandparent born abroad; n=3763) of migrants. The diagnostic tool used was the Mini International Neuropsychiatric Interview (MINI). The MINI is a brief structured diagnostic interview developed by psychiatrists for ICD-10 and DSM-IVTR psychiatric disorders in the general population. The comparisons by generation of migrants were performed by chi-square test for qualitative variables and by an analysis of variance for quantitative variables. The same tests were used to compare the presence of mental disorders according to the characteristics of the population. Factors with a P-value less than 0.2 were entered in a multivariable logistic regression to assess the relationship between the generation of migrants and the presence of mental disorders, adjusting for the confounding factors. RESULTS: Thirty-eight per cent of migrant subjects have psychological difficulties, versus 30 % in the host population. These results are observed on three successive generations of migrants. Migration status increases risk of depressive disorders (OR=1.555), bipolar disorder (OR=1.597, CI=1.146-2.227), post-traumatic stress disorder (OR=1.615), substance abuse (OR=2.522) and alcohol abuse (OR=1.524), and drug dependence

(OR=2.116). This risk is maintained at the second and third generation. The migration process affects mental health of population regardless of socioeconomic status or geographic origin. CONCLUSION: The consideration of migration and generation of migration shows a specific psychopathological risk profile. This is related to the joint action of a migratory past and precarious socioeconomic situation.

Halley, E., Giai, J., Chappuis, M., et al. (2021). "Health Profile of Precarious Migrants Attending the Médecins Du Monde's Health and Social Care Centres in France: a Cross-Sectional Study." Int J Public Health **66**: 602394.

Objective: The present study aimed to compare the precarious migrants' health problems managed in Médecins du Monde's health and social care centres (CASO) with those of patients attending general practice in France. Methods: We compared the most frequent health problems managed in the 19 CASO in metropolitan France with those of a national sample of usual general practice consultations, after standardisation for age and sex. Results: Precarious migrants had fewer health problems managed per consultation than other patients (mean: 1.31 vs. 2.16), and these corresponded less frequently to chronic conditions (21.3% vs. 46.8%). The overrepresented health problems among CASO consultations were mainly headache (1.11% vs. 0.45%), viral hepatitis (1.05% vs. 0.20%), type 1 diabetes (1.01% vs. 0.50%) and teeth/gum disease (1.01% vs. 0.23%). Their underrepresented health problems were mainly lipid disorder (0.39% vs. 8.20%), depressive disorder (1.36% vs. 5.28%) and hypothyroidism (0.50% vs. 3.08%). Prevention issues were nominal in precarious migrants (0.16%). Conclusion: Both chronic somatic and mental conditions of precarious migrants are presumably underdiagnosed. Their screening should be improved in primary care.

Hamel, C. et Moisy, M. (2012). "Migrations, conditions de vie et santé en France à partir de l'enquête Trajectoires et origines, 2008." Bulletin Epidemiologique Hebdomadaire(2-3-4): 21-24.

[BDSP. Notice produite par InVS qR0xl9s8. Diffusion soumise à autorisation]. Les immigrés âgés de 18-60 ans se déclarent globalement en plus mauvaise santé que les personnes sans ascendance migratoire depuis au moins deux générations. Toutefois, la catégorie "immigrés" revêt des réalités différentes en fonction de l'origine, des parcours migratoires et des conditions de vie passées et actuelles sur le territoire métropolitain. Les immigrés originaires de Turquie et du Portugal sont ceux qui se déclarent le plus en mauvaise santé. Pour les premiers, un cumul de précarité sur le territoire métropolitain explique cette sur-déclaration d'une mauvaise santé malgré une structure de population très jeune ; pour les seconds, les facteurs explicatifs relèvent davantage d'événements vécus pendant l'enfance et de faibles niveaux de qualification, qui, s'ils ne les empêchent pas d'être sur le marché du travail, les exposent à des conditions de travail pénibles. (R.A.).

Hourdel, A., Reinier, M., Van Destee, G. F., et al. (2020). "État de santé des patients se déclarant mineurs non accompagnés et non reconnus mineurs: enquête rétrospective au sein de la Permanence d'accès aux soins de santé de l'Hôtel-Dieu." Bulletin Epidemiologique Hebdomadaire (Beh)(27): 531-537. http://beh.santepubliquefrance.fr/beh/2020/27/2020_27_2.html

Le nombre de mineurs non accompagnés (MNA) a augmenté de façon exponentielle ces dernières années. Après une première évaluation de la minorité au sein du Dispositif national de

mise à l'abri, d'évaluation et d'orientation des mineurs isolés étrangers (Demie), on estime à 57% le nombre de jeunes non reconnus mineurs. Le cadre juridictionnel autour de ce statut reste flou et l'accès aux soins est entravé. Une étude rétrospective a été menée afin d'évaluer l'état de santé de cette population. Le recueil a été effectué de manière rétrospective à partir du dossier médical Orbis®. Les patients inclus étaient ceux se déclarant MNA mais non reconnus mineurs par le Demie lors de la consultation à la Permanence d'accès aux soins de santé de l'Hôtel-Dieu (Paris). Ont été recueillis ? les données démographiques, les diagnostics de consultation, la prévalence de pathologies cibles, les hospitalisations et les correspondants associatifs. Entre le 1er janvier 2019 et le 9 octobre 2019, 301 patients ont été inclus et un total de 1 035 consultations ont été analysées. La proportion d'homme était de 95% et l'âge moyen déclaré de 16,2 ans. La prévalence des psychotraumatismes était de 27,7% et des infections chroniques par le virus de l'hépatite B (VHB) de 12,8%. Les principaux diagnostics de consultation concernaient l'appareil locomoteur, la dermatologie et la gastro-entérologie. Le taux d'hospitalisation suite à la consultation était de 6%. Il s'agit d'une population fragile et isolée. Les prévalences des pathologies graves et le taux d'hospitalisation sont plus élevés qu'attendus. L'adhésion à la prise en charge au sein de la structure est bonne. La population des MNA non reconnus mineurs est une population à risque pour laquelle l'accès aux soins doit être facilité et amélioré.

Huame, H., Kellou, N., Tomasino, A., et al. (2017). "Profil de santé des migrants en situation de précarité en France : une étude comparative des migrants accueillis dans les centres de Médecins du Monde et des patients de médecine générale de ville, 2011-2012." *Bull Epidemiol Hebd*(19-20): 430-436.

Introduction : la précarité des conditions de vie des migrants et les difficultés d'accès aux soins dans le pays d'accueil les rendent particulièrement vulnérables sur le plan sanitaire. Cependant, leurs problèmes de santé sont peu documentés. Méthodes : les motifs et les résultats de consultation des populations accueillies dans les Centres d'accueil, de soins et d'orientation (Caso) métropolitains de l'association Médecins du Monde entre décembre 2011 et mars 2012 ont été comparés à un échantillon national de patients ayant consulté en médecine générale de ville durant la même période. Résultats : les données de 15 608 consultations des Caso ont été comparées avec celles de 19 344 consultations de médecine générale de ville. Les consultants des Caso présentaient des motifs de consultation moins nombreux (1,4 vs 2,6) et ceux-ci correspondaient moins fréquemment à des demandes de renouvellement de prescriptions (2,1% vs 20,4%) ou de suivi (3,5% vs 5,3%). Les résultats de consultation étaient plus souvent des symptômes et des plaintes (65,8% vs 43,2%) que des diagnostics. Les problèmes de santé sur-représentés étaient surtout digestifs (14,5% vs 7,8%), oculaires (3,7% vs 1,0%), cutanés (9,2% vs 4,8%) et respiratoires (19,5% vs 12,9%). Les problèmes de santé sous-représentés dans les Caso étaient principalement métaboliques (4,5% vs 10,7%) et cardiovasculaires (8,3% vs 12,8%). Les situations de prévention étaient peu fréquentes dans les consultations des Caso (0,1%) alors qu'elles représentaient le premier résultat de consultation en médecine générale de ville (11,7%). Conclusion : un meilleur accès aux droits et aux soins primaires pourrait améliorer la continuité des soins des migrants en situation de précarité.

Ichou, M. et Wallace, M. (2019). "The Healthy Immigrant Effect: The role of educational selectivity in the good health of migrants." *Demographic Research* **40**(4): 61-94.

<https://www.demographic-research.org/volumes/vol40/4/default.htm>

The Healthy Immigrant Effect (HIE) refers to the fact that recent migrants are in better health than the nonmigrant population in the host country. Central to explaining the HIE is the idea that migrants are positively selected in terms of their socioeconomic and health characteristics when compared to nonmigrants in their country of origin. However, due to a lack of reliable and comparable data, most existing studies rely on socioeconomic and health measures as collected in the host country after migration and do not actually measure selection. We directly test selection as an explanation of the HIE among migrants living in France. Using the French Trajectories and Origins (TeO) survey and Barro's Lee dataset, we construct a direct measure of migrants' educational selectivity. We then test its effect on health differences between migrants and nonmigrants using measures self-rated health, health limitations, and chronic illnesses, by fitting logistic regression and Karlson Holm Breen (KHB) decompositions. After demonstrating that migrants in France experience an HIE, especially males, we also show that educational level as measured in the host country cannot account for the HIE. By contrast, we provide important evidence that educational selectivity constitutes a significant factor in explaining health disparities between migrant and nonmigrant populations. Capitalizing on a novel measure of migrants' educational selectivity, we give credit to the oft-cited but rarely tested theory that the HIE is a consequence of migrants' positive selection.

Ichou, M. (2021). "Discriminations et renoncement aux soins dans le système de santé français : certains groupes d'immigrés et d'enfants d'immigrés sont particulièrement exposés à des expériences de discriminations dans le système de santé "(Enquête Teo)." *Fe Facto*(25): 32-36.

Institut National des Études Démographiques (2016). Trajectoires et origines : enquête sur la diversité des populations en France. Paris Ined: 623, tab., graph., fig.
https://www.ined.fr/fichier/s_rubrique/24668/grande.enquetes_teo_fascicule.fr.pdf

L'enquête TeO vise à identifier l'impact des origines sur les conditions de vie et les trajectoires sociales, tout en prenant en considération les autres caractéristiques sociodémographiques que sont le milieu social, le quartier, l'âge, la génération, le sexe, le niveau d'études. Les questions d'intégration et de discrimination occupent une place importante dans les débats publics. Mais aujourd'hui la France manque encore de statistiques nationales permettant d'étudier ces phénomènes. L'enquête TeO est conçue pour combler ces lacunes. TeO s'intéresse à toutes les populations vivant en France métropolitaine, à leurs conditions de vie actuelles et à leurs parcours. L'enquête porte cependant un intérêt particulier aux populations qui peuvent rencontrer des obstacles dans leurs trajectoires du fait de leur origine ou de leur apparence physique (immigrés, descendants d'immigrés, personnes originaires des DOM et leurs descendants). L'enquête TeO a été réalisée conjointement par l'INED et l'INSEE. Elle a été rigoureusement contrôlée par les organismes qui encadrent la statistique publique (CNIS ; CNIL). Elle respecte scrupuleusement le droit des enquêtés : les personnes ont été enquêtées de manière volontaire et anonyme.

Jusot, F., et al. (2008). Etat de santé des populations immigrés en France. *Document de travail Irdes ; 14*. Paris Irdes: 20.
<http://www.irdes.fr/EspaceRecherche/DocumentsDeTravail/DT14EtatSantePopulImmigrFrance.pdf>

Ce document étudie les liens existants entre nationalité, migration et état de santé à partir des données de l'Enquête décennale Santé menée en 2002-2003 en France. Les résultats montrent

l'existence d'inégalités face à la santé des personnes d'origine étrangère, liées à l'existence d'un effet de sélection à la migration compensé à long terme par un effet délétère de la migration, expliqué en partie seulement par la situation sociale difficile des immigrés. Cette analyse suggère également un effet non négligeable à long terme des caractéristiques économiques et sanitaires du pays de naissance, propre à expliquer les disparités d'état de santé observées au sein de la population immigrée.

Jusot, F., et al. (2009). "Inégalités de santé liées à l'immigration en France. Effet des conditions de vie ou sélection à la migration ?" *Revue Economique* 60(2): 385-412.

http://www.cairn.info/resume.php?ID_ARTICLE=RECO_602_0385

Cet article étudie les liens existants entre nationalité, migration et état de santé à partir des données de l'enquête décennale Santé menée en 2002-2003 en France. Les résultats montrent l'existence d'inégalités face à la santé des personnes d'origine étrangère, liées à l'existence d'un effet de sélection à la migration compensé à long terme par un effet délétère de la migration, expliqué en partie seulement par la situation sociale difficile des immigrés en France. Cette analyse suggère également un effet non négligeable à long terme des caractéristiques économiques et sanitaires du pays de naissance, propre à expliquer les disparités d'état de santé observées au sein de la population immigrée.

Jusot, F., Dourgnon, P., Guillaume, S., et al. (2019). "Le recours à l'Aide médicale de l'État des personnes en situation irrégulière en France : premiers enseignements de l'enquête Premiers pas." *Questions D'economie De La Sante (Irdes)*(245): 8.

<https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/245-le-recours-a-l-aide-medicale-de-l-etat-des-personnes-en-situation-irreguliere-en-france-enquete-premiers-pas.pdf>

La France a choisi de longue date de garantir l'accès aux soins des étrangers en situation irrégulière avec l'Aide médicale gratuite puis, depuis 2000, l'Aide médicale de l'Etat (AME). L'existence d'un tel dispositif ne garantit pas, à elle seule, que l'ensemble des personnes éligibles y accèdent ni en fassent usage. Nous étudions ici le recours à l'AME et ses déterminants à partir des données de l'enquête Premiers pas, réalisée en 2019 auprès d'un échantillon de personnes étrangères sans titre de séjour. Seules 51 % des personnes qui y sont éligibles bénéficient de l'AME. Près de la moitié des personnes sans titre de séjour déclarant souffrir de pathologies nécessitant des soins, comme le diabète ou les maladies infectieuses, ne sont dans les faits pas assurées pour la santé, ni par l'AME, ni par l'assurance maladie de droit commun. Le recours à l'AME est un peu plus important chez les 10 % ayant cité la santé parmi leurs motifs de migration. Il est cependant assez peu corrélé aux problèmes de santé, en dehors des troubles musculosquelettiques. Le recours à l'AME augmente avant tout avec la durée de séjour sur le territoire. Ces résultats suggèrent que la plupart des migrants ont peu de connaissances de l'AME et n'ont pas tous la capacité à se saisir d'un dispositif complexe. Même après cinq années ou plus de résidence en France, 35 % des personnes sans titre de séjour n'ont pas l'AME. Ce troisième Questions d'économie de la santé sur l'accès à l'Aide médicale de l'Etat des personnes étrangères en situation irrégulière s'inscrit dans une série. Le premier rappelle l'histoire des droits de cette population en France et dresse un état des lieux des connaissances sur le dispositif de l'AME. Le deuxième présente l'enquête Premiers pas.

Klat, M., Legleye, S. et Bricard, D. (2020). "Gender Patterns in Immigrants' Health Profiles in France: Tobacco, Alcohol, Obesity and Self-Reported Health." *Int J Environ Res Public Health* **17**(23): 1-10.
<https://www.mdpi.com/1660-4601/17/23/8759>

To date, little attention has been given to gender differences in the health of migrants relative to native-born. In this study, we examine the health profile of the largest immigrant groups in metropolitan France, considering several health indicators and with a special interest in the gendered patterns.

Klat, M., Legleye, S. et Bricard, D. (2021). "Les profils de santé des migrants en France : tabac, alcool, obésité et santé perçue." *La Sante En Action*(455): 19.
<https://www.santepubliquefrance.fr/docs/la-sante-en-action-mars-2021-n-455-migrants-en-situation-de-vulnerabilite-et-sante>

À ce jour, peu d'attention a été accordée aux différences entre les sexes dans la santé des migrants par rapport aux personnes nées dans le pays. Dans cette étude, nous examinons le profil de santé des plus grands groupes d'immigrants en France métropolitaine, en considérant plusieurs indicateurs de santé et avec un intérêt particulier pour les modèles de genre.

Khlat, M., Bricard, D. et Legleye, S. (2018). "Smoking among immigrant groups in metropolitan France: prevalence levels, male-to-female ratios and educational gradients." *BMC Public Health* **18**(1): 479.

BACKGROUND: Although the French population comprises large and diverse immigrant groups, there is little research on smoking disparities by geographical origin. The aim of this study is to investigate in this country smoking among immigrants born in either north Africa, sub-Saharan Africa or French overseas départements. **METHODS:** The data originate from the 2010 Health Barometer survey representative of metropolitan France. The subsample of 20,211 individuals aged 18-70 years (born either in metropolitan France or in the above-mentioned geographical regions) was analysed using logistic regression. **RESULTS:** Both immigrants from sub-Saharan Africa and immigrants from overseas départements were protected from smoking compared to the reference population, and the former had a distinctive strongly reversed educational gradient in both genders. Returned former settlers from the French colonies in North Africa (repatriates) had the highest smoking levels. Natives from the Maghreb (Maghrebins) showed considerable gender discordance, with men having both a higher prevalence (borderline significance) and a reversed gradient and women having lower prevalence than the reference population. **CONCLUSION:** Immigrants from regions of the world in stage 1 of the cigarette epidemic had relatively low smoking levels and those from regions in stage 2 had relatively high smoking levels. Some groups had a profile characteristic of late phases of the cigarette epidemic, and others, some of which long-standing residents, seemed to be positioned at its early stages. The situation for Maghrebins reflected the enduring influence of gendered norms post-migration. Based on their educational gradients, immigrants from overseas départements (particularly men) and Maghrebins women may be at risk of losing their particularly low prevalence. Immigrants from sub-Saharan Africa could retain it. In-depth analysis of smoking profiles of immigrants' groups is essential for a better targeting of smoking prevention and cessation programs.

Khlat, M. et Guillot, M. (2017). *Health and Mortality Patterns Among Migrants in France.*, University of Pennsylvania: 35p.

http://repository.upenn.edu/psc_publications/8/

Research on migrants' health and mortality has been lagging in France, by comparison with other European countries with shorter immigration histories. This lag has been related to the predominance in France of the modèle d'intégration républicaine (republican model of integration), according to which the state disregards criteria such as race, ethnicity or religion when interacting with individuals, in order to guarantee equal treatment for all (Oberti, 2008). Given the strong links between the state and the statistical system, the dividing line has long been limited to the basic distinction between foreigners and French citizens (Safi, 2007).

Khlat, M., Wallace, M. et Guillot, M. (2019). "Adult mortality among second-generation immigrants in France: Results from a nationally representative record linkage study." *Demographic Research* **40**(54): 1603–1644.

<https://www.demographic-research.org/Volumes/Vol40/54/>

France has a large population of second-generation immigrants (i.e., native-born children of immigrants) who are known to experience important socioeconomic disparities by country of origin. The extent to which they also experience disparities in mortality, however, has not been previously examined. We used a nationally representative sample of individuals 18 to 64 years old in 1999 with mortality follow-up via linked death records until 2010. We compared mortality levels for second-generation immigrants with their first-generation counterparts and with the reference (neither first- nor second-generation) population using mortality hazard ratios as well as probabilities of dying between age 18 and 65. We also adjusted hazard ratios using educational attainment reported at baseline. We found a large amount of excess mortality among second-generation males of North African origin compared to the reference population with no migrant background. This excess mortality was not present among second-generation males of southern European origin, for whom we instead found a mortality advantage, nor among North African-origin males of the first-generation. This excess mortality remained large and significant after adjusting for educational attainment. In these first estimates of mortality among second-generation immigrants in France, males of North African origin stood out as a subgroup experiencing a large amount of excess mortality. This finding adds a public health dimension to the various disadvantages already documented for this subgroup. Overall, our results highlight the importance of second-generation status as a significant and previously unknown source of health disparity in France.

Khlat, M., et al. (1998). "La morbidité dans les ménages originaires du Maghreb : sur la base de l'enquête santé de l'INSEE, 1991-1992." *Population* **53**(6): 1155-1184, 1158 tabl.

Limousi, F., Lert, F., Desgrees du Lou, A., et al. (2017). "Dynamic of HIV-testing after arrival in France for migrants from sub-Saharan Africa: The role of both health and social care systems." *PLoS One* **12**(12): e0188751.

OBJECTIVE: HIV testing is an important tool in the management of the HIV epidemic among key populations. We aimed to explore the dynamic of first-time HIV testing in France for sub-Saharan migrants after their arrival. METHODS: ANRS-Parcours is a retrospective life-event survey conducted from 2012 to 2013 in healthcare facilities in the Paris region, among 926 sub-Saharan HIV-infected migrants and 763 non-infected migrants. After describing the time to first

HIV test in France and associated circumstances, we performed a discrete-time logistic regression to analyze the influence of socioeconomic position, contact with the healthcare system and sexual behaviors, on first-time HIV testing in France in migrants who arrived after 2000. RESULTS: Median first-time HIV testing occurred during the second year spent in France for non-infected men and women in both groups, and during the first year for men of the HIV group. The probability of testing increased with hospitalization and pregnancy for women of both groups. For non-infected men unemployment and absence of a residence permit were associated with an increased probability of HIV testing [respectively, OR = 2.2 (1.2-4.1) and OR = 2.0 (1.1-3.5)]. Unemployment was also associated with an increased probability of first-time HIV-testing for women of the HIV group [OR: 1.7 (1.0-2.7)]. Occasional and multiple sexual relationships were associated with an increased probability of first-time testing only for HIV-infected women [OR: 2.2 (1.2-4.0) and OR = 2.4 (1.3-4.6)]. CONCLUSION: Access to first HIV testing in France is promoted by contact with the health care system and is facilitated for unemployed and undocumented migrants after arrival. However, testing should be offered more systematically and repeated in order to reduce time between HIV infection and diagnosis, especially for deprived people which are particularly vulnerable regarding HIV infection.

Lot, F., et al. (2012). "Trois pathologies infectieuses fréquemment rencontrées chez les migrants en France : le VIH, la tuberculose et l'hépatite B." Bulletin Epidemiologique Hebdomadaire(2-3-4): 25-30.

[BDSP. Notice produite par InVS FHmm7R0x. Diffusion soumise à autorisation]. La prévalence du VIH, de la tuberculose et de l'hépatite B est élevée dans certaines régions du monde, notamment en Afrique subsaharienne et en Asie. L'objectif de cet article est de décrire le poids de ces pathologies dans la population migrante vivant en France. Parmi les 6 700 découvertes de séropositivité à VIH et les 5 276 cas de tuberculose maladie déclarés en 2009, environ la moitié concernait des migrants. Parmi les 1 715 patients pris en charge pour une hépatite B chronique (HBC) en 2008-2009, les trois-quarts étaient migrants. La part de l'Afrique subsaharienne était importante, puisque 70% des migrants découvrant leur séropositivité VIH, 54% de ceux pris en charge pour une HBC et un tiers de ceux déclarés pour une tuberculose étaient nés dans cette partie du monde. Les taux de découvertes de séropositivité VIH et de déclarations de tuberculose étaient en 2009 respectivement 10 et 8 fois plus élevés chez les migrants que chez les non-migrants. Le recours au dépistage du VIH était beaucoup trop tardif chez les migrants nés en Asie ou en Afrique du Nord, ce qui n'était pas observé chez ceux nés en Afrique subsaharienne. La prise en charge après un diagnostic d'HBC chez les migrants nés en Asie ou en zone de moyenne endémicité était également souvent tardive, alors que celle des migrants d'Afrique subsaharienne était l'une des plus rapides. Parallèlement aux actions de prévention, il est donc indispensable de renforcer les stratégies de dépistage du VIH, de l'hépatite B et de la tuberculose dans toutes les populations migrantes. Il est également nécessaire que leur accès au système de soins soit facilité, afin de permettre une prise en charge précoce et un suivi régulier, ceci dans le but de réduire les disparités observées. (R.A.).

Luan, L., Fraise, P., Cordel, H., et al. (2021). "Screening for active and latent TB among migrants in France." Int J Tuberc Lung Dis **25**(11): 903-910.

SETTING: Migrants to Europe face a disproportionate burden of infections, including TB, yet little is known about the approach taken by primary and secondary care providers to screening and treatment. We therefore explored policy and practice relating to screening of active TB and

latent TB infection (LTBI) in France. METHODS: We conducted an online national survey of French primary and secondary care physicians regarding their practices in relation to TB/LTBI screening among migrants. RESULTS: 367 physicians responded to the questionnaire among which 195 (53.1%) were primary care physicians, 126 (34.3%) were TB specialists in secondary care, and 46 (12.5%) other physicians; 303 (85.5%) were involved daily in the care of migrants. Most respondents recommended systematic TB screening with chest X-ray for migrants from medium and high-incidence countries (71.9%). Primary care physicians were less likely to offer screening than physicians in other settings (aOR 0.21, 95% CI 0.09-0.48). 220 (61.8%) offered LTBI screening for children (<15 years) and 34.0% for all migrants from high incidence countries. CONCLUSION: Improving awareness on TB screening is a critical next step to improve health outcomes in migrant groups and meet regional targets for tackling TB.

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Marsaudon, A., Dourgnon, P., Jusot, F., et al. (2020). "Anticiper les conséquences de l'épidémie de la Covid-19 et des politiques de confinement pour les personnes sans titre de séjour." *Questions D'economie De La Sante (Irdes)*(253): 6.

<https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/253-anticiper-les-consequences-de-l-epidemie-covid-19-et-des-politiques-de-confinement-pour-les-personnes-sans-titre-de-sejour.pdf>

À partir des données de l'enquête Premiers pas, réalisée en 2019 auprès de personnes étrangères sans titre de séjour et de structures leur proposant de l'assistance, cette étude éclaire les risques encourus par cette population du fait de l'épidémie et des confinements successifs. La vulnérabilité des personnes sans titre de séjour aux facteurs de risque médicaux, leur situation économique ainsi que leurs problèmes de santé mentale les rendent plus fragiles aux conséquences de la mise en quarantaine. Alors qu'un second confinement est en place, il est important d'en anticiper les conséquences sur une population mal connue. Ce Questions d'économie de la santé s'inscrit dans la suite des travaux menés à partir de l'enquête Premiers pas sur la santé et l'accès aux soins des personnes étrangères sans titre de séjour en France. Il vient compléter trois autres Questions d'économie de la santé. Le premier revenait sur l'histoire

des droits des personnes étrangères sans titre de séjour en France et dressait un état des lieux des connaissances concernant l'Aide médicale de l'État (AME). Le second présentait la méthodologie de l'enquête et le troisième était consacré à l'analyse de l'accès à l'AME.

Médecins du Monde (2021). Observatoire de l'accès aux droits et aux soins dans les programmes de Médecins du Monde en France : rapport 2020. Paris Médecins du Monde : 112.

<https://www.medecinsdumonde.org/statement/observatoire-de-lacces-aux-droits-et-aux-soins-2020/>

Ce rapport de l'observatoire de l'accès aux droits et aux soins est spécifiquement dédié à l'analyse de cette première année de crise sanitaire. Il se veut un témoignage objectif et équilibré de nos constats sur le terrain. Il décrit les conséquences de l'épidémie sur la santé pour les populations en situation de précarité et montre en quoi l'accès à des conditions de vie et d'hygiène dignes est un élément vital de la réponse à la Covid-19. Il illustre aussi l'importance d'avoir des stratégies de prévention adaptées et intégrées à des soins curatifs, de développer les démarches d'« allervers », la médiation en santé pour les populations en rupture et l'enjeu de travailler avec les personnes concernées.

Médecins du Monde (2020). Observatoire de l'accès aux droits et aux soins dans les programmes de Médecins du Monde en France : rapport 2019. Paris Médecins du Monde: 128.

<https://www.medecinsdumonde.org/statement/observatoire-de-lacces-aux-droits-et-aux-soins-2019/>

Médecins du Monde (2019). Observatoire de l'accès aux droits et aux soins dans les programmes de Médecins du Monde en France : rapport 2018. Paris Médecins du Monde: 128.

<https://www.medecinsdumonde.org/fr/actualites/presse/2019/10/15/19e-rapport-de-lacces-aux-soins-de-medecins-du-monde>

L'Observatoire de l'accès aux soins de Médecins du Monde est un outil essentiel de connaissance des populations rencontrées par les équipes de Médecins du Monde permettant de faire le lien entre leurs conditions de vie, leur environnement, leurs droits et leurs problèmes de santé, d'observer les discriminations dans l'accès aux soins, les dysfonctionnements des dispositifs, mais aussi les expériences positives. Il contribue à enrichir la connaissance des populations vulnérables en France, par ailleurs largement ignorées par les statistiques officielles françaises de santé publique : les données portent sur un nombre important de personnes sans domicile fixe ou vivant avec un statut administratif précaire sur le territoire. Au travers de ces programmes d'intervention en France, le rapport de l'année 2018 fait le même constat que celui des années précédentes : la grande majorité des personnes, qu'elle soit bénéficiaire de l'AME ou demandeuse d'asile, que nous accueillons et soignons dans nos centres d'accueil, de soin et d'orientation (CASO) se trouve physiquement et psychologiquement épuisée et nécessite une prise en charge médicale immédiate. Parmi elles, 85,7 % n'ont aucune couverture maladie.

Médecins du Monde (2018). La souffrance psychique des exilés. Une urgence de santé publique. Paris Médecins du Monde, Paris Centre Primo Levi: 34 , ill.

La santé mentale, et plus largement la souffrance psychique, se situe dans l'exact angle mort des politiques publiques concernant les personnes exilées, encore majoritairement orientées vers le soin des maladies infectieuses et la prise en charge des urgences médicales. Elle constitue pourtant une urgence sanitaire et un enjeu de santé publique majeur. Le Centre Primo Levi et

Médecins du Monde, tous deux engagés dans l'accueil et le soin des personnes exilées, réunissent leurs constats dans ce rapport. Ils dressent un tableau sans concession de la situation et mettent en avant des propositions afin que soit enfin élaborée, au niveau national, une réponse de santé publique adaptée à l'enjeu majeur que représente la santé mentale de ces personnes.

Médecins du Monde (2018). Observatoire de l'accès aux soins de la mission France de Médecins du Monde : rapport 2018. Paris Médecins du Monde : 134 tabl., annexes.

À l'occasion de la Journée mondiale du refus de la misère, le 17 octobre, Médecins du Monde (Mdm) publie son 18e rapport annuel sur l'accès aux droits et aux soins des plus démunis en France. 18e rapport annuel, 18e constat implacable et persistant tiré de nos actions : le non-accès aux droits et à la santé en France contribue à exclure de plus en plus de personnes précaires du système de santé. Sur les bases de données objectives, ce rapport témoigne des obstacles et des dysfonctionnements croissants dans l'accès aux soins et aux droits de ces personnes.

Médecins du Monde (2016). Observatoire de l'accès aux soins de la mission France de Médecins du Monde : rapport 2015. Paris Médecins du Monde: 152 , annexes.

L'Observatoire de l'accès aux soins de Médecins du Monde est un outil essentiel de connaissance des populations rencontrées par les équipes de Médecins du Monde permettant de faire le lien entre leurs conditions de vie, leur environnement, leurs droits et leurs problèmes de santé, d'observer les discriminations dans l'accès aux soins, les dysfonctionnements des dispositifs, mais aussi les expériences positives. Il contribue à enrichir la connaissance des populations vulnérables en France, par ailleurs largement ignorées par les statistiques officielles françaises de santé publique : les données portent sur un nombre important de personnes sans domicile fixe ou vivant avec un statut administratif précaire sur le territoire. A l'occasion de la Journée mondiale du refus de la misère, le 17 octobre 2016, Médecins du Monde a publié son 16e rapport de l'observatoire de l'accès aux droits et aux soins des plus démunis en France. Un rapport qui témoigne des difficultés persistantes rencontrées par ces personnes pour accéder à leurs droits et se faire soigner. Cette année, elle constate que les politiques publiques sont bien en-deçà des enjeux actuels. De plus, l'année 2015 a été marquée par de nombreuses réformes (loi de santé, loi immigration, loi asile, réforme PUMa....) qui sont venues modifier en profondeur le contexte législatif français en matière d'accueil et d'intégration des étrangers en particulier et qui ont fortement mobilisé les équipes de Mdm.

Miszkowicz, T., Julia, C., Hercberg, S., et al. (2017). "Évaluation des fréquences de consommation alimentaire d'une population d'immigrés en situation d'insertion en région parisienne." Bulletin Epidemiologique Hebdomadaire(19-20): 422-429.

[BDSP. Notice produite par SANTE-PUBLIQUE-FRANCE m9R0xo8F. Diffusion soumise à autorisation]. Introduction : en changeant de pays, les migrants doivent se réappropriier certains repères fondamentaux. Cette adaptation peut conduire à l'instauration d'habitudes alimentaires moins favorables à la santé. L'objectif de l'étude était de décrire les comportements alimentaires d'une population d'immigrés enquêtés lors de leur passage à l'Office français de l'immigration et de l'Intégration (OFII), et d'étudier les relations entre ces consommations et la

durée de résidence en France. Méthodes : les immigrés se rendaient à l'OFII afin de signer un contrat d'accueil et d'intégration (CAI). L'étude était proposée par l'enquêteur à ceux maîtrisant le français oral et écrit. Les participants recevaient un court questionnaire, renseignant les fréquences de consommations pour 11 groupes d'aliments. Afin d'étudier les relations entre ces consommations et la durée de résidence, des analyses ajustées sur les caractéristiques sociodémographiques ont été réalisées. Résultats : l'échantillon d'étude se composait de 723 participants. Parmi eux, 33,4% consommaient au moins cinq fruits et légumes par jour. Seuls 13,3% consommaient trois produits laitiers quotidiennement. Par ailleurs, 66,3% consommaient au moins deux fois par semaine des produits issus de la pêche. Plus d'un quart (28,0%) consommait des boissons sucrées quotidiennement, et la moitié des produits sucrés (48,7%) ou gras et salés (47,0%) tous les jours. Il n'y avait aucune association statistiquement significative entre consommations par groupe d'aliments et durée de résidence en France. Conclusion : les consommations alimentaires de la population immigrée présentent quelques spécificités en comparaison de celles de la population générale, nécessitant des messages de prévention adaptés.

Mizrahi, A. et Mizrahi, A. (2008). "Morbidity et soins médicaux aux personnes nées à l'étranger." Journal D'economie Médicale **26**(3): 159-176, tabl., graph.
http://argses.free.fr/textes/41_Morb_et_CM_etrangers_2006.pdf

[BDSP. Notice produite par ORSRA BIFDR0xD. Diffusion soumise à autorisation]. Peu de données nationales sont disponibles sur la situation sanitaire et médicale des étrangers en France : les auteurs ont cherché à regrouper les informations mobilisables sur ce thème. Les données utilisées proviennent de trois sources nationales : l'enquête décennale auprès des ménages sur la santé et les soins médicaux - ESSM (2003, et 1970,1980,1991), l'enquête permanente auprès des ménages sur les soins et la protection sociale - ESPS (2000 et 2002 regroupées), l'enquête sur les hospitalisés (EH) de 1991. Sont analysés quelques résultats sur la morbidité des étrangers comparée à celle des Français, puis la couverture maladie, et enfin la consommation médicale (médecine de ville et hospitalisation).

Mizrahi, A., et al. (1993). Accès aux soins et état de santé des populations immigrées en France. Rapport Credes. Paris CREDES: 62, tabl., graph.

Deux sources de données complémentaires, l'Enquête Santé et Protection Sociale (ESPS 1988-1991) et l'étude de clientèle des Centres de Soins Gratuits (CSG 1990-1991) ont permis d'étudier la différence entre l'état de santé et l'accès aux soins des étrangers et des Français favorisés ou non. La première enquête apporte des informations sur l'état de santé, la protection complémentaire maladie et la consommation médicale des ménages dont un membre au moins était assuré au Régime général. La seconde étudie une population défavorisée, ou plus exactement, les nouveaux patients de centres de soins gratuits. Les informations recueillies permettent de mieux appréhender les motifs de consultation et le type de protection sociale de cette population.

Malmusi, D. (2015). "Immigrants' health and health inequality by type of integration policies in European countries." Eur J Public Health **25**(2): 293-299.
<http://eurpub.oxfordjournals.org/content/25/2/293.long>

BACKGROUND: Recent efforts to characterize integration policy towards immigrants and to compare immigrants' health across countries have rarely been combined so far. This study explores the relationship of country-level integration policy with immigrants' health status in Europe. **METHODS:** Cross-sectional study with data from the 2011 European Union Survey on Income and Living Conditions. Fourteen countries were grouped according to a typology of integration policies based on the Migrant Integration Policy Index: 'multicultural' (highest scores: UK, Italy, Spain, Netherlands, Sweden, Belgium, Portugal, Norway, Finland), 'exclusionist' (lowest scores: Austria, Denmark) and 'assimilationist' (high or low depending on the dimension: France, Switzerland, Luxembourg). People born in the country (natives, n = 177 300) or outside the European Union with >10 years of residence (immigrants, n = 7088) were included. Prevalence ratios (PR) of fair/poor self-rated health between immigrants in each country cluster, and for immigrants versus natives within each, were computed adjusting by age, education, occupation and socio-economic conditions. **RESULTS:** Compared with multicultural countries, immigrants report worse health in exclusionist countries (age-adjusted PR, 95% CI: men 1.78, 1.49-2.12; women 1.58, 1.37-1.82; fully adjusted, men 1.78, 1.50-2.11; women 1.47, 1.26-1.70) and assimilationist countries (age-adjusted, men 1.21, 1.03-1.41; women 1.21, 1.06-1.39; fully adjusted, men 1.19, 1.02-1.40; women 1.22, 1.07-1.40). Health inequalities between immigrants and natives were also highest in exclusionist countries, where they persisted even after adjusting for differences in socio-economic situation. **CONCLUSION:** Immigrants in 'exclusionist' countries experience poorer socio-economic and health outcomes. Future studies should confirm whether and how integration policy models could make a difference on migrants' health.

Parkin, D. M. et Khat, M. (1996). "Studies of cancer in migrants: rationale and methodology." Eur J Cancer **32a**(5): 761-771.

Migrant populations comprise substantial numbers of individuals who have undergone a change in their environment, sociocultural and physical. The corresponding changes in risk for different cancers have, therefore, been widely used to infer the relative importance of environmental factors versus inherited predisposition in cancer aetiology. The uncontrolled experiment of migration also provides an indication of the possible effects of certain preventive interventions at the population level--especially with respect to diet. In the past, there has been a surprising lack of attention to analytical methods for migrant data, and we review the epidemiological methods available to best bring out the relevant differences in risk. The major sources of bias which confuse interpretation are also described. Migrant studies are classified into four groups, in a hierarchy corresponding to the amount of information which they can provide, and examples of each type are provided.

Pauti, M. D., Tomasino, A., Mari, C., et al. (2016). "Limiter les opportunités manquées de dépistage des hépatites B et C chez les migrants en situation de précarité : le programme de Médecins du Monde en France." Bull Epidemiol Hebd(13-14): 230-236.

La Mission France de Médecins du Monde a pour objectif de faciliter l'accès aux soins et aux droits des populations vulnérables dans le système de droit commun, et de témoigner de leur situation. La population reçue dans ses Centres d'accueil, de soins et d'orientation (CASO), à 94,5% étrangère, vit dans des conditions précaires et est particulièrement touchée par les hépatites B et C. Depuis 2000, un dossier social et médical standardisé a été mis en place dans

les CASO. Le dossier médical aborde la connaissance du statut sérologique vis-à-vis du VHB et du VHC. Un dépistage est proposé à tous les nouveaux patients, après un entretien de prévention individualisé. En 2014, les 20 CASO ont reçu 28 517 patients différents. Moins de 24% connaissaient leur statut vis-à-vis des hépatites. Les Français étaient 58% à l'ignorer contre 78% des étrangers. Pour ces derniers, la méconnaissance était plus répandue parmi les classes d'âge extrêmes. Les personnes originaires d'Afrique subsaharienne et d'Océanie/Amériques étaient significativement plus nombreuses à connaître leur statut comparativement aux autres étrangers. La durée de séjour en France favorisait l'accès au dépistage. Le taux de couverture vaccinale vis-à-vis du VHB des personnes de plus de 15 ans était faible (26,9%), meilleur chez les moins de 15 ans (58,1%). Chez ces derniers, plus les conditions de logement se dégradent, plus ce taux était bas, mais il augmentait avec la durée de séjour en France et chez les enfants suivis par les services de Protection maternelle et infantile. Parmi les patients dépistés dans quatre CASO en 2014, les prévalences de l'antigène HBs et des anticorps anti-VHC étaient respectivement de 8,6% et 4,3%. Ces résultats soulignent toute la nécessité de développer des projets spécifiques de prévention envers les populations migrantes en situation de précarité

Petruzzi, M., Veisse, A., Wolmark, L., et al. (2019). "Impact des violences de genre sur la santé des exilé(e)s." *Bull Epidemiol Hebd*(17-18): 327-333.

Objectifs et méthodes : cette étude a pour but d'évaluer la fréquence des violences fondées sur le genre parmi les personnes exilées suivies au Comité pour la santé des exilés (Comède), les caractéristiques des victimes, ainsi que l'impact de ces violences sur la santé. Elle se fonde sur des données recueillies auprès des 2 065 femmes, dont 449 femmes enceintes, et 3 816 hommes ayant bénéficié d'un bilan de santé et d'un suivi médical au Centre de santé du Comède entre 2012 et 2017, ainsi que des personnes suivies en psychothérapie. Résultats et discussion : entre 2012 et 2017 au Comède, des antécédents de violences de genre ont été retrouvés chez 30% des femmes et 4% des hommes. Ces violences sont plus fréquentes chez les jeunes et chez les exilés originaires d'Afrique subsaharienne. Elles sont très liées à la situation de vulnérabilité sociale, en particulier une partie des viols subis par les femmes ayant lieu en France. Les troubles psychiques graves sont particulièrement fréquents parmi les victimes (59% des femmes et 84,9% des hommes) et sévères sur le plan clinique, plus des trois quarts des patients concernés souffrant de syndromes psycho traumatiques et de traumatismes complexes. Les victimes de violence fondées sur le genre sont également plus souvent atteintes d'infection par le VIH et relèvent plus souvent d'une prise en charge pluridisciplinaire, incluant des soins ostéopathiques. Ces résultats corroborent en partie d'autres travaux réalisés sur le sujet, ces violences apparaissant notamment plus fréquentes parmi les femmes et plus sévères parmi les hommes exilés. Conclusion : cette étude met en lumière l'impact des violences de genre dans un contexte de multiples facteurs de vulnérabilité pour la santé, la perpétuation de certaines violences en France signant l'insuffisance ou la défaillance des dispositifs de protection théoriquement prévus. Les actions de prévention et de soins reposent sur la création d'espaces de parole rassurants, individuels et collectifs, dans un cadre pluridisciplinaire intégrant la nécessité de la « mise à l'abri » des personnes exilées.

Prieur, C., Dourgnon, P., Jusot, F., et al. (2022). "Une personne sans titre de séjour sur six souffre de troubles de stress post-traumatique en France." *Questions D'economie De La Sante (Irdes)*(266): 8. <https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/266-une-personne-sans-titre-de-sejour-sur-six-souffre-de-troubles-de-stress-post-traumatique-en-france.pdf>

Les Troubles de stress post-traumatique (TSPT) sont des troubles psychiatriques qui surviennent après un événement traumatisant. Ils se traduisent par une souffrance morale et des complications physiques qui altèrent profondément la vie personnelle, sociale et professionnelle. Ces troubles nécessitent une prise en charge spécialisée. Pour les personnes sans titre de séjour, la migration peut avoir donné lieu à des expériences traumatiques sur le parcours migratoire ou dans le pays d'accueil, qui peuvent s'ajouter à des traumatismes plus anciens survenus dans le pays d'origine, alors que les conditions de vie sur le sol français sont susceptibles de favoriser le développement de TSPT. Quelle est la prévalence des troubles de stress post-traumatique au sein de cette population encore mal connue ? Comment les conditions de migration et les conditions de vie dans le pays d'accueil jouent-elles sur leur prévalence ? Quel est l'accès à l'Aide médicale de l'Etat (AME) des personnes qui en souffrent ?

Revault, P., et al. (2017). "Infections par le VHB et le VHC chez les personnes migrantes, en situation de vulnérabilité, reçues au Comède entre 2007 et 2016." Bulletin Epidemiologique Hebdomadaire(14-15): 271-276.

[BDSP. Notice produite par SANTE-PUBLIQUE-FRANCE A8IR0x9o. Diffusion soumise à autorisation]. Le centre de santé du Comède à l'hôpital Bicêtre reçoit en consultation de médecine un public migrant vivant en Île-de-France, récemment arrivé en France, particulièrement vulnérable. Un bilan de santé est systématiquement proposé, comportant en particulier le dépistage des infections par le VHB et le VHC et réalisé par 96% des consultants. Les résultats sont documentés en continu par les soignants dans une base de données et dans un dossier médical papier. Les prévalences des personnes chroniquement infectées par le VHB et le VHC, parmi 16 095 personnes accueillies en consultation de médecine générale au centre de santé entre 2007 et 2016, sont de 6,8% pour le VHB et de 1,8% pour le VHC. Seules 8% des personnes infectées par le VHB et 15% de celles infectées par le VHC connaissaient déjà leur statut sérologique. Parmi les personnes accueillies en 2014, 6% étaient vaccinées contre le VHB et 45% nécessitaient un rattrapage vaccinal. Un cumul de vulnérabilités plus important est retrouvé chez les personnes infectées par le VHC, qui sont plus âgées. Ces résultats sont en faveur d'une proposition de dépistage au moyen des trois marqueurs du VHB et des anticorps du VHC, complété si besoin par un rattrapage vaccinal ou une orientation pour un suivi et un traitement. De façon plus générale, il s'agit d'améliorer l'accès aux soins et à la prévention chez les migrants cumulant des facteurs de vulnérabilité.

Rivenbark, J. G. et Ichou, M. (2020). "Discrimination in healthcare as a barrier to care: experiences of socially disadvantaged populations in France from a nationally representative survey." BMC Public Health **20**(1): 31.

BACKGROUND: People in socially disadvantaged groups face a myriad of challenges to their health. Discrimination, based on group status such as gender, immigration generation, race/ethnicity, or religion, are a well-documented health challenge. However, less is known about experiences of discrimination specifically within healthcare settings, and how it may act as a barrier to healthcare. **METHODS:** Using data from a nationally representative survey of France (N = 21,761) with an oversample of immigrants, we examine rates of reported discrimination in healthcare settings, rates of foregoing healthcare, and whether discrimination could explain disparities in foregoing care across social groups. **RESULTS:** Rates of both reporting

discrimination within healthcare and reporting foregone care in the past 12 months were generally highest among women, immigrants from Africa or Overseas France, and Muslims. For all of these groups, experiences of discrimination potentially explained significant proportions of their disparity in foregone care (Percent disparity in foregone care explained for: women = 17%, second-generation immigrants = 8%, Overseas France = 13%, North Africa = 22%, Sub-Saharan Africa = 32%, Muslims = 26%). Rates of foregone care were also higher for those of mixed origin and people who reported "Other Religion", but foregone healthcare was not associated with discrimination for those groups. CONCLUSIONS: Experiences of discrimination within the healthcare setting may present a barrier to healthcare for people that are socially disadvantaged due to gender, immigration, race/ethnicity, or religion. Researchers and policymakers should consider barriers to healthcare that lie within the healthcare experience itself as potential intervention targets.

Romby, A., Fleury, F. et Revault, P. (2013). "Migrants en situation de vulnérabilité et tuberculose, suivi et dépistages autour des cas. Enquête au centre de santé du Comède, France, 2009-2011." Bull Epidemiol Hebd(28-29): 348-353.

Introduction - Le traitement et le suivi de la tuberculose chez les migrants/étrangers en situation de vulnérabilité représentent un enjeu majeur de santé publique. Le Comité médical pour les exilés (Comède) s'intéresse au suivi des patients qui ont consulté dans la structure et aux enquêtes de dépistage dans leur entourage. Méthode - Une étude rétrospective des cas de tuberculose chez les patients suivis entre 2009 et 2011 a été menée. Les données sociodémographiques et d'issues de traitement, le vécu de la maladie et les données de dépistage autour de ces cas ont été recueillis. Résultats - Sur 13 patients, un a arrêté le traitement. Trois enquêtes n'ont pas pu être réalisées et deux n'ont pas identifié de sujets contact. Seules trois enquêtes ont donné lieu au dépistage des sujets contacts identifiés. Des difficultés de communication entre patients et soignants ainsi qu'entre professionnels ont été identifiées. Conclusion - Les données de suivi de traitement et d'enquêtes sont semblables à celles retrouvées en population générale. L'étude des cas ayant posé un problème de suivi ou de dépistage a permis d'identifier des pistes d'amélioration. La création d'un réseau régional de prise en charge des patients migrants/précaires souffrant de tuberculose, formant un maillage entre les équipes des centres hospitaliers, des associations et des Centres de lutte antituberculeuse, permettrait d'apporter des réponses mieux adaptées aux problèmes de compréhension et d'exclusion des personnes, et de pallier les difficultés de coordination entre professionnels. (R.A.)

Roudot-Thoraval, F., et al. (2017). "Prise en charge des populations précaires fréquentant les permanences d'accès aux soins de santé, atteintes d'hépatites et ayant bénéficié d'une proposition systématique de dépistage : étude PrécaVIR 2007-2015." Bulletin Epidemiologique Hebdomadaire(14-15): 263-270.

http://invs.santepubliquefrance.fr/beh/2017/14-15/2017_14-15_2.html

[BDSP. Notice produite par SANTE-PUBLIQUE-FRANCE DqR0xCr8. Diffusion soumise à autorisation]. Chez les personnes en situation de précarité, la prévalence des hépatites est plus élevée que dans la population générale. Nous rapportons notre expérience du dépistage systématique du VHB et du VHC dans deux permanences d'accès aux soins de santé (PASS) et de la prise en charge des personnes dépistées positives. De mai 2007 à décembre 2015, un

dépistage a été proposé à 3 540 sujets et effectué chez 2 870 d'entre eux (81%), plus souvent en cas de prélèvement immédiat sur site. Il s'agissait de migrants dans 94% des cas, majoritairement originaires d'Afrique subsaharienne (66%) ; 78% étaient demandeurs d'asile ou en séjour irrégulier. Une sérologie d'hépatite positive était observée chez 292 consultants (10,2%) : l'antigène HBs était positif chez 211 (7,4%) et les anticorps anti-VHC positifs chez 88 (3,1%). Seuls 21 patients connaissaient au préalable leur infection. L'accès à une consultation spécialisée et à un bilan virologique a été possible dans 90% des cas. Une évaluation de la fibrose a été effectuée chez 102 patients VHB et 31 des 42 patients ARN VHC positifs. Un traitement a été institué chez 32 des 39 patients VHB le justifiant et chez 22 des patients VHC. À deux ans, 59% et 65% respectivement des patients VHB et VHC étaient toujours suivis. Le dépistage systématique des virus des hépatites en soins primaires des populations précaires est possible et efficace. Sa mise en oeuvre devrait être encouragée auprès des professionnels en proposant, dans la mesure du possible, un prélèvement immédiat. Une amélioration du suivi à long terme reste souhaitable.

Roulot, D., Briclher, S., Layese, R., et al. (2020). "Origin, HDV genotype and persistent viremia determine outcome and treatment response in patients with chronic hepatitis delta." *J Hepatol* **73**(5): 1046-1062.

BACKGROUND & AIMS: HDV infection causes severe chronic liver disease in individuals infected with HBV. However, the factors associated with poor prognosis are largely unknown. Thus, we aimed to identify prognostic factors in patients with HDV infection. **METHODS:** The French National Reference Centre for HDV performed a nationwide retrospective study on 1,112 HDV-infected patients, collecting epidemiological, clinical, virological and histological data from the initial referral to the last recorded follow-up. **RESULTS:** The median age of our cohort was 36.5 (29.9-43.2) years and 68.6% of our cohort were male. Most patients whose birthplace was known were immigrants from sub-Saharan Africa (52.5%), southern and eastern Europe (21.3%), northern Africa and the Middle East (6.2%), Asia (5.9%) and South America (0.3%). Only 150 patients (13.8%) were French native. HDV load was positive in 659 of 748 tested patients (88.1%). HDV-1 was predominant (75.9%), followed by sub-Saharan genotypes: HDV-5 (17.6%), HDV-7 (2.9%), HDV-6 (1.8%) and HDV-8 (1.6%). At referral, 312 patients (28.2%) had cirrhosis, half having experienced at least 1 episode of hepatic decompensation. Cirrhosis was significantly less frequent in African than in European patients regardless of HDV genotype. At the end of follow-up (median 3.0 [0.8-7.2] years), 48.8% of the patients had developed cirrhosis, 24.2% had ≥ 1 episode(s) of decompensation and 9.2% had hepatocellular carcinoma. European HDV-1 and African HDV-5 patients were more at risk of developing cirrhosis. Persistent replicative HDV infection was associated with decompensation, hepatocellular carcinoma and death. African patients displayed better response to interferon therapy than non-African patients (46.4% vs. 29.1%, $p < 0.001$). HDV viral load at baseline was significantly lower in responders than in non-responders. **CONCLUSION:** Place of birth, HDV genotype and persistent viremia constitute the main determinants of liver involvement and response to treatment in chronic HDV-infected patients. **LAY SUMMARY:** Chronic liver infection by hepatitis delta virus (HDV) is the most severe form of chronic viral hepatitis. Despite the fact that at least 15-20 million people are chronically infected by HDV worldwide, factors determining the severity of liver involvement are largely unknown. By investigating a large cohort of 1,112 HDV-infected patients followed-up in France, but coming from different areas of the world, we were able to determine that HDV genotype, place of birth (reflecting both viral and host-related factors) and persistent viremia constitute the main determinants of liver involvement and response to treatment.

Saurel Cubizolles, M. J., et al. (2012). "Santé périnatale des femmes étrangères en France." Numéro thématique. Santé et recours aux soins des migrants en France.(2-3-4): 30-34.

Introduction et méthode - Cet article montre les différences de situation sociodémographique, de surveillance prénatale et d'issue de la grossesse selon la nationalité de la mère parmi les femmes qui ont accouché en France métropolitaine en 2010. En outre, il présente les données les plus récentes, sur la période 2003-2007 concernant les décès maternels et leurs causes et sur la période 1998-2007 concernant les caractéristiques des femmes décédées. Résultats - L'ensemble des femmes étrangères, et particulièrement les femmes d'Afrique subsaharienne, représente une population à risque périnatal : femmes plus âgées, parité plus élevée, niveau d'études plus faible, ressources issues d'une activité professionnelle moins fréquentes. Cependant, la consommation de tabac est moins fréquente que chez les femmes françaises. Les femmes d'Afrique du Nord présentent certains facteurs de risque périnatal mais pas d'excès de mortalité, de prématurité, ni d'hypotrophie. En revanche, les femmes d'Afrique subsaharienne ont un taux de césariennes élevé et des risques de mortalité, de prématurité et d'hypotrophie plus élevés que ceux des femmes françaises. Le taux de mortalité maternelle des femmes étrangères, considérées globalement, est de 12,5 pour 100 000 naissances vivantes versus 7,9 pour les femmes françaises. Il existe toujours des disparités entre les nationalités étrangères elles-mêmes. Le taux pour les femmes de nationalité étrangère autre que celles de l'Europe ou du Maghreb est 2 à 3 fois plus élevé que celui des Françaises. Conclusion - Ces résultats soulignent les besoins de prévention et de prise en charge pour certains groupes de femmes étrangères, et tout particulièrement les femmes d'Afrique subsaharienne, assez nombreuses en France. (R.A.).

Sauvegrain, P., Stewart, Z., Gonthier, C., et al. (2017). "Accès aux soins prénatals et santé maternelle des femmes immigrées." Bull Epidemiol Hebd(19-20): 389-395.

Introduction : en France en 2015, 22% des naissances vivantes concernaient des femmes nées à l'étranger. En adéquation avec la littérature européenne, de récentes recherches font état d'un risque accru de mort maternelle ou de morbidité maternelle sévère (MMS) pour ces femmes. Notre objectif est d'analyser, en lien avec le statut migratoire, les inégalités sociales d'accès aux soins prénatals et de santé maternelle à partir de données françaises. Matériel et méthodes : les données sont issues de quatre études françaises : l'Enquête nationale confidentielle sur les morts maternelles (ENCMM) 2007-2012, l'étude Epimoms de la morbidité maternelle sévère menée dans six régions en 2012-2013, la cohorte prospective PreCARE des femmes ayant accouché en 2010-2011 au sein de quatre maternités du GHU Paris-Nord et une étude qualitative menée en 2016 auprès de femmes enceintes hypertendues. Résultats : les femmes immigrées présentent un risque accru de décès maternel, en particulier celles nées en Afrique subsaharienne (RR: 3,4 [IC95%: 2,3-5,1]). Ces dernières présentent également un risque significativement plus important de MMS (OR ajusté : 1,8 [1,4-2,4]) portant majoritairement sur les complications hypertensives et les sepsis. Ces travaux mettent de plus en évidence un taux de suivi prénatal inadéquat très élevé ainsi que certains soins différenciés pour les femmes nées en Afrique subsaharienne. Conclusion : les données françaises, qui montrent l'existence d'inégalités sociales de santé maternelle entre femmes immigrées et femmes nées en France, sont convergentes avec les données de la littérature internationale. L'hypothèse explicative de soins prénatals quantitativement et qualitativement moindres est de plus étayée par ces

résultats. Ceux-ci soulignent la nécessité de poursuivre les recherches concernant les barrières à l'accès au système de soins et aux soins de qualité des femmes immigrées enceintes, et en particulier les implications que peuvent avoir les représentations et les discriminations dans la genèse des inégalités de santé maternelle et périnatale.

Schmengler, H., El-Khoury Lesueur, F., Yermachenko, A., et al. (2019). "Maternal immigrant status and signs of neurodevelopmental problems in early childhood: The French representative ELFE birth cohort." *Autism Res* **12**(12): 1845-1859.

A growing body of evidence suggests that children of immigrants may have increased risks of neurodevelopmental disorders. However, evidence based on parent report and on very young children is lacking. We therefore investigated the association between maternal immigrant status and early signs of neurodevelopmental problems in a population-based sample of 2-year-old children using standardized parent-report instruments. We used data from the French representative Etude Longitudinale Française depuis l'Enfance birth cohort, initiated in 2011. The study sample included 9,900 children of nonimmigrant French, 1,403 children of second, and 1,171 children of first generation immigrant women followed-up to age 2 years. Neurodevelopment was assessed using the Modified Checklist for Autism in Toddlers (M-CHAT) and an adaptation of the MacArthur-Bates Communicative Development Inventories (MB-CDI). In fully adjusted linear regression models, maternal immigrant status was associated with M-CHAT scores, with stronger associations in children of first (beta-coefficient: 0.19; 95% CI 0.08-0.29) than second generation immigrants (0.09; 0.01-0.17). This association was especially strong among children of first generation immigrant mothers native of North Africa (vs. nonimmigrant French: 0.33; 0.16-0.49) and French-speaking Sub-Saharan Africa (0.26; 0.07-0.45). MB-CDI scores were lowest among children of first generation immigrant mothers, particularly from mostly non-francophone regions. Children of first generation immigrant mothers were most likely to have simultaneously low MB-CDI and high M-CHAT scores. Our findings suggest that maternal immigrant status is associated with early signs of neurodevelopmental difficulties, with strong variations according to maternal region of origin. Further research is necessary to test whether these associations persist and to determine the underlying mechanisms. *Autism Res* 2019, 12: 1845-1859. (c) 2019 International Society for Autism Research, Wiley Periodicals, Inc. LAY SUMMARY: We asked immigrant and nonimmigrant mothers in France about early signs of neurodevelopmental problems in their 2-year-old children. Overall, we found that children of immigrants may be at higher risk of showing these early warning signs, as compared to children of nonimmigrants. This is in line with previous studies, which were based on doctors' diagnoses at later ages. However, our results differed depending on the mothers' regions of origin. We found the highest risks in children of first generation immigrants from North and French-speaking Sub-Saharan Africa, who also seemed especially at risk of neurodevelopmental problems combined with low language development.

Sirna, F., Sauvegrain, P., Azria, E., et al. (2021). "Un système de santé universel ? Inégalités et discriminations dans le soin en France." *In De Facto*(25): 66.

Ce numéro présente des enquêtes récentes qui permettent d'éclairer, à différents niveaux, la question des inégalités et des discriminations à l'encontre des immigré-es et de leurs descendant-es dans le système de santé, à la fois en tant que patient-es mais aussi en tant que soignant-es.

Tapie-Deceleyran, F., Astre, H., Aras, N., et al. (2017). "Étude nationale sur les caractéristiques des personnes migrantes consultant dans les Permanences d'accès aux soins de santé en France en 2016." Bulletin Epidemiologique Hebdomadaire(19-20): 396-405.

[BDSP. Notice produite par SANTE-PUBLIQUE-FRANCE ER0xDr8o. Diffusion soumise à autorisation]. Les Permanences d'accès aux soins de santé (PASS) sont des structures majoritairement hospitalières qui assurent un accueil médico-social des patients en situation de précarité, dont une partie importante est constituée d'immigrés récemment arrivés en France. À partir d'une étude descriptive nationale réalisée en 2016 auprès de 848 immigrants ayant consulté dans 30 PASS de France métropolitaine et de Guyane, cet article décrit leurs caractéristiques sociales, médicales et administratives, en fonction de l'ancienneté d'arrivée en France. Les personnes immigrées consultant dans les PASS étaient principalement des hommes jeunes avec un niveau d'éducation secondaire, demandeurs d'asile ou sans droit au séjour, en situation de précarité et d'isolement social. L'Afrique subsaharienne est la première région d'origine. Les motifs de consultations étaient souvent multiples, dominés par les troubles digestifs, les maladies infectieuses et les troubles musculosquelettiques. Les violences subies étaient fréquemment rapportées. Les migrants sans domicile, sans couverture maladie et en insécurité alimentaire, ainsi que les femmes étaient davantage représentées parmi les consultants arrivés en France depuis moins d'un an. Ces derniers étant majoritaires parmi les consultants, ceci conforte la place privilégiée des PASS pour répondre aux enjeux de l'accès aux soins des primo-arrivants, en particulier la prise en charge des pathologies chroniques, et pour assurer une transition vers le système de droit commun.

Vaillant, N. et Wolff, F. C. (2010). Origin differences in self-reported health among older migrants living in France. Working Paper. Nantes Université de Nantes. Laboratoire d'Economie et de Management Nantes-Atlantique: 19 , tabl.

http://hal.archives-ouvertes.fr/docs/00/44/96/08/PDF/LEMNA_WP_201001.pdf

Little is known about the health status of older migrants living in Europe. Using detailed data collected in 2003, we investigate differences in health status by origin country within the older immigrant population living in France using a self-rated health measure. The database used in this research is the 'Passage à la Retraite des Immigrés' survey, conducted from November 2002 to February 2003 on a sample of 6,211 migrants aged 45 to 70 and living in France at the time of survey. A difficulty with the self-rated outcome is that it may not be comparable between different origin groups, in particular because of cultural and linguistic differences. We thus estimate generalized ordered Probit models and construct for each respondent an indicator of health net of cross-cultural effects. Male immigrants from Southern Africa and Asia and female immigrants from Northern Europe, Southern Africa and Asia are more likely to be in good health, while the health status is lower among immigrants from Eastern Europe living in France. The diversity in health status within the immigrant population is large in France. These results are helpful in order to target the more disadvantaged origin groups and to adjust the provision of health care.

Veïsse, A., Wolmark, L. et Revault, P. (2012). "Santé mentale des migrants/étrangers : mieux caractériser pour mieux soigner." Bull Epidemiol Hebd(2-3-4): 36-40.

Introduction - Les pathologies psychiques représentent l'un des enjeux majeurs de santé chez les migrants/étrangers en France, mais ceux-ci sont souvent ignorés dans les études en population générale. Matériel et méthode - Les données recueillies au sein des dispositifs de soins du Comède (Comité médical pour les exilés) ont permis de décrire les psycho traumatismes dans une population d'exilés marquée par des antécédents de violence, la précarité du statut administratif et des difficultés de communication pour les personnes non francophones. Résultats - Entre 2004 et 2010, parmi les 17 836 personnes ayant consulté un médecin dans les centres de santé du Comède, plus de 60 % avaient subi des violences dans leur pays d'origine, et près d'un quart la torture. Le taux de prévalence des psycho traumatismes à la première consultation était de 112 . Il était le plus élevé chez les personnes âgées de 29 à 49 ans, chez les femmes, et variait selon la nationalité. Ces résultats montrent une forte prévalence des syndromes psycho traumatiques dans cette population, plus élevée que la prévalence des pathologies psychiques rapportée dans les études en population générale. Conclusion - La fréquence et les caractéristiques des maladies psychiques chez les migrants/étrangers en situation de vulnérabilité nécessitent de développer la recherche associant enquêtes épidémiologiques et études qualitatives et de faire évoluer les catégories diagnostiques utilisées (R.A.) ;

Veisse, A., Wolmark, L., Revault, P., et al. (2017). "Violence, vulnérabilité sociale et troubles psychiques chez les migrants/exilés." *Bull Epidemiol Hebd*(19-20): 405-414.

Objectifs : mesurer et caractériser trois phénomènes associés dans l'observation du Comité pour la santé des exilés (Comède) : les violences subies par les exilés, leurs conditions de vulnérabilité sociale et les troubles psychiques graves dont ils sont atteints, ainsi que les liens entre ces trois phénomènes. Méthodes : les taux de prévalence des troubles psychiques graves ont été calculés parmi les 16 095 personnes ayant effectué un bilan de santé au Comède entre 2007 et 2016. Les résultats portant sur les autres indicateurs (violence, vulnérabilité sociale, symptômes et syndromes) sont issus d'une analyse des consultations médicales et psychologiques de 5 204 patients reçus entre 2012 et 2016. Résultats : entre 2012 et 2016, 62% des personnes accueillies ont déclaré des antécédents de violence, 14% des antécédents de torture et 13% des violences liées au genre et à l'orientation sexuelle. Les violences extrêmes plus fréquentes parmi les femmes et les demandeurs d'asile sont très liées à la nationalité et au statut social dans le pays d'origine. Toutes les formes de violences sont liées à une probabilité significativement plus élevée d'être suivi en psychothérapie trois fois plus souvent en cas de violences extrêmes et fortement associées à des formes graves de troubles psychiques. Par ailleurs, ces personnes exilées cumulent les facteurs de vulnérabilité sociale : faibles ressources financières, absence de logement et d'hébergement, précarité du séjour, défaut de protection maladie, obstacles linguistiques, difficultés d'accès à l'alimentation, isolement et situation de détresse sociale (24% cumulent au moins 5 critères de vulnérabilité). Ces indicateurs de vulnérabilité sociale sont très liés aux antécédents de violence subie, en particulier pour les personnes en situation de détresse sociale. Les antécédents de torture et de violence liée au genre sont fortement associés à la précarité du quotidien et de l'hébergement, à l'isolement social et plus encore à l'isolement relationnel. La prévalence globale des troubles psychiques graves s'élève à 16,6% dans cette population, plus importante chez les femmes (23,5% versus 13,8% chez les hommes). Ces troubles sont constitués pour les deux tiers de syndromes psycho traumatiques (60%) et de traumatismes complexes (8%), formes cliniques plus fréquentes parmi les demandeurs d'asile et les victimes de violence intentionnelle, particulièrement pour certaines nationalités. Les tableaux

dépressifs (22%) sont plus fréquents chez les exilés en situation de détresse sociale et les personnes déboutées de leur demande d'asile. Le retentissement de ces troubles est conséquent, tant aux plans de la concentration, de l'attention et de la mémoire que du risque suicidaire. Conclusion : ces résultats nous conduisent à recommander une meilleure prise en compte des questions de santé mentale des exilés et de leur accompagnement social dans les actions de prévention et de soins. Il est nécessaire d'intégrer les besoins spécifiques de ces personnes tout au long du parcours de soins, depuis le bilan de santé librement consenti jusqu'à la prise en charge pluridisciplinaire. Et ce, sur l'ensemble du territoire, en favorisant notamment le recours à l'interprétariat professionnel et les autres mesures facilitant l'accès aux soins.

Vignier, N., Desgrees du Lou, A., Pannetier, J., et al. (2018). "Access to health insurance coverage among sub-Saharan African migrants living in France: Results of the ANRS-PARCOURS study." *PLoS One* **13**(2): e0192916.

BACKGROUND: Migrants' access to care depends on their health insurance coverage in the host country. We aimed to evaluate in France the dynamic and the determinants of health insurance coverage acquisition among sub-Saharan migrants. **METHODS:** In the PARCOURS life-event retrospective survey conducted in 2012-2013 in health-care facilities in the Paris region, data on health insurance coverage (HIC) each year since arrival in France has been collected among three groups of sub-Saharan migrants recruited in primary care centres (N = 763), centres for HIV care (N = 923) and for chronic hepatitis B care (N = 778). Year to year, the determinants of the acquisition and lapse of HIC were analysed with mixed-effects logistic regression models. **RESULTS:** In the year of arrival, 63.4% of women and 55.3% of men obtained HIC. But three years after arrival, still 14% of women and 19% of men had not obtained HIC. HIC acquisition was accelerated in case of HIV or hepatitis B infection, for migrants arrived after 2000, and for women in case of pregnancy and when they were studying. Conversely, it was slowed down in case of lack of a residency permit and lack of financial resources for men. In addition, women and men without residency permits were more likely to have lost HIC when they had one. **CONCLUSION:** In France, the health insurance system aiming at protecting all, including undocumented migrants, leads to a prompt access to HIC for migrants from sub-Saharan Africa. Nevertheless, this access may be impaired by administrative and social insecurities.

Vignier, N., et al. (2017). "Accès aux soins des personnes originaires d'Afrique subsaharienne vivant avec une hépatite B chronique." *Sante Publique* **30**(3): 361-370.

[BDSP. Notice produite par EHESP mo8R0x8A. Diffusion soumise à autorisation]. Objectif : L'objectif de cette étude est d'analyser l'accès aux soins des personnes originaires d'Afrique subsaharienne (ASS) vivant avec une hépatite B chronique (HBC) en France. Méthodes : L'enquête ANRS-Parcours est une étude biographique réalisée en 2012-2013 auprès de personnes originaires d'ASS recrutées dans des services de prise en charge de l'HBC en Ile-de-France. Les données ont été recueillies en face-à-face à l'aide d'une grille biographique et d'un questionnaire standardisé. Résultats : Parmi les 619 participants, 96,4% ont une couverture maladie de base dont 18,6% la Couverture maladie universelle (CMU) et 23,4% l'Aide médicale d'état (AME). Un tiers des bénéficiaires de l'Assurance maladie n'ont pas de complémentaire santé et 75,7% sont couverts au titre d'une Affection longue durée. L'obtention d'une couverture maladie après l'arrivée en France a lieu en médiane la première année. Parmi les participants, 22,0% rapportent avoir renoncé aux soins pour raisons financières depuis l'arrivée

en France et 9,7% avoir vécu un refus de soins le plus souvent par refus de la CMU ou l'AME. Une fois diagnostiqué, l'entrée en soins a lieu en médiane l'année-même du diagnostic. Le retard à l'entrée en soins est plus fréquent chez les personnes sans couverture maladie l'année du diagnostic. Les ruptures de suivi de plus de 12 mois sont rares. Conclusion : Les personnes originaires d'ASS vivant avec une HBC accèdent rapidement à une couverture maladie et aux soins. Cependant, des obstacles à l'accès aux soins persistent pour certaines du fait notamment de l'absence ou de l'incomplétude d'une couverture maladie et des refus de soins aux bénéficiaires de l'AME ou de la CMU.

Vignier, N., Dray Spira, R., Pannetier, J., et al. (2018). "Refusal to provide healthcare to sub-Saharan migrants in France: a comparison according to their HIV and HBV status." *Eur J Public Health* **28**(5): 904-910.

Background: In this study, we aim to measure and compare the frequency of reported denial of care in sub-Saharan African migrants living in the Paris area, according to their HIV and HBV status and social and migration characteristics. Methods: The ANRS-PARCOURS study is a life-event survey conducted in 2012-13 in healthcare facilities in the Paris area, among three groups of sub-Saharan migrants recruited in primary care centres (N = 760; reference group), in dedicated centres for HIV care (N = 922; HIV group) and in centres for chronic hepatitis B care (N = 777; CHB group). Characteristics associated with refusal of care since arrival in France were identified using a logistic regression model. Results: Compared to the reference group (6%, $P < 0.001$), the reported refusal of care was twice as high in the HIV group (12%) and the CHB group (10%). In the multivariate analysis, men and women living with HIV were at greater risk of being denied care (aOR = 2.20[1.14-4.25] and 2.24[1.25-4.01]). Women covered by the specific health insurance (HI) for precarious or undocumented migrants were also at higher risk (aOR = 2.07[1.10-3.89] and 2.69[1.18-6.10], respectively). The risk was also increased in men who remained for at least one year without permit of residence or without HI and among those who were threatened in their country. Conclusion: Refusals to provide healthcare are frequent and deleterious situations especially for migrants living with HIV. Health decision makers, public insurance bodies and health professional councils must address this issue to improve equity in the healthcare system.

Wanner, P., et al. (1995). "Habitudes de vie et comportements en matière de santé des immigrés de l'Europe du Sud et du Maghreb en France." *Rev Epidemiol Sante Publique* **43**(6): 548-559, 549 tabl.

A partir d'une enquête nationale française, les comportements de prévention et les habitudes de consommation alimentaire, d'alcool et de tabac de trois groupes d'immigrés (Italie, Espagne et Portugal, Maghreb) ont été comparés à ceux des Français. Des odds-ratios ont été calculés par une régression logistique après ajustement sur l'âge, la catégorie socio-professionnelle et la région de résidence. Des comportements différents ont été observés, notamment, des pratiques de prévention primaire et secondaire moins fréquentes, une consommation plus faible en viandes et produits laitiers et plus riche en féculents et en légumes secs, une consommation plus faible en alcool et plus forte de tabac chez les immigrés Maghrébins. Les différences observées sont discutées en fonction des autres données disponibles en France. Par rapport à d'autres études, elle confirme des habitudes alimentaires importées et une perception plus faible des messages préventifs.

Wluczka, M., et al. (2008). La santé des primo-migrants en 2007 : Etude réalisée à partir des enquêtes "semaine données". Paris ANAEM: 19.

Aux mois de mai et novembre 2007, les équipes médicales des Délégations de l'ANAEM ont participé à un recueil exhaustif de données à partir des fiches médicales révisées des enquêtes « semaine données ». Ce recueil a permis de dresser une synthèse de l'état de santé des primo-migrants vus par le service médical dans des conditions de représentativité satisfaisante, la cohorte ainsi enregistrée représente 8119 dossiers.

Wittwer, J., Raynaud, D., Dourgnon, P., et al. (2019). "Protéger la santé des personnes étrangères en situation irrégulière en France. L'Aide médicale de l'État, une politique d'accès aux soins mal connue." *Questions D'economie De La Sante (Irdes)*(243): 8.

<https://www.irdes.fr/recherche/questions-d-economie-de-la-sante/243-protoger-la-sante-des-personnes-etrangeres-en-situation-irreguliere-en-france.pdf>

Depuis sa création en 2000, l'Aide médicale de l'État (AME), assurance publique permettant aux personnes étrangères en situation irrégulière d'accéder à des services de santé, polarise le débat. Quand certains rappellent le devoir de protection d'une population vulnérable et l'universalité du droit à la protection de la santé en France, d'autres suspectent un dévoiement du système qui favoriserait l'immigration irrégulière. Dans un contexte de fortes contraintes financières pour le système de santé, les questions de légitimité, de coût et d'efficacité de l'AME sont posées de façons plus aiguës. Pour autant, les informations sur les personnes sans-papiers comme sur ce dispositif sont longtemps restées très lacunaires. Le projet Premier pas, mené par l'université de Bordeaux et l'Irdes se fonde sur ce constat et vise à étudier l'accès à l'AME et le recours aux services de santé des personnes en situation irrégulière en France. Trois Questions d'économie de la santé proposent : de décrire le contexte et la problématique de la protection des personnes en situation irrégulière en France ; puis une présentation de l'enquête Premier pas recueillie auprès des personnes éligibles à l'AME ; enfin les premiers résultats de l'enquête sur l'accès à l'AME de ces personnes. Ce premier article revient sur l'histoire des droits à la santé des personnes étrangères en situation irrégulière en France et dresse un état des lieux des connaissances, comme des besoins de connaissances sur le dispositif.

Enquêtes nationales menées à l'étranger

Les liens sur les intitulés des enquêtes pointent sur les sites des enquêtes, ou à défaut, sur un article de Medline traitant de ces enquêtes.

TABLEAU RECAPITULATIF DES ENQUETES

Enquêtes spécifiques auprès des immigrés et/ou des migrants

Intitulés des enquêtes	Dates	Pays
Enquête longitudinale auprès des immigrants (Statistics Canada's Longitudinal Survey of Immigrants to Canada)	2001, 2008	Canada
Internal Migrant Dynamic Monitoring Survey of Health	2014	Chine

<u>Migrant Dynamics Monitoring Survey (MDMS)</u>	2015	Chine
<u>The Oslo Immigrant Health Study</u>	2000-2002	Danemark
<u>Foreign Immigrant Population Survey</u>	2014	Espagne
<u>The National Immigrant Survey of Spain</u>	2003-2014	Espagne

Intitulés des enquêtes	Dates	Pays
<u>Mexican Family Life Survey (MXFLS)</u>	2002-2005	Etats-Unis
<u>Pew Hispanic Center/Robert Wood Johnson Foundation Hispanic Healthcare Survey</u>	2007	Etats-Unis
<u>Survey of undocumented Latino immigrants</u>	1996-1998	Etats-Unis
<u>The New Immigrant Survey (NIS)</u>	2001-2005	Etats-Unis
<u>Cross-sectional probability survey of Mexico-born migrant women</u>	2013	Etats-Unis/Mexique
<u>Migrant Health and Wellbeing Study (Maamu)</u>	2008-2010	Finlande
<u>A pilot probability health care survey of migrants in the border US/Mexique</u>		Mexique
<u>Migrant Survey Data</u>	2012	Nouvelle-Zélande
<u>Social Position, Health and Well-being of Elderly Immigrants survey</u>	2002	Pays-Bas
<u>Fourth National Survey of Ethnic Minorities (Ethmins4)</u>	1993-1994	Royaume-Uni
<u>Health Survey for England (HSE)</u>	1999, 2004	Royaume-Uni
<u>Survey of PHAMIT-2</u> <u>https://journals.openedition.org/factsreports/310</u>	2010	Thaïlande

Enquêtes en population générale avec un module d'enquêtes Immigrés/Migrants

Health surveys of the Robert Koch Institute: DEGS (German Health Examination and Interview Survey)	2008-2010	Allemagne
Health surveys of the Robert Koch Institute: KIGGS Wave 1 (Kinder- und Jugendgesundheitssurvey)	2009-2012	Allemagne
The German Socio-Economic Panel (SOEP)	2002-2010	Allemagne
Australian National Health Survey	2015	Australie
Australian National Survey of Mental Health and Wellbeing		Australie
National Survey of Adult Oral Health	2004-2006	Australie
NSW Adult Population Health Survey	2013-2015	Australie
Austrian Health Interview Survey (ATHIS)	2014	Autriche
Canadian Community Health Survey (CCHS)	2001 et suivantes	Canada
Canadian Community Health Survey Mental Health	2012	Canada
Canadian Health Measures Survey (CHMS)	2007-2011	Canada
National Population Health Survey (NPHS)	2002-2017	Canada
Statistics Canada National Population Health Survey	1994-2004	Canada
Nationally representative CASEN (Socioeconomic characterization of the population) Survey	2017	Chili
Spanish National Health Survey (SNHS)	2006-2012, 2017	Espagne
National Health Interview Survey (NHIS)	1957 et suivantes-	Etats-Unis

Intitulés des enquêtes	Dates	Pays
<u>Medical Expenditure Panel Survey (MEPS)</u>	2000-2010	Etats-Unis
<u>National Longitudinal Study of Adolescent to Adult Health</u>	1994-2008	Etats-Unis
<u>National Survey of Children's Health (NSCH)</u>	2011-2012	Etats-Unis
<u>American Community Survey</u>		Etats-Unis
<u>California Health Interview Survey</u>	2011-2012	Etats-Unis
<u>National Epidemiologic Survey on Alcohol and Related Conditions</u>	2004, 2013	Etats-Unis
<u>National Survey of American Life</u>	2001-2003	Etats-Unis
<u>National Latino and Asian American Survey</u>	2002-2003	Etats-Unis
<u>Cross-Border Utilization of Health Care Survey</u>	2008	Etats-Unis
<u>Health and retirement Study (HRS)</u>	1992-2008	Etats-Unis
<u>National Health Examination Survey (NAHES)</u>	2003-2014	Etats-Unis
<u>National Health Interview Survey (NHIS)</u>	2013-2015	Etats-Unis
<u>Health Behavior in School-Aged Children</u>		Etats-Unis
<u>IPUMS National Health Survey</u>	2015-2017	Etats-Unis
Enquête EHIS	2019	Europe
<u>European Social Survey</u>	2012	Europe
Eurobarometer	2017	Europe
<u>European Union Survey on Income and Living Conditions (SILC)</u>	2011	Europe
<u>National Family Health Survey</u>	1992-1993, 2005-2006	Inde
<u>World Values Survey (1981-2005)</u>	1981-2005	International
<u>Nationally representative Health Survey</u>	2016	Irlande
<u>European Health Examination Survey (EHES - LUX)</u>	2013-2015	Luxembourg

Intitulés des enquêtes	Dates	Pays
ORISCAV-LUX survey	2007-2008	Luxembourg
European Health Examination Survey - EHS LUX	2013-2015	Luxembourg
New Zealand Health Survey Database	2016-2017	Nouvelle-Zélande
Netherlands Housing Survey	2008	Pays-Bas
National Health Survey	2014	Portugal
National Community Child Health Database	2013 et suivantes	Royaume-Uni
Health Survey for England (HSE)	1999, 2004	Royaume-Uni
Swedish Annual Level of Living Survey (SALLS)	1992-1999	Suède
Swedish National Health Survey		Suède
Swiss Health Survey (SHS)	2012	Suisse

BIBLIOGRAPHIE

Les références relatives aux enquêtes sont classées par pays.

Allemagne

Brzoska, P. et Abdul-Rida, C. (2016). "Participation in cancer screening among female migrants and non-migrants in Germany: A cross-sectional study on the role of demographic and socioeconomic factors." *Medicine (Baltimore)* **95**(30): e4242.

In many European countries, migrants utilize cancer screening less often than non-migrants. In Germany, in contrast, higher rates of utilization among migrants as compared with non-migrants have been reported. The role of demographic and socioeconomic factors potentially confounding the association between migration status and participation in screening, however, could not be studied. The present study aims to investigate the utilization of cancer screening among migrant and non migrant women residing in Germany, adjusting for potential confounders. We used self-reported information from women surveyed on whether they have ever participated in screening for cancer (n = 11,709). The data was collected as part of a cross-sectional representative telephone survey conducted by the Robert Koch-Institute in 2010. We distinguished between three groups of women: (1) respondents of non-German nationality, those who had immigrated to Germany after their birth or those who have two foreign-born parents ("migrants with two-sided migration background"), (2) respondents who only have one foreign-born parent ("migrant with one-sided migration background"), and (3) all others ("non-migrants"). To account for confounders, logistic regression analysis was performed. Only individuals proficient in German were included in the survey, allowing to control for a bias arising from poor language proficiency. 84.9% of non migrant women, 82.1% of women with a

one-sided, and 70.5% of women with a two-sided migration background had utilized screening for cancer at least once in their lifetime before the survey. The adjusted odds ratios (OR) as compared with nonmigrant women were 0.99 (95% confidence interval [95% CI]: 0.77-1.27) and 0.55 (95% CI: 0.47-0.64), respectively. The study shows that migrant women with a two-sided migration background residing in Germany utilize screening for cancer less often than nonmigrant women-independently of demographic and socioeconomic factors. This is in line with findings from other countries. Likely, barriers that migrant women encounter limit them from taking informed choices. These barriers need to be identified and appropriate measures aiming to enhance informed decision making must be implemented.

Brzoska, P., Aksakal, T. et Yilmaz-Aslan, Y. (2020). "Utilization of cervical cancer screening among migrants and non-migrants in Germany: results from a large-scale population survey." BMC Public Health **20**(1): 5.

BACKGROUND: Studies from European and non-European countries have shown that migrants utilize cervical cancer screening less often than non-migrants. Findings from Germany are inconsistent. This can be explained by several limitations of existing investigations, comprising residual confounding and data which is restricted to only some regions of the country. Using data from a large-scale and nationwide population survey and applying the Andersen Model of Health Services Use as the theoretical framework, the aim of the present study was to examine the role that different predisposing, enabling and need factors have for the participation of migrant and non-migrant women in cervical cancer screening in Germany. **METHODS:** We used data from the 'German Health Update 2014/2015' survey on n = 12,064 women ≥20 years of age. The outcome of interest was the participation in cancer screening (at least once in lifetime vs. no participation). The outcome was compared between the three population groups of non-migrants, migrants from EU countries and migrants from non-EU countries. We employed multivariable logistic regression to examine the role of predisposing, enabling and need factors. **RESULTS:** Non-EU and EU migrant women reported a lower utilization of cervical cancer screening (50.1 and 52.7%, respectively) than non-migrant women (57.2%). The differences also remained evident after adjustment for predisposing, enabling and need factors. The respective adjusted odds ratios (OR) for non-EU and EU migrants were OR = 0.67 (95%-CI = 0.55-0.81) and OR = 0.80 (95%-CI = 0.66-0.97), respectively. Differences between migrants and non-migrants were particularly pronounced for younger age groups. Self-rated health was associated with participation in screening only in non-migrants, with a poorer health being indicative of a low participation in cancer screening. **CONCLUSIONS:** The disparities identified are in line with findings from studies conducted in other countries and are indicative of different obstacles this population group encounters in the health system. Implementing patient-oriented health care through diversity-sensitive health services is necessary to support informed decision-making.

Giuntella, O. et Mazzonna, F. (2015). "Do immigrants improve the health of natives?" J Health Econ **43**: 140-153.

This paper studies the effects of immigration on health. Specifically, we merge information on individual characteristics from the German Socio-Economic Panel (1984-2009) with detailed local labour market characteristics, and we then exploit the longitudinal component of the data to determine how immigration affects the health of both immigrants and natives over time. We find that immigrants to Germany are healthier than natives upon their arrival (the healthy

immigrant effect) but that immigrants' health deteriorates over time. We show that the convergence in health is heterogeneous across immigrants and occurs more rapidly among those working in more physically demanding jobs. Because immigrants are significantly more likely to work in strenuous occupations, we investigate whether changes in the spatial concentration of immigrants affect the health of the native population. Our results suggest that immigration reduces the likelihood that residents will report negative health outcomes. We show that these effects are concentrated in blue-collar occupations and are stronger among low-educated natives. Improvements in natives' average working conditions and workloads help explain the positive effects of immigration on the health of the native population.

Glaesmer, H., et al. (2009). "[Are migrants more susceptible to mental disorders?]." *Psychiatr Prax* **36**(1): 16-22.

OBJECTIVES: There are few, methodically heterogeneous and unsatisfactory studies about the mental health of immigrants. Commonly, these studies refer to a single group of immigrants and in consequence general statements about the mental health of immigrants are impossible. **METHODS:** In a representative population survey in Germany (N = 2 510) depressive and somatoform symptoms were screened with the Patients Health Questionnaire, Post Traumatic Stress Disorder was screened with the PTSD. If at least one parent was born abroad, people are classified as immigrants. **RESULTS:** 11.1 % of the sample are immigrants, which are mostly better integrated ones. There are no significant differences in the prevalence of the investigated mental disorders of immigrants compared to the native population. **CONCLUSION:** The sample includes a large variety of immigrants living in Germany and does not refer to a single group. Asylum seekers and undocumented migrants are not included, those immigrants with low language skills might be underrepresented because of the methodology. Against our expectations, no differences in the mental health between immigrants and native Germans could be proven. This finding stands in a marked contrast to the well established deficit-oriented point of view on the health of immigrants.

Hussong, J., Rosenthal, A., Wagner, C., et al. (2020). "Bladder and bowel control in a population-based sample: Associations to quality of life and behavioral problems of 4-6-year-old children participating in the German Health Interview and Examination Survey (KiGGS)." *J Pediatr Urol* **16**(2): 194.e191-194.e199.

BACKGROUND: Prevalence rates for psychiatric comorbidities are high in incontinent children. We analyzed data from the KiGGS survey in order to assess the rate of preschool children with delayed or regular continence, the mean age of gaining continence, psychiatric problems, and quality of life in a nation-wide, representative sample. **METHODS:** Parental questionnaire data of 3875 preschool children (4-6 years) were analyzed. Percentages of children with daytime, nighttime, and complete continence, and mean ages of gaining continence were calculated. Psychological and behavioral problems (SDQ), as well as Quality of life (KINDL-R), were assessed. **RESULTS:** 16.9% showed delayed gaining of continence. Percentages of children with nighttime bladder continence were lower for boys (76.3%) than for girls (80.6%), and lower for children without (78.2%) than those with a migration status (79.2%). Complete continence was gained by more girls (83.9%) than boys (78.2%), more children from the former East Germany (82.4%) than former West Germany (81.1%), and by more migrants (82.7%) than nonmigrants (81.9%). Girls, children living in the former East of Germany, and migrants achieved continence consistently at

an earlier age. Children with incontinence or continence ≥ 4 years showed significantly more psychological problems, less prosocial behavior and low quality of life. CONCLUSION: The age at gaining continence is moderated by gender, German region, and migration status. Delayed achievement of continence is associated with more psychological problems and a lower quality of life. The importance of effective treatment of incontinence is emphasized by the results of this study.

Rommel, A., et al. (2015). "[Health status of people with a migrant background and impact of socio-economic factors: First results of the German Health Interview and Examination Survey for Adults (DEGS1)]." Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz **58**(6): 543-552.

People with a migrant background (PMB) have specific health-related risk factors and resources compared to the non-migrant population (NMP). The analysis focuses on the relationship between migrant background and health and health-related behavior. Moreover, the study analyses whether socio-economic status (SES) contributes to the explanation of differences between PMB and the NMP. The research is based on the German Health Interview and Examination Survey for Adults (DEGS1) (2008-2012, n = 8151). The population for cross-sectional analyses contains 1107 PMB (weighted 19.8 %). The research question is addressed on the basis of nine exemplary health outcomes. All analyses are gender specific and make a distinction between first and second generation PMB. Logistic regression is calculated adjusting for age and SES. The results reveal clear gender-specific patterns: For women, differences are statistically significant mainly for first generation PMB. Compared to the NMP their self-assessed health status is lower, they are less physically active, consume less alcohol, feel less informed about cancer screening programs and make less use of preventive health services. However, daily smoking is more prevalent in second generation women. For men, differences are statistically significant for first and second generation PMB. Men with a migrant background show more symptoms of depression, consume less alcohol and feel less informed about cancer screening programs. After adjusting for SES the impact of migrant background on health status and health-related behavior largely remains stable. The study shows that the DEGS1 data offers valuable results and new insights into the health status of people with a migrant background. The use of this data for further research requires a differentiated approach to the concept of migrant background and a careful interpretation of results.

Sass, A. C., et al. (2015). "[Participation of people with migration background in health surveys of the Robert Koch Institute]." Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz **58**(6): 533-542.

People with migration background (PMB) make up a huge section of the population with specific health chances and risks. There are only limited data available on the health situation of PMB, since inclusion of PMB in surveys is hindered, e.g. due to language barriers. The present study has examined to what extent the population-based health surveys of the Robert Koch Institute have managed to include a representative extent of PMB, with the aim of deriving recommendations for analysis options and future recruitment strategies. The 2009 microcensus (MC) of the Federal Statistical Office was used as the basis to check whether the sample of KiGGS Wave 1 (2009-2012) and DEGS 1 (2008-2011) are representative regarding socio-demographic and migrant-specific characteristics. 1107 PMB participated in DEGS 1. In

comparison to the MC, particular sub-groups are underrepresented in the sample: people who immigrated themselves (first-generation migrants), people with a low education and Turkish citizens. On the other hand, some age groups are overrepresented. In KiGGS Wave 1, 2021 children and adolescents with a migration background participated. Response was lower if parents had a low education. In total, the participation of children and adolescents with a migration background was lower in comparison to the KiGGS baseline survey. The data on PMB in DEGS 1 and KiGGS Wave 1 are appropriate for health analyses of this population group. However, analyses should be stratified according to characteristics like migrant generation, age or education level, or these characteristics should be adjusted for in statistical models. In order to achieve a representative inclusion of people with a migration background, in future surveys sub-group-specific activities to increase participation of PMB are recommended.

Schunck, R., et al. (2015). "Pathways between perceived discrimination and health among immigrants: evidence from a large national panel survey in Germany." *Ethn Health* **20**(5): 493-510.

OBJECTIVE: Discrimination is an important determinant of health, and its experience may contribute to the emergence of health inequalities between immigrants and nonimmigrants. We examine pathways between perceived discrimination and health among immigrants in Germany: (1) whether perceptions of discrimination predict self-reported mental and physical health (SF-12), or (2) whether poor mental and physical health predict perceptions of discrimination, and (3) whether discrimination affects physical health via mental health. **DESIGN:** Data on immigrants come from the German Socio-Economic Panel (SOEP) from the years 2002 to 2010 (N = 8,307), a large national panel survey. Random and fixed effects regression models have been estimated. **RESULTS:** Perceptions of discrimination affect mental and physical health. The effect of perceived discrimination on physical health is mediated by its effect on mental health. Our analyses do not support the notion that mental and physical health predict the subsequent reporting of discrimination. Different immigrant groups are differentially exposed to perceived discrimination. **CONCLUSION:** In spite of anti-discrimination laws, the health of immigrants in Germany is negatively affected by perceived discrimination. Differential exposure to perceived discrimination may be seen as a mechanism contributing to the emergence of health inequalities in Germany.

Starker, A. (2021). "Utilization of preventive care among migrants and non-migrants in Germany: results from the representative cross-sectional study 'German health interview and examination survey for adults (DEGS1)'." *BMC Public Health* **79**(1): 86.

BACKGROUND: In Germany, different health checks for adults are offered for primary and secondary prevention. Previous findings indicate that preventive care utilization varies according to social determinants, especially migration background. This study examined the extent to which migration background is associated with preventive care utilization, independent of factors like age and socioeconomic status and whether length of stay in Germany has a positive effect on the use of preventive care. **METHODS:** The first wave of the 'German Health Interview and Examination Survey for Adults' (DEGS1) is a comprehensive data collection facilitating the description of the utilization of general health checks, dental check-ups, skin cancer screening, and cervical cancer screening among people aged 18-79 years with and without migration background. Migration background was differentiated in first-generation migrants having immigrated to Germany themselves or second-generation migrants born in Germany. First-

generation migrants were further differentiated by length of stay in Germany, and second-generation migrants as having one or two parents who were born abroad. Multivariate binary logistic regression models with average marginal effects were calculated to analyse the associations between preventive care utilization and migration background. RESULTS: The sample comprised 7987 participants, 1091 of whom had a migration background. Compared with non-migrants, women and men with migration background- particularly first-generation migrants with length of stay ≤ 20 years in Germany - make less use of preventive care. This association was observed statistically independent from sociodemographic factors. For dental check-ups a significantly lower use was also found for first-generation migrants who have lived in Germany for more than 20 years and second-generation of migrants with two parents born abroad. Post-model predictions showed that the utilization rates of first-generation migrants are gradually converging to the average values for non-migrants. CONCLUSIONS: Our findings suggest inequalities in realized access to preventive care for first-generation migrants particularly for those who have lived in Germany for 20 years or less. Barriers to the utilization of preventive care may be addressed by informing migrant communities about preventive health care services at an early stage after immigration using migrant-sensitive information strategies.

Australie

Liddell, B. J., et al. (2016). "The generational gap: Mental disorder prevalence and disability amongst first and second generation immigrants in Australia." *J Psychiatr Res* **83**: 103-111.

Despite unprecedented numbers of migrants internationally, little is known about the mental health needs of immigrant groups residing in common countries of resettlement. The majority of studies support the 'healthy migrant hypothesis', but few studies have examined: 1) shifts in prevalence patterns across generations; 2) how prevalence relates to disability in immigrant groups. Our study examined the prevalence of common mental disorders and disability in first and second generation migrants to Australia. Twelve-month and lifetime prevalence rates of affective, anxiety, and substance use disorders were obtained from the Australian National Survey of Mental Health and Wellbeing (N = 8841). First generation immigrants (born overseas) and second generation immigrants (both parents overseas) from non-English and English speaking backgrounds were compared to an Australian-born cohort. Disability was indexed by days out of role and the WHO Disability Assessment Schedule (WHODAS12). First generation immigrants with non-English speaking (1G-NE) backgrounds evidenced reduced prevalence of common mental disorders relative to the Australian-born population (adjusted odds ratio 0.5 [95% CI 0.38-0.66]). This lower prevalence was not observed in second generation immigrant cohorts. While overall levels of disability were equal between all groups ($p > 0.05$), mental health-related disability was elevated in the 1G-NE group relative to the Australian-born group ($p = 0.012$). The findings challenge the overarching notion of the "healthy migrant" and suggest a dissociation between reduced prevalence and elevated mental health-related disability amongst first generation immigrants with non-English speaking backgrounds. These findings highlight the heterogeneous psychiatric needs of first and second generation immigrants.

Lim, M., Crocombe, L. A. et Do, L. G. (2017). "Perceptions of dental treatment need in Australian-born and migrant populations." *Eur J Oral Sci* **125**(6): 479-486.

The objective of this study was to investigate differences in self-perceived and dentist-determined treatment need in Australian-born and migrant residents of Australia. Participants in the National Survey of Adult Oral Health 2004-06 were categorized into six groups according to country of birth. Interview and examination data were used to analyze differences between self-perceived and the 'gold standard' examiner-determined treatment need, and to compare the accuracy of self-reporting according to country of birth. Self-reported treatment needs, defined as the need for a restoration and/or extraction, were cross-tabulated with clinically observed conditions and compared using a multivariable logistic regression model. Concordance between self-reported and clinically-determined treatment need differed significantly for migrants from Europe and the UK and Australian-born individuals. In the logistic regression model, stratification according to examiner-determined treatment need revealed significantly greater reporting of treatment need by Asian-born migrants than by the Australian-born reference group. The results of this study demonstrate that self-perceived treatment need was less than the examiner-determined findings in European and UK migrant groups and Australian-born individuals. Additionally, Asian migrants were more likely than Australian-born individuals to over-report treatment need for a filling and/or extraction.

Marcus, K., Balasubramaniam, M., Short, S., et al. (2022). "Cultural and linguistic disparities in dental utilisation in New South Wales, Australia." *PLoS One* **39**(2): 123-128.

OBJECTIVE: To examine the patterns and predictors of dental utilisation in culturally and linguistically diverse (CALD) and non-CALD groups in New South Wales. **DESIGN:** Secondary analysis of the 2013 and 2015 NSW Adult Population Health Survey (n=24,707). **MAIN OUTCOME:** Dental utilisation, defined as a dental visit within the last 12 months. CALD groups were defined using country of birth and language. Andersen's theoretical model was used. Chi-square test and multivariate logistic regression analysis adjusted for potential confounding. Sample weights adjusted for sampling design. **RESULTS:** Most (69%) of the population were Australian born; 20% spoke a language other than English at home. Dental utilisation was 58.9% and 63.9% for CALD and non-CALD groups respectively. The foreign-born non-English speaking group had the highest level of education (60%) but lower levels of dental utilisation (OR:0.81, CI 0.69-0.94) than all groups. Australian born non-English speakers had similar levels of dental utilisation to the reference group (OR:1.27, CI 0.99-1.63). **CONCLUSION:** There are significant disparities in dental care utilisation among CALD populations. Foreign born, non-English speaking CALD migrants, and people experiencing socioeconomic disadvantage, are at greatest risk of inadequate dental utilisation. Furthermore, the combination of predisposing factors, language and cultural barriers compound disparities in oral health care utilisation. This data highlights the need for oral healthcare services that are sensitive to population needs, to reduce disparities among CALD communities residing in NSW.

Stubbe, J., Jönsson, R. et Brijnath, B. (2020). "Psychological distress among migrant groups in Australia: results from the 2015 National Health Survey." *Laryngoscope Investig Otolaryngol* **55**(4): 467-475.

PURPOSE: To understand the relationship between migration and psychological distress, we (a) calculated the prevalence of psychological distress in specific migrant groups, and (b) examined the association between specific birth groups and psychological distress, while controlling for

confounding variables to understand vulnerabilities across migrant groups. METHODS: The prevalence of psychological distress, disaggregated by birthplace, was calculated using data from the Australian 2015 National Health Survey, which measures psychological distress via the Kessler Screening Scale for Psychological Distress (K10). Multivariable logistic regression models, with adjustments for complex survey design, were fitted to examine the association between country of birth and psychological distress once extensive controls for demographic, and socioeconomic factors were included. RESULTS: 14,466 individuals ≥ 18 years completed the K10. Migrants from Italy (20.7%), Greece (20.4%), Southern and Eastern European (18.2%), and North African and Middle Eastern (21.9%) countries had higher prevalence estimates of distress compared to Australian born (12.4%) or those born in the United Kingdom (UK) (9.5%)-the largest migrant group in Australia. After adjusting for demographics, SES factors, duration in Australia, a birthplace in Italy (OR = 2.79 95% CI 1.4, 5.7), Greece (OR = 2.46 95% CI 1.1, 5.5), India (OR = 2.28 95% CI 1.3, 3.9), Southern and Eastern Europe (excluding Greece and Italy) (OR = 2.43 95% CI 1.5, 3.9), North Africa and the Middle East (OR = 3.39 95% CI 1.9, 6.2) was associated with increased odds of distress relative to those born in the UK. CONCLUSIONS: Illuminating variability in prevalence of psychological distress across migrant communities, highlights vulnerabilities in particular migrant groups, which have not previously been described. Identifying such communities can aid mental health policy-makers and service providers provide targeted culturally appropriate care.

Autriche

Waxenegger, A., Mayerl, H., Rasky, E., et al. (2019). "[The Impact of Migration Background on Health: Results of the Austrian Health Interview Survey (ATHIS 2014)]." *Gesundheitswesen* **81**(2): 128-136.

OBJECTIVES: Previous research has shown migrants to have a poorer health status than those without a migration background in many respects. So far, it is not completely clear whether the poorer health results of migrants are mainly the cause of their socioeconomic status (SES), which on average is lower than the SES of people without a migration background. The present study explores the question whether the fact of having a migration background has an impact on health, even though SES and health-related behavior are taken into account. METHODS: Based on data from the current Austrian Health Interview Survey (ATHIS 2014) multiple linear regression models, adjusted for age and stratified by gender, were conducted. The dependent variables were physical quality of life, psychological quality of life, self-perceived health, body-mass-index (BMI), headaches/musculoskeletal pain, and diabetes/cardiovascular diseases (n=15,748). RESULTS: We found differences in health between men and women with migration background and men and women without migration background. After adjusting for age, SES and health-related behavior, almost all of the revealed differences got smaller. The strongest link between migrant status and health status was detected for migrants from countries with a lower Inequality-adjusted Human Development Index (IHDI) in comparison to Austria. CONCLUSION: The results lead to the conclusion that although SES and health-related behavior do not fully explain health differences between people with migration background and those without, they can explain the differences to a large extent. However, for the health status of migrants who stem from countries with a lower standard of living and a weaker distributive justice in comparison to Austria, further factors might play a role. With respect to this group of

migrants, differences in health compared to non-migrants are not solely attributable to SES and health-related behavior.

Canada

Aglipay, M., et al. (2013). "Does the healthy immigrant effect extend to anxiety disorders? Evidence from a nationally representative study." J Immigr Minor Health **15**(5): 851-857.

It is currently unknown whether the healthy immigrant effect applies to anxiety disorders. To assess the association between immigrant identity and anxiety disorders, data from 116,796 adults who participated in the nationally representative 2007-2008 Canadian Community Health Survey were analyzed and potential confounders were controlled by using logistic regression models. Compared to the Canadian-born, recent immigrants had a reduced odds of anxiety disorders in the 18-39 year age group (adjusted odds ratio (aOR) = 0.19, 95 % confidence interval (CI) 0.13, 0.26) and the 40-59 year age group (aOR = 0.26, 95 % CI 0.17, 0.40). Immigrants arriving 10 or more years ago also had a reduced odds of anxiety disorders compared with native born Canadians, but to a lesser extent (18-39: aOR = 0.41, 95 % CI 0.32, 0.53; 40-59: aOR = 0.76, 95 % CI 0.64, 0.90). There was a healthy immigrant effect on anxiety disorders among working age Canadians.

Antonipillai, V., Guindon, G. E., Sweetman, A., et al. (2021). "Associations of health services utilization by prescription drug coverage and immigration category in Ontario, Canada." Health Policy **125**(10): 1311-1321.

Canada is the only high-income country with a universal healthcare system that does not provide prescription drug coverage for all its residents. This study examines whether Canadians' prescription drug coverage status is associated with their health services use and how this association differs by gender across non-migrants and three categories of migrants: economic immigrants, family-class immigrants, and refugees. Very few studies have examined differences across these migrant groups, and there is a need to do so as they experience varying health disparities. This study contributes to the prescription drug coverage, migration and health literature by employing an intersectional lens to analyze a sample of Ontario working-aged residents (n=39,792) generated from linking the Canadian Community Health Survey (2005, 2008, 2013, 2014) and Longitudinal Immigrant Database. Predicted probabilities and average marginal effects from multivariable logistic regression models were generated, and interaction effects between prescription drug coverage and immigrant status were examined. The study reveals important differences in the use of health services across prescription drug coverage groups by immigration status. As the general debate about universal pharmacare in Canada is ongoing, this study reveals that drug insurance is positively associated with health services use of most migrants and non-migrants, however, some immigrant women may still experience barriers to access general practitioner services. If pharmacare is introduced, ongoing evaluation is needed to ensure that its implementation produces equitable outcomes for all.

Asadi, L., Heffernan, C., Menzies, D., et al. (2017). "Effectiveness of Canada's tuberculosis surveillance strategy in identifying immigrants at risk of developing and transmitting tuberculosis: a population-based retrospective cohort study." Lancet Public Health **2**(10): e450-e457.

BACKGROUND: In Canada, tuberculosis disproportionately affects the foreign-born population. The national tuberculosis medical surveillance programme aims to prevent these cases. Individuals referred for further in-country surveillance (referrals) have a history of active tuberculosis or have features of old, healed tuberculosis on chest radiograph; those not referred (non-referrals) do not undergo surveillance. We aimed to examine the risk of transmission arising from referrals versus non-referrals. **METHODS:** We did this population-based retrospective cohort study of foreign-born migrants (aged 15-64 years) to Alberta, Canada, between Jan 1, 2002, and Dec 31, 2013. We obtained information about year of arrival and country of citizenship from Immigration, Refugees and Citizenship Canada, and data for tuberculosis cases and their contacts from the Alberta Tuberculosis Registry. The outcome of interest was culture-positive pulmonary tuberculosis. We compared the incidence of pulmonary tuberculosis and the odds of transmission among referrals versus non-referrals. By use of conventional and molecular epidemiological techniques, we defined transmission as either a secondary case or a tuberculin skin-test (TST) conversion among close contacts. We used multivariate logistic regression to determine the independent association between referral for tuberculosis surveillance and transmission. **FINDINGS:** Between 2002 and 2013, there were 223 225 foreign-born migrants to Alberta, of whom 5500 (2%) were referrals and 217 657 (98%) were non-referrals. 3805 (69%) referrals and 115 226 (53%) non-referrals were from countries with a tuberculosis incidence of more than 150 per 100 000 populations, or sub-Saharan Africa. 234 foreign-born individuals were diagnosed with culture-positive pulmonary tuberculosis between Jan 1, 2004, and Dec 31, 2013. The incidence of culture-positive pulmonary disease was nine times higher in referrals (n=50) than all non-referrals (n=184; incidence rate ratio 9.1, 95% CI 6.7-12.5) and five times higher in referrals than non-referrals from high-risk countries (n=167; 5.0, 3.6-6.8). 71 total transmission events arose from the individuals with culture-positive pulmonary tuberculosis-three (4%) from referrals and 68 (96%) from non-referrals. No secondary cases were attributable to a referral source case, whereas 18 secondary cases were attributable to 11 different non-referral source cases. Three TST conversions were attributable to three different referral source cases compared with 50 conversions from 31 different non-referral source cases. That is, three (6%) referrals transmitted tuberculosis compared with 42 (22%) non-referrals (adjusted odds ratio of 0.19, 95% CI 0.054-0.66; p=0.009). **INTERPRETATION:** Despite a much higher incidence of pulmonary tuberculosis in referrals than non-referrals, referrals were 80% less likely to transmit tuberculosis. Rather than a focus on referrals, Canada could consider screening and treatment of latent tuberculosis in all migrants from high-risk countries-a group that accounted for 100% of secondary cases. **FUNDING:** Canadian Institutes of Health Research.

Blair, A. H. et Schneeberg, A. (2014). "Changes in the 'healthy migrant effect' in Canada: are recent immigrants healthier than they were a decade ago?" *J Immigr Minor Health* **16**(1): 136-142.

This study sought to assess whether the health of recent immigrants to Canada has changed in the past decade. Using the Canadian Community Health Survey this study examined changes in self-perceived health of 5,757 recent immigrants over a decade. Multivariable ordinal logistic regressions were conducted to calculate odds ratios (OR) and 95% confidence intervals (CI) for the association between time and self-perceived health. Bivariable analysis showed recent immigrants more likely to report better health. After adjustment, reported health did not change over time (OR 0.97; CI 0.91-1.04). However, being female, increased age, life stress, and

smoking all remained associated with higher odds of reporting worse health in both adjusted and unadjusted models. Despite global shifts in health burdens, the health of recent immigrants to Canada does not seem to have changed in the past decade. This suggests they now inhabit an ever more elite health demographic.

Burchell, A. N., Kendall, C. E., Cheng, S. Y., et al. (2018). "Cervical cancer screening uptake among HIV-positive women in Ontario, Canada: A population-based retrospective cohort study." *Prev Med* **107**: 14-20.

Cervical cancer caused by oncogenic types of the human papillomavirus (HPV) is of concern among HIV-positive women due to impairment of immune responses required to control HPV infection. Our objectives were to describe patterns of cervical cancer screening using Pap cytology testing among HIV-positive women in Ontario, Canada from 2008 to 2013 and to identify factors associated with adequate screening. We conducted a retrospective, population-based cohort study among screen-eligible HIV-positive women using provincial administrative health data. We estimated annual proportions tested and reported these with 95% confidence intervals (CI). Next, using person-years as the unit of analysis, we identified factors associated with annual Pap testing using log-binomial regression. A total of 2271 women were followed over 10,697 person-years. In 2008, 34.0% (95%CI 31.1-37.0%) had a Pap test. By 2013, the proportion of HIV-positive women tested was 25.9% (95%CI 23.6-28.2%). Women who were most likely to undergo testing were younger, were immigrants from countries with generalized HIV epidemics, lived in the highest income neighbourhoods, had a female primary care physician, had two or more encounters per year with an infectious disease or internal medicine specialist, and had greater comorbidity. Nearly three in four HIV-positive women were under-screened despite all having universal insurance for medically-necessary services. Annual Pap testing decreased following the 2011-2013 release of new guidelines for a lengthened screen interval for average risk women and a billing disincentive. Clinic-based intervention such as physician alerts or reminders may be needed to improve screening coverage among HIV-positive women.

Calvasina, P., et al. (2015). "The deterioration of Canadian immigrants' oral health: analysis of the Longitudinal Survey of Immigrants to Canada." *Community Dent Oral Epidemiol* **43**(5): 424-432.

OBJECTIVE: To examine the effect of immigration on the self-reported oral health of immigrants to Canada over a 4-year period. METHODS: The study used Statistics Canada's Longitudinal Survey of Immigrants to Canada (LSIC 2001-2005). The target population comprised 3976 non-refugee immigrants to Canada. The dependent variable was self-reported dental problems. The independent variables were as follows: age, sex, ethnicity, income, education, perceived discrimination, history of social assistance, social support, and official language proficiency. A generalized estimation equation approach was used to assess the association between dependent and independent variables. RESULTS: After 2 years, the proportion of immigrants reporting dental problems more than tripled (32.6%) and remained approximately the same at 4 years after immigrating (33.3%). Over time, immigrants were more likely to report dental problems (OR = 2.77; 95% CI 2.55-3.02). An increase in self-reported dental problems over time was associated with sex, history of social assistance, total household income, and self-perceived discrimination. CONCLUSION: An increased likelihood of reporting dental problems occurred over time. Immigrants should arguably constitute an important focus of public policy and

programmes aimed at improving their oral health and access to dental care in Canada.

Clarke, A. et Fisher, K. A. (2021). "Effect of socio-demographic and health factors on the association between multimorbidity and acute care service use: population-based survey linked to health administrative data." *BMJ Open* **21**(1): 62.

BACKGROUND: This study explores how socio-demographic and health factors shape the relationship between multimorbidity and one-year acute care service use (i.e., hospital, emergency department visits) in older adults in Ontario, Canada. **METHODS:** We linked multiple cycles (2005-2006, 2007-2008, 2009-2010, 2011-2012) of the Canadian Community Health Survey (CCHS) to health administrative data to create a cohort of adults aged 65 and older. Administrative data were used to estimate one-year service use and to identify 12 chronic conditions used to measure multimorbidity. We examined the relationship between multimorbidity and service use stratified by a range of socio-demographic and health variables available from the CCHS. Logistic and Poisson regressions were used to explore the association between multimorbidity and service use and the role of socio-demographic factors in this relationship. **RESULTS:** Of the 28,361 members of the study sample, 60% were between the ages of 65 and 74 years, 57% were female, 72% were non-immigrant, and over 75% lived in an urban area. Emergency department visits and hospitalizations consistently increased with the level of multimorbidity. This study did not find strong evidence of moderator or interaction effects across a range of socio-demographic factors. Stratified analyses revealed further patterns, with many being similar for both services - e.g., the odds ratios were higher at all levels of multimorbidity for men, older age groups, and those with lower household income. Rurality and immigrant status influenced emergency department use (higher in rural residents and non-immigrants) but not hospitalizations. Multimorbidity and the range of socio-demographic variables remained significant predictors of service use in the regressions. **CONCLUSIONS:** Strong evidence links multimorbidity with increased acute care service use. This study showed that a range of factors did not modify this relationship. Nevertheless, the factors were independently associated with acute care service use, pointing to modifiable risk factors that can be the focus of resource allocation and intervention design to reduce service use in those with multimorbidity. The study's results suggest that optimizing acute care service use in older adults requires attention to both multimorbidity and social determinants, with programs that are multifactorial and integrated across the health and social service sectors.

Dahal, R., Bhattarai, A. et Adhikari, K. (2020). "Variation in characteristics of people with mental disorders across smoking status in the Canadian general population." *JMIR Ment Health* **6**: 61.

INTRODUCTION: People with mental disorders are less successful in smoking cessation efforts. This study compared the characteristics of current smokers and former smokers with mental disorders. **METHODS:** This was a cross-sectional study that used the Public Use Microdata File of the Canadian Community Health Survey 2012. Survey respondents with any mental health disorder in the last 12 months (n=2700), identified using the World Health Organization Composite International Diagnostic Interview instrument, were included in the analysis. Smoking status was classified based on self-report responses as current, former and never smoker. Logistic regression models were used to analyze the data. **RESULTS:** The odds of quitting smoking were significantly lower among people who were single or never married (widowed/divorced/separated/single) compared to those who were married or had a common-

law partner (adjusted odds ratio, AOR=0.6, 95% CI: 0.4-0.9). Similarly, significantly lower odds of quitting smoking were observed among people with less than post-secondary education compared to those with post-secondary education (AOR=0.4, 95% CI: 0.3- 0.6). Also, the odds of quitting were significantly lower among immigrants, young adults, and middle-aged adults. CONCLUSIONS: People who are young or middle-aged, single or never married, less educated, and immigrants, are less likely to quit smoking. This pattern underscores the socioeconomic disparities in quitting smoking among people with mental disorders. Future research should investigate why these groups continue to smoke more often than their counterparts. This will help design the smoking cessation support that address the challenges experienced by vulnerable populations and reduce the disparities.

Degelman, M. L. et Herman, K. M. (2016). "Immigrant status and having a regular medical doctor among Canadian adults." Can J Public Health **107**(1): e75-80.

OBJECTIVE: New immigrants generally arrive in Canada with a health advantage over their Canadian counterparts, but lose that advantage over time. Difficulties in acquiring a physician may contribute. Past studies relied on older data, and lacked control for many confounders and assessment of gender differences. We assessed the relationship between immigrant status and having a regular doctor among Canadian adults. METHODS: Cross-sectional data from the 2011-2012 Canadian Community Health Survey were self-reported by 73,958 respondents aged 18-64, representing >20 million Canadian adults. The relationship between immigrant status and having a doctor was analyzed using chi2 and logistic regression analyses stratified by gender. Age, body mass index, race, education, province of residence, physical activity, chronic conditions, self-perceived health, and number of children in household were controlled. RESULTS: Approximately 77% of males and 87% of females reported having a doctor. About 7% of respondents reported being new immigrants in Canada (0-9 years), while 16% were established immigrants (>=10 years). For males (M) and females (F) respectively, 78% and 88% of non-immigrants, 55% and 68% of new immigrants, and 84% and 91% of established immigrants reported having a doctor ($p < 0.001$). Compared to non-immigrants, new immigrants were significantly less likely to have a doctor (OR (95% CI) M: 0.43 (0.38-0.47); F: 0.36 (0.32-0.41)), while established immigrants were significantly more likely to have a doctor (M: 1.13 (1.03-1.24); F: 1.16 (1.03-1.30)). CONCLUSION: New Canadian immigrants are less likely to have a regular doctor compared to non-immigrants, and should be targeted by policies and programs facilitating finding a doctor.

Frank, K. et Hou, F. (2017). "Over-education and well-being: how does education-occupation mismatch affect the life satisfaction of university-educated immigrant and non-immigrant workers?" Ethn Health: 1-18.

OBJECTIVE: The increased migration of skilled workers has resulted in a focus on the economic costs of their unsuccessful labor market integration. Few studies investigate the consequences of employment difficulties on immigrants' well-being. Researchers studying over-education and life satisfaction tend to only examine the general population despite high levels of over-education among skilled immigrants. This study examines the relationship between over-education and life satisfaction among both immigrant and native-born workers in Canada. Factors associated with immigrants specifically (e.g. years since migration) are also considered. DESIGN: Descriptive and multivariate analyses are conducted using pooled data from the 2009

to 2014 Canadian Community Health Survey (CCHS). Ordinary-least-squares (OLS) regression models are estimated with life satisfaction as the outcome. The models are run separately for immigrant and Canadian-born workers, accounting for differences in the degree to which individuals are over-educated. There are 5826 immigrant respondents and 24,985 non-immigrant respondents. RESULTS: Over-education was negatively associated with the life satisfaction of both immigrants and non-immigrants, although the effect was weaker among the immigrant population. Income was the main factor mediating the negative relationship between over-education and life satisfaction among immigrants. Moreover, the negative influence of over-education on life satisfaction weakened with immigrants' increased residence in Canada. CONCLUSION: Although over-education was negatively associated with immigrants' life satisfaction, it had a stronger influence on the non-immigrant population. This may be due to differences in the reference groups to which immigrants and non-immigrants compare themselves when assessing their life satisfaction; over-education may be less influential to immigrants' life satisfaction because it is a common experience among immigrants. Additionally, over-education is less detrimental to immigrants' life satisfaction with increased time in the host country. This may be attributable to a shift in the importance immigrants assign to the employment domain of their life over time.

Fuller-Thomson, E., et al. (2011). "Health decline among recent immigrants to Canada: findings from a nationally-representative longitudinal survey." *Can J Public Health* **102**(4): 273-280.

OBJECTIVE: The healthy immigrant effect suggests new immigrants to Canada enjoy better health, on average, than those born in Canada, yet cross-sectional data suggest that immigrants who have been in Canada for decades have comparable health to their native-born peers. We analyzed prospective cohort data to identify the factors associated with health decline among new immigrants. METHODS: The Longitudinal Survey of Immigrants to Canada was conducted by Statistics Canada and Citizenship and Immigration Canada between April 2001 and November 2005. A probability sample of 7,716 recent immigrants from abroad was interviewed three times: at six months, two years and four years after arrival in Canada. Logistic regression was used to model predictors of a two-step decline in self-reported health (e.g., from excellent to good or from very good to fair). RESULTS: Among recent immigrants, 15% reported a two-step decline in health in the first four years after arrival in Canada. In comparison, only 6% of non-immigrants from a similar age cohort reported a two-step decline in health during the same time period. The characteristics associated with an increased likelihood of health decline among recent immigrants include initial health status, age, gender, marital status, language skills and place/region of birth. Experience of discrimination was also associated with health decline. One in four immigrants who experienced a health decline reported problems accessing Canadian health services. CONCLUSIONS: The process of immigration is associated with health decline for some recent immigrants. These findings support Health Canada's identification of immigration as a determinant of health. Strategies need to be developed to improve access to health care among new immigrants.

Gagnon, A. J., et al. (2004). "A systematic review of questionnaires measuring the health of resettling refugee women." *Health Care Women Int* **25**(2): 111-149.

Because many ethnically diverse refugee women resettle in industrialized countries, several biopsychosocial factors need to be considered in caring for them. This systematic review of

studies conducted with female refugees, asylum-seekers, or "unspecified" immigrants based on six electronic databases was conducted to determine which questionnaires best measure relevant variables. Questionnaires were reviewed for measurement properties, application of translation theory, and quality of representation. Studies must have included > or = 1 measure of the following: general health; torture, abuse, sex-and-gender-based violence (SGBV); depression; stress; posttraumatic stress disorder (PTSD); anxiety; somatization; migration history; social support; socioeconomic status; discrimination; or mother-child interactions. Fifty-six studies using 47 questionnaires were identified; only five had strong evidence for use with resettling refugee women. Thus, few high-quality tools are available to measure concepts relevant to resettling refugee women's health.

Hetherington, E., Adhikari, K., Scime, N. V., et al. (2022). "Cesarean Deliveries Among Immigrant and Canadian-Born Women in a Representative Community Population in Canada: A Retrospective Cohort Study." *J Obstet Gynaecol Can* **44**(2): 148-156.

OBJECTIVE: To examine differences in the rate of cesarean delivery between Canadian-born women and immigrants to Canada and by duration of time in Canada and rate of cesarean delivery in their country-of-origin. **METHODS:** We used linked data from hospitalization records and the Canadian Community Health Survey for all deliveries after 20 weeks gestation between 2002 and 2017 in Canada (excluding Québec). Odds of cesarean delivery in recent immigrants (<5 y in Canada) and non-recent immigrants (≥5 y in Canada) were compared with those of Canadian-born women using multivariable logistic regression. Immigrants were further categorized using the cesarean delivery rate in their country-of-origin as low (<10%), medium (≥10 to <35%), or high (≥35%). **RESULTS:** Of the 53 505 women included, 89% were Canadian-born, 4% were recent immigrants and 7% were non-recent immigrants. Overall, 28.6% of women had a cesarean delivery. After adjusting for medical and socio-economic factors, the odds of cesarean delivery among recent immigrants (OR 1.12; 95% CI 0.95-1.34) and non-recent immigrants (OR 1.11; 95% CI 0.98-1.25) did not differ statistically from those of Canadian-born women. Recent immigrants from countries with lower cesarean delivery rates had higher odds of cesarean delivery (OR 1.34; 95% CI 1.05-1.70), whereas the odds of cesarean for recent immigrants from medium- and high-rate countries did not differ from those of Canadian-born women. **CONCLUSION:** After accounting for demographic and medical factors, few differences remained in cesarean delivery rates between immigrants and Canadian-born women. Country-of-origin practices are unlikely to reflect preferences for cesarean delivery in immigrant women in Canada.

Hövenner, C., Rommel, A., Adjei, J. K., et al. (2020). "Revisiting the healthy immigrant effect with diabetes risk in Canada: why race/ethnicity matters." *Arch Public Health* **25**(4): 495-507.

Objective: Evidence shows that recent immigrants are healthier than the native-born population, a phenomenon known as the healthy immigrant effect. With increasing duration of stay, this health gap significantly narrows as immigrants' health deteriorates to either resemble or become worse than the host population. However, little is known about the category of immigrants for whom this decline is most pronounced since the extant research largely considers immigrants as a homogeneous group, thus overlooking important racial/ethnic differences. **Design:** Using data from the 2014 Canadian Community Health Survey (CCHS), we categorised immigrants by race/ethnicity and duration of stay in Canada and compared them to

their native-born white Canadian counterparts on the likelihood of having a chronic health condition, using type 2 diabetes (T2D) as a case. Results: In the base model, recent visible minority (i.e. non-white or non-Caucasian) immigrants and recent white immigrants were less likely than the native-born white Canadian population to have T2D (recent visible minority immigrants OR = 0.46, CI = 0.27-0.79, p = 0.005; recent white immigrants OR = 0.26, CI = 0.11-0.64, p = 0.003). The odds of having T2D were significantly higher for long-term immigrants than the native-born white Canadian population (long-term visible minority immigrants OR = 1.59, CI = 1.27-2.00, p = 0.000; long-term white immigrants OR = 1.74, CI = 1.44-2.10, p = 0.000). In the multivariate model, long-term visible minority immigrants were about 2.3 times more likely than their white Canadian born counterparts to have T2D (CI = 1.86-2.96, p = 0.000). Long-term visible minority immigrants were about 2.1 times more likely than long-term white immigrants to have T2D (CI = 1.49-2.94, p = 0.000). Conclusion: Immigrants' health deterioration varies significantly across ethnic categories in Canada. Interventions for facilitating the integration of visible minority immigrants may help reduce these health inequities.

Islam, F. (2015). "Immigrating to Canada During Early Childhood Associated with Increased Risk for Mood Disorders." *Community Ment Health J* 51(6): 723-732.

This study explored the impact of age at time of immigration on mental health in Canada. The Canadian Community Health Survey (CCHS) 2011 was analyzed to determine prevalence rates for mood disorders for those who immigrated during early childhood, middle childhood, adolescence, and adulthood. Multivariable logistic regression analysis was carried out on pooled CCHS 2007-2011 data to calculate risk of mood disorders. Those who immigrated during early childhood (before the age of six) had a significantly higher prevalence rate of mood disorders (6.83 %, 95 % CI 6.77-6.89) compared to those who immigrated later in life (4.83-4.88 %, 95 % CI 4.56-4.93). Immigrating during early childhood was also associated with elevated risk of mood disorders (OR 1.40, 95 % CI 1.04-1.88) compared to those who immigrated as adults after adjusting for key factors. Mental health services need to consider the factors associated with early childhood migration and the implications for early intervention programming.

Islam, F., Khanlou, N., Macpherson, A., et al. (2018). "Mental Health Consultation Among Ontario's Immigrant Populations." *Community Ment Health J* 54(5): 579-589.

To determine the prevalence rates and characteristics of past-year mental health consultation for Ontario's adult (18 + years old) immigrant populations. The Canadian Community Health Survey (CCHS) 2012 was used to calculate the prevalence rates of past-year mental health consultation by service provider type. Characteristics associated with mental health consultation were determined by carrying out multivariable logistic regression analysis on merged CCHS 2008-2012 data. Adult immigrant populations in Ontario (n = 3995) had lower estimated prevalence rates of past-year mental health consultation across all service provider types compared to Canadian-born populations (n = 14,644). Amongst those who reported past-year mental health consultation, 57.89% of Ontario immigrants contacted their primary care physician, which was significantly higher than the proportion who consulted their family doctor from Canadian-born populations (45.31%). The factors of gender, age, racial/ethnic background, education level, working status, food insecurity status, self-perceived health status, smoking status, alcohol drinking status, years since immigration, and age at time of immigration were significantly associated with past-year mental health consultation for immigrant populations.

Ontario's adult immigrant populations most commonly consult their family doctor for mental health care. Potential exists for expanding the mental health care role of primary care physicians as well as efforts to increase accessibility of specialized mental health services. Integrated, coordinated care where primary care physicians, specialized mental health professionals, social workers, and community educators, etc. working together in a sort of "one-stop-shop" may be the most effective way to mitigate gaps in the mental health care system. In order to effectively tailor mental health policy, programming, and promotion to suit the needs of immigrant populations initiatives that focus on the connection between physical and mental health and migration variables such as length of stay in Canada, years since immigration, and other important migration variables (beyond the scope of the CCHS which require further study) need to be developed. Examination of the social determinants of mental health is critical to understand how we can best serve the mental health needs of Ontario's immigrant populations

Kammogne, C. L. et Marchand, A. (2021). "[Ethnicity and immigration status: How are they associated with work and depressive symptoms?]." Rev Epidemiol Sante Publique **69**(3): 145-153.

BACKGROUND: The purpose of this research is to determine whether, in the Canadian workforce, cultural identity traits, particularly ethnicity and immigrant status, might modify the association of work with depressive symptoms. **METHOD:** Data were derived from the nine cycles of the National Population Health Survey (NPHS) conducted by Statistics Canada. Based on a sample of 6477 workers, multilevel regression models were brought into being. Analyses were adjusted for family-related factors, non-work social support, and personal characteristics. **RESULTS:** After accounting for potential confounders, ethnicity and work-related factors were distinctly and directly associated with depressive symptoms. Workers belonging to visible minorities had significantly fewer depressive symptoms than their Caucasian counterparts. Unlike Caucasians, they were more often overqualified, less in a position to use their skills, and largely without decision-making authority. On the other hand, all analyses having to do with immigrant status led to inconclusive results. **CONCLUSION:** Ethnicity seems to have some bearing on the association of work with depressive symptoms among members of the Canadian workforce. It might be beneficial to carry out targeted interventions aimed at improving working conditions according to ethnicity and situations involving professional overqualification.

Kim, I. H., et al. (2013). "Ethnicity and postmigration health trajectory in new immigrants to Canada." Am J Public Health **103**(4): e96-104.

OBJECTIVES: In this prospective cohort study, we examined the trajectory of general health during the first 4 years after new immigrants' arrival in Canada. We focused on the change in self-rated health trajectories and their gender and ethnic disparities. **METHODS:** Data were derived from the Longitudinal Survey of Immigrants to Canada and were collected between April 2001 and November 2005 by Statistics Canada. We used weighted samples of 3309 men and 3351 women aged between 20 and 59 years. **RESULTS:** At arrival, only 3.5% of new immigrants rated their general health as poor. Significant and steady increases in poor health were revealed during the following 4 years, especially among ethnic minorities and women. Specifically, we found a higher risk of poor health among West Asian and Chinese men and among South Asian and Chinese women than among their European counterparts. **CONCLUSIONS:** Newly arrived immigrants are extremely healthy, but the health advantage dissipates rapidly during the initial years of settlement in Canada. Women and minority ethnic groups may be more vulnerable to

social changes and postmigration settlement.

Kwak, K. (2016). "An evaluation of the healthy immigrant effect with adolescents in Canada: Examinations of gender and length of residence." *Soc Sci Med* **157**: 87-95.

BACKGROUND: The healthy immigrant effect, HIE, is the finding that immigrants initially arrive in the settlement society in the same or better health than their native-born counterparts, yet this advantage is lost as their length of residence increases. This phenomenon has been found among adult populations. **OBJECTIVE:** The present study sought to extend the premise of HIE to adolescents in Canada. **METHODS:** Utilizing national data sets of three years (Canadian Community Health Survey 2007, 2009, 2011; Statistics Canada), adolescents (aged 12-19), foreign-born immigrants (N = 2919) and native-born non-immigrants (N = 39,083), were compared for their perceived general health and mental health as well as diagnosed chronic illnesses and psychological illnesses. Multiple imputations were first carried out for the degrees of missing values, and multivariate analyses were conducted to find differences between non-immigrants and immigrants, and between recent and long-term immigrants to verify (1) whether immigrant adolescents show better health than their non-immigrant peers, (2) whether the health of immigrant adolescents vary with length of residence and gender, and (3) whether persistent trends would be shown across the three survey years. **RESULTS:** After adjusting for age, visible minority status, household income and household size as covariates, immigrant adolescents indeed reported better health in all four measures in each survey year. Girls experienced more health problems regardless of immigrant status, especially for chronic and psychological illnesses. However, only in 2009 the long-term immigrant adolescents reported less favorite health than recent immigrants, and length of residence influenced boys' and girls' mental health in different directions. **CONCLUSIONS:** The HIE was confirmed with national community population samples of adolescents in Canada: foreign-born immigrant adolescents experience better health than their native-born peers. However, understanding of the HIE needs to be further extended to encompass the influence of societal contexts and their impact on various segments of populations.

Kwak, K. et Rudmin, F. (2014). "Adolescent health and adaptation in Canada: examination of gender and age aspects of the healthy immigrant effect." *Int J Equity Health* **13**: 103.

INTRODUCTION: A longstanding and widely held assumption is that immigrants suffer from ill health and adaptation problems. Yet recent studies show that immigrants report the same or better state of health compared to their native-born counterparts. This phenomenon, known as the healthy immigrant effect, has been found in studies of specific health conditions of adults. The present study focuses instead on adolescents and extends its examination of the healthy immigrant effect, measuring both health and adaptation. **METHODS:** Using data from population samples in the Canadian Community Health Survey (2007), foreign-born immigrant adolescents (n = 920) were compared to non-immigrant adolescents (n = 13,572) for their self-report to questionnaire items for health (general health, mental health, chronic illnesses with psychosomatic symptoms, and psychological illnesses) and adaptation (daily life stress, life satisfaction, and sense of belonging). Adolescents' gender, age, and length of residence were analyzed for the effects. **RESULTS:** Immigrant adolescents were better than non-immigrant peers on the four health measures, and did not differ from non-immigrants on the three adaptation measures despite having less household income and more family members in the household.

Immigrant girls exhibited more resilient adaptability, while young immigrant boys and older non-immigrant girls displayed some potential vulnerability. Length of residence, on the other hand, did not contribute to differences for the health and adaptation of immigrant adolescents. CONCLUSIONS: The healthy immigrant effect was confirmed in a community population sample of adolescents in Canada. Foreign-born immigrant adolescents experience better health, as well as good adaptation equal to their native-born peers. These outcomes call for further research on sustaining good health and adaptation of the immigrant population, in particular by providing age-related effective services and prevention strategies.

Kyeremeh, E., Sano, Y., Antabe, R., et al. (2021). "Exploring the Intersection Between Immigration and Gender in the Context of Troubled Sleep: Some Evidence from Canada." *J Immigr Minor Health* **23**(2): 257-264.

This study explored the linkage between immigration status and troubled sleep among recent immigrants, established immigrants and native-born in Canada. In particular, it examined whether the role of immigration status on troubled sleep differs between females and males. Using the 2012 Canadian Community Health Survey-Mental Health, logistic regression models were fitted to examine the relationship between troubled sleep and immigration status among a weighted sample of 12,932,829 women and 12,424,195 men. Findings indicate that female recent (OR 0.42, $p < 0.01$) and established immigrants (OR 0.74, $p < 0.05$) report fewer troubled sleep than their native-born counterparts. However, only male established immigrants report fewer troubled sleep (OR 0.42, $p < 0.05$), as male recent immigrants did not significantly differ from their native-born counterparts (OR 0.70, $p > 0.05$). Moreover, male recent immigrants were more likely to report troubled sleep than their female counterparts (OR 1.30, $p < 0.05$). Based on these findings, we discussed the potential gendered mechanisms in which immigrants' sleep is informed by social, cultural, and economic factors. We also provided several useful implications for policymakers.

Lacey, K. K., Briggs, A. Q., Park, J., et al. (2021). "Social and economic influences on disparities in the health of racial and ethnic group Canadian immigrants." *Can J Public Health* **112**(3): 482-492.

OBJECTIVE: To examine social, economic, and migratory influences on the health of racial and ethnic minority groups in Canada, with a special focus on Caribbean immigrants. METHODS: Combined annual cycles (2011-2016) of the Canadian Community Health Survey (CCHS) data totaling over 300,000 adult Canadian residents were aggregated. Descriptive statistics and multivariable logistic regression models were used to examine the prevalence and associated factors of (1) cardiovascular disease diagnosed by a healthcare professional, and (2) self-rated general health among racial and ethnic groups. RESULTS: Caribbeans in general, Black and other non-White Canadians had significantly higher odds (adjusted for age/sex) of reporting any cardiovascular disease compared with White Canadians. Only non-Caribbean Blacks had higher odds of self-rated fair or poor general health compared with White Canadians. Multivariate logistic regression models revealed that after controlling for social and demographic factors, immigration status and years since migration, Caribbean non-Blacks and Black Caribbeans were at higher odds of having a doctor-reported cardiovascular health condition compared with White Canadians. Caribbean non-Blacks also had higher odds of fair or poor self-rated health than White Canadians. CONCLUSION: The results of this study highlight the need for additional investigations of other potential influences on physical health statuses, especially among

migrants and those of African ancestry who might be more prone to adverse health outcomes.

McKay, R., Letarte, L., Lebel, A., et al. (2022). "Exploring social inequalities in healthcare trajectories following diagnosis of diabetes: a state sequence analysis of linked survey and administrative data." *BMC Health Serv Res* **22**(1): 131.

BACKGROUND: Social inequalities in complications associated with diabetes mellitus persist. As a primary care sensitive condition (PCSC), this association could be related to differential access to primary care. Our objectives are to establish a typology of care trajectories following a new diagnosis, and to explore social determinants of trajectories. **METHODS:** We used the TorSaDe (The Care Trajectories-Enriched Data) cohort, which links Canadian Community Health Survey respondents to health administrative data. Care trajectories were mapped over a two-year period following a new diagnosis and analysed using state sequence and clustering methods. Associations between individual and geographic characteristics with trajectory types were assessed with multinomial logistic regression. **RESULTS:** Three trajectories were identified: Regular Family Physician (FP) Predominant, Specialist Physician Predominant, and Few Services. With Regular FP as the reference, males had higher odds of experiencing the Few Services trajectory, higher education was associated with higher odds of both the Few Services and the Specialist trajectories, and immigrants had higher odds of the Specialist trajectory. Diagnoses in a physician's office, as opposed to in hospital, were associated with higher odds of the Regular FP trajectory. **CONCLUSIONS:** The Regular FP trajectory most closely aligns with the management principles of the PCSC approach. We did not find strong evidence of social status privileging access to this trajectory. However, the association with location of diagnosis suggests that efforts to ensure patients diagnosed in hospital are well linked to a regular family physician for follow up may help to reduce unnecessary specialist use and meet PCSC goals.

Newbold, B. (2005). "Health status and health care of immigrants in Canada: a longitudinal analysis." *J Health Serv Res Policy* **10**(2): 77-83.

OBJECTIVES: This paper focuses upon health status, need for care, and use of health care from 1994/95 to 2000/01 in the Canadian foreign-born population. **METHODS:** Using Statistics Canada's longitudinal National Population Health Survey, descriptive and survival analyses are used to explore immigrant health status and health care. **RESULTS:** The health status of immigrants quickly declines after arrival, with a concomitant increase in use of health care services. However, survival analysis of the risk of a change to poor health indicates no difference between immigrants and the native-born. Similarly, there is no difference in the risk of hospital use between the two populations. **CONCLUSIONS:** The health status of recent immigrant arrivals is observed to decline towards that of the native-born population, while health care utilization increases. However, increased use may not be sufficient to offset declines in health, meaning that need for health care within the immigrant population may be unmet.

Ng, E. et Zhang, H. (2020). "The mental health of immigrants and refugees: Canadian evidence from a nationally linked database." *Demography* **31**(8): 3-12.

BACKGROUND: Few studies of the healthy immigrant effect (HIE) have examined the mental health outcomes of Canadian-born individuals on a national scale compared with immigrants by admission category. This study fills this gap by examining the self-reported mental health

(SRMH) of immigrants by admission category and other immigration dimensions (e.g., source world region and duration since landing) and making comparisons with Canadian-born respondents to a population-based survey. DATA AND METHODS: Based on four cycles (2011 to 2014) of the Canadian Community Health Survey (CCHS) linked to the Longitudinal Immigration Database (IMDB), odds ratios of high (i.e., excellent or very good) SRMH among Canadian-born respondents and IMDB-linked immigrants are compared using logistic regression. Among the IMDB immigrant population, high SRMH was also examined according to the above-mentioned immigration dimensions. Adjusted results were hierarchically controlled for age, sex, social and economic factors, and sense of belonging. RESULTS: Age-sex adjusted results show that immigrants, especially refugees, are less likely than the Canadian-born population to report high mental health levels, but these differences disappeared after full adjustment. The odds of immigrants having high SRMH differed more by source world region and duration since landing. For example, fully adjusted results show support for the HIE, with recent immigrants (interviewed within 10 years of landing) more likely to report high SRMH than either the Canadian-born population or established immigrants. Greater odds of high SRMH among recent immigrants also holds across admission classes and for selected world regions. DISCUSSION: This study provides new evidence on differences in mental health between Canadian-born individuals and immigrants by various characteristics. Results support a deterioration of the HIE in SRMH and identify factors significantly associated with SRMH. This study can also serve as a baseline for further studies on the impact of COVID-19 on immigrants' mental health by immigrant category.

Ng, E. et Zhang, H. (2021). "Access to mental health consultations by immigrants and refugees in Canada." *Health Rep* **32**(6): 3-13.

BACKGROUND: Few quantitative studies have used national-level data to examine access to mental health consultation (MHC) by immigrants in Canada, and even fewer studies investigate MHCs using the following variables: immigrant admission category, duration in Canada since landing and world source regions. This study examines MHCs by immigrants and refugees-compared with those of Canadian-born respondents-while controlling for self-reported mental health (SRMH) and immigrant characteristics, using a population-based survey linked to immigrant landing information. This study, which is based on a linked database, allows for much richer insight into immigrant populations than most previous studies. DATA AND METHODS: Based on data from four cycles (2011 to 2014) of the Canadian Community Health Survey linked to data from the Longitudinal Immigration Database, the odds ratios of having had MHCs are compared between the Canadian-born population and immigrants by immigration dimensions, while controlling for SRMH. Results are hierarchically adjusted for age, sex, socioeconomic factors and sense of belonging. RESULTS: After the above-mentioned factors were controlled for, immigrants were much less likely than Canadian-born respondents to access MHCs. Specifically, compared with the Canadian-born population that had high levels of SRMH, immigrants with high levels of SRMH were statistically less likely to have had an MHC (odds ratio [OR]=0.5, 95% confidence interval [CI] from 0.4 to 0.5), while those with low SRMH levels were more likely to report an MHC (OR=4.8, 95% CI from 4.5 to 5.1, for the Canadian-born population but OR=1.8, 95% CI from 1.5 to 2.1, for immigrants). Most Asian immigrants with low SRMH levels were only as likely to report MHCs as Canadian-born respondents with high SRMH levels. Refugees with low SRMH levels also had only a slightly elevated MHC level (OR=1.6, 95% CI from 1.1 to 2.3) compared with Canadian-born individuals with high SRMH levels. Overall, refugees

were not more likely than immigrants of other admission categories to report having had an MHC, even though previous findings have shown that refugees report low levels of SRMH. DISCUSSION: This study provides new evidence on the differences in access to MHC between Canadian-born individuals and immigrants by various characteristics, while controlling for SRMH. Results probably reflect the structural or cultural barriers to MHC and point to a possible pathway to either maintain or improve mental health among immigrants.

Ngwakongnwi, E., et al. (2011). "Official language proficiency and self-reported health among immigrants to Canada." Health Rep **22**(4): 15-23.

BACKGROUND: New immigrants to Canada initially report better health than does the Canadian-born population. With time, this "healthy immigrant effect" appears to diminish. Limited ability to speak English or French has been identified as a possible factor in poor health. This analysis explored the relationship between self-reported official language proficiency and transitions to poor self-reported health. DATA AND METHODS: Statistics Canada's Longitudinal Survey of Immigrants to Canada tracked a sample of the 2001 immigrant cohort for four years (6, 24 and 48 months after arrival). Data from each of the three survey waves were available for 7,716 respondents. Bivariate and multivariate analysis were used to examine associations between official language proficiency and self-reported health, by sex, controlling for selected pre-migration and post-migration factors. The prevalence of poor health among immigrants was compared with rates among the Canadian-born population, based on data from the Canadian Community Health Survey. RESULTS: Among a representative sample of recent immigrants, the prevalence of poor self-reported health had risen substantially, especially among women, after four years in Canada. Prolonged limited official language proficiency was strongly associated with a transition to poor health among male and female immigrants who had earlier reported good health. Other factors significantly associated with an increase in the prevalence of poor self-reported health differed by sex. Refugee status, self-reported discrimination, and living in Vancouver were significant for men. Age, health care access problems, and limited friendliness of neighbours were significant for women.

Ngwakongnwi, E. (2015). "Canadian Health Measures Survey: A tool for immigrant health research?" Health Rep **26**(3): 3-9.

BACKGROUND: The Canadian Health Measures Survey (CHMS) fills important health information gaps, but the feasibility of using it for immigrant research is unknown. DATA AND METHODS: Weighted estimates of socio-demographic variables by immigrant status from the combined cycles 1 and 2 of the CHMS (2007 to 2009 and 2009 to 2011) were compared with distributions from the 2006 Census and the 2011 National Household Survey (NHS). Weighted CHMS estimates of selected self-reported health indicators among immigrants were compared with corresponding data from the 2009/2010 Canadian Community Health Survey (CCHS) by age group, sex, broad world region of origin, and period of arrival. Z-scores were used to detect statistical significance between the CHMS and CCHS estimates. RESULTS: The CHMS immigrant sample is generally similar to the average of 2006 Census/2011 NHS samples, but it contains higher percentages of recent immigrants, 30- to 49-year-olds, and immigrants from South/Central America. Estimates of selected self-reported health and health behaviour variables from the CHMS and the CCHS were similar overall, with minor differences at subgroup levels, and some inconclusive results due to high variability. INTERPRETATION: The combined

CHMS immigrant sample can be used for health research. However, it is necessary to ensure that variables of interest meet sample size and prevalence requirements, especially at the subgroup level.

Nwoke, C. N. et Okpalauwaekwe, U. (2020). "Mental Health Professional Consultations and the Prevalence of Mood and Anxiety Disorders Among Immigrants: Multilevel Analysis of the Canadian Community Health Survey." *7*(9): e19168.

BACKGROUND: There is a significant body of evidence on the link between migration and mental health stressors. However, there has been very little research on the use of mental health services by immigrants in Canada. The prevalence of mental health professional consultations among immigrants, as well as its correlations, are not well understood and remain largely unknown. **OBJECTIVE:** This study aims to examine how specialist mental health visits (to a psychiatrist) differ from general mental health visits (to a family doctor or general practitioner) from immigrants, when compared to visits from those born in Canada, in a nationally representative sample of Canadian adults. This study also examines which group-immigrant or Canadian-born-suffers more from depression or anxiety, 2 of the more common mental health conditions. **METHODS:** We used data from the Canadian Community Health Survey (CCHS) between the years 2015 and 2016. The outcome variables included consultation with any mental health professional, consultation with a specialist (psychiatrist), and the prevalence of mood and anxiety disorders. The independent variable was immigrant status. Other variables of interest were adjusted for in the analyses. Multilevel regression models were developed, and all analyses were performed with Stata IC statistical software (version 13.0, StataCorp). **RESULTS:** The prevalence of mood and anxiety disorders was significantly lower among immigrants compared with individuals born in Canada; the prevalence of mood disorders was 5.24% (389,164/7,422,773) for immigrants vs. 9.15% (2,001,829/21,885,625) for individuals born in Canada, and the prevalence of anxiety disorders was 4.47% (330,937/7,410,437) for immigrants vs. 9.51% (2,083,155/21,898,839) for individuals born in Canada. It is expected that individuals with a lower prevalence of mood or anxiety disorders would use mental health services less frequently. However, results show that immigrants, while less likely to consult with any mental health professional (OR=0.80, 95% CI 0.72-0.88, P<.001), were more likely to consult with a psychiatrist (OR=1.24, 95% CI 1.04-1.48, P=.02) for their mental health visits when compared to individuals born in Canada. **CONCLUSIONS:** The results of this study reveal an unusual discord between the likelihood of mental health professional consultations with any mental health professional and mental health visits with psychiatrists among immigrants compared to nonimmigrants in Canada. Mental health initiatives need to be cognizant of the differences in the associated characteristics of consultations for immigrants to better tailor mental health services to be responsive to the unique needs of immigrant populations in Canada.

Ohle, R., et al. (2017). "The immigrant effect: factors impacting use of primary and emergency department care - a Canadian population cross-sectional study." *Cjem*: 1-6.

OBJECTIVE: In 2011, Canada had a foreign-born population of approximately 6,775,800. They represented 20.6% of the total population. Immigrants possess characteristics that reduce the use of primary care. This is thought to be, in part, due to a lower education level, employment, and better health status. Our objective was to assess whether, in an immigrant population without a primary care physician, similar socioeconomic factors would also reduce the likelihood

of using the emergency department compared to a non-immigrant population without primary care. METHODS: Data regarding individuals ≥ 12 years of age from the Canadian Community Health Survey from 2007 to 2008 were analysed ($n=134,073$; response rate 93%). Our study population comprised 15,554 individuals identified without a primary care physician who had a regular place for medical care. The primary outcome was emergency department as a regular care access point. Socioeconomic variables included employment, health status, and education. Covariates included chronic health conditions, mobility, gender, age, and mental health. Weighted logistic regression models were constructed to evaluate the importance of individual risk factors. RESULTS: The sample of 15,554 (immigrants $n=1,767$) consisted of 57.3% male and 42.7% female respondents from across Canada. Immigrants were less likely than Canadian-born respondents to use the emergency department as a regular access point for health care (odds ratio=0.48 [95% CI 0.40 - 0.57]). Adjusting for health, education, or employment had no effect on this reduced tendency (odds ratio=0.47 [95% CI 0.38 - 0.58]). CONCLUSION: In a Canadian population without a primary care physician, immigrants are less likely to use the emergency department as a primary access point for care than Canadian-born respondents. However, this effect is independent of previously reported social and economic factors that impact use of primary care. Immigration status is an important but complex component of racial and ethnic disparity in the use of health care in Canada.

Patterson, A. C. et Veenstra, G. (2016). "Black-White health inequalities in Canada at the intersection of gender and immigration." *Can J Public Health* **107**(3): e278-e284.

OBJECTIVES: Intersectionality theory proposes that each combination of social categories derived from gender, race and nationality, such as immigrant White man or native-born Black woman, is associated with unique social experiences. We tested the potential of intersectionality theory for explicating racial inequalities in Canada by investigating whether Black-White health inequalities are conditioned by gender and immigrant status in a synergistic way. METHODS: Our dataset comprised 10 cycles (2001-2013) of the Canadian Community Health Survey. We used binary logistic regression to model Black-White inequalities in hypertension, diabetes, self-rated health, self-rated mental health and asthma separately for native-born women, native-born men, immigrant women and immigrant men. RESULTS: After controlling for potentially confounding factors we found that immigrant Black women had significantly higher odds of hypertension, diabetes and fair/poor self-rated health than immigrant White women. Native-born Black women and immigrant Black men had higher odds of hypertension and diabetes than native-born White women and immigrant White men respectively, and native-born White women were more likely than native-born Black women to report asthma. There were no statistically significant health differences between native-born Black and White men. Socio-economic status, smoking, physical activity and body mass index were implicated in some but not all of these racial health inequalities. None of the three-way interactions between racial identity, gender and immigration status was statistically significant. CONCLUSION: We found relatively high risks of ill health for Black Canadians in three of the four samples. Overall, however, we found little support for the intersectional hypothesis that Black-White health inequalities in Canada are conditioned by gender and immigrant status in a synergistic way.

Ravichandiran, N., Mathews, M. et Ryan, B. L. (2022). "Utilization of healthcare by immigrants in Canada: a cross-sectional analysis of the Canadian Community Health Survey." *BMC Prim Care* **23**(1): 69.

BACKGROUND: Immigrants to Canada face unique barriers to health care, which leads to inequities in health care utilization. Lower utilization of health care by immigrants to Canada is associated with the deteriorating health of individual immigrants as well as increased costs to the health care system. The existing literature suggests that time since immigration is an important predictor for utilization of health care for Canadian immigrants; however, few studies have included this variable in their analysis. This study aims to examine the relationships between having a regular health care provider and time since immigration, and number of medical consultations in the past year and time since immigration. **METHODS:** A secondary cross-sectional data analysis using Andersen and Newman's Framework of Health Service Utilization and data from the 2015-2016 Canadian Community Health Survey (CCHS) was conducted to examine health care utilization among immigrants in Canada. We used multiple logistic regression to examine the relationship between time since immigration and having a regular physician and negative binomial regression to compare the number of consultations of recent (less than 10 years since immigration) and established (10 or more years since immigration) immigrants. **RESULTS:** Eighty four percent of immigrant respondents to CCHS 2015-2016 had a regular health care provider. After controlling for other independent variables, established immigrants were 1.75 (95% confidence interval: 1.45-2.10) times more likely to have a regular health care provider compared to recent immigrants. Immigrants had a mean of 3.37 (standard deviation 4.53) medical consultations in the preceding year. There was no difference in the mean number of medical consultations by recent and established immigrants. **CONCLUSIONS:** After controlling for other independent variables, this study found that time since immigration had a significant effect on having a regular provider but not on number of consultations. Differences in health care utilization for recent and for established immigrants observed in this study may be partially explained by Canada's evolving immigration policy and the economic and social integration of immigrants over time.

Rivera, J. M. B. (2021). "Primary Care and Access to Mental Health Consultations among Immigrants and Nonimmigrants with Mood or Anxiety Disorders: Soins de première ligne et accès aux consultations en santé mentale chez les immigrants et les non-immigrants souffrant de troubles de l'humeur ou anxieux." *J Am Heart Assoc* **66**(6): 540-550.

OBJECTIVE: To examine the association between usual place of primary care and mental health consultation among those with self-reported mood or anxiety disorders. We also describe access to mental health services among people who are recent immigrants, longer-term immigrants, and nonimmigrants and determine whether the association with place of primary care differs by immigration group. **METHODS:** We used data from the Canadian Community Health Survey (2015 to 2016) to identify a representative sample of individuals with self-reported mood or anxiety disorders. We used logistic regression, with models stratified by immigration group (recent, longer-term, nonimmigrant), to examine the association between usual place of primary care and receiving a mental health consultation in the previous 12 months. **RESULTS:** Higher percentages of recent and longer-term immigrants see a doctor in solo practice, and a higher percentage of recent immigrants use walk-in clinics as a usual place of care. Compared with people whose usual place of care was a community health center or interdisciplinary team, adjusted odds of a mental health consultation were significantly lower for people whose usual place of care was a solo practice doctor's office (AOR = 0.71; 95% CI, 0.62 to 0.82), a walk-in clinic (AOR = 0.75; 95% CI, 0.66 to 0.85), outpatient clinic/other place

(AOR = 0.72 95% CI, 0.59 to 0.88), and lowest among people reporting no usual place other than the emergency room (AOR = 0.59; 95% CI, 0.51 to 0.67). Differences in access to mental health consultations by usual place of primary care were greatest among immigrants, especially recent immigrants. CONCLUSIONS: People with mood or anxiety disorders who have access to team-based primary care are more likely to report mental health consultations, and this is especially true for immigrants. Expanded access to team-based primary health care may help reduce barriers to mental health services, especially among immigrants.

Salami, B., Yaskina, M., Hegadoren, K., et al. (2017). "Migration and social determinants of mental health: Results from the Canadian Health Measures Survey." *Can J Public Health* **108**(4): e362-e367.

OBJECTIVES: Studies worldwide point to increased risk of mental health problems among immigrants. However, the data on Canadian immigrants' mental health are ambiguous. To address this, we examined the relationship of both self-perceived mental health and reported diagnosis of mood disorders with age, gender, migration status, time since migration, and social of health factors. METHODS: We analyzed three cycles of the Canadian Health Measures Survey. Our outcome variables were self-perceived mental health and reported diagnosis of mood disorders. We used weighted logistic regression to model time since migration conditional on age, gender, income, community belonging, education, and employment status for 12 160 participants aged 15-79 years. RESULTS: Recent (within 5 years) migrants reported better self-perceived mental health (odds ratio 3.98, 95% confidence interval [CI]: 2.06-7.70) but this effect disappeared with longer time since immigration. Other predictors were older age, higher income, better sense of community belonging, and being employed. Similarly, diagnosis of mood disorders was less likely to be reported in recent migrants (odds ratio 0.23, 95% CI: 0.10-0.53) with some weak evidence that this was also seen among longer-term migrant residents (>10 years). Diagnosis was also associated with older age, being a woman, lower income, weak sense of community belonging, and being unemployed. DISCUSSION: Our findings indicate that migrants to Canada do not have worse mental health in general, though health and social policies need to attend to the socio-economic determinants, such as low income, unemployment, and a poor sense of community belonging, which contribute to population health outcomes.

Sano, Y. (2022). "Regular Dental Care Utilization: The Case of Immigrants in Ontario, Canada." *Public Health Nutr* **24**(1): 162-169.

Considering the critical role of oral health on people's well-being, access to regular dental care to improve oral health may be a useful medium for improving immigrant integration and settlement in Canada. Using the 2013-14 Canadian Community Health Survey, this study contributes to the literature and policy by examining if there are disparities in regular utilization of dental care among recent immigrants, established immigrants, and the native-born in Ontario, Canada. Adopting Andersen's behavioural model of health services use as a conceptual framework, we introduce three sets of variables in our statistical analysis including predisposing, need, and enabling factors. At the bivariate level, recent (OR = 0.42, $p < 0.001$) and established immigrants (OR = 0.81, $p < 0.001$) are less likely to use dental care at least once a year than their native-born counterparts. Once accounting for enabling characteristics, however, we observe that the direction of the association becomes positive for established immigrants (OR = 1.15,

$p < 0.05$). The difference between recent immigrants and the native-born is partially attenuated when we control for enabling characteristics but remains statistically significant ($OR = 0.73$, $p < 0.05$). Based on these findings, we provide several implications for policymakers and future research.

Su, Y. et Rao, W. (2020). "Depression risk and body mass index among immigrants and non-immigrants in Canada: results from the Canadian Community Health Surveys, 2010-2014." *55*(10): 1283-1295.

PURPOSE: Obesity has been associated with an increased risk of the depression in the general population, but it is unknown whether this relationship applies equally to immigrants as well as non-immigrants. Furthermore, the nature of the relationship is uncertain, is it direct or curvilinear? The aim of this study is to examine the relationship between body mass index and major depressive episode among immigrants and non-immigrants. **METHODS:** To provide more statistically robust data, a series of cross-sectional health surveys of the Canadian population for the 5 years 2010-2014 were pooled to increase the number of immigrants in the study. Restricted cubic splines analysis was used to examine the nature of the association. **RESULTS:** Immigrants had lower 12-month depression and obesity prevalence rates than non-immigrants. In addition, it was found that non-immigrants were more likely to develop depression than immigrants, $OR = 1.40$ (95% CI, 1.16-1.67). Obese respondents were more likely to develop depression than normal weight respondents in both immigrant ($OR = 1.55$; 95% CI, 1.03-2.32) and non-immigrant groups ($OR = 1.23$; 95% CI, 1.15-1.32). A significant nonlinear elongated J-shaped association between obesity and depression was found for both immigrants and non-immigrants with increased risk of depression in obese individuals. **CONCLUSION:** Culture-specific, clinical-based interventions should be developed to improve the early identification, treatment and recovery of individuals with a high BMI particularly among those with BMIs in the obese range.

Subedi, R. P. et Rosenberg, M. W. (2014). "Determinants of the variations in self-reported health status among recent and more established immigrants in Canada." *Soc Sci Med* **115**: 103-110.

Studies have shown that immigrants are normally in better health on arrival compared to their Canadian-born counterparts. However, the health conditions of new immigrants deteriorate after a few years of their arrival in Canada. This phenomenon is popularly termed the "healthy immigrant effect" (HIE) in the immigrant health literature. Although different hypotheses have been proposed to understand HIE, the causes are subject to ongoing discussion. Unlike previous studies, this study explored the possible causes behind the variations in the health status of recent and more established immigrants comparing 2001 and 2010 Canadian Community Health Surveys (CCHS). Four different hypotheses - namely lifestyle change, barriers to health care services, poor social determinants of health, and work related stress - were tested to understand variations in health status. The study concludes that there is a statistically significant difference in the socioeconomic characteristics and health outcomes of immigrants having less than and more than 10 years of residency in Canada. Logistic regression models show that the health conditions of immigrants are associated with age, sex, ethnic origin, smoking habit, Body Mass Index (BMI), total household income, number of consultations made with a family doctor per year and work related stress

Wahi, G., et al. (2014). "Body mass index among immigrant and non-immigrant youth: evidence from the Canadian Community Health Survey." *Can J Public Health* **105**(4): e239-244.

OBJECTIVES: The objectives of this study are to: i) examine differences in body mass index (BMI) and prevalence of overweight/obesity between immigrant versus non-immigrant youth aged 12-19 years, and ii) identify the extent to which lifestyle and socio-demographic factors account for between-group differences. **METHODS:** Data for analyses come from combining repeated, cross-sectional surveys of the Canadian Community Health Survey (CCHS) conducted between 2000 and 2008. The sample for analyses included 63,509 youth aged 12 to 19 years (mean 15.2, SD 2.3 years) with self-reported weight and height. Immigrant youth composed 6.4% of this sample. Multilevel linear and logistic regression analyses were used to address the study objectives. **RESULTS:** Approximately 22% of non-immigrant youth were overweight/obese, compared to 18% of immigrant youth ($p < 0.001$). Immigrant youth had a lower zBMI by 0.44 compared to non-immigrant youth ($p < 0.001$) and zBMI increased by 0.02 for every year an immigrant-responder resided in Canada. Measures of lifestyle and socio-demographic factors did not account for differences in body composition between immigrant and non-immigrant youth. **CONCLUSION:** Even after adjusting for lifestyle and socio-demographic factors, immigrant youth have a lower level of overweight/obesity and a lower zBMI, compared to non-immigrant youth. Further, for immigrant youth zBMI increases with time spent in Canada, which highlights an opportunity for primary preventative strategies for obesity aimed at newcomers to Canada.

Wang, L. et Hu, W. (2013). "Immigrant health, place effect and regional disparities in Canada." *Soc Sci Med* **98**: 8-17.

The paper addresses a critically important area in Canadian immigration and health from both a social and a spatial perspective. It employs multilevel and contextual approaches to examine the social determinants of immigrant health as well as the place effects on self-reported health at a regional and neighborhood scale. The data come from the raw microdata file of the 2005-10 Canadian Community Health Survey (a random national health survey) and the publicly available Canadian Marginalization index based on the 2006 Census. Three populations are compared: Canadian-born, overall foreign-born, and Chinese immigrants. The results suggest various degrees of association between self-reported health, individual and lifestyle behavioral characteristics, and neighborhood material deprivation and ethnic concentration in census tracts. These factors contribute differently to the reported health of Chinese immigrants, Canada's largest recent immigrant group. A healthy immigrant effect is partially evident in the overall foreign-born population, but appears to be relatively weak in Chinese immigrants. For all groups, neighborhood deprivation moderately increases the likelihood of reporting poor health. Ethnic concentration negatively affects self-rated health, with the exception of the slight protective effect of Chinese-specific ethnic density in census tracts. The multilevel models reveal significant area inequalities across Census Metropolitan Areas/Census Agglomerations in risk of reporting unhealthy status, with greater magnitude in the foreign-born population. The vast regional variations in health among Chinese immigrants should be interpreted carefully due to the group's heavy concentration in large cities. The study contributes to the literature on ethnicity and health by systematically incorporating neighborhood contextual effects in modeling the social determinants of immigrant health status. It fills a gap in the literature on neighborhoods and health by focusing on ethnically disparate groups rather than on the general population. By revealing regional disparities in health, the paper adds a spatial perspective to

the work on immigrant health.

Wang, L. et Palacios, E. L. (2017). "The Social and Spatial Patterning of Life Stress Among Immigrants in Canada." *J Immigr Minor Health* **19**(3): 665-673.

While much literature has examined immigrants' health in Canada, less attention has focused specifically on the life stress, an important yet understudied post-migration challenge which may lead to poor coping strategies and negative health consequences. For this study, the pooled 2009-2014 Canadian Community Health Survey (CCHS) was analyzed, using multilevel logistic regression to examine the compositional effects (at an individual level) and areal effects (at a CMA/CA level) on reported high life stress. Separate models have been run for immigrants and non-immigrants for comparative purposes. The results reveal different ways in which select individual socioeconomic and lifestyle factors affect life stress. A statistically significant yet small areal effect at the CMA/CA level on life stress was identified for both immigrants and non-immigrants. When comparing immigrants to non-immigrants, factors such as smoking, length of residency in Canada, and mental health status were found to be particularly informative for predicting high life stress among immigrants. A Healthy Immigrant Effect (HIE) is partially evident, as immigrants with a longer stay in Canada are more likely to be highly stressed than recent arrivals. The areal effect on variances in high life stress is minimal, suggesting the importance of focusing on individual-level effects as stress predictors.

Yao, J. et Sbihi, H. (2016). "Prevalence of non-food allergies among non-immigrants, long-time immigrants and recent immigrants in Canada." *Can J Public Health* **107**(4-5): e461-e466.

OBJECTIVES: The prevalence of allergic conditions has been increasing worldwide, with the highest rates seen in Western countries like Canada. The development of allergies is known to be related to both genetic and environmental factors, but the causal pathways remain unclear. Studies on immigrants provide a unique opportunity to disentangle these two factors and provide a better understanding of the disease aetiology. The aim of this study was to investigate the relationship between immigration status and prevalence of non-food allergies in a population-based study of Canadians. **METHODS:** Data of 116,232 respondents from the Canadian Community Health Survey (Cycle 3.1, 2005) were used in a multivariable logistic regression to assess the association between immigration status (non-immigrant, long-time immigrant [≥ 10 years] and recent immigrant [≤ 10 years]) and self-reported doctor-diagnosed non-food allergies, adjusting for potential confounders. **RESULTS:** The highest prevalence of non-food allergies was found among non-immigrants (29.6%), followed by long-time immigrants (23.9%) and then recent immigrants (14.3%). The odds of non-food allergies were reduced by 60% (OR = 0.40, 95% CI: 0.35, 0.45) among recent immigrants and 25% (OR = 0.75, 95% CI: 0.70, 0.80) among long-time immigrants, compared with non-immigrants, after adjusting for sex, age, socio-economic status and rurality. **CONCLUSION:** This study finds a distinctly lower prevalence of non-food allergies among immigrants compared with non-immigrants, with the difference diminishing with longer duration of residence in Canada. The findings highlight the potential of environmental determinants of allergy development that warrant further investigation, and demonstrate the need for multicultural strategies to manage the public health burden of allergic conditions.

Yung, S. (2022). "Immigrant Status and Unmet Home Care Needs: Results from the Canadian Community

Health Survey." J Immigr Minor Health **24**(1): 154-161.

This study assessed the relationship between immigration status, including recency, and unmet home care needs. Data from the 2015-2016 Canadian Community Health Survey (CCHS) was used to analyze the relationship between immigration status and unmet home care needs. Descriptive analyses and multivariable logistic regression controlling for age, sex, marital status, and education were calculated. Of the study sample of 5976 respondents, 34.5% had unmet home care needs. Prevalence of unmet needs was highest among recent immigrants (43.8%), compared with long-time immigrants (40.5%) and non-immigrants (32.7%). Adjusted odds of unmet needs was higher for both immigrant categories than non-immigrants, and stronger for long-time immigrants (OR = 1.58, 95% CI: 1.14, 2.20) than recent immigrants (OR = 1.42, 95% CI: 0.67, 3.00). The finding that immigrants are more likely to experience unmet home care needs, with a slight difference between recent and long-time immigrants, suggests home care access inequities exist between immigrants and non-immigrants, and among immigrants.

Chili

Cabieses, B. et Oyarte, M. (2020). "Health access to immigrants: identifying gaps for social protection in health." **54**: 20.

OBJECTIVE: To compare the access to and effective use of health services available among international migrants and Chileans. METHODS: Secondary analysis of the National Socioeconomic Characterization Survey (CASEN - Caracterización Socioeconómica Nacional), version 2017. Indicators of access to the health system (having health insurance) and effective use of health services (perceived need, appointment or coverage, barriers and need satisfaction) were described in immigrants and local population, self-reported. Gaps by immigrant status were estimated using logistic regressions, with complex samples. RESULTS: Immigrants were 7.5 times more likely to have no health insurance than local residents. Immigrants presented less perceived need than local residents, together with a greater lack of appointments (OR: 1.7 95%CI: 1.2-2.5), coverage (OR: 2.7 95%CI: 2.0-3.7) and unsatisfied need. The difference between immigrants and locals was not statistically significant in barriers to health care access ($\alpha = 0.005$). CONCLUSIONS: Disadvantages persist regarding the access to and use of health services by immigrants as opposed to Chileans compared with information from previous years. It is necessary to reduce the gaps between immigrants and people born in Chile, especially in terms of health system access. This is the first barrier to effective use of services. The generation of concrete strategies and health policies that consider an approach of social participation of the immigrant community is suggested to bring the health system closer to this population.

Cabieses, B., et al. (2012). "Understanding differences in access and use of healthcare between international immigrants to Chile and the Chilean-born: a repeated cross-sectional population-based study in Chile." Int J Equity Health **11**: 68.

INTRODUCTION: International evidence indicates consistently lower rates of access and use of healthcare by international immigrants. Factors associated with this phenomenon vary significantly depending on the context. Some research into the health of immigrants has been conducted in Latin America, mostly from a qualitative perspective. This population-based study

is the first quantitative study to explore healthcare provision entitlement and use of healthcare services by immigrants in Chile and compare them to the Chilean-born. METHODS: Data come from the nationally representative CASEN (Socioeconomic characterization of the population in Chile) surveys, conducted in 2006 and 2009. Self-reported immigrants were compared to the Chilean-born, by demographic characteristics (age, sex, urban/rural, household composition, ethnicity), socioeconomic status (SES: education, household income, contractual status), healthcare provision entitlement (public, private, other, none), and use of primary services. Weighted descriptive, stratified and adjusted regression models were used to analyse factors associated with access to and use of healthcare. RESULTS: There was an increase in self-reported immigrant status and in household income inequality among immigrants between 2006 and 2009. Over time there was a decrease in the rate of immigrants reporting no healthcare provision and an increase in reporting of private healthcare provision entitlement. Compared to the Chilean-born, immigrants reported higher rates of use of antenatal and gynaecological care, lower use of well-baby care, and no difference in the use of Pap smears or the number of attentions received in the last three months. Immigrants in the bottom income quintile were four times more likely to report no healthcare provision than their equivalent Chilean-born group (with different health needs, i.e. vertical inequity). Disabled immigrants were more likely to have no healthcare provision compared to the disabled Chilean-born (with similar health needs, i.e. horizontal inequity). Factors associated with immigrants' access to, and use of, healthcare were sex, urban/rural status, education and country of origin. CONCLUSION: There were significant associations between SES, and access to and use of healthcare among immigrants in Chile and a higher prevalence of no health care provision entitlement among poor and disabled immigrants compared to the Chilean-born. Changing associations between access and use of healthcare and SES among immigrants in Chile over time may reflect changes in their socio-demographic composition or in the survey methodology between 2006 and 2009.

Chine

Lin, Y., et al. (2016). "Association between Social Integration and Health among Internal Migrants in ZhongShan, China." *PLoS One* **11**(2): e0148397.

Internal migrants are the individuals who migrate between regions in one country. The number of internal migrants were estimated at 245 million in China in 2013. Results were inconsistent in the literature about the relationship between their health statuses and social integration. The main difference exists on how to measure the social integration and whether health statuses of internal migrants improve with years of residence. To complement the existing literature, this study measured social integration more comprehensively and estimated the internal migrants' health statuses with varying years of residence, and explored the associations between the migrants' social integration and health. We used the data from 2014 Internal Migrant Dynamic Monitoring Survey of Health and Family Planning in ZhongShan, China. Health status was measured from four aspects: self-reported health, subjective well-being, perception of stress, mental health. We measured social integration through four dimensions: economy, social communication, acculturation, and self-identity. The analyses used multiple linear regressions to examine the associations between self-reported health, subjective well-being, and perception of stress, mental health and social integration. The analytical sample included 1,999 households of the internal migrants and 1,997 local registered households, who were permanent residents in

ZhongShan. Among the internal migrants, Adults in the labor force, who were aged 25 to 44 years old, accounted for 91.2% of the internal migrant population, while 74.6% of the registered population were in that age group. Median residential time among migrants was 2.8 (1.3-6.2) years, and 20.2% of them were migrating in the same Guangdong province. Except for mental health, other health statuses among migrants had significant differences compared with local registered population, e.g. self-reported health was better, but subjective well-being was worse. However, these health measurements were improved with more years of residence. Moreover, our results show that two aspects of social integration, economic integration and self-identity, were significantly associated with health status. Subjective feeling of relative social status levels were more associated with health, which prompted the attention to social fairness and the creation of a fair and respectful culture. More interventions could be experimented, such as encouraging internal migrants to participate in community activities more actively, educating local registered residents to treat internal migrants more equally, and developing self-identity among internal migrants. Better social, economic, and cultural environment can benefit internal migrants' health statuses.

Lu, Y. et Qin, L. (2014). "Healthy migrant and salmon bias hypotheses: a study of health and internal migration in China." *Soc Sci Med* **102**: 41-48.

The existing literature has often underscored the "healthy migrant" effect and the "salmon bias" in understanding the health of migrants. Nevertheless, direct evidence for these two hypotheses, particularly the "salmon bias," is limited. Using data from a national longitudinal survey conducted between 2003 and 2007 in China, we provide tests of these hypotheses in the case of internal migration in China. To examine the healthy migrant effect, we study how pre-migration self-reported health is associated with an individual's decision to migrate and the distance of migration. To test the salmon bias hypothesis, we compare the self-reported health of migrants who stay in destinations and who return or move closer to home villages. The results provide support for both hypotheses. Specifically, healthier individuals are more likely to migrate and to move further away from home. Among migrants, those with poorer health are more likely to return or to move closer to their origin communities.

Wang, Q. (2017). "Health of the Elderly Migration Population in China: Benefit from Individual and Local Socioeconomic Status?" *Int J Environ Res Public Health* **14**(4).

The study aims to estimate the relationship between the individual/local socioeconomic status and the health of internal elderly migrants in China. A multilevel logistic model was used to estimate this association. The estimations were undertaken for 11,111 migrants aged over 60 years, using nationally representative data: the 2015 Migrant Dynamics Monitoring Survey (MDMS), which was carried out in China. Odds ratios with 95% confidence intervals were reported. Both the household income per capita and the area-level average wage were positively associated with migrants' self-reported health; however, public service supply was not significantly related to their health. In addition, given the household income, migrants living in communities with a higher average wage were more likely to report poor health. Migrants' health benefited from individual socioeconomic status, but not from the local socioeconomic status, which the migrants cannot enjoy. This study highlights the importance of multilevel and non-discriminatory policies between migrants and local residents.

Danemark

Ahlmark, N., et al. (2015). "Survey nonresponse among ethnic minorities in a national health survey - a mixed-method study of participation, barriers, and potentials." *Ethn Health* **20**(6): 611-632.

OBJECTIVES: The participation rate in the Danish National Health Survey (DNHS) 2010 was significantly lower among ethnic minorities than ethnic Danes. The purpose was to characterize nonresponse among ethnic minorities in DNHS, analyze variations in item nonresponse, and investigate barriers and incentives to participation. **DESIGN:** This was a mixed-method study. Logistic regression was used to analyze nonresponse using data from DNHS (N = 177,639 and chi-square tests in item nonresponse analyses. We explored barriers and incentives regarding participation through focus groups and cognitive interviews. Informants included immigrants and their descendants of both sexes, with and without higher education. **RESULTS:** The highest nonresponse rate was for non-Western descendants (80.0%) and immigrants 25 (72.3%) with basic education. Immigrants and descendants had higher odds ratios (OR = 3.07 and OR = 3.35, respectively) for nonresponse than ethnic Danes when adjusted for sex, age, marital status, and education. Non-Western immigrants had higher item nonresponse in several question categories. Barriers to non-participation related to the content, language, format, and layout of both the questionnaire and the cover letter. The sender and setting in which to receive the questionnaire also influenced answering incentives. We observed differences in barriers and incentives between immigrants and descendants. **CONCLUSIONS:** Nonresponse appears related to linguistic and/or educational limitations, to alienation generated by the questions' focus on disease and cultural assumptions, or mistrust regarding anonymity. Ethnic minorities seem particularly affected by such barriers. To increase survey participation, questions could be sensitized to reflect multicultural traditions, and the impact of sender and setting considered.

Tiittala, P. J., et al. (2015). "Achieving high acceptability of HIV testing in a population-based survey among immigrants in Finland." *Scand J Public Health* **43**(4): 393-398.

AIMS: The aim of this study was to assess the acceptability of human immunodeficiency virus (HIV) testing among migrants in Finland and the factors contributing to non-acceptance. **METHODS:** The Finnish Migrant Health and Wellbeing Study 'Maamu' was the first national population-based Health Interview and Examination Survey (HIS/HES) among migrants in Finland. A total of 386 Kurdish, Russian and Somali immigrants in Helsinki participated in the study. **RESULTS:** Despite the participants' different sociodemographic backgrounds, a high rate of test acceptability (92%, 95% CI 90-95) was achieved. HIV test acceptance was associated with pretest counselling, ability to understand spoken Finnish or Swedish and employment status. No participants tested positive for HIV. **CONCLUSIONS:** The results imply that a universal HIV testing strategy is well accepted in a low-HIV prevalence immigrant population and can be included in a general health examination in immigrant population-based surveys.

Espagne

Agudelo-Suárez, A. A., Muñoz-Pino, N., Vivares-Builes, A. M., et al. (2020). "Oral Health and Oral Health Service Utilization in Native and Immigrant Population: A Cross-Sectional Analysis from the PELFI

Cohort in Spain." *J Immigr Minor Health* **22**(3): 484-493.

This study analyzes associated factors to self-perceived oral health and use of oral health services in native and immigrant adults from the PELFI cohort in Spain. A cross-sectional analysis was conducted (401 adults \geq 18 years, from Spain, Ecuador, Colombia and Morocco). Frequencies for sociodemographic, self-perceived general and oral health variables were calculated. The association between oral health/oral health services use and origin country was estimated by logistic regression (adjusted odds ratio-aOR; 95% confidence intervals -95%CI-). Ecuadorian men were more likely to report dental caries (aPR 2.75; 95%CI 1.30-5.80) and Moroccan women were more likely to report gingival bleeding (aPR 3.61; 95%CI 1.83-7.15) and the use of oral health services \geq 1 year/never (aPR 1.69; 95%CI 1.06-2.69). Colombian women were less likely to report missing teeth (aPR 0.73; 95%CI 0.56-0.95). Poor self-perceived oral health indicators were observed in immigrants and were modified for sociodemographic and general health variables.

Barrera-Castillo, M., Fernández-Peña, R., Del Valle-Gómez, M. D. O., et al. (2020). "[Social integration and gynecologic cancer screening of immigrant women in Spain]." *Gac Sanit* **34**(5): 468-473.

OBJECTIVE: To explore the association between immigrant status and performance of pap-smear and mammography, and to study the potential effect of social integration on that association. METHOD: Secondary analysis of the National Health Survey of Spain 2012. Individual data from 8944 women aged 18-75 were analyzed. Dependent variables were the performance of pap-smear tests and mammographies according to the guidelines of the state of residence. The level of integration in Spain was estimated through perceived social support (Duke-UNC scale) and the number of years living in Spain. Logistic regressions were used in order to obtain odds ratios (OR) and their 95% confidence intervals (95%CI), adjusted for confounders (sociodemographic and health-status). RESULTS: Compared to natives, immigrant women were more likely to not adhere to cervical cancer screening (OR: 1.31; 95%CI: 1.06-1.63) or breast cancer screening (OR:=3.13; 95%CI: 2.14-4.58). Additional adjustment by social support and length of residence in Spain attenuated the association, consequently losing statistical significance (OR: 1.08, 95%CI: .77-1.52 for pap-smear; OR: 1.62, 95%CI: .97-2.74 for mammographies). CONCLUSIONS: The probability of participating in the screening programs for gynecological cancer was lower if women were born abroad. Perceived social support and time living in Spain of immigrant women explained to a large extent the differences between immigrants and natives.

Casillas-Clot, J. et Pereyra-Zamora, P. (2021). "Determinants of Disability in Minority Populations in Spain: A Nationwide Study." **18**(7).

Some population groups could be especially vulnerable to the effects of population ageing. The Global Activity Limitation Indicator (GALI) has been proposed as a measure of disability, but it has not been used in minority groups. The aim of this study is to estimate the prevalence of disability using the GALI and to analyse its determinants in immigrant and Roma populations. Data from the Spanish National Health Survey 2017 and the National Health Survey of the Roma Population 2014 were used, including adults aged 50 and above. Prevalence of disability was estimated, and odds ratios were calculated using logistic regression models to assess the association between disability and demographic, socioeconomic, and health variables. The

prevalence of disability was estimated at 39.4%, 30.6%, and 58.7% in the native, immigrant, and Roma populations, respectively. Gender was a common determinant for the native and Roma populations. On the other hand, among immigrants, the risk of disability increased over the time residing in Spain. There were significant interactions with age and gender in the native population. Disability has different determinants in the three population groups. Public health measures to protect the Roma population and immigrants' health should be considered.

Garcia-Subirats, I., et al. (2014). "Changes in access to health services of the immigrant and native-born population in Spain in the context of economic crisis." *Int J Environ Res Public Health* **11**(10): 10182-10201.

AIM: To analyze changes in access to health care and its determinants in the immigrant and native-born populations in Spain, before and during the economic crisis. METHODS: Comparative analysis of two iterations of the Spanish National Health Survey (2006 and 2012). Outcome variables were: unmet need and use of different healthcare levels; explanatory variables: need, predisposing and enabling factors. Multivariate models were performed (1) to compare outcome variables in each group between years, (2) to compare outcome variables between both groups within each year, and (3) to determine the factors associated with health service use for each group and year. RESULTS: unmet healthcare needs decreased in 2012 compared to 2006; the use of health services remained constant, with some changes worth highlighting, such as the decline in general practitioner visits among autochthons and a narrowed gap in specialist visits between the two populations. The factors associated with health service use in 2006 remained constant in 2012. CONCLUSION: Access to healthcare did not worsen, possibly due to the fact that, until 2012, the national health system may have cushioned the deterioration of social determinants as a consequence of the financial crisis. Further studies are necessary to evaluate the effects of health policy responses to the crisis after 2012.

Gonzalez-Rabago, Y., et al. (2014). "[Participation and representation of the immigrant population in the Spanish National Health Survey 2011-2012]." *Gac Sanit* **28**(4): 281-286.

OBJECTIVE: Population health surveys have been the main data source for analysis of immigrants' health status in Spain. The aim of this study was to analyze the representation of this population in the Spanish National Health Survey (SNHS) 2011-2012. METHODS: We analyzed methodological publications and data from the SNHS 2011-2012 and the population registry. Differences in the participation rate between the national and foreign populations and the causes for these differences were analyzed, as well as the representation of 11 countries of birth in the survey with respect to the general population, with and without weighting. RESULTS: Households with any foreign person had a lower participation rate, either due to a higher error in the sampling frame or to a higher non-response rate. In each country of birth, the sample was smaller than would be expected according to the population registry, especially among the Chinese population. When we applied the sample weights to the 11 countries of birth, the estimated population volume was closer to the estimated volume of the population registry for all the countries considered, although globally both the underrepresentation and the intranational bias remained. CONCLUSIONS: The lower participation of the immigrant population and differences in participation depending on the country of origin suggest the existence of a potential bias in the SNHS, which should be taken into account in studies

analyzing the health of this population. The lower participation rate should be studied in greater depth in order to take appropriate measures to increase the representativeness of health surveys.

Gotsens, M., et al. (2015). "Health inequality between immigrants and natives in Spain: the loss of the healthy immigrant effect in times of economic crisis." *Eur J Public Health* **25**(6): 923-929.
<http://eurpub.oxfordjournals.org/content/25/6/923.long>

BACKGROUND: The immigrant population living in Spain grew exponentially in the early 2000s but has been particularly affected by the economic crisis. This study aims to analyse health inequalities between immigrants born in middle- or low-income countries and natives in Spain, in 2006 and 2012, taking into account gender, year of arrival and socioeconomic exposures. **METHODS:** Study of trends using two cross-sections, the 2006 and 2012 editions of the Spanish National Health Survey, including residents in Spain aged 15-64 years (20 810 natives and 2950 immigrants in 2006, 14 291 natives and 2448 immigrants in 2012). Fair/poor self-rated health, poor mental health (GHQ-12 > 2), chronic activity limitation and use of psychotropic drugs were compared between natives and immigrants who arrived in Spain before 2006, adjusting robust Poisson regression models for age and socioeconomic variables to obtain prevalence ratios (PR) and 95% confidence interval (CI). **RESULTS:** Inequalities in poor self-rated health between immigrants and natives tend to increase among women (age-adjusted PR₂₀₀₆ = 1.39; 95% CI: 1.24-1.56, PR₂₀₁₂ = 1.56; 95% CI: 1.33-1.82). Among men, there is a new onset of inequalities in poor mental health (PR₂₀₀₆ = 1.10; 95% CI: 0.86-1.40, PR₂₀₁₂ = 1.34; 95% CI: 1.06-1.69) and an equalization of the previously lower use of psychotropic drugs (PR₂₀₀₆ = 0.22; 95% CI: 0.11-0.43, PR₂₀₁₂ = 1.20; 95% CI: 0.73-2.01). **CONCLUSIONS:** Between 2006 and 2012, immigrants who arrived in Spain before 2006 appeared to worsen their health status when compared with natives. The loss of the healthy immigrant effect in the context of a worse impact of the economic crisis on immigrants appears as potential explanation. Employment, social protection and re-universalization of healthcare would prevent further deterioration of immigrants' health status.

Hernandez-Quevedo, C. et Jimenez-Rubio, D. (2009). "A comparison of the health status and health care utilization patterns between foreigners and the national population in Spain: new evidence from the Spanish National Health Survey." *Soc Sci Med* **69**(3): 370-378.

The increasing proportion of immigrants in Spanish society is placing pressure on the National Health Care System to accommodate the needs of this population group while keeping costs under control. In the year 2000, a law was approved in Spain according to which all people, regardless of their nationality, are entitled to use health care services under the same conditions as Spanish citizens, provided that they are registered in the local population census. However, empirical evidence about differences in health status and health care utilization between the immigrant and the Spanish population is insufficient. This paper uses the 2003 and 2006 Spanish National Health Surveys to explore the existence of inequalities in health and in the access to health services for the immigrant population living in Spain, relative to that of Spaniards. Our results show that there are different patterns in the level of health and the medical care use between the national and the foreign population in Spain: while immigrants' self-reported health relative to that of the Spanish population depends upon individual nationality, all immigrants, regardless of their nationality, seem to face barriers of entry to specialized care.

Further research is needed to understand the nature of these barriers in order to design more effective health policies.

Ichou, M., Ronda, E., Zhao, G., et al. (2020). "[Frequency of medical consultations in the adult population in Spain, before and after the restriction of access to undocumented immigrants]." BMC Public Health **46**(5): 306-312.

OBJECTIVE: To study the frequency of medical consultations in autochthonous and immigrant populations in Spain, before and after a government measure of 2012 that restricted the use of public health services to undocumented immigrants. **MATERIAL AND METHODS:** The data were taken from the European Health Surveys in Spain in 2009 and 2014. An analysis was made of the consultations with the family doctor and the consultations with the medical specialist in autochthonous and immigrant populations from 18 to 64 years. Percentage increases were calculated in the frequency of people who consulted in 2014 with respect to 2009, and, in each year, the percentage ratio (PR) of consultation in immigrants with respect autochthonous, with 95% confidence intervals (95% CI). **RESULTS:** The frequency of consultations increased in 2014 compared to 2009, with the exception of family doctor's consultation with the autochthonous women. The highest increases occurred in visits to medical specialists in immigrants (39.9%), in autochthonous (21.6%), and in visits by the family doctor to immigrant women. After adjusting for age and socioeconomic variables and indicators of need for assistance, there were no significant differences in both years between immigrants and autochthonous in the 2 types of consultations. **CONCLUSIONS:** The frequency of consultations to the family doctor or medical specialist did not decrease in Spain between 2009 and 2014 in the immigrant population.

Lostao, L., Ronda, E., Pascual, C., et al. (2020). "Erosion of universal health coverage and trend in the frequency of physician consultations in Spain." Can J Psychiatry **19**(1): 121.

BACKGROUND: We studied the frequency of physician visits in the native and immigrant populations in Spain before and after implementation of a governmental measure to restrict the use of public healthcare services by undocumented immigrants beginning in 2012. **METHODS:** Data were taken from the 2009 and 2014 European Health Surveys carried out in Spain. We investigated any physician consultation in the last 4 weeks before the interview, as well as visits to a family physician, public specialist physician and private specialist physician. We estimated the frequency of visits in 2009 and in 2014 in the native and immigrant populations and the difference in the frequency between the two populations, by calculating the percentage ratio estimated by binomial regression and adjusted for different confounders that are indicators of the need for assistance. **RESULTS:** The percentage of persons who consulted any physician in 2009 and 2014 was 31.7 and 32.9% in the native population, and 25.6 and 30.1% in the immigrant population, respectively. In the immigrant population, the frequency of visits to the general practitioner and public specialist physician increased, whereas in the native population only public specialist physician visits increased. The frequency of private specialist visits remained stable in both populations. After adjusting for the indicators of need for healthcare, no significant differences between the immigrant and native populations were seen in the frequency of visits, except for private specialist consultations, which were less frequent among immigrants. **CONCLUSION:** The restriction of universal healthcare coverage in Spain did not reduce the frequency of physician visits between 2009 and 2014, as the frequency of these consultations was seen to increase in both the native and immigrant populations.

Munoz-Pino, N., et al. (2017). "Comparing Oral Health Services Use in the Spanish and Immigrant Working Population." J Immigr Minor Health.

We aim to analyze oral health services use and related factors in the immigrant working population compared to the Spanish counterparts. Cross-sectional study of working population (n = 8591) that responded Spanish National Health Survey (SNHS), 2011-2012. The association between oral health services use and migration status was estimated using logistic regression. Immigrant men presented a greater probability of oral health service use a year or more prior (aOR 1.63; 95% CI 1.26-2.02), independently of oral health, sociodemographic and socioeconomic characteristics. In immigrant women, greater probability of use of oral health services one year or more prior disappeared after adjusting for the same variables (aOR 1.15; 95% CI 0.91-1.45). Occupational social class and education level could explain better a high percentage of oral health service use one year or more prior in immigrant women but there is a persistent inequality in oral health service use in immigrant men.

Reher, D. et Requena, M. L. (2009). "The National Immigrant Survey of Spain: A new data source for migration studies in Europe." Demographic Research **20**(12): 28 , tab., graph., fig.
<http://www.demographic-research.org/Volumes/Vol20/12/>

Spain has recently become the destination for large numbers of international migrants and now ranks as a key focal point for international migration in Europe. Currently, approximately one in ten residents in Spain are foreigners, up more than tenfold from figures existing at the outset of this century. Migration has now become a major social and political issue in the country. In order to provide reliable data about migrants in Spain for researchers and policy makers, acting on a proposal of a research team working within the context of the Population and Society Research Network (GEPS), the Spanish Statistical Office has recently carried out an extremely ambitious survey of foreign-born persons currently living in Spain. In the course of the survey, nearly 15,500 persons were interviewed regarding a large array of issues pertaining to their migration experience. Important documentation, including the project report, the methodological specifications of the survey, and the anonymized micro data have recently been made available to the scientific community and to policy makers at the website of the Instituto Nacional de Estadística. The purpose of this paper is to describe this data source, its content, its methodological underpinnings, and the way the fieldwork and data cleaning were carried out. Examples of preliminary results will be presented so as to underscore the potential this survey affords for researchers everywhere.

Rodriguez-Alvarez, E. et Borrell, L. N. (2022). "Immigrant Status and Ethnic Inequities in Dental Caries in Children: Bilbao, Spain." **19**(8).

This study examined the migratory status/ethnic inequities in dental caries in school children aged 4-9 years (n = 1388) and the impact of the Children's Oral Health Program in the Municipality of Bilbao in the Basque Country Region, Spain. Using the 2017 Children's Oral Health Survey, log binomial regression was used to quantify the association of parental immigration status/ethnicity with tooth decay for (1) the primary and the permanent dentitions, separately, in children 4-9 years old; and (2) for the permanent dentition in children aged 7-9 years. Compared with Spanish children, Spanish Roma and immigrant children had a higher

probability of tooth decay in primary and permanent teeth after adjustment. Similarly, Spanish Roma and immigrant children had a higher probability of caries experience in primary and permanent teeth. In children aged 7-9 years, Spanish Roma children had a greater probability of tooth decay and caries experience (DMFT index ≥ 1 ; PR: 6.20; 95% CI: 3.18, 12.12; and PR: 4.52; 95% CI: 2.46, 8.32; respectively) compared with Spanish Children. These associations were not observed in immigrant children. This study shows that parental immigration status and/or ethnicity affect caries outcomes in immigrant and Roma children in both primary and permanent dentition.

Rodriguez-Alvarez, E., Lanborena, N. et Borrell, L. N. (2020). "Cardiovascular disease risk factors in Spain: A comparison of native and immigrant populations." *PLoS One* **15**(11): e0242740.

Cardiovascular disease (CDV) risk factors are highly prevalent among adults with low social class in Spain. However, little is known on how these factors are distributed in the immigrant population, a socio-economic disadvantaged population. Thus, this study aims to examine inequalities in CVD risk factors among immigrant and native populations. We conducted a cross-sectional study using data from the Spanish National Health Survey 2017 and used log-binomial regression to quantify the association of immigrant status on CVD risk factors among adults aged 25-64 years. The probabilities of having at least three CVD risk factors were higher for immigrants from Eastern Europe (PR: 1.25; 95% CI: 1.15-1.35) and lower for immigrants from Africa (PR: 0.79; 95% CI: 0.69-0.89) when compared with natives. The association of immigrant status and CVD risk factors varies with educational attainment (p -interaction = 0.001). Immigrants from Eastern Europe with low educational attainment have a higher probability of having at least three CVD risk factors compared with their native counterparts. In contrast, immigrants from Africa and Latin America with low educational attainment had a protective effect against having at least three CVD risk relative to natives. Health prevention and promotion strategies to reduce the burden of CVD taking should account for educational attainment given its differential effect among the immigrant population in Spain.

Rodriguez-Alvarez, E., et al. (2017). "Perceived discrimination and self-rated health in the immigrant population of the Basque Country, Spain." *Gac Sanit* **31**(5): 390-395.

OBJECTIVE: To examine the effect of perceived discrimination and self-rated health among the immigrant population in the Basque Country, Spain, and determine whether this effect varies according to region of origin, age, sex and education. **METHODS:** Descriptive cross-sectional study. The study population included immigrants aged 18 and older residing in the Basque Country. Data from the 2014 Foreign Immigrant Population Survey ($n=3,456$) were used. Log-binomial regression was used to quantify the association between perceived discrimination and self-rated health before and after checking for the selected characteristics. **RESULTS:** Almost 1 in 10 immigrant adults reports perceiving discrimination. In adjusted analyses, the immigrants perceiving discrimination were almost were 1.92 more likely to rate their health as poor (prevalence ratio: 1.92; 95% CI: 1.44-2.56) than those who did not report discrimination. This association did not vary according to region of origin, age, sex or educational level. **CONCLUSIONS:** Perceived discrimination shows a consistent relationship with perceived health. Moreover, this association did not depend on the region of origin, age, sex or educational level of immigrants. These results show the need for implementing inclusive policies to eliminate individual and institutional discrimination and reduce health inequalities between the immigrant

and native populations.

Serral, G., Borrell, C. et Puigpinos, I. R. R. (2018). "[Socioeconomic inequalities in mammography screening in Spanish women aged 45 to 69]." *Gac Sanit* **32**(1): 61-67.

OBJECTIVE: To analyse mammography screening in Spanish women aged 45 to 69 according sociodemographic variables and to describe the role of population-based breast cancer screening programmes in terms of variability of said screening. METHODS: Cross-sectional study of the 2011 National Health Survey. The study population includes women living in Spain between late 2011 and early 2012. The weighted sample analysed corresponds to 3,086 women aged 45 to 69. The dependent variables were mammograms and when the last mammogram was performed and why. Independent variables were age, social class, occupational status, country of origin, area of origin (rural/urban), health cover and years the programme had been in place. Logistic regression models were performed, with odds ratio (OR) adjusted according to age and 95% confidence intervals (95% CI). RESULTS: Approximately 91.9% indicated that they had had a mammogram before. The women who had had their last mammography screening in the previous 1 to 2 years were associated with the highest social class (OR: 1.69; 95% CI: 1.03-2.75). The reason for performing the last periodic mammogram via a population-based programme was associated with women aged between 60 and 69 years (OR: 1.51; 95% CI: 1.04-2.19). CONCLUSIONS: The results show that there are still inequalities in preventive practices. Possible risk groups need to be identified in order to promote the implementation of specific actions.

Tormo, M. J., et al. (2015). "[Results of two surveys of immigrants and natives in Southeast Spain: health, use of services, and need for medical assistance]." *Salud Publica Mex* **57**(1): 38-49.

OBJECTIVE: To compare the self-perceived health, use of health services and unmet need for health care (UNHC) among immigrants and native populations of Southeast Spain. MATERIALS AND METHODS: Cross-sectional study of two representative samples of 1150 immigrants, and 1303 native participants from the National Health Survey. A single database was created with specific weights for each sample, and prevalence ratios (PR) were estimated by multivariate regression. RESULTS: Moroccans, Ecuadorians and Eastern Europeans (EE) reported poorer health than the native population (PRs [CI95%]: 2.45 [1.91-3.15]; 1.51 [1.28-1.79] and 1.44 [1.08-1.93], respectively). Immigrants made greater use of emergencies than natives (except for EE) and had lower use of medication. Moroccan showed the greatest difference in the frequency of UNHC (PR [CI95%]:12.20 [5.25 - 28.37]), mainly because of working limitations (46%). CONCLUSIONS: The health status and use of health services among immigrants differ significantly from those of natives. Results highlight the higher frequency of UNHC among immigrants, especially high in Moroccans.

Villarroel, N. et Artazcoz, L. (2012). "Heterogeneous patterns of health status among immigrants in Spain." *Health Place* **18**(6): 1282-1291.

OBJECTIVES: (1) To analyse differences in the self-perceived health and mental health status between the Spanish population and immigrants from the seven leading countries in terms of number of immigrants; (2) to examine whether differences are accounted for by socio-economic characteristics, and (3) to determine whether the patterns of associations differ by gender.

METHODS: Data come from the 2006 Spanish National Health Survey. The sample was composed of all 20-64 year old Spaniards and immigrants from the seven countries with most immigrants in Spain (Argentina, Bolivia, Colombia, Ecuador, Peru, Romania and Morocco) [n=20,731]. **RESULTS:** In both sexes, people from Bolivia had poorer health outcomes, above all Bolivian males. Conversely, people from Argentina and Colombia had the best health outcomes. For the rest of the countries varied results depending on gender, country and health indicator were found. **CONCLUSIONS:** Differences in health status between people born in Spain and foreign-born people depend on relationships between country of birth, characteristics of the migration process, gender, ethnicity and the health outcome analyzed.

Etats-Unis

Alang, S. M., et al. (2015). "Race, Ethnicity, and Self-Rated Health Among Immigrants in the United States." *J Racial Ethn Health Disparities* 2(4): 565-572.

OBJECTIVES: Previous work has not fully explored the role of race in the health of immigrants. We investigate race and ethnic differences in self-rated health (SRH) among immigrants, assess the degree to which socio-economic characteristics explain race and ethnic differences, and examine whether time in the USA affects racial and ethnic patterning of SRH among immigrants. **METHODS:** Data came from the 2012 National Health Interview Survey (N = 16, 288). Using logistic regression, we examine race and ethnic differences in SRH controlling for socio-economic differences and length of time in the country. **RESULTS:** Hispanic and non-Hispanic Black immigrants were the most socio-economically disadvantaged. Asian immigrants were socio-economically similar to non-Hispanic White immigrants. Contrary to U.S. racial patterning, Black immigrants had lower odds of poor SRH than did non-Hispanic White immigrants when socio-demographic factors were controlled. When length of stay in the USA was included in the model, there were no racial or ethnic differences in SRH. However, living in the USA for 15 years and longer was associated with increased odds of poor SRH for all immigrants. **CONCLUSIONS:** Findings have implications for research on racial and ethnic disparities in health. Black-White disparities that have received much policy attention do not play out when we examine self-assessed health among immigrants. The reasons why non-Hispanic Black immigrants have similar self-rated health than non-Hispanic White immigrants even though they face greater socio-economic disadvantage warrant further attention.

Alberto, C. K., Pintor, J. K., Martínez-Donate, A. P., et al. (2020). "Health Care Access and Utilization for Latino Youth in the United States: The Roles of Maternal Citizenship and Distress." *Med Care* 58(6): 541-548.

OBJECTIVES: We sought to determine the associations between maternal citizenship and health care access and utilization for US-born Latino youth and to determine whether maternal distress is a moderator of the associations. **METHODS:** Using 2010-2017 Integrated Public Use Microdata Series National Health Interview Survey data, multivariable logistic regressions were run to examine the associations among maternal citizenship and health care access and utilization for US-born Latino youth. Maternal citizenship and distress interactions were tested. **RESULTS:** Noncitizen mothers had higher odds of reporting uninsurance, lack of transportation for delaying care, and lower odds of health care utilization for their youth than citizen mothers.

Compared with no distress, moderate and severe distress were positively associated with uninsurance, delayed medical care due to cost, lack of transportation, and having had an emergency department visit for their youth. Moderate distress was positively associated with youth having had a doctor's office visit. Noncitizen mothers with moderate distress were less likely to report their youth having had an emergency department visit than citizen mothers with moderate distress. Among severely distressed mothers, noncitizen mothers were more likely to report youth uninsurance and delayed care due to lack of transportation compared with citizen mothers. CONCLUSIONS: Health care access and utilization among US-born Latino youth are influenced by maternal citizenship and distress. Maternal distress moderates the associations among maternal citizenship and youth's health care access and use. Almost one-third of all US-born youth in the United States are Latino and current federal and state noninclusive immigration policies and anti-Latino immigrant rhetoric may exacerbate health care disparities.

Alkaid Albqoor, M., Chen, J. L., Weiss, S., et al. (2021). "Serious psychological distress: A national study of Middle Eastern immigrants." *J Psychiatr Ment Health Nurs* **28**(2): 163-173.

WHAT IS KNOWN ON THE SUBJECT?: There is very limited literature on the health of Middle Eastern immigrants in the United States, and the available studies were mostly conducted on small convenient samples in local communities. There is also a need to understand changes in the rates of serious psychological distress (SPD) during the 15 years after 2001, as there were negative effects on Arabs' health since the September 2001 aftermath. WHAT DOES THIS PAPER ADD TO EXISTING KNOWLEDGE?: The study examined the rates of SPD, the risk of SPD and its associated factors in a national sample of Middle Eastern immigrants in the United States from 2001 to 2015. The study found that serious psychological distress rate was high among Middle Eastern immigrants. Being a female and having obesity were associated with a higher risk of reporting serious psychological distress among this population. WHAT ARE THE IMPLICATIONS FOR PRACTICE?: These outcomes necessitate mental health nursing interventions that provide culturally sensitive mental health care to immigrants. For example, developing community-based prevention programmes is required to address risk factors of psychological distress and to increase awareness about psychological distress among Middle Eastern immigrants. ABSTRACT: Introduction While Middle Eastern immigrants are a fast-growing population in the United States, there is very limited literature on their mental health. Most of the available studies were conducted on small convenient samples in local communities. Aims To examine rates of serious psychological distress (SPD) and its associated factors among Middle Eastern immigrants in the United States, compared with US-born, non-Hispanic Whites. Methods Data from the National Health Interview Survey (NHIS) from 2001 to 2015 were analysed. The survey included 1,246 Middle Eastern immigrants and 232,392 US-born, non-Hispanic Whites. SPD was measured by the Kessler-6 psychological distress scale. Survey analysis procedures, sampling weights and variance estimates were conducted. Descriptive statistics and regression analyses were employed to examine differences and factors associated with SPD. Results SPD rate was the highest among Middle Eastern immigrants (5.99%) between 2006 and 2010. Among Middle Eastern immigrants, being female and obese were significantly associated with a higher risk of SPD. Discussion Middle Eastern immigrants in the United States suffered high rates of SPD. Gender and obesity were factors associated with SPD risk. Implications These outcomes indicate the need for mental health nursing interventions that provide culturally sensitive mental health care to immigrants, such as developing community-based prevention programmes.

Antecol, H. et Bedard, K. (2006). "Unhealthy assimilation: why do immigrants converge to American health status levels?" Demography **43**(2): 337-360.

It is well documented that immigrants are in better health upon arrival in the United States than their American counterparts but that this health advantage erodes over time. We study the potential determinants of this "healthy immigrant effect," with a particular focus on the tendency of immigrants to converge to unhealthy American BMI levels. Using data from the National Health Interview Survey, we find that average female and male immigrants enter the United States with BMIs that are approximately two and five percentage points lower than native-born women and men, respectively. Consistent with the declining health status of immigrants the longer they remain in the United States, we also find that female immigrants almost completely converge to American BMIs within 10 years of arrival, and men close a third of the gap within 15 years.

Arasteh, K. (2021). "Self-reported Hazardous Drinking, Hypertension, and Antihypertensive Treatment Among Hispanic Immigrants in the US National Health Interview Survey, 2016-2018." J Racial Ethn Health Disparities **8**(3): 638-647.

Compared to the US-born population, Hispanic immigrants are reported to have lower age-adjusted prevalence of hypertension. However, country of origin, race/ethnicity, and risk behaviors associated with acculturation, including hazardous drinking, can affect the prevalence of hypertension. Additionally, health disparities across immigration/nativity status may be associated with suboptimal antihypertensive treatment and control of hypertension. In the present study, population-based data from the years 2016 to 2018 of the National Health Interview Survey (NHIS) were analyzed to assess the association of nativity status and hazardous drinking with hypertension among US-born and foreign-born Hispanic populations. Age-adjusted prevalence of past-year hypertension among foreign-born Hispanics was lower than US-born Hispanics. However, the proportion of Hispanic immigrants who had their blood pressure checked by a healthcare professional was also smaller than US-born Hispanics, suggesting that the prevalence of hypertension among Hispanic immigrants may be underreported. Hazardous drinking was associated with decreased odds of antihypertensive treatment among the Hispanic immigrants.

Berk, M. L., et al. (2000). "Health care use among undocumented Latino immigrants." Health Aff (Millwood) **19**(4): 51-64.

Using data from a 1996/1997 survey of undocumented Latino immigrants in four sites, we examine reasons for coming to the United States, use of health care services, and participation in government programs. We find that undocumented Latinos come to this country primarily for jobs. Their ambulatory health care use is low compared with that of all Latinos and all persons nationally, and their rates of hospitalization are comparable except for hospitalization for childbirth. Almost half of married undocumented Latinos have a child who is a U.S. citizen. Excluding undocumented immigrants from receiving government-funded health care services is unlikely to reduce the level of immigration and likely to affect the well-being of children who are U.S. citizens living in immigrant households.

Brown, M. J., et al. (2015). "Duration of U.S. residence and suicidality among racial/ethnic minority

immigrants." Soc Psychiatry Psychiatr Epidemiol **50**(2): 257-267.

PURPOSE: The immigration experience embodies a range of factors including different cultural norms and expectations, which may be particularly important for groups who become racial/ethnic minorities when they migrate to the U.S. However, little is known about the correlates of mental health indicators among these groups. The primary and secondary aims were to determine the association between duration of U.S. residence and suicidality, and 12-month mood, anxiety, and substance use disorders, respectively, among racial/ethnic minority immigrants. **METHODS:** Data were obtained from the National Survey of American Life and the National Latino and Asian American Survey. Multivariable logistic regression was used to determine the association between duration of US residence, and suicidality and 12-month psychopathology. **RESULTS:** Among Afro-Caribbeans, there was a modest positive association between duration of U.S. residence and 12-month psychopathology (P linear trend = 0.016). Among Asians there was a modest positive association between duration of US residence and suicidal ideation and attempts (P linear trend = 0.018, 0.063, respectively). Among Latinos, there was a positive association between duration of US residence, and suicidal ideation, attempts and 12-month psychopathology (P linear trend = 0.001, 0.012, 0.002, respectively). Latinos who had been in the U.S. for >20 years had 2.6 times greater likelihood of suicidal ideation relative to those who had been in the U.S. for <5 years (95% CI 1.01-6.78). **CONCLUSIONS:** The association between duration of US residence and suicidality and psychopathology varies across racial/ethnic minority groups. The results for Latino immigrants are broadly consistent with the goal-striving or acculturation stress hypothesis.

Brown, A. G. M., Houser, R. F., Mattei, J., et al. (2017). "Hypertension among US-born and foreign-born non-Hispanic Blacks: National Health and Nutrition Examination Survey 2003-2014 data." J Hypertens **35**(12): 2380-2387.

OBJECTIVES: Non-Hispanic Blacks in the United States have the highest reported prevalence of hypertension (44%) worldwide. However, this does not consider the heterogeneity of Blacks within the United States, particularly comparing US-born to long-standing or recent (foreign-born) immigrants. The objective of this study is to compare odds of hypertension between US-born and foreign-born Blacks in the United States. **METHODS:** We assessed the prevalence of hypertension among US-born (n = 4511) vs. foreign-born (n = 522) non-Hispanic Black adults aged 22-79 years, based on pooled nationally representative data (2003-2014); as well by length of US residency among immigrants. Multivariable-adjusted logistic regression was used to investigate the association between nativity and hypertension odds. **RESULTS:** Nearly half (42.8%) of US-born Blacks but only 27.4% of foreign-born Blacks had hypertension. After adjusting for major covariates, foreign-born Blacks were 39.0% less likely (odds ratio 0.61 95% confidence interval 0.49, 0.77) to have hypertension than their US-born counterparts. Among foreign-born Blacks, length of US residency was not significantly associated with odds of hypertension. **CONCLUSION:** Foreign-born vs. US-born non-Hispanic Blacks have substantially lower prevalence of hypertension. Considering nativity among US Blacks in clinical research and public health efforts may improve accuracy of characterizing health disparities and facilitate development of targeted interventions to reduce hypertension in this diverse population.

Chavez, L. R. (2012). "Undocumented immigrants and their use of medical services in Orange County, California." Soc Sci Med **74**(6): 887-893.

Does an undocumented immigration status predict the use of medical services? To explore this question, this paper examines medical care utilization of undocumented Latino immigrants compared to Latino legal immigrants and citizens, and non-Latino whites in Orange County, California. Data were collected through a random sample telephone survey of 805 Latinos and 396 non-Hispanic whites between January 4 and January 30, 2006. Findings show that undocumented immigrants had relatively low incomes and were less likely to have medical insurance; experience a number of stresses in their lives; and underutilize medical services when compared to legal immigrants and citizens. Predictors of use of medical services are found to include undocumented immigration status, medical insurance, education, and gender. Undocumented Latinos were found to use medical services less than legal immigrants and citizens, and to rely more on clinic-based care when they do seek medical services.

Cobb, C. L., Salas-Wright, C. P., John, R., et al. (2021). "Discrimination Trends and Mental Health Among Native- and Foreign-Born Latinos: Results from National Surveys in 2004 and 2013." *Prev Sci* **22**(3): 397-407.

We examined national trends and mental health correlates of discrimination among Latinos in the USA. We used data from two nationally representative surveys based on the National Epidemiologic Survey on Alcohol and Related Conditions collected in 2004 and 2013. Results indicated that perceived discrimination, both any and recurrent, increased for Latinos across nearly every demographic, with the greatest increases occurring for Latinos who were ages 65 and older, had household incomes less than \$35,000, were less educated, were immigrants, and who lived in the Midwest. Findings also indicated that any and recurrent discrimination were associated with increased odds of a mood, anxiety, or substance use disorder and this association was observed for nearly all manifestations of discrimination. We also observed a dose-response association where experiencing discrimination in a greater number of domains was associated with increased likelihood of mood, anxiety, and substance use disorders. Results suggest that discrimination is a social stressor that has increased for Latino populations in recent years and may represent a serious risk factor for the psychological and behavioral health of Latinos. Findings are discussed in terms of prior research and the potential implications for prevention scientists working with Latino populations.

Cobian, J., González, M. G., Cao, Y. J., et al. (2020). "Changes in Health Insurance Coverage Over Time by Immigration Status Among US Older Adults, 1992-2016." *Int J Equity Health* **3**(3): e200731.

IMPORTANCE: Disparities in health insurance coverage by immigration status are well documented; however, there are few data comparing long-term changes in insurance coverage between immigrant and nonimmigrant adults as they age into older adulthood. **OBJECTIVE:** To compare longitudinal changes in insurance coverage over 24 years of follow-up between recent immigrant, early immigrant, and nonimmigrant adults in the US. **DESIGN, SETTING, AND PARTICIPANTS:** This population-based cohort study used data from the nationally representative Health and Retirement Study. Data were collected biennially from 1992 to 2016. The population included community-dwelling US adults born between 1931 and 1941 and aged 51 to 61 years at baseline. Statistical analysis was performed from February 3, 2017, to January 10, 2020. **EXPOSURES:** Participants were categorized as nonimmigrants (born in the US), early immigrants (immigrated to the US before the age of 18 years), and recent immigrants (immigrated to the US

from the age of 18 years onward). MAIN OUTCOMES AND MEASURES: Self-reported data on public, employer, long-term care, and other private insurance were used to define any insurance coverage. Longitudinal changes in insurance coverage were examined over time by immigration status using generalized estimating equations accounting for inverse probability of attrition weights. The association between immigration status and continuous insurance coverage was also evaluated. RESULTS: A total of 9691 participants were included (mean [SD] age, 56.0 [3.2] years; 5111 [52.6%] female). Nonimmigrants composed 90% (n = 8649) of the cohort; early immigrants, 2% (n = 201); and recent immigrants, 8% (n = 841). Insurance coverage increased from 68%, 83%, and 86% of recent immigrant, early immigrant, and nonimmigrant older adults, respectively, in 1992 to 97%, 100%, and 99% in 2016. After accounting for selective attrition, recent immigrants were 15% less likely than nonimmigrants to have any insurance at baseline (risk ratio, 0.85; 95% CI, 0.82-0.88), driven by lower rates of private insurance. However, disparities in insurance decreased incrementally over time and were eliminated, such that insurance coverage rates were similar between groups as participants attained Medicare age eligibility. Furthermore, recent immigrants were less likely than nonimmigrants to be continuously insured (risk ratio, 0.89; 95% CI, 0.85-0.94). CONCLUSIONS AND RELEVANCE: Among community-dwelling adults who were not age eligible for Medicare, recent immigrants had lower rates of health insurance, but this disparity was eliminated over the 24-year follow-up period because of uptake of public insurance among all participants. Future studies should evaluate policies and health care reforms aimed at reducing disparities among vulnerable populations such as recent immigrants who are not age eligible for Medicare.

Cofie, L. E., Hirth, J. M., Guo, F., et al. (2018). "HPV Vaccination Among Foreign-Born Women: Examining the National Health Interview Survey 2013-2015." *Am J Prev Med* **54**(1): 20-27.

INTRODUCTION: Human papillomavirus vaccination is less prevalent among foreign-born than U.S.-born women and may lead to disparities in human papillomavirus-related cancers in the future. There is limited research on factors associated with vaccination uptake between these two groups. This study examined the association between place of birth and human papillomavirus vaccine uptake, and what determinants of vaccination attenuate this relationship. METHODS: The 2013-2015 National Health Interview Survey data on women was analyzed in 2016, to determine differences in prevalence of human papillomavirus vaccination between foreign- and U.S.-born women. Multivariate binary logistic regression analysis was used to examine the association between foreign-born status and human papillomavirus vaccine initiation, after controlling for health insurance status, having a usual source of care, obstetrician/gynecologist visits, Pap tests, length of U.S. residency, and citizenship. RESULTS: Human papillomavirus vaccination prevalence varied significantly among women born in different regions of the world. European and South-American women had the highest vaccination rates among all foreign-born women. Compared with U.S.-born women, foreign-born women were significantly less likely to report human papillomavirus vaccine initiation. This relationship was partially attenuated after adjusting for the covariates. Among foreign-born women, Asians were significantly less likely to report human papillomavirus vaccination uptake than white women. Additionally, living in the U.S. for >5 years was significantly associated with vaccine initiation, but attenuated by U.S. citizenship status. CONCLUSIONS: Public health interventions to improve human papillomavirus vaccination need to be developed to address multicultural audiences with limited access to health insurance and health care.

Coleman-Minahan, K. et Samari, G. (2020). "'He supported me 100%': Mexican-immigrant fathers, daughters, and adolescent sexual health." *Addiction* **25**(4): 560-579.

Objective: First and second generation Mexican-origin adolescents in the U.S. face social and economic disadvantage and sexual health disparities. Although fathers can support child and adolescent development, the literature has portrayed Mexican-origin immigrant fathers as emotionally distant and sexist. This study aims to treat migration as a social determinant of health to examine father-daughter relationships and adolescent sexual health in Mexican-origin immigrant families. **Methods:** Integrating qualitative data from life history interviews with 21 Mexican-origin young women in immigrant families with quantitative data on first and second generation Mexican-origin young women in the National Longitudinal Study of Adolescent to Adult Health, this study describes father-daughter relationships, examines the association between father-daughter relationships and daughters' early sexual initiation, and considers the impact of migration on the father-daughter relationship and sexual health among Mexican-origin young women. **Results:** Qualitative data identify four types of father-daughter relationships: 'good,' hostile, distant, and conflicted. Supporting the qualitative patterns, quantitative data find that positive or 'good' father-daughter relationship quality is significantly associated with reduced risk of early sexual initiation. Importantly, father-daughter separation across borders and economic inequality facing immigrant families is associated with hostile or distant father-daughter relationship quality and increased risk of early sexual initiation. **Conclusions:** Reports of good father-daughter relationships are common and may protect against early sexual initiation in Mexican-origin immigrant families. Policies that keep families together and reduce economic inequality among immigrants may also reduce sexual health disparities among immigrant adolescents.

De Jesus, M. et Xiao, C. (2013). "Cross-border health care utilization among the Hispanic population in the United States: implications for closing the health care access gap." *Ethn Health* **18**(3): 297-314.

OBJECTIVES: To examine predictors of health care service utilization in Mexico or any other country in Latin America among the U.S. Hispanic population. **METHODS:** This study used data from the 2007 Pew Hispanic Healthcare Survey, a nationally representative survey of 4013 Hispanic adults. Using the Behavioral Model of Health Service Use (BMHSU) model, we examined three levels of predictive factors: (1) predisposing characteristics (e.g., language proficiency), (2) enabling resources (e.g., health insurance status), and (3) need (e.g., self-perceived health status). Multivariate logistic regression analyses were conducted to predict odds of seeking health care services in Mexico or any other country in Latin America. **RESULTS:** As hypothesized, lack of continuous health insurance coverage, perceived lack of quality health care, and low English proficiency increased the likelihood of seeking health care in Mexico or any other Latin American country among US Hispanic adults. Self-reported health status and usual source of care, however, were not significant predictors. **CONCLUSIONS:** Hispanic immigrants face critical access gaps to health care in the United States. Implications for closing the access gap for this population are discussed within the context of health care system reform and immigration reform in the United States.

Demlow, S. E., et al. (2015). "Increased risk of tuberculosis among foreign-born persons with diabetes in California, 2010-2012." *BMC Public Health* **15**: 263.

BACKGROUND: Diabetes increases the risk of tuberculosis. We sought to identify populations of persons with diabetes in California at further increased risk for tuberculosis to target tuberculosis infection screening and treatment efforts. **METHODS:** We performed a retrospective population-based analysis of adult (aged ≥ 18 years) tuberculosis cases reported in California during 2010-2012. Tuberculosis cases with and without diabetes were grouped into regions of birth and stratified by age category. Population estimates were calculated using 2011-2012 California Health Interview Survey data. We calculated tuberculosis disease rate and relative risk of tuberculosis among persons with diabetes stratified by birth location and age group; and the number needed to screen and, if positive, treat for tuberculosis infection to prevent one case of active tuberculosis over 5 years (NNS). **RESULTS:** During 2010-2012, among 6,050 adults with active tuberculosis in California, 82% were foreign-born and 24% had diabetes. The overall relative risk for tuberculosis among persons with diabetes was 3.5 (95% confidence interval, 3.3-3.7) with a rate of 21 per 100,000 persons with diabetes. The rate among foreign-born persons with diabetes (141.5/100,000) was almost 12 times greater than among nonforeign-born persons with diabetes (12.0/100,000). The NNS was 7,930 among all adults, 2,740 among adults with diabetes, 1,526 among all foreign-born adults, and 596 among foreign-born adults with diabetes. **CONCLUSIONS:** In California, foreign-born persons with diabetes had significantly elevated rates of active tuberculosis. Focusing tuberculosis infection screening and treatment efforts on foreign-born persons with diabetes may be a feasible and efficient way to make progress toward tuberculosis elimination in California.

Do, E. K. et Matsuyama, R. K. (2014). "Healthcare utilization among Hispanic immigrants with diabetes: investigating the effect of US documentation status." *J Immigr Minor Health* **16**(2): 189-194.

Previous studies have not examined whether documentation status has an effect on healthcare utilization among US Hispanic immigrants with diabetes. A secondary analysis was conducted using data from the Pew Hispanic Center and Robert Johnson Wood Foundation's 2007 Hispanic Healthcare Survey. Hispanic immigrants diagnosed with diabetes were included in analyses. The association between documentation status and healthcare utilization was assessed using logistic regressions. Of N = 577 Hispanic immigrants with diabetes, 80 % were documented immigrants and 81% reported having visited a healthcare provider in the last 6 months. Adjusting for confounders, those who were undocumented faced higher odds of having seen a healthcare provider more than 6 months ago or never when compared to those who were documented (OR = 1.79; 95% CI 1.01, 3.14). Unique opportunities in addressing healthcare disparities can be found in focusing on the Hispanic immigrant population living with diabetes.

Galletly, C. L., Lechuga, J., Dickson-Gomez, J. B., et al. (2021). "Assessment of COVID-19-Related Immigration Concerns Among Latinx Immigrants in the US." *JAMA Netw Open* **4**(7): e2117049.

IMPORTANCE: Despite the contentious immigration environment and disproportionate rates of COVID-19 infection among Latinx individuals in the US, immigrants' concerns about engaging in COVID-19-related testing, treatment, and contact tracing have been largely unexplored. **OBJECTIVE:** To examine the proportions of Latinx immigrants who endorse statements about the potential negative immigration ramifications of seeking and using COVID-19-related testing and treatment services and engaging in contact tracing. **DESIGN, SETTING, AND PARTICIPANTS:** In this cross-sectional survey study, 25 COVID-19-related items were incorporated into the online

Spanish-language survey of an ongoing study. Data were collected between July 15 and October 9, 2020, in Chicago, Illinois; Los Angeles, California; and Phoenix, Arizona. A nonrandom sample of 379 adult, Spanish-speaking, noncitizen Latinx immigrants (with either documented or undocumented immigration status) were sent surveys. Of those, 336 individuals (88.7% participation rate) returned surveys, and 43 individuals did not. An additional 213 individuals were screened but ineligible. Descriptive statistics were computed, and mean comparisons and bivariate correlations between sociodemographic variables, indices of immigration risk, and COVID-19-related survey items were conducted. MAIN OUTCOMES AND MEASURES: Items elicited agreement or disagreement with statements about immigrants' access to COVID-19-related testing and treatment services and the potential immigration ramifications of using these services. Willingness to identify an undocumented person during contact tracing was also assessed. RESULTS: A total of 336 Latinx immigrants completed surveys. The mean (SD) age of participants was 39.7 (8.9) years; 210 participants (62.5%) identified as female, and 216 participants (64.3%) had undocumented immigration status. In total, 89 participants (26.5%) agreed that hospital emergency departments were the only source of COVID-19 testing or treatment for uninsured immigrants, and 106 participants (31.6%) agreed that using public testing and health care services for COVID-19 could jeopardize one's immigration prospects. A total of 96 participants (28.6%) and 114 participants (33.9%), respectively, would not identify an undocumented household member or coworker during contact tracing. Reluctance to identify an undocumented household member or coworker was associated with having had deportation experiences ($r = -0.17$; 95% CI, -0.06 to 0.27 ; $P = .003$) but not with the number of years lived in the US ($r = 0.07$; 95% CI, -0.16 to 0.17 ; $P = .15$) or immigration status ($r = 0.03$; 95% CI, -0.07 to 0.13 ; $P = .56$). CONCLUSIONS AND RELEVANCE: In this cross-sectional survey study, a substantial number of immigrants endorsed statements about immigrants' restricted access to COVID-19-related testing and treatment services and the potential negative immigration ramifications of using these services. These results suggest that programs for COVID-19-related testing, contact tracing, and vaccine administration that are designed to allay immigration concerns are needed.

García-Pérez, M. (2016). "Converging to American: Healthy Immigrant Effect in Children of Immigrants." American Economic Review **106**(5): 461-466.

We analyze children of immigrants' healthy immigrant effect using parental year of arrival and region of birth. Using data from Integrated National Health Interview Survey 2008-2014, we evaluate children of immigrants' health status by using obesity rates and the number of visits to the doctor versus their native counterparts. Consistent with their parents, children of immigrants' health status declines the longer their parents, remain in the United States. Meanwhile, there is an increase in the number of visits to the doctor the more years their parents, have resided in the country. The convergence rate differs by immigrant group.

Greenaway, C., Hargreaves, S., Barkati, S., et al. (2020). "COVID-19: Exposing and addressing health disparities among ethnic minorities and migrants." J Travel Med **27**(7).

Gubernskaya, Z. (2015). "Age at migration and self-rated health trajectories after age 50: understanding the older immigrant health paradox." J Gerontol B Psychol Sci Soc Sci **70**(2): 279-290.

OBJECTIVES: This research contributes to the "immigrant health paradox" debate by testing the hypothesis that older age at migration is associated with the increased risk of poor health in

later life. METHOD: Using the 1992-2008 Health and Retirement Study, I construct linear random-intercept models to estimate self-rated health (SRH) trajectories after age 50 for the native and foreign born by age at migration. RESULTS: At age 50, both Hispanic and non-Hispanic foreign born report better SRH compared with their native-born counterparts, net of race, gender, and education. Non-Hispanic foreign born who migrated after age 35 and Hispanic foreign born who migrated after age 18, however, experience steeper decline in SRH after age 50, which results in a health disadvantage vis-a-vis the native born in old age. Education has a smaller protective effect on SRH for the foreign born, especially those who migrated as adults. DISCUSSION: Age at migration is an important factor for understanding health status of older immigrants. Steeper health decline in later life of the foreign born who migrated in advanced ages may be related to longer exposure to unfavorable conditions in home countries and limited opportunities for incorporation in the United States.

Guerrero, N., et al. (2016). "Cervical and Breast Cancer Screening Among Mexican Migrant Women, 2013." *Prev Chronic Dis* **13**: E104.

INTRODUCTION: Information on cervical and breast cancer screening among Latinas in the United States is limited. Even less information is available on screening practices of migrant women who engage in circular migration. We examined rates of cervical and breast cancer screening and the extent to which sociodemographics and other characteristics explain screening practices of Mexican migrant women who return to Mexico from the United States. METHODS: We used data from a cross-sectional probability survey of Mexico-born migrant women who returned, through Tijuana, to Mexico from the United States in 2013. The sample consisted of women who returned involuntarily (via deportation) or voluntarily; 177 reported authorized documentation status, and 36 reported unauthorized documentation status in the previous 12 months. Descriptive statistics were calculated and logistic regressions were estimated. RESULTS: Of 36 undocumented migrant women, 8 (22.2%) had a Papanicolaou test and 11 (30.6%) had a mammogram in the previous year; of 177 documented migrants, 83 (46.9%) had a Papanicolaou test and 68 (38.4%) had a mammogram. Undocumented migrants were less likely than documented migrants to receive a Papanicolaou test (odds ratio [OR] = 0.29; 95% confidence interval [CI], 0.12-0.67); the likelihood was similar after adjustment for sociodemographic, migration, and acculturation factors (adjusted OR = 0.33; 95% CI, 0.12-0.90). Having health insurance (adjusted OR = 4.17; 95% CI, 1.80-9.65) and a regular source of health care (adjusted OR = 2.83; 95% CI, 1.05-7.65) were significant predictors of receiving a mammogram but not a Papanicolaou test. CONCLUSION: Public health programs are needed to improve access to cervical and breast cancer screenings for Latina migrant women in general and undocumented circular migrants in particular.

Lu, Y., et al. (2017). "Health of newly arrived immigrants in Canada and the United States: Differential selection on health." *Health Place* **48**: 1-10.

Canada and the U.S. are two major immigrant-receiving countries characterized by different immigration policies and health care systems. The present study examines whether immigrant health selection, or the "healthy immigrant effect", differs by destination and what factors may account for differences in immigrant health selection. We use 12 years of U.S. National Health Interview Survey and Canadian Community Health Survey data to compare the risks of overweight/obesity and chronic health conditions among new immigrants in the two countries.

Results suggest a more positive health selection of immigrants to Canada than the U.S. Specifically, newly arrived U.S. immigrants are more likely to be overweight or obese and have serious chronic health conditions than their Canadian counterparts. The difference in overweight/obesity was explained by differences in source regions and educational levels of immigrants across the two countries. But this is not the case for serious chronic conditions. These results suggest that immigration-related policies can potentially shape immigrant health selection.

Maynard, B. R., et al. (2016). "Bullying Victimization Among School-Aged Immigrant Youth in the United States." *J Adolesc Health* **58**(3): 337-344.

PURPOSE: Bullying is a serious sociodevelopmental issue associated with a range of short- and long-term problems among youth who are bullied. Although race and ethnicity have been studied, less attention has been paid to examining prevalence and correlates of bullying victimization among immigrant youth. **METHODS:** Using data from the Health Behavior in School-Aged Children (N = 12,098), we examined prevalence and correlates of bullying victimization among U.S. immigrant youth. **RESULTS:** After controlling for several demographic variables, findings indicate that immigrant youth are more likely to experience bullying victimization than native-born youth. Furthermore, immigrant youth who experience bullying victimization were more likely to report interpersonal, socioemotional, health, and substance use problems. **CONCLUSIONS:** Given the greater risk and unique challenges experienced by immigrant youth, prevention and intervention programs may need to be tailored to their needs and circumstances. Further research is needed to understand the specific factors and mechanisms involved in bullying victimization among immigrant youth.

Mannoh, I. et Turkson-Ocran, R. A. (2021). "Disparities in Awareness of Myocardial Infarction and Stroke Symptoms and Response Among United States- and Foreign-Born Adults in the National Health Interview Survey." **10**(23): e020396.

Background Atherosclerotic cardiovascular disease, defined as nonfatal myocardial infarction (MI), coronary heart disease death, or fatal or nonfatal stroke, is the leading cause of death in the United States. MI and stroke symptom awareness and response reduce delays in hospitalization and mortality. Methods and Results We analyzed cross-sectional data from the 2014 and 2017 National Health Interview Surveys on US- and foreign-born adults from 9 regions of birth (Europe, South America, Mexico/Central America/Caribbean, Russia, Africa, Middle East, Indian subcontinent, Asia, and Southeast Asia). The outcomes were recommended MI and stroke knowledge, defined as knowing all 5 symptoms of MI or stroke, respectively, and choosing "call 9-1-1" as the best response. We included 63 059 participants, with a mean age 49.4 years; 54.1% were women, and 38.5% had a high school education or less. Recommended MI and stroke knowledge were highest in US-born people. In both 2014 and 2017, MI knowledge was lowest in individuals born in Asia (23.9%±2.5% and 32.1%±3.3%, respectively), and stroke knowledge lowest for the Indian subcontinent (44.4%±2.4% and 46.0%±3.2%, respectively). Among foreign-born adults, people from Russia and Europe had the highest prevalence of recommended MI knowledge in 2014 (37.4%±5.4%) and 2017 (43.5%±2.5%), respectively, and recommended stroke knowledge was highest in people from Europe (61.0%±2.6% and 67.2%±2.5%). Improvement in knowledge was not significant in all groups between 2014 and 2017. Conclusions These findings suggest a disparity in MI and stroke

symptom awareness and response among immigrants in the United States. Culturally tailored public health education and health literacy initiatives are needed to help reduce these disparities in awareness.

Maskileyson, D. et Seddig, D. (2021). "The Comparability of Perceived Physical and Mental Health Measures Across Immigrants and Natives in the United States." *58*(4): 1423-1443.

The comparative study of perceived physical and mental health in general-and the comparative study of health between the native-born and immigrants, in particular-requires that the groups understand survey questions inquiring about their health in the same way and display similar response patterns. After all, observed differences in perceived health may not reflect true differences but rather cultural bias in the health measures. Research on cross-country measurement equivalence between immigrants and natives on self-reported health measures has received very limited attention to date, resulting in a growing demand for the validation of existing perceived health measures using samples of natives and immigrants and establishing measurement equivalence of health-related assessment tools. This study, therefore, aims to examine measurement equivalence of self-reported physical and mental health indicators between immigrants and natives in the United States. Using pooled data from the 2015-2017 IPUMS Health Surveys, we examine the cross-group measurement equivalence properties of five concepts that are measured by multiple indicators: (1) perceived limitations in activities of daily life; (2) self-reported disability; (3) perceived functional limitations; (4) perceived financial stress; and (5) nonspecific psychological distress. Furthermore, we examine the comparability of these data among respondents of different ethnoracial origins and from different regions of birth, who report few versus many years since migration, their age, gender, and the language used to respond to the interview (e.g., English vs. Spanish). We test for measurement equivalence using multigroup confirmatory factor analysis. The results reveal that health scales are comparable across the examined groups. This finding allows drawing meaningful conclusions about similarities and differences among natives and immigrants on measures of perceived health in these data.

Miranda, P. Y., et al. (2017). "Citizenship, length of stay, and screening for breast, cervical, and colorectal cancer in women, 2000-2010." *Cancer Causes Control* **28**(6): 589-598.

BACKGROUND: Two factors jointly account for significant gaps in access to health care among immigrants who are present in the U.S.-legal status, and length of residence. The objective of this study is to examine the association between citizenship and length of residence in the U.S. and cancer screening (breast, cervical, and colorectal) among women. **METHODS:** We analyzed 11 years (2000-2010) of consolidated data from the Medical Expenditure Panel Survey linked with the National Health Interview Survey. Multivariate analyses compared cancer screening among U.S.-born citizens ($n = 58,484$), immigrant citizens ($n = 8,404$), and immigrant non-citizens ($n = 6,564$). **RESULTS:** Immigrant non-citizens living in the U.S. for less than 5 years were less likely to receive guideline-concordant breast (OR = 0.68 [0.53-0.88]), cervical (OR = 0.65 [0.54-0.78]), and colorectal (OR = 0.31 [0.19-0.50]) cancer screening compared to U.S.-born citizens. Immigrant citizens and non-citizens living in the U.S. for 5 years or more had higher odds of being screened for breast and cervical cancer compared to U.S.-born citizens; (OR = 1.26 [1.13-1.41] and OR = 1.17 [1.06-1.29]) for immigrant citizens, (OR = 1.28 [1.13-1.45] and OR = 1.23 [1.09-1.38]) for non-citizens. Immigrant non-citizens living in the U.S. for 5 years or more

had lower odds of being screened for colorectal cancer compared to U.S.-born citizens (OR = 0.76 [0.65-0.90]). CONCLUSIONS: Based on these findings, duration mandates in immigration policy may indirectly influence future pathways to preventive health care and cancer disparities disproportionately affecting immigrant women. We suggest that limits of duration mandates be reevaluated, as they may offer pathways to preventive health care for this vulnerable population, and prevent future cancer disparities.

Oh, H., et al. (2015). "Immigration and psychotic experiences in the United States: Another example of the epidemiological paradox?" *Psychiatry Res* **229**(3): 784-790.

In Europe, it is widely established that immigration increases risk for psychotic disorder. However, research has yet to confirm this association in the United States, where immigrants paradoxically report better health status than their native-born counterparts. Further, few studies have examined this topic with respect to sub-threshold psychotic experiences, which are more common than psychotic disorders in the general population. This study analyzes the (1) National Comorbidity Survey-Replication, (2) the National Latino and Asian American Survey, and (3) the National Survey of American Life, in order to determine whether generation status had any impact on risk for lifetime and 12-month PE, and whether these associations vary across racial/ethnic groups, adjusting for demographic variables and socioeconomic status. We found an absence of an immigration effect on PE across various ethnic groups and across various geographic areas, and found that immigration is actually protective among Latinos, supporting the idea that the epidemiological paradox extends to the psychosis phenotype.

Okafor, M. T., et al. (2014). "Greater dietary acculturation (dietary change) is associated with poorer current self-rated health among African immigrant adults." *J Nutr Educ Behav* **46**(4): 226-235.

OBJECTIVE: Investigate the relationship between dietary acculturation and current self-rated health (SRH) among African immigrants, by country or region of origin. DESIGN: Cross-sectional, mixed-methods design using baseline data from longitudinal study of immigrants granted legal permanent residence May to November, 2003, and interviewed June, 2003 to June, 2004. SETTING: 2003 New Immigrant Survey. PARTICIPANTS: African immigrants from a nationally representative sample (n = 763) averaged 34.7 years of age and 5.5 years' US residency; 56.6% were male, 54.1% were married, 26.1% were Ethiopian, and 22.5% were Nigerian. MAIN OUTCOME MEASURE(S): Current SRH (dependent variable) was measured using 5-point Likert scale questions; dietary acculturation (independent variable) was assessed using a quantitative dietary change scale. ANALYSIS: Multivariate logistic regression tested the relationship of dietary acculturation with current SRH (alpha = .05; P < .05 considered significant); exploratory qualitative subset dietary analysis (n = 60) examined food/beverages consumed pre-/post-migration. RESULTS: African immigrants reporting moderate dietary change since arrival in the US had higher odds of poorer SRH status than immigrants reporting low dietary change (odds ratio, 1.903; 95% confidence interval, 1.143-3.170; P = .01). Among most dietary change groups, there was an increase in fast food consumption and decrease in fruit and vegetable consumption. CONCLUSIONS AND IMPLICATIONS: Nutrition educators and public health practitioners should develop targeted nutrition education for African immigrants who are older, less educated, and at increased health risk.

Oropesa, R. S., et al. (2015). "Family legal status and health: Measurement dilemmas in studies of

Mexican-origin children." *Soc Sci Med* **138**: 57-67.

Family legal status is a potentially important source of variation in the health of Mexican-origin children. However, a comprehensive understanding of its role has been elusive due to data limitations and inconsistent measurement procedures. Using restricted data from the 2011-2012 California Health Interview Survey, we investigate the implications of measurement strategies for estimating the share of children in undocumented families and inferences about how legal status affects children's health. The results show that inferences are sensitive to how this "fundamental cause" is operationalized under various combinatorial approaches used in previous studies. We recommend alternative procedures with greater capacity to reveal how the statuses of both parents affect children's well-being. The results suggest that the legal statuses of both parents matter, but the status of mothers is especially important for assessments of child health. The investigation concludes with a discussion of possible explanations for these findings.

Panikkar, B., et al. (2013). "Occupational health outcomes among self-identified immigrant workers living and working in Somerville, Massachusetts 2006-2009." *J Immigr Minor Health* **15**(5): 882-889.

This study examines the burden of occupational health risks among a convenience sample of three immigrant worker populations (Brazilian, Haitian, and El Salvadoran) in Somerville, Massachusetts. In this community based research initiative (n = 346), logistic regression is used to analyze immigrant occupational health survey data collected from 2006 to 2009. In this study, injuries at work were significantly associated with lower English proficiency (OR = 1.8, 95 % CI 1.1-3.0), workers between the ages of 46 and 65 (OR = 2.7, 95 % CI 1.0-7.0), service workers (OR = 13.8, 95 % CI 1.8-105.2), production workers (OR = 10.8, 95 % CI 1.3-90.1), construction workers (OR: 21.7, 95 % CI 2.8-170.9) and immigrants with no health insurance (OR = 1.8, 95 % CI 1.0-3.1). Injuries were negatively associated with years in the US with more established immigrants in the US >15 years reporting more injuries at work. Older immigrants who have been in the US longer but are less proficient in English, and are still employed in low-wage occupations with no health insurance suffered more injuries than recent immigrants. Further validation of this result is required.

Percheski, C. et Bzostek, S. (2017). "Public Health Insurance and Health Care Utilization for Children in Immigrant Families." *Matern Child Health J* **21**(12): 2153-2160.

Objectives To estimate the impacts of public health insurance coverage on health care utilization and unmet health care needs for children in immigrant families. Methods We use survey data from National Health Interview Survey (NHIS) (2001-2005) linked to data from Medical Expenditures Panel Survey (MEPS) (2003-2007) for children with siblings in families headed by at least one immigrant parent. We use logit models with family fixed effects. Results Compared to their siblings with public insurance, uninsured children in immigrant families have higher odds of having no usual source of care, having no health care visits in a 2 year period, having high Emergency Department reliance, and having unmet health care needs. We find no statistically significant difference in the odds of having annual well-child visits. Conclusions for practice Previous research may have underestimated the impact of public health insurance for children in immigrant families. Children in immigrant families would likely benefit considerably from

expansions of public health insurance eligibility to cover all children, including children without citizenship. Immigrant families that include both insured and uninsured children may benefit from additional referral and outreach efforts from health care providers to ensure that uninsured children have the same access to health care as their publicly-insured siblings.

Prentice, J. C., et al. (2005). "Immigration status and health insurance coverage: who gains? Who loses?" Am J Public Health **95**(1): 109-116.

OBJECTIVES: We compared health insurance status transitions of nonimmigrants and immigrants. **METHODS:** We used multivariate survival analysis to examine gaining and losing insurance by citizenship and legal status among adults with the Los Angeles Family and Neighborhood Survey. **RESULTS:** We found significant differences by citizenship and legal status in health insurance transitions. Undocumented immigrants were less likely to gain and more likely to lose insurance compared with native-born citizens. Legal residents were less likely to gain and were slightly more likely to lose insurance compared with native-born citizens. Naturalized citizens did not differ from native-born citizens. **CONCLUSIONS:** Previous studies have not examined health insurance transitions by citizenship and legal status. Policies to increase coverage should consider the experiences of different immigrant groups.

Reynolds, M. M. et Childers, T. B. (2020). "Preventive Health Screening Disparities Among Immigrants: Exploring Barriers to Care." J Immigr Minor Health **22**(2): 336-344.

Immigrant health research has highlighted the relevance of socioeconomic, health services, and immigration-related factors in explaining disparities in health screening rates between native- and foreign-born individuals. This study advances knowledge in this area by investigating the explanatory strength of such factors for cardiovascular risk screening across eight immigrant groups. Using nationally representative data from the National Health Interview Survey, we test the hypothesis that known correlates of preventive healthcare seeking differ in their ability to predict screening behavior depending on region of origin. Results show that health service factors (lack of insurance and no place for care) are fairly consistent predictors of preventive screening while socioeconomic and immigration-related factors are less so. These findings surface the complex processes underlying observed differentials in health-seeking behaviors and illuminate potential targets for public health and clinical intervention.

Ro, A., et al. (2016). "An examination of health selection among U.S. immigrants using multi-national data." Soc Sci Med **158**: 114-121.

While migrants are widely believed to be positively selected on health, there has been very little empirical exploration of the actual health differential between migrants and non-migrants. This paper explored: 1) the extent of health selection by comparing US immigrants from 19 sending countries to their non-migrating counterparts still residing in the countries of origin; 2) country-level correlates of health selection; and 3) whether country-level health selection accounted for differences in self-rated health between immigrants and US-born Whites. We combined nationally-representative international data with data from US immigrants from the 2003-2007 Current Population Survey. The health selectivity measure was the Net Difference Index (NDI), which compares the distribution of self-rated health between migrants and non-migrants. We calculated Spearman correlation and bivariate regression coefficients between the NDI and

economic, health, distance, and migration characteristics of the sending countries. We used generalized estimating equation models to examine the association between country-level health selection and immigrants' current self-rated health. We found immigrants from South America to show the most positive health selection. Health selection was significantly correlated with visa mode of entry, where family networks decrease, but work-related networks increase health selection. There was little evidence that country-level health selection explained differences in the self-rated health of US immigrants relative to US-born Whites. Our findings do not support the idea that country-level health selection underlies the "healthy immigrant effect".

Rubalcava, L. N., et al. (2008). "The healthy migrant effect: new findings from the Mexican Family Life Survey." *Am J Public Health* **98**(1): 78-84.

OBJECTIVES: We used nationally representative longitudinal data from the Mexican Family Life Survey to determine whether recent migrants from Mexico to the United States are healthier than other Mexicans. Previous research has provided little scientific evidence that tests the "healthy migrant" hypothesis. **METHODS:** Estimates were derived from logistic regressions of whether respondents moved to the United States between surveys in 2002 and 2005, by gender and urban versus rural residence. Covariates included physical health measurements, self-reported health, and education measured in 2002. Our primary sample comprised 6446 respondents aged 15 to 29 years. **RESULTS:** Health significantly predicted subsequent migration among females and rural males. However, the associations were weak, few health indicators were statistically significant, and there was substantial variation in the estimates between males and females and between urban and rural dwellers. **CONCLUSIONS:** On the basis of recent data for Mexico, the largest source of migrants to the United States, we found generally weak support for the healthy migrant hypothesis.

Samari, G., Sharif, M. Z. et Alcalá, H. E. (2020). "Racial and Citizenship Disparities in Health Care Among Middle Eastern Americans." *Med Care* **58**(11): 974-980.

OBJECTIVE: To assess differences in health access and utilization among Middle Eastern American adults by White racial identity and citizenship. **METHODS:** Data from the 2011 to 2018 National Health Interview Surveys (N=1013) and survey-weighted logistic regression analyses compare Middle Eastern immigrants by race and citizenship on access and utilization of health care in the United States. **RESULTS:** White respondents had 71% lower odds of delaying care [adjusted odds ratio (AOR)=0.34; 95% confidence interval (CI)=0.13, 0.71] and 84% lower odds of being rejected by a doctor as a new patient (AOR=0.16; 95% CI=0.03, 0.88) compared to non-White respondents. US citizens had higher odds of visiting the doctor in the past 12 months compared with noncitizens (AOR=1.76; 95% CI=1.25, 2.76). **CONCLUSION:** Middle Eastern immigrants who do not identify as White and who are not US citizens are significantly less likely to access and utilize health care compared with those who identify as White and are US citizens. **POLICY IMPLICATIONS:** This study shows that racial and citizenship disparities persist among Middle Eastern Americans at a national-level, playing a critical role in access to and use of health care.

Singh, G. K., et al. (2013). "Immigrant health inequalities in the United States: use of eight major national data systems." *ScientificWorldJournal* **2013**: 512313.

Eight major federal data systems, including the National Vital Statistics System (NVSS), National Health Interview Survey (NHIS), National Survey of Children's Health, National Longitudinal Mortality Study, and American Community Survey, were used to examine health differentials between immigrants and the US-born across the life course. Survival and logistic regression, prevalence, and age-adjusted death rates were used to examine differentials. Although these data systems vary considerably in their coverage of health and behavioral characteristics, ethnic-immigrant groups, and time periods, they all serve as important research databases for understanding the health of US immigrants. The NVSS and NHIS, the two most important data systems, include a wide range of health variables and many racial/ethnic and immigrant groups. Immigrants live 3.4 years longer than the US-born, with a life expectancy ranging from 83.0 years for Asian/Pacific Islander immigrants to 69.2 years for US-born blacks. Overall, immigrants have better infant, child, and adult health and lower disability and mortality rates than the US-born, with immigrant health patterns varying across racial/ethnic groups. Immigrant children and adults, however, fare substantially worse than the US-born in health insurance coverage and access to preventive health services. Suggestions and new directions are offered for improvements in health monitoring and for strengthening and developing databases for immigrant health assessment in the USA.

Singh, G. K., et al. (2013). "Health, chronic conditions, and behavioral risk disparities among U.S. immigrant children and adolescents." Public Health Rep **128**(6): 463-479.

OBJECTIVE: We examined differentials in the prevalence of 23 parent-reported health, chronic condition, and behavioral indicators among 91,532 children of immigrant and U.S.-born parents. **METHODS:** We used the 2007 National Survey of Children's Health to estimate health differentials among 10 ethnic-nativity groups. Logistic regression yielded adjusted differentials. **RESULTS:** Immigrant children in each racial/ethnic group had a lower prevalence of depression and behavioral problems than native-born children. The prevalence of autism varied from 0.3% among immigrant Asian children to 1.3%-1.4% among native-born non-Hispanic white and Hispanic children. Immigrant children had a lower prevalence of asthma, attention deficit disorder/attention deficit hyperactivity disorder; developmental delay; learning disability; speech, hearing, and sleep problems; school absence; and ≥ 1 chronic condition than native-born children, with health risks increasing markedly in relation to mother's duration of residence in the U.S. Immigrant children had a substantially lower exposure to environmental tobacco smoke, with the odds of exposure being 60%-95% lower among immigrant non-Hispanic black, Asian, and Hispanic children compared with native non-Hispanic white children. Obesity prevalence ranged from 7.7% for native-born Asian children to 24.9%-25.1% for immigrant Hispanic and native-born non-Hispanic black children. Immigrant children had higher physical inactivity levels than native-born children; however, inactivity rates declined with each successive generation of immigrants. Immigrant Hispanic children were at increased risk of obesity and sedentary behaviors. Ethnic-nativity differentials in health and behavioral indicators remained marked after covariate adjustment. **CONCLUSIONS:** Immigrant patterns in child health and health-risk behaviors vary substantially by ethnicity, generational status, and length of time since immigration. Public health programs must target at-risk children of both immigrant and U.S.-born parents.

Slopen, N., et al. (2016). "Racial Disparities in Child Adversity in the U.S.: Interactions With Family

Immigration History and Income." Am J Prev Med **50**(1): 47-56.

INTRODUCTION: Childhood adversity is an under-addressed dimension of primary prevention of disease in children and adults. Evidence shows racial/ethnic and socioeconomic patterning of childhood adversity in the U.S., yet data on the interaction of race/ethnicity and SES for exposure risk is limited, particularly with consideration of immigration history. This study examined racial/ethnic differences in nine adversities among children (from birth to age 17 years) in the National Survey of Child Health (2011-2012) and determined how differences vary by immigration history and income (N=84,837). **METHODS:** We estimated cumulative adversity and individual adversity prevalences among white, black, and Hispanic children of U.S.-born and immigrant parents. We examined whether family income mediated the relationship between race/ethnicity and exposure to adversities, and tested interactions (analyses conducted in 2014-2015). **RESULTS:** Across all groups, black and Hispanic children were exposed to more adversities compared with white children, and income disparities in exposure were larger than racial/ethnic disparities. For children of U.S.-born parents, these patterns of racial/ethnic and income differences were present for most individual adversities. Among children of immigrant parents, there were few racial/ethnic differences for individual adversities and income gradients were inconsistent. Among children of U.S.-born parents, the Hispanic-white disparity in exposure to adversities persisted after adjustment for income, and racial/ethnic disparities in adversity were largest among children from high-income families. **CONCLUSIONS:** Simultaneous consideration of multiple social statuses offers promising frameworks for fresh thinking about the distribution of disease and the design of targeted interventions to reduce preventable health disparities.

Su, D., et al. (2014). "Uninsurance, underinsurance, and health care utilization in Mexico by US border residents." J Immigr Minor Health **16**(4): 607-612.

Using data from the 2008 Cross-Border Utilization of Health Care Survey, we examined the relationship between United States (US) health insurance coverage plans and the use of health care services in Mexico by US residents of the US-Mexico border region. We found immigrants were far more likely to be uninsured than their native-born counterparts (63 vs. 27.8 %). Adults without health insurance coverage were more likely to purchase medications or visit physicians in Mexico compared to insured adults. However, adults with Medicaid coverage were more likely to visit dentists in Mexico compared to uninsured adults. Improving health care access for US residents in the southwestern border region of the country will require initiatives that target not only providing coverage to the large uninsured population but also improving access to health care services for the large underinsured population.

Thomson, E. F., et al. (2013). "The Hispanic Paradox and older adults' disabilities: is there a healthy migrant effect?" Int J Environ Res Public Health **10**(5): 1786-1814.

The "Hispanic Paradox" suggests that despite rates of poverty similar to African Americans, Hispanics have far better health and mortality outcomes, more comparable to non-Hispanic White Americans. Three prominent possible explanations for the Hispanic Paradox have emerged. The "Healthy Migrant Effect" suggests a health selection effect due to the demands of migration. The Hispanic lifestyle hypothesis focuses on Hispanics' strong social ties and better health behaviors. The reverse migration argument suggests that the morbidity profile in the USA is affected when many Hispanic immigrants return to their native countries after developing a

serious illness. We analyzed data from respondents aged 55 and over from the nationally representative 2006 American Community Survey including Mexican Americans (13,167 U.S. born; 11,378 immigrants), Cuban Americans (314 U.S. born; 3,730 immigrants), and non-Hispanic White Americans (629,341 U.S. born; 31,164 immigrants). The healthy migrant effect was supported with SES-adjusted disability comparable between Mexican, Cuban and non-Hispanic Whites born in the USA and all immigrants having lower adjusted odds of functional limitations than U.S. born non-Hispanic Whites. The reverse migration hypothesis was partially supported, with citizenship and longer duration in the USA associated with higher rates of SES-adjusted disability for Mexican Americans. The Hispanic healthy life-style explanation had little support in this study. Our findings underline the importance of considering nativity when planning for health interventions to address the needs of the growing Hispanic American older adult population.

Torres, J. M. et Waldinger, R. (2015). "Civic Stratification and the Exclusion of Undocumented Immigrants from Cross-border Health Care." *J Health Soc Behav* **56**(4): 438-459.

This paper proposes a theoretical framework and an empirical example of the relationship between the civic stratification of immigrants in the United States, and their access to healthcare. We use the 2007 Pew Hispanic Center/Robert Wood Johnson Foundation Hispanic Healthcare Survey, a nationally representative survey of U.S. Latinos (N = 2,783 foreign-born respondents) and find that immigrants who are not citizens or legal permanent residents are significantly more likely to be excluded from care in both the United States and across borders. Legal-status differences in cross-border care utilization persisted after controlling for health status, insurance coverage, and other potential demographic and socioeconomic predictors of care. Exclusion from care on both sides of the border was associated with reduced rates of receiving timely preventive services. Civic stratification, and political determinants broadly speaking, should be considered alongside social determinants of population health and health care.

Turkson-Ocran, R. N., Nmezi, N. A., Botchway, M. O., et al. (2020). "Comparison of Cardiovascular Disease Risk Factors Among African Immigrants and African Americans: An Analysis of the 2010 to 2016 National Health Interview Surveys." *J Am Heart Assoc* **9**(5): e013220.

Background Racial/ethnic minorities, especially non-Hispanic blacks, in the United States are at higher risk of developing cardiovascular disease. However, less is known about the prevalence of cardiovascular disease risk factors among ethnic sub-populations of blacks such as African immigrants residing in the United States. This study's objective was to compare the prevalence of cardiovascular disease risk factors among African immigrants and African Americans in the United States. Methods and Results We performed a cross-sectional analysis of the 2010 to 2016 National Health Interview Surveys and included adults who were black and African-born (African immigrants) and black and US-born (African Americans). We compared the age-standardized prevalence of hypertension, diabetes mellitus, overweight/obesity, hypercholesterolemia, physical inactivity, and current smoking by sex between African immigrants and African Americans using the 2010 census data as the standard. We included 29 094 participants (1345 African immigrants and 27 749 African Americans). In comparison with African Americans, African immigrants were more likely to be younger, educated, and employed but were less likely to be insured (P<0.05). African immigrants, regardless of sex, had lower age-

standardized hypertension (22% versus 32%), diabetes mellitus (7% versus 10%), overweight/obesity (61% versus 70%), high cholesterol (4% versus 5%), and current smoking (4% versus 19%) prevalence than African Americans. Conclusions The age-standardized prevalence of cardiovascular disease risk factors was generally lower in African immigrants than African Americans, although both populations are highly heterogeneous. Data on blacks in the United States. should be disaggregated by ethnicity and country of origin to inform public health strategies to reduce health disparities.

Wang, Y., Wilson, F. A., Stimpson, J. P., et al. (2018). "Fewer immigrants have preventable ED visits in the United States." *Am J Emerg Med* **36**(3): 352-358.

OBJECTIVE: The aim of this study is to examine differences in having preventable emergency department (ED) visits between noncitizens, naturalized and US-born citizens in the United States. METHODS: We linked the 2008-2012 Medical Expenditure Panel Survey with National Health Interview Survey data to draw a nationally representative sample of US adults. Univariate analysis described distribution of preventable ED visits identified by the Prevention Quality Indicators across immigration status. We also assessed the association between preventable ED visits and immigration status, controlling for demographics, socioeconomic status, health service utilization, and health status. We finally applied the Oaxaca-Blinder decomposition method to measure the contribution of each covariate to differences in preventable ED services utilization between US natives, naturalized citizens, and noncitizens. RESULTS: Of US natives, 2.1% had any preventable ED visits within the past years as compared to 1.0% of noncitizens and 1.5% of naturalized citizens. Multivariate results also revealed that immigrants groups had significantly lower odds (adjusted OR: naturalized citizen 0.77 [0.61-0.96], noncitizen 0.62 [0.48-0.80]) of having preventable ED visits than natives. Further stratified analysis by insurance status showed these differences were only significant among the uninsured and public insurance groups. Race/ethnicity and health insurance explained about 68% of the difference in preventable ED service utilization between natives and noncitizens. CONCLUSION: Our study documents the existing differences in preventable ED visits across immigration status, and highlights the necessity to explore unmet health needs among immigrants and eliminate disparities.

Wong, E. C. et Miles, J. N. (2014). "Prevalence and correlates of depression among new U.S. immigrants." *J Immigr Minor Health* **16**(3): 422-428.

Although immigrants comprise one of the fastest growing segments of society, information on their adjustment to life in the US remains limited. The present study examined the prevalence of depression and associated correlates among a national sample of immigrants newly admitted to legal permanent residence to the US. Data were derived from the baseline adult cohort of the New Immigrant Survey, a national representative sample of immigrants who had obtained legal permanent residence between May and November 2003. Approximately 3% of respondents met criteria for probable depression in the past 12 months. Respondents who were female, younger in age, in the US for a longer period of time, and exposed to political violence in their country of origin were more likely to meet criteria for probable depression. Both pre-immigration and resettlement related factors were associated with probable depression. Further research is needed to better understand how processes in the country of origin and in the resettlement country influence the adjustment of immigrants.

Europe

Barrera, O., Bensidoun, I. et Edo, A. (2022). Second-generation immigrants and native attitudes toward immigrants in Europe. *Working Paper Cepii ; 2022-03*. Paris Cepii: 54.

<http://d.repec.org/n?u=RePEc:cii:cepidt:2022-03&r=>

This paper investigates the role played by immigrants and their children in shaping native attitudes toward immigrants in the European Union. By exploiting the 2017 Special Eurobarometer on immigrant integration, we show that countries with a relatively high share of immigrants are more likely to believe that immigrants are a burden on the welfare system and worsen crime. In contrast, native opinions on the impact of immigration on culture and the labor market are unrelated to the presence of immigrants. We also find that the effects of second-generation immigrants on pro-immigrant attitudes toward security and fiscal concerns are positive (as opposed to first-generation immigrants). Finally, we find no impact of the immigrant share on the attitudes of natives supporting far-left or left political parties, while it is the most negative among respondents affiliated with far-right parties.

Borrell, C., et al. (2015). "Perceived Discrimination and Health among Immigrants in Europe According to National Integration Policies." *Int J Environ Res Public Health* **12**(9): 10687-10699.

BACKGROUND: Discrimination harms immigrants' health. The objective of this study was to analyze the association between perceived discrimination and health outcomes among first and second generation immigrants from low-income countries living in Europe, while accounting for sex and the national policy on immigration. **METHODS:** Cross-sectional study including immigrants from low-income countries aged ≥ 15 years in 18 European countries (European Social Survey, 2012) (sample of 1271 men and 1335 women). The dependent variables were self-reported health, symptoms of depression, and limitation of activity. The independent variables were perceived group discrimination, immigrant background and national immigrant integration policy. We tested for association between perceived group discrimination and health outcomes by fitting robust Poisson regression models. **RESULTS:** We only observed significant associations between perceived group discrimination and health outcomes in first generation immigrants. For example, depression was associated with discrimination among both men and women (Prevalence Ratio-, 1.55 (95% CI: 1.16-2.07) and 1.47 (95% CI: 1.15-1.89) in the multivariate model, respectively), and mainly in countries with assimilationist immigrant integration policies. **CONCLUSION:** Perceived group discrimination is associated with poor health outcomes in first generation immigrants from low-income countries who live in European countries, but not among their descendants. These associations are more important in assimilationist countries.

Chauvin, P., Parizot, N. et Simonnot, N. (2009). Access to healthcare for undocumented migrants in 11 eleven countries : 2008 survey report. Paris Médecins du Monde: 156 , tab., graph., fig.

The 14 organisations within the Médecins du Monde international network work with the most vulnerable populations throughout the world and in their own societies. Through the national programmes, they meet people in Europe who have fled extreme poverty, violent armies and police forces, conflict areas and disasters. A tiny minority of the children, women and men

whom we try to support when they work in their countries end up coming here. After migration journeys which are very often long, dangerous and exhausting, many find themselves without permission to stay in the country, forced into the shadows of our towns and cities. At home, as abroad, Médecins du Monde aims to provide some support and tries to help this population protect what is often the only thing they have left—their health. This study shows how undocumented migrants' living conditions are harmful to their health and prevent them from building, or rebuilding, their lives. This is despite the fact that these children, women and men are in particular need of support, given what they have lived through and the migration journeys they have undertaken.

Lanari, D., et al. (2015). "Self-perceived health among Eastern European immigrants over 50 living in Western Europe." *Int J Public Health* **60**(1): 21-31.

OBJECTIVES: This paper examines whether Eastern European immigrants aged 50 and over living in Northern and Western Europe face a health disadvantage in terms of self-perceived health, with respect to the native-born. We also examined health changes over time (2004-2006-2010) through the probabilities of transition among self-perceived health states, and how they vary according to nativity status and age group. **METHODS:** Data were obtained from the Survey of Health, Ageing and Retirement in Europe (SHARE). Logistic regressions and probabilities of transition were used. **RESULTS:** Results emphasise the health disadvantage of Eastern European immigrants living in Germany, France and Sweden with respect to the native-born, even after controlling for socio-economic status. Probabilities of transition also evidenced that people born in Eastern Europe were more likely to experience worsening health and less likely to recover from sickness. **CONCLUSIONS:** This paper suggests that health inequalities do not affect immigrant groups in equal measure and confirm the poorer and more steeply deteriorating health status of Eastern European immigrants.

Falla, A. M., et al. (2017). "Language support for linguistic minority chronic hepatitis B/C patients: an exploratory study of availability and clinicians' perceptions of language barriers in six European countries." *BMC Health Serv Res* **17**(1): 150.

BACKGROUND: Language support for linguistic minorities can improve patient safety, clinical outcomes and the quality of health care. Most chronic hepatitis B/C infections in Europe are detected among people born in endemic countries mostly in Africa, Asia and Central/Eastern Europe, groups that may experience language barriers when accessing health care services in their host countries. We investigated availability of interpreters and translated materials for linguistic minority hepatitis B/C patients. We also investigated clinicians' agreement that language barriers are explanations of three scenarios: the low screening uptake of hepatitis B/C screening, the lack of screening in primary care, and why cases do not reach specialist care. **METHODS:** An online survey was developed, translated and sent to experts in five health care services involved in screening or treating viral hepatitis in six European countries: Germany, Hungary, Italy, the Netherlands, Spain and the United Kingdom (UK). The five areas of health care were: general practice/family medicine, antenatal care, health care for asylum seekers, sexual health and specialist secondary care. We measured availability using a three-point ordinal scale ('very common', 'variable or not routine' and 'rarely or never'). We measured agreement using a five-point Likert scale. **RESULTS:** We received 238 responses (23% response rate, N = 1026) from representatives in each health care field in each country. Interpreters are common

in the UK, the Netherlands and Spain but variable or rare in Germany, Hungary and Italy. Translated materials are rarely/never available in Hungary, Italy and Spain but commonly or variably available in the Netherlands, Germany and the UK. Differing levels of agreement that language barriers explain the three scenarios are seen across the countries. Professionals in countries with most infrequent availability (Hungary and Italy) disagree strongest that language barriers are explanations. CONCLUSIONS: Our findings show pronounced differences between countries in availability of interpreters, differences that mirror socio-cultural value systems of 'difference-sensitive' and 'difference-blindness'. Improved language support is needed given the complex natural history of hepatitis B/C, the recognised barriers to screening and care, and the large undiagnosed burden among (potentially) linguistic minority migrant groups.

Malmusi, D. (2015). "Immigrants' health and health inequality by type of integration policies in European countries." *Eur J Public Health* **25**(2): 293-299.

<http://eurpub.oxfordjournals.org/content/25/2/293.long>

BACKGROUND: Recent efforts to characterize integration policy towards immigrants and to compare immigrants' health across countries have rarely been combined so far. This study explores the relationship of country-level integration policy with immigrants' health status in Europe. METHODS: Cross-sectional study with data from the 2011 European Union Survey on Income and Living Conditions. Fourteen countries were grouped according to a typology of integration policies based on the Migrant Integration Policy Index: 'multicultural' (highest scores: UK, Italy, Spain, Netherlands, Sweden, Belgium, Portugal, Norway, Finland), 'exclusionist' (lowest scores: Austria, Denmark) and 'assimilationist' (high or low depending on the dimension: France, Switzerland, Luxembourg). People born in the country (natives, n = 177 300) or outside the European Union with >10 years of residence (immigrants, n = 7088) were included. Prevalence ratios (PR) of fair/poor self-rated health between immigrants in each country cluster, and for immigrants versus natives within each, were computed adjusting by age, education, occupation and socio-economic conditions. RESULTS: Compared with multicultural countries, immigrants report worse health in exclusionist countries (age-adjusted PR, 95% CI: men 1.78, 1.49-2.12; women 1.58, 1.37-1.82; fully adjusted, men 1.78, 1.50-2.11; women 1.47, 1.26-1.70) and assimilationist countries (age-adjusted, men 1.21, 1.03-1.41; women 1.21, 1.06-1.39; fully adjusted, men 1.19, 1.02-1.40; women 1.22, 1.07-1.40). Health inequalities between immigrants and natives were also highest in exclusionist countries, where they persisted even after adjusting for differences in socio-economic situation. CONCLUSION: Immigrants in 'exclusionist' countries experience poorer socio-economic and health outcomes. Future studies should confirm whether and how integration policy models could make a difference on migrants' health.

Sole-Auro, A., et al. (2008). Health of Immigrants in European countries. Barcelone, RIAC: 23p.

The health of older immigrants can have important consequences for needed social support and demands placed on health systems. This paper examines health differences between immigrants and the native born populations aged 50 years and older in 11 European countries. We examine differences in functional ability, disability, disease presence and behavioral risk factors, for immigrants and non-immigrants using data from the Survey of Health, Aging and Retirement in Europe (SHARE) database. Among the 11 European countries, migrants generally have worse health than the native population. In these countries, there is a little evidence of the "healthy

migrant" at ages 50 years and over. In general, it appears that growing numbers of immigrants may portend more health problems in the population in subsequent years.

Sole-Auro, A., et al. (2012). "Health care usage among immigrants and native-born elderly populations in eleven European countries: results from SHARE." *Eur J Health Econ* **13**(6): 741-754.

PM:21660564

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3591521/pdf/nihms437801.pdf>

Differences in health care utilization of immigrants 50 years of age and older relative to the native-born populations in eleven European countries are investigated. Negative binomial and zero-inflated Poisson regression are used to examine differences between immigrants and native-borns in number of doctor visits, visits to general practitioners, and hospital stays using the 2004 Survey of Health, Ageing, and Retirement in Europe database. In the pooled European sample and in some individual countries, older immigrants use from 13 to 20% more health services than native-borns after demographic characteristics are controlled. After controlling for the need for health care, differences between immigrants and native-borns in the use of physicians, but not hospitals, are reduced by about half. These are not changed much with the incorporation of indicators of socioeconomic status and extra insurance coverage. Higher country-level relative expenditures on health, paying physicians a fee-for-service, and physician density are associated with higher usage of physician services among immigrants

Sole-Auro, A., et al. (2009). Health care utilization among immigrants and native-born populations in 11 European countries. Results from the Survey of Health, Ageing and Retirement in Europe. Barcelone, University of Barcelona. Department of Econometrics and Statistics: 29p.

This study examines health care utilization of immigrants relative to the native-born populations aged 50 years and older in eleven European countries. Methods. We analyzed data from the Survey of Health Aging and Retirement in Europe (SHARE) from 2004 for a sample of 27,444 individuals in 11 European countries. Negative Binomial regression was conducted to examine the difference in number of doctor visits, visits to General Practitioners (GPs), and hospital stays between immigrants and the native-born individuals. Results : We find evidence those immigrants above age 50 use health services on average more than the native-born populations with the same characteristics. Our models show immigrants have between 6% and 27% more expected visits to the doctor, GP or hospital stays when compared to native-born populations in a number of European countries. Discussion : Elderly immigrant populations might be using health services more intensively due to cultural reasons.

Villarroel, N. et Artazcoz, L. (2017). "Immigration and Sleep Problems in a Southern European Country: Do Immigrants Get the Best Sleep?" *Behav Med* **43**(4): 233-241.

This study analyzes the differences in the prevalence of insomnia symptoms and nonrestorative sleep (NRS) between people born in Spain and immigrants from 7 countries with most immigrants in Spain. Data come from the 2006 Spanish National Health Survey. The sample was composed of all individuals aged 16 to 64 years from Spain and the 7 countries with most immigrants in Spain (N = 22,224). In both sexes, people from Bolivia had a higher prevalence of insomnia symptoms and NRS. Conversely, people from Ecuador, Morocco, and Romania had less insomnia symptoms and NRS than Spanish-born participants. No differences were found

between Spanish-born participants and Colombian, Peruvian, and Argentinian women. Poor living conditions in the country of origin and in the host country, discrimination, and culturally related lifestyles could be related to poorer sleep health among Bolivian men. Acculturation may explain the similar sleep health patterns noted between Spanish-born participants and long-term immigrants.

Finlande

Adebayo, F. A., et al. (2017). "Consumption of healthy foods and associated socio-demographic factors among Russian, Somali and Kurdish immigrants in Finland." Scand J Public Health **45**(3): 277-287.

AIMS: We evaluated the consumption of healthy foods among Russian, Somali and Kurdish immigrants in Finland, and examined the relationship between socio-demographic factors and food consumption. **METHODS:** We used data from the Migrant Health and Wellbeing Study (Maamu), a population-based health interview and examination survey in six different municipalities in Finland between 2010 and 2012. Altogether, 635 men and 737 women, aged 18-64 years, of Russian (n = 527), Somali (n = 337) and Kurdish (n = 508) origin were included. The important socio-demographic determinants of healthy food consumption - sex, age, education, place of residence and household size - were assessed by logistic regression. **RESULTS:** Based on the consumption frequencies of recommended healthy foods - fruits, berries, vegetables, fish and rye bread - immigrants of Russian origin had higher consumption of healthy foods than their peers of Kurdish and Somali origin. Low consumption of fresh vegetables, fruits and berries was found among Somali immigrants. Sex and age were the most important determinants of healthy food consumption, as women and older age groups had diets closer to the national nutrition recommendations. High educational level was also positively associated with healthy food consumption. **CONCLUSIONS:** We found ethnic differences in the consumption of healthy foods among the immigrant groups of Russian, Somali and Kurdish origin in Finland. Socio-demographic factors, especially age, sex and education, seem to also play an important role in immigrants' food consumption. Further studies examining the consumption of fruits, berries and fresh vegetables among Somali immigrants in Finland are needed.

Idehen, E. E., et al. (2017). "Factors associated with cervical cancer screening participation among immigrants of Russian, Somali and Kurdish origin: a population-based study in Finland." BMC Womens Health **17**(1): 19.

BACKGROUND: Previous studies revealed low participation in cervical cancer screening among immigrants compared with non-immigrants. Only a few studies about factors associated with immigrants' lower participation rates have been conducted in European countries that have universal access for all eligible women. Our study aimed to explore factors associated with cervical screening participation among women of Russian, Somali, and Kurdish origin in Finland. **METHODS:** We used data from the Migrant Health and Well-being Survey, 2010-2012. Structured face-to-face interviews of groups of immigrants aged 25-60 yielded 620 responses concerning screening participation in the previous five years. Statistical analysis employed logistic regression. **RESULTS:** The age-adjusted participation rates were as follows: among women of Russian origin 73.9% (95% CI 68.1-79.7), for Somalis 34.7% (95% CI 26.4-43.0), and for

Kurds 61.3% (95% CI 55.0-67.7). Multiple logistic regressions showed that the most significant factor increasing the likelihood of screening participation among all groups was having had at least one gynecological check-up in the previous five years (Odds ratio [OR] = 6.54-26.2; $p < 0.001$). Other factors were higher education (OR = 2.63; $p = 0.014$), being employed (OR = 4.31; $p = 0.007$), and having given birth (OR = 9.34; $p = 0.014$), among Kurds; and literacy in Finnish/Swedish (OR = 3.63; $p = 0.003$) among Russians. CONCLUSIONS: Our results demonstrate that women who refrain from using reproductive health services, those who are unemployed and less educated, as well as those with poor language proficiency, might need more information on the importance of screening participation. Primary and occupational healthcare services may have a significant role in informing immigrant women about this importance.

Ortiz-Paredes, D., Engler, K., Lessard, D., et al. (2020). "Pre-migration traumatic experiences, post-migration perceived discrimination and substance use among Russian and Kurdish migrants-a population-based study." *AIDS Patient Care STDS* **115**(6): 1160-1171.

BACKGROUND AND AIMS: The associations between traumatic events, substance use and perceived discrimination have been rarely studied among migrants in host countries. We examined whether pre-migration potentially traumatic experiences (PTEs) or perceived discrimination (PD) are associated with substance use among migrants with voluntary (Russians) and forced (Kurds) migration backgrounds. **DESIGN:** Cross-sectional interview and health examination data from the Finnish Migrant Health and Wellbeing Study were used. The target sample ($n = 1000$ for each group) was drawn from the national population register using stratified random sampling by participants' country of birth and native language. **SETTING:** Population-based data were collected from six cities in Finland during 2010-12. **PARTICIPANTS:** The participation rates were 68% (Russians) and 59% (Kurds). The analytical sample size varied (Russians $n = 442-687$, Kurds $n = 459-613$), as some participants completed only interview, health examination or short interview. The majority of Kurds had a refugee background (75%) while Russians had mainly migrated for other reasons (99%). **MEASUREMENTS:** The three main outcomes were self-reported binge drinking, daily smoking and life-time cannabis use. PTEs and PD were self-reported in the interview. Socio-demographic background, migration-related factors and current affective symptoms were adjusted for. **FINDINGS:** Among Kurds, PTEs were associated with binge drinking [adjusted odds ratio (aOR) = 2.65, 95% confidence interval (CI) = 1.30-5.42] and PD was associated with life-time cannabis use (aOR = 3.89, 95% CI = 1.38-10.97) after adjusting for contextual factors. Among Russians, PTEs were associated with life-time cannabis use adjusting for contextual factors (aOR = 2.17, 95% CI = 1.12-4.18). **CONCLUSIONS:** In Finland, pre-migration traumatic experiences appear to be associated with life-time cannabis use among the Russian migrant population (voluntary migration) and binge drinking among the Kurdish migrant population (forced migration). Perceived discrimination in Finland appears to be associated with life-time cannabis use among Kurdish migrants.

Rask, S., et al. (2015). "The association between mental health symptoms and mobility limitation among Russian, Somali and Kurdish migrants: a population based study." *BMC Public Health* **15**: 275.

BACKGROUND: Research has demonstrated a bidirectional relationship between physical function and depression, but studies on their association in migrant populations are scarce. We examined the association between mental health symptoms and mobility limitation in Russian, Somali and Kurdish migrants in Finland. **METHODS:** We used data from the Finnish Migrant

Health and Wellbeing Study (Maamu). The participants comprised 1357 persons of Russian, Somali or Kurdish origin aged 18-64 years. Mobility limitation included self-reported difficulties in walking 500 m or stair climbing. Depressive and anxiety symptoms were measured using the Hopkins Symptom Checklist-25 (HSCL-25) and symptoms of somatization using the somatization subscale of the Symptom Checklist-90 Revised (SCL-90-R). A comparison group of the general Finnish population was selected from the Health 2011 study. RESULTS: Anxiety symptoms were positively associated with mobility limitation in women (Russians odds ratio [OR] 2.98; 95% confidence interval [CI] 1.28-6.94, Somalis OR 6.41; 95% CI 2.02-20.29 and Kurds OR 2.67; 95% CI 1.41-5.04), after adjustment for socio-demographic factors, obesity and chronic diseases. Also somatization increased the odds for mobility limitation in women (Russians OR 4.29; 95% CI 1.76-10.44, Somalis OR 18.83; 95% CI 6.15-57.61 and Kurds OR 3.53; 95% CI 1.91-6.52). Depressive symptoms were associated with mobility limitation in Russian and Kurdish women (Russians OR 3.03; 95% CI 1.27-7.19 and Kurds OR 2.64; 95% CI 1.39-4.99). Anxiety symptoms and somatization were associated with mobility limitation in Kurdish men when adjusted for socio-demographic factors, but not after adjusting for obesity and chronic diseases. Finnish women had similar associations as the migrant women, but Finnish men and Kurdish men showed varying associations. CONCLUSIONS: Mental health symptoms are significantly associated with mobility limitation both in the studied migrant populations and in the general Finnish population. The joint nature of mental health symptoms and mobility limitation should be recognized by health professionals, also when working with migrants. This association should be addressed when developing health services and health promotion.

Rask, S., et al. (2016). "The ethnic gap in mobility: a comparison of Russian, Somali and Kurdish origin migrants and the general Finnish population." *BMC Public Health* **16**: 340.

BACKGROUND: Many ethnic minority populations have poorer health than the general population. However, there is limited knowledge on the possible ethnic gap in physical mobility. We aim to examine the prevalence of mobility limitations in working-age Russian, Somali and Kurdish origin migrants in comparison to the general population in Finland. We also determine whether the association between ethnic group and mobility limitation remains after taking into account socio-economic and health-related factors. METHODS: We used data from the Finnish Migrant Health and Wellbeing Study (Maamu) and the Finnish Health 2011 Survey. The participants comprised 1880 persons aged 29-64 years. The age-adjusted prevalence of difficulties in various mobility tasks was calculated using predictive margins. Logistic regression analysis was used to examine the association between socio-economic, health- and migration-related factors and mobility limitation (self-reported difficulty in walking 500 m or stair climbing). The association between ethnic group and mobility limitation was calculated using logistic regression analysis. RESULTS: Mobility limitations were much more prevalent among Somali origin women (46 %) and Kurdish origin men (32 %) and women (57 %) compared to men and women in the general Finnish population (5-12 %). In Russian origin men and women, the prevalence of mobility limitation (7-17 %) was similar to the general Finnish population. Socio-economic and health-related factors, but not migration-related factors (time lived in Finland and language proficiency in Finnish or Swedish), were found to be associated with mobility limitation in the studied populations. Somali and Kurdish origin migrants were found to have increased odds for mobility limitation compared to the general Finnish population, even after adjusting for socio-economic and health-related factors (Somalis odds ratio [OR] 3.61; 95 % confidence interval [CI] 2.07-6.29, Kurds OR 7.40; 95 % CI 4.65-11.77). CONCLUSIONS: This study

demonstrates a functional disadvantage in Somali and Kurdish origin populations compared to the general Finnish population, even after adjusting for socio-economic and health-related factors. The high prevalence of mobility limitation among Somali origin women and Kurdish origin men and women in Finland demonstrates an acute need to promote the health and functioning of these populations.

Rask, S., et al. (2016). "The ethnic gap in mental health: A population-based study of Russian, Somali and Kurdish origin migrants in Finland." *Scand J Public Health* **44**(3): 281-290.

AIMS: Research demonstrates that migrants are more vulnerable to poor mental health than general populations, but population-based studies with distinct migrant groups are scarce. We aim to (1) assess the prevalence of mental health symptoms in Russian, Somali and Kurdish origin migrants in Finland; (2) compare the prevalence of mental health symptoms in these migrant groups to the Finnish population; (3) determine which socio-demographic factors are associated with mental health symptoms. **METHODS:** We used data from the Finnish Migrant Health and Wellbeing Study and Health 2011 Survey. Depressive and anxiety symptoms were measured using the Hopkins Symptom Checklist-25 (HSCL-25), and 1.75 was used as cut-off for clinically significant symptoms. Somatization was measured using the Symptom Checklist-90 (SCL-90) somatization scale. The age-adjusted prevalence of mental health symptoms in the studied groups was calculated by gender using predicted margins. Logistic regression analysis was used to determine which socio-demographic factors are associated with mental health symptoms in the studied population groups. **RESULTS:** The prevalence of depressive and anxiety symptoms was higher in Russian women (24%) and Kurdish men (23%) and women (49%) than in the Finnish population (9-10%). These differences were statistically significant ($p < .001$). Socioeconomic disadvantage (e.g. unemployment and poor economic situation) and migration-related factors (e.g. poor language proficiency and short time since migration) significantly increased the odds for depressive and anxiety symptoms. **CONCLUSIONS:** Mental health symptoms are highly prevalent particularly in Kurdish migrants in Finland. Holistic interventions and co-operation between integration and mental health services are acutely needed.

Townson, M., Cottrell, S., Fagan, L., et al. (2020). "Prevalence and determinants of vitamin D deficiency and insufficiency among three immigrant groups in Finland: evidence from a population-based study using standardised 25-hydroxyvitamin D data." *Eur J Pediatr* **23**(7): 1254-1265.

OBJECTIVE: We investigated the determinants of serum 25-hydroxyvitamin D [S-25(OH)D] and dietary vitamin D sources among three immigrant groups in Finland and compared their S-25(OH)D to the general Finnish population. **DESIGN:** Cross-sectional population-based Migrant Health and Wellbeing Study and the nationally representative Finnish Health 2011 Survey. S-25(OH)D was standardised according to the Vitamin D Standardisation Program. Vitamin D sources were assessed by interview. **SETTING:** Six different municipalities in Finland (60°-63°N). **PARTICIPANTS:** Immigrants aged 18-64 years (446 Russians, 346 Somalis, 500 Kurds), 798 Finns aged 30-64 years. **RESULTS:** The mean of S-25(OH)D was 64 (95 % CI 62, 66), 44 (95 % CI 41, 46), 35 (95 % CI 34, 37) and 64 (95 % CI 62, 66) nmol/l for Russians, Somalis, Kurds and Finns, respectively. S-25(OH)D among Somalis and Kurds was lower compared with Finns ($P < 0.001$). The prevalence of vitamin D deficiency (S-25(OH)D < 30 nmol/l) and insufficiency (S-25(OH)D < 50 nmol/l) was higher among immigrants than Finns ($P < 0.001$). Vitamin D-rich foods differed between the groups; vitamin D-fortified fat spread consumption was higher among Somalis (91

%) than among Russians (73 %) and Kurds (60 %); fish was less consumed among Kurds (17 %) than among Russians (43 %) and Somalis (38 %); and 57 % Russians, 56 % Kurds and 36 % Somalis consumed vitamin D-fortified dairy daily ($P < 0.001$ for all). Daily smoking, alcohol consumption and winter blood sampling were determinants of vitamin D insufficiency ($P \leq 0.03$). Older age, physical activity, fish and vitamin D-fortified dairy consumption were associated with lower odds of insufficiency ($P \leq 0.04$). CONCLUSIONS: Vitamin D status differed among immigrant groups and the determinants are, to some degree, associated with learned or existing cultural behaviours.

Inde

Singh, P. K., et al. (2012). "Examining the effect of household wealth and migration status on safe delivery care in urban India, 1992-2006." *PLoS One* **7**(9): e44901.

BACKGROUND: Although the urban health issue has been of long-standing interest to public health researchers, majority of the studies have looked upon the urban poor and migrants as distinct subgroups. Another concern is, whether being poor and at the same time migrant leads to a double disadvantage in the utilization of maternal health services? This study aims to examine the trends and factors that affect safe delivery care utilization among the migrants and the poor in urban India. METHODOLOGY/PRINCIPAL FINDINGS: Using data from the National Family Health Survey, 1992-93 and 2005-06, this study grouped the household wealth and migration status into four distinct categories poor-migrant, poor-non migrant, non poor-migrant, non poor-non migrant. Both chi-square test and binary logistic regression were performed to examine the influence of household wealth and migration status on safe delivery care utilization among women who had experienced a birth in the four years preceding the survey. Results suggest a decline in safe delivery care among poor-migrant women during 1992-2006. The present study identifies two distinct groups in terms of safe delivery care utilization in urban India--one for poor-migrant and one for non poor-non migrants. While poor-migrant women were most vulnerable, non poor-non migrant women were the highest users of safe delivery care. CONCLUSION: This study reiterates the inequality that underlies the utilization of maternal healthcare services not only by the urban poor but also by poor-migrant women, who deserve special attention. The ongoing programmatic efforts under the National Urban Health Mission should start focusing on the poorest of the poor groups such as poor-migrant women. Importantly, there should be continuous evaluation to examine the progress among target groups within urban areas.

International

Noymer, A. et Lee, R. (2013). "Immigrant health around the world: evidence from the World Values Survey." *J Immigr Minor Health* **15**(3): 614-623.

We describe the relationship between immigrant status and self-rated health around the world, both in raw descriptive statistics and in models controlling for individual characteristics. Using the World Values Survey (1981-2005), we analyze data from 32 different countries worldwide. We estimate four regression models per country. The basic model tests mean differences in self-

rated health. Additional models add demographic and social class controls. Introduction of control variables (most particularly, age) changes the results dramatically. In the final model, net of controls, only two countries show poorer immigrant health and three countries show better immigrant health. The multivariate regression models net of controls show few differences in health status between immigrants and the native born. The age structure of immigrant populations is an important mediator of differences in health status compared to the native-born population.

Irlande

Barlow, P., Mohan, G. et Nolan, A. (2022). "Utilisation of healthcare by immigrant adults relative to the host population: Evidence from Ireland." *J Migr Health* 5: 100076.

OBJECTIVE: While there is a broad consensus that barriers to access in the utilisation of healthcare exist for immigrants in the US, European evidence exploring this issue paints a mixed picture, with studies from a variety of European jurisdictions presenting different conclusions. In this context, Ireland, a European country with substantial private involvement in healthcare delivery, and, a largely young immigrant population, provides an opportunity to investigate the healthcare utilisation of immigrants compared to natives in a European country with mixed private-public healthcare provision. **DESIGN:** The healthcare utilisation patterns of immigrants (defined as residents with a foreign country of birth) and native-born participants were analysed from a nationally representative health survey of 6,326 adults, carried out in Ireland in 2016. An array of socio-economic and health information was collected such that regression analysis on healthcare consultations accounted for confounding factors. **RESULTS:** Non-native residents of Ireland born outside the UK were less likely to have attended a General Practitioner (Odds ratio (OR): 0.62 [95% Confidence Interval (CI): 0.51-0.74]; $p < 0.001$) or consultant doctor (OR: 0.60 [95% CI: 0.47-0.76]; $p < 0.001$) in the previous year, relative to Irish-born individuals. UK-born residents of Ireland displayed similar utilisation patterns to those of the native population in terms of GP visitation, but a higher likelihood of having attended a consultant (OR: 1.44 [95% CI: 1.14-1.816]; $p = 0.004$). **CONCLUSIONS:** Lower use of healthcare by those born outside Ireland and the UK relative to the native Irish population may be due to different approaches to healthcare utilisation or obstacles to healthcare utilisation. The findings suggest that the utilisation of healthcare by immigrants merits continued policy attention to respond to the needs of these key groups in society and facilitate integration.

Luxembourg

Alkerwi, A., et al. (2012). "Acculturation, immigration status and cardiovascular risk factors among Portuguese immigrants to Luxembourg: findings from ORISCAV-LUX study." *BMC Public Health* 12: 864.

BACKGROUND: No previous study has examined the prevalence of cardiovascular risk factors and explored the influence of immigration status and acculturation on overweight/obesity among the Portuguese immigrants to Luxembourg. Our objectives were to (1) compare the prevalence of cardiovascular risk factors between native Luxembourgers and Portuguese

immigrants, (2) examine the relationship between immigrant generation status, proportion of life spent in Luxembourg and language proficiency or preference (as proxy variables of acculturation) and overweight/obesity among Portuguese immigrants, and (3) elucidate the role of underlying socioeconomic, behavioral and dietary factors in overweight/obesity differences among the two populations. METHODS: Recent national cross-sectional data from ORISCAV-LUX survey 2007-2008, composed of 843 subjects were analyzed. Overweight/obesity was defined as body mass index (BMI) >25 kg/m². Acculturation score was measured by using immigrant generation status, proportion of life spent in Luxembourg, and language proficiency or preference. Univariable and multivariable logistic regression analyses were performed to examine the association between acculturation markers and overweight/obesity. Further, a series of successive models were fitted to explore the separated and added impact of potential mediators (socioeconomic status, physical activity, dietary factors) on overweight/obesity among Luxembourgers and Portuguese immigrants. RESULTS: Compared to Luxembourgers, Portuguese immigrants of first and second generation were younger and currently employed. About 68% of first generation Portuguese had only primary school, and about 44% were living below poverty threshold. Although the cardiovascular risk factors were comparable, Portuguese immigrants were more frequently overweight and obese than Luxembourgers, even after age and gender standardization to the European population. Overweight/obesity was significantly higher among Portuguese of first generation compared to second generation ($P=0.028$). Although we observed a tendency of lower risk with higher acculturation, none of the acculturation markers, both individually and taken together as a score, was statistically significant after controlling for age and gender. Compared to Luxembourgers, odds of overweight/obesity were significantly higher among Portuguese immigrants, in unadjusted model 1 ($P=0.043$), in age and gender-adjusted model 2 ($P<0.0001$), in socioeconomic status adjusted model 3 ($P=0.01$), in physical activity adjusted model 4 ($P=0.007$). However, this difference was attenuated and statistically disappeared after controlling for dietary factors ($P=0.09$). CONCLUSIONS: These findings address a lack of heterogeneity between Portuguese immigrants and Luxembourgers regarding hypertension, hyperlipidemia, diabetes mellitus, physical inactivity, and current cigarette smoking. However, Portuguese immigrants to Luxembourg were more likely to be overweight/obese than Luxembourgers participants. This risk may be explained by different dietary practice. An in-depth comparative assessment of dietary habits of Luxembourgers and Portuguese immigrants is warranted.

Ruiz-Castell, M., et al. (2017). "Depression burden in Luxembourg: Individual risk factors, geographic variations and the role of migration, 2013-2015 European Health Examination Survey." *J Affect Disord* **222**: 41-48.

BACKGROUND: Depression is a complex mental disorder that affects an increasing proportion of the worldwide population. This study aims to estimate the prevalence of depressive symptoms in Luxembourg, associated risk factors and geographic variations. Additionally, it aims to assess whether first and second generation immigrants are at higher risk for depressive symptoms compared to non-immigrants. METHODS: Representative cross-sectional data from 1499 residents of Luxembourg, aged 25-64 years, were collected from the Luxembourg European Health Survey (EHES-LUX). Depressive symptoms were defined as a score of ≥ 5 on the Patient Health Questionnaire for depression (PHQ-9) (i.e. mild, moderate or severe). Standard and Bayesian regression models were used to examine associations between depressive symptoms, immigration status and geographic distribution across Luxembourg. RESULTS: The prevalence of

depressive symptoms was 21.55% (15.54% mild, 3.54% moderate, and 2.49% moderately severe to severe). The odds of having depressive symptoms was higher among second generation immigrants compared to non-immigrants (OR: 1.58, 95% CI: 1.04, 2.41), independent of socioeconomic and behavioral characteristics. Healthier diet, higher social support and good health perception were protective towards experiencing depressive symptoms. One of the highest likelihoods of reporting depressive symptoms was observed in the South-West of the country with a positive effect at 80% credible region [CR] (1.42 [0.92, 2.73]). LIMITATIONS: The participation rate was low (26.7%). The cross-sectional nature of the study does not allow us to establish causality. CONCLUSIONS: Depression constitutes an important public health challenge in Luxembourg due to the impact on the overall health of the population. Social programs of health promotion should be developed to improve mental wellbeing in immigrants, especially those of second generation.

Mexique

Martinez-Donate, A. P., Verdecias, N., Zhang, X., et al. (2020). "Health Profile and Health Care Access of Mexican Migration Flows Traversing the Northern Border of Mexico." Int J Environ Res Public Health **58**(5): 474-482.

BACKGROUND: The health of Latino migrants is most often studied with samples of immigrants settled in the United States or returned migrants in Mexico. We examine health outcomes and health care access of Mexican migrants traversing the Mexican border region to gain a better understanding of migrant health needs as they transition between migration phases. METHODS: We used data from a 2013 probability survey of migrants from Northbound and Southbound migration flows in Tijuana, Mexico (N=2412). Respondents included Northbound migrants with and without US migration experience, Southbound migrants returning home from the United States or the Mexican border region, and migrants returning to Mexico via deportation. Descriptive statistics and regression models were estimated to characterize and compare their health status, behavioral health, and health care access across migration phases. RESULTS: Northbound migrants with US migration experience, Southbound migrants from the United States, and deported migrants had worse levels of health insurance, health care utilization, and diabetes than Northbound migrants without US migration experience. Southbound migrants returning from the border reported worse self-rated health and deportees had higher odds of reported substance use compared with Northbound migrants without US migration experience. CONCLUSIONS: Mexican migrants' health profile and health care access vary significantly across migration flows and generally are worse for migrants with US migration experience. The results add to our understanding of Mexican migrant health along the migration continuum and can inform services in sending, receiving, and intermediate communities.

Norvège

Lien, E., et al. (2008). "Non-western immigrants' satisfaction with the general practitioners' services in Oslo, Norway." Int J Equity Health **7**: 7.

BACKGROUND: Over the last few years the number of immigrants from the non-western parts of

the world living in Oslo, has increased considerably. We need to know if these immigrants are satisfied with the health services they are offered. The aim of this study was to assess whether the immigrants' level of satisfaction with visits to general practitioners was comparable with that for ethnic Norwegians. METHODS: Two population-based surveys, the Oslo Health Study and the Oslo Immigrant Health Study, were performed on selected groups of Oslo citizens in 2000 and 2002. The response rates were 46% and 33%, respectively. In all, 11936 Norwegians and 1102 non-western immigrants from the Oslo Health Study, and 1774 people from the Oslo Immigrant Health Study, were included in this analysis. Non-western immigrants' and ethnic Norwegians' level of satisfaction with visits to general practitioners were analysed with respect to age, gender, health, working status, and use of translators. Bivariate (Chi square) and multivariate analyses (logistic regression) were performed. RESULTS: Most participants were either moderately or very satisfied with their last visit to a general practitioner. Non-western immigrants were less satisfied than Norwegians. Dissatisfaction among the immigrants was associated with young age, a feeling of not having good health, and coming from Turkey, Iran, Pakistan, or Vietnam as compared to Sri Lanka. The attendance rates in the surveys were rather low and lowest among the non-western immigrants. CONCLUSION: Although the degree of satisfaction with the primary health care was relatively high among the participants in these surveys, the non-western immigrants in this study were less satisfied than ethnic Norwegians with their last visit to a general practitioner. The rather low response rates opens for the possibility that the degree of satisfaction may not be representative for all immigrants.

Nouvelle Zélande

Montayre, J. et Ho, M. H. (2021). "Factors Associated With ED Use Among New Asian Immigrants in New Zealand: A Cross-Sectional Analysis of Secondary Data." *J Emerg Nurs* **47**(1): 157-166.e154.

INTRODUCTION: New Zealand has an ethnically diverse population and continues to host immigrants from different countries. The present study aimed to examine the factors associated with ED use among new Asian immigrants in New Zealand. METHODS: A secondary analysis of 2016-2017 New Zealand Health Survey database. Univariate and multivariate logistic regression models were employed. A total of 414 new Asian immigrants were identified. RESULTS: Asthma, diabetes, chronic pain, anxiety, hypertension, body mass index, waist measurement, perceived health status, and distress were associated with a significantly increased likelihood to ED visits. The multivariate logistic regression analysis revealed that asthma (adjusted odds ratio = 5.29, 95% confidence interval, 1.26-22.24) and perceived health status (adjusted odds ratio = 0.81, 95% confidence interval, 0.66-0.99) were factors associated with ED use among new Asian immigrants. CONCLUSION: Asthma and perceived health status were the 2 key factors associated with ED use among new Asian immigrants in New Zealand. ED use among new Asian immigrants encompassed both chronic health conditions and mental health indicators.

Pays-Bas

Denktas, S., et al. (2009). "Ethnic background and differences in health care use: a national cross-sectional study of native Dutch and immigrant elderly in the Netherlands." *Int J Equity Health* **8**: 35.

BACKGROUND: Immigrant elderly are a rapidly growing group in Dutch society; little is known about their health care use. This study assesses whether ethnic disparities in health care use exist and how they can be explained. Applying an established health care access model as explanatory factors, we tested health and socio-economic status, and in view of our research population we added an acculturation variable, elaborated into several sub-domains. **METHODS:** Cross-sectional study using data from the "Social Position, Health and Well-being of Elderly Immigrants" survey, conducted in 2003 in the Netherlands. The study population consisted of first generation immigrants aged 55 years and older from the four major immigrant populations in the Netherlands and a native Dutch reference group. The average response rate to the survey was 46% (1503/3284; country of origin: Turkey n = 307, Morocco n = 284, Surinam n = 308, the Netherlands Antilles n = 300, the Netherlands n = 304). **RESULTS:** High ethnic disparities exist in health and health care utilisation. Immigrant elderly show a higher use of GP services and lower use of physical therapy and home care. Both self-reported health status (need factor) and language competence (part of acculturation) have high explanatory power for all types of health services utilisation; the additional impact of socio-economic status and education is low. **CONCLUSION:** For all health services, health disparities among all four major immigrant groups in the Netherlands translate into utilisation disparities, aggravated by lack of language competence. The resulting pattern of systematic lower health services utilisation of elderly immigrants is a challenge for health care providers and policy makers.

Portugal

Dias, S. F., et al. (2008). "Determinants of health care utilization by immigrants in Portugal." *BMC Health Serv Res* 8: 207-207.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2567319/>

BACKGROUND: The increasing diversity of population in European Countries poses new challenges to national health systems. There is a lack of data on accessibility and use of health care services by migrants, appropriateness of the care provided, client satisfaction and problems experienced when confronting the health care system. This limits knowledge about the multiple determinants of the utilization of health services. The aim of this study was to describe the access of migrants to health care and its determinants in Portugal. **METHODS:** The study sample included 1513 immigrants (53% men), interviewed at the National Immigrant Support Centre, in Lisbon. Data were collected using questionnaires. The magnitude of associations between use of National Health Service and socio-demographic variables was estimated by means of odds ratios (OR) at 95% confidence intervals, calculated using logistic regression. **RESULTS:** Among participants, 3.6% stated not knowing where to go if facing a health problem. Approximately 20% of the respondents reported that they had never used the National Health Service, men more than women. Among National Health Service users, 35.6% attended Health Centres, 12% used Hospital services, and 54.4% used both. Among the participants that ever used the health services, 22.4% reported to be unsatisfied or very unsatisfied. After adjusting for all variables, utilization of health services, among immigrant men, remained significantly associated with length of stay, legal status, and country of origin. Among immigrant women, the use of health services was significantly associated with length of stay and country of origin. **CONCLUSION:** There is a clear need to better understand how to ensure access to health care services and to

deliver appropriate care to immigrants, and that special consideration must be given to recent and undocumented migrants. To increase health services use, and the uptake of prevention programs, barriers must be identified and approaches to remove them developed, through coherent and comprehensive strategies.

Moniz, M., Abrantes, A. et Nunes, C. (2020). "Healthy immigrant effect in non-European Union immigrants in Portugal: after a decade of (non-)integration!" Public Health **186**: 95-100.

OBJECTIVES: The aim of the study was to characterise the existence of the healthy immigrant effect (HIE; better health initially, worsening with an increase in the length of residence) in a big city from a Western European country, particularly in a non-European Union immigrant population. **STUDY DESIGN:** This is a cross-sectional study. **METHODS:** We used data from the National Health Survey 2014 to compare the health status of the immigrant and Portuguese populations with different lengths of residence. After descriptive statistics, binary logistic regressions models, with adjusted levels and 95% confidence intervals, were used. **RESULTS:** Immigrants were healthier than the Portuguese population (<10 years: odds ratio [OR] = 0.07; 95% confidence interval [CI] = [0.01; 0.51]; ≥10 years: OR = 0.62; 95% CI = [0.19; 2.03]), but had an increased likelihood of suffering from chronic diseases and risk behaviours with the increase in their length of stay in Portugal. After living in Portugal for more than 10 years, the immigrants showed no statistical difference in the main health indicators. **CONCLUSIONS:** There was a tendency for the health status of immigrants to deteriorate over 10 years of residence in Portugal. To better understand the reasons behind the HIE, specific and tailored studies must be developed.

Royaume-Uni

Chandola, T. et Jenkinson, C. (2000). "Validating self-rated health in different ethnic groups." Ethn Health **5**(2): 151-159.

BACKGROUND: Subjective accounts of health status are increasingly utilized in social surveys and medical research to assess functioning and well-being. Despite the fact that substantial research evidence suggests that self-rated health is meaningful and provides valid and reliable data, some authors have raised concerns that different social groups may interpret the notion of health in different ways, and hence complete health measures in systematically different ways. This study evaluates the validity of using self-rated health status to measure health status in different ethnic groups. **METHODS:** Logistic regression models were used to examine the association of self-rated health with more objective measures of morbidity in different ethnic groups. **SAMPLE:** Two sources of data were used--the Health Survey for England (HSE) 1991-96 combined file and the Fourth National Survey of Ethnic Minorities (Ethmins4). **MEASURES OF HEALTH:** Hypertension, presence of cardiovascular disease or diabetes, limiting health and number of visits to a doctor. Self-rated health was measured on 5-point scale ranging from excellent to very poor. **RESULTS:** Poorer self-rated health was associated with greater morbidity within each ethnic group. Furthermore, there was little evidence that the association of self-rated health with more objective measures of morbidity differed between ethnic groups. **CONCLUSION:** The evidence reported here suggests that the use of a single item measure of self-rated health to measure health status in different ethnic groups is valid. Further research

might usefully explore the validity of using more comprehensive profile measures of health status in different ethnic groups.

Lebouché, B., Delgado-Angulo, E. K., Zúñiga Abad, F., et al. (2020). "Is there a healthy migrant effect in relation to oral health among adults in England?" *BMJ Open* **181**: 53-58.

OBJECTIVE: The aim of the study was to assess the healthy migrant effect in relation to oral health among adults in England. **STUDY DESIGN:** This is a secondary data analysis of a nationally representative survey. **METHODS:** Data from 13,373 adults of Irish, black Caribbean, Indian, Pakistani, Bangladeshi and Chinese ethnicity, who participated in the Health Survey for England, were analysed. The proportions of edentate and dentate adults with toothache in the last 6 months in first- and second-generation migrants within each ethnic group were compared with those in the white British (reference group) ethnic group in logistic regression models after adjusting for demographic factors and socio-economic position. Among first-generation migrants, the associations of age at arrival and length of residence with each oral health outcome were assessed in logistic regression models after adjusting for sociodemographic factors. **RESULTS:** Compared with white British migrants, first-generation black Caribbean (odds ratio [OR]: 1.42) and second-generation Pakistani (OR: 3.16) migrants had higher odds of being edentulous, whereas first-generation Indian (OR: 0.62), Pakistani (OR: 0.62), Bangladeshi (OR: 0.41) and Chinese (OR: 0.49) migrants had lower odds. Among dentate adults, second-generation Irish (OR: 1.51) migrants, first- and second-generation black Caribbean (OR: 1.61 and 1.54, respectively) migrants, first-generation Indian (OR: 1.24) migrants and second-generation Pakistani (OR: 1.34) migrants had higher odds of having toothache in the past 6 months, whereas second-generation Bangladeshi (OR: 0.51) migrants had lower odds than white British. Age at arrival and length of residence were positively associated with being edentulous among first-generation black Caribbean, Pakistani and Bangladeshi migrants. **CONCLUSION:** Evidence on the healthy migrant effect was mixed, with more consistent findings seen for edentulousness among Asian groups. Black Caribbean migrants were generally the ethnic group with the worst oral health when compared with white British.

Perry, M. (2020). "Inequalities in vaccination coverage and differences in follow-up procedures for asylum-seeking children arriving in Wales, UK." *Soc Psychiatry Psychiatr Epidemiol* **179**(1): 171-175.

The European Vaccine Action Plan 2015-2020 highlights the importance of reducing inequities and monitoring performance in underserved groups including migrants. However, there are limited data from European countries and policies for catch-up vary by country. Vaccination coverage in accompanied asylum-seeking children aged 5 to 16 years in two dispersal areas of Wales is presented alongside the coverage in the local population. Coverage data for asylum-seeking children were collated locally using asylum seeker nurse records whilst coverage in the local population was calculated using data from the National Community Child Health Database, a repository of data from all local Child Health Systems in Wales. The processes for following up outstanding vaccinations were also collected using a face-to-face questionnaire distributed to lead asylum seeker nurses in each area. As at the date of assessment, 45.6% (67/147) of children dispersed to area one had received all recommended immunisations compared with 62.2% (150/241) dispersed to area two, OR 0.51 (95% CI 0.33-0.79). At both sites the odds of being vaccinated against key vaccine preventable infections were around three times lower if you

were an asylum-seeking child, compared with the local population. Similar procedures were in place for new asylum seekers in both dispersal areas. Area one had less resource to follow up missing immunisations, and children did not receive an initial health assessment unlike area two. Verbal history was accepted in area one but not in area two, despite area two having higher vaccine uptake. Conclusion: Asylum-seeking children have low rates of vaccine uptake compared with the general population, although uptake differs depending on dispersal area. Inequalities in vaccination services, such as resource and strategies to improve uptake, need to be considered. What is Known: • The European Vaccine Action Plan 2015-2020 highlights the importance of reducing inequities and monitoring performance in underserved groups including migrants. • Limited data from European countries suggest inequalities in uptake of immunisations in migrants compared with the local population. Policies for catching up immunisations vary by country. What is New: • Despite national policy for vaccination of migrants with missing or incomplete vaccination history in Wales, this work suggests vaccination coverage in asylum-seeking children is not equitable with the local population. • Vaccination coverage in asylum-seeking children dispersed to different areas of Wales also varies, and this may be associated with differences in local catch-up strategies and the ability to follow national policy. Resource and strategies to maintain engagement with health services play an important role in increasing vaccine uptake in underserved groups.

Suisse

Tzogiou, C., Boes, S. et Brunner, B. (2021). "What explains the inequalities in health care utilization between immigrants and non-migrants in Switzerland?" *BMC Public Health* **21**(1): 530.

BACKGROUND: Inequalities in health care use between immigrants and non-migrants are an important issue in many countries, with potentially negative effects on population health and welfare. The aim of this study is to understand the factors that explain these inequalities in Switzerland, a country with one of the highest percentages of foreign-born population. **METHODS:** Using health survey data, we compare non-migrants to four immigrant groups, differentiating between first- and second-generation immigrants, and culturally different and similar immigrants. To retrieve the relative contribution of each inequality-associated factor, we apply a non-linear decomposition method and categorize the factors into demographic, socio-economic, health insurance and health status factors. **RESULTS:** We find that non-migrants are more likely to visit a doctor compared to first-generation and culturally different immigrants and are less likely to visit the emergency department. Inequalities in doctor visits are mainly attributed to the explained component, namely to socio-economic factors (such as occupation and income), while inequalities in emergency visits are mainly attributed to the unexplained component. We also find that despite the universal health care coverage in Switzerland systemic barriers might exist. **CONCLUSIONS:** Our results indicate that immigrant-specific policies should be developed in order to improve access to care and efficiently manage patients in the health system.

Wolff, H., et al. (2005). "Health care and illegality: a survey of undocumented pregnant immigrants in Geneva." *Soc Sci Med* **60**(9): 2149-2154.

Little is known about the conditions of life and the specific health problems of pregnant,

undocumented immigrants. This study describes the socio-demographic characteristics and health problems encountered during pregnancy among uninsured, undocumented immigrants in Geneva, Switzerland. A socio-demographic questionnaire was completed by 134 pregnant and undocumented women (mean age 27.8 years) who attended a free antenatal facility between October 2002 and October 2003. The first control of pregnancy was at a median of 10.5 weeks (range 5-33) of amenorrhoea. They were mostly Latino-American (78%), had a median 12 years of education but almost exclusively performed domestic work (91%) after an average residence in Geneva of 18 months. Half of the 62 mothers had left at least one child in their home country. One out of three had never had a cervical smear test and 13% were not immune to rubella. Unintended pregnancies (83%), mostly resulted from lack of contraception (70%). All but one delivery were simple, with a median maternity inpatient stay of 5 days (range 2-10). This population of undocumented, pregnant immigrants comprised mostly highly educated, young, Latino-American women living in poor housing conditions and wages below the legal minimum. The study identified the high proportion of unintended pregnancies as a major health issue. Future research should target these issues and programs addressing lack of access to preventive measures. As well as this, the specific needs of this hard-to-reach population, such as contraception advice, rubella vaccination and cervical cancer screening, should be supported.

Suède

Leao, T. S., et al. (2009). "The influence of age at migration and length of residence on self-rated health among Swedish immigrants: a cross-sectional study." *Ethn Health* **14**(1): 93-105.

OBJECTIVE: Increasing global migration has led to profound demographic changes in most industrialised countries. A growing body of research has investigated various health aspects among immigrant groups and found that some immigrant groups have poorer health than the majority population. It has been suggested that poor acculturation in the host country could lie behind the increased risk of worsened health among certain immigrant groups. The aim was to investigate the cross-sectional association between acculturation, measured as age at migration or length of residence, and self-rated health among young immigrants. **DESIGN:** The simple, random samples of 7137 women and 7415 men aged 16-34 years were based on pooled, independent data collected during the period 1992-1999 obtained from the Swedish Annual Level of Living Survey (SALLS). Logistic regression was applied in the estimation of odds ratios (OR) for poor self-rated health, after accounting for age, sex, socioeconomic status (SES) and social networks. The non-response rate varied between 23.6 and 28.3% in the different immigrant groups. **RESULTS:** The odds of poor self-rated health increased with increasing age at migration to Sweden among first-generation immigrants. For those who had resided in Sweden less than 15 years the odds of poor self-rated health were significantly increased. In addition, most of the immigrant groups had higher odds of poor self-rated health than the reference group. **CONCLUSIONS:** Health care workers and policy makers need to be aware that immigrants who arrive in the host country at higher ages and/or have lived in the host country for a shorter period of time might need special attention as they are more likely to suffer from poor self-rated health, a valid health status indicator that can be used in population health monitoring.

Pauli, N. et Dahlin Redfors, Y. (2022). "Tinnitus in immigrants attending Swedish language education classes." **7**(2): 614-620.

OBJECTIVES: The aim of this study was to investigate the prevalence of tinnitus in immigrants attending Swedish language education classes in comparison with data from the general population and tinnitus's relation to hearing in this specific population. **METHODS:** The study was based on prospectively collected data regarding hearing and health status in newcomers attending language classes. The examination consisted of pure tone audiometry, an otoscopic examination, and a study-specific questionnaire including questions from the Swedish National Health Survey. Data from the Swedish general population were retrieved from the National Health Survey. Grading of hearing according to the World Health Organization was applied. **RESULTS:** A total of 188 study participants were included in the study. Tinnitus was reported by 38% of the immigrants, and severe tinnitus was reported by 8%. Corresponding percentages from the general population were 17% and 3%. High-frequency hearing loss (PTA(h3) > 25 worse ear) was found to be a significant predictor for tinnitus ($p = 0.032$, odds ratio (OR): 2.74 [95% confidence interval (CI): 1.40-5.35]). Additionally, self-reported general health significantly predicted tinnitus, with an increased risk of tinnitus relating to worse general health ($p < .001$, OR: 2.43 [95% CI: 1.66-3.57]). **CONCLUSION:** Severe tinnitus was more than three times as common in the immigrant participants compared to the Swedish population. High-frequency hearing loss and self-reported worse general health were predictors for tinnitus. **LEVEL OF EVIDENCE:** 1b.

Thaïlande

Musumari, P. M. et Chamchan, C. (2016). "Correlates of HIV Testing Experience among Migrant Workers from Myanmar Residing in Thailand: A Secondary Data Analysis." *PLoS One* **11**(5): e0154669.

BACKGROUND: Thailand continues to attract an increasing number of migrant workers (MW) from neighboring countries including mainly Myanmar, Cambodia, and Laos; however, little is known about the extent to which MWs from these countries have access to HIV prevention, treatment, and care services. We used data from the baseline survey of the Prevention of HIV/AIDS among MWs in Thailand (PHAMIT-2) project to document the prevalence of, and factors associated with, HIV testing among MWs from Myanmar, the largest group of MWs in Thailand. **METHODS AND FINDINGS:** The baseline survey of PHAMIT-2 was conducted in 2010 among MWs from Myanmar, Cambodia, and Laos in 10 purposely-selected provinces of Thailand. Of the 1,034 participants who qualified for the analysis to identify correlates of HIV testing, only 5.3% reported ever having been tested for HIV. Factors associated with HIV testing included having a secondary or higher education level (AOR, 2.58; CI, 1.36-4.90; $P = 0.004$), being female (AOR, 1.96; CI, 1.05-3.66; $P = 0.033$), knowing someone who died of AIDS (AOR, 1.81; CI, 1.00-3.27; $P = 0.048$), working in the fishery sector (AOR, 2.51; CI, 1.28-4.92; $P = 0.007$), and not having a work permit (AOR, 3.71; CI, 1.36-10.13; $P = 0.010$). **CONCLUSION:** Our study, in addition to revealing significantly low HIV testing among MWs from Myanmar, identifies important barriers to HIV testing which could be addressed through interventions that promote migrants' culturally-sensitive and friendly service, for example by facilitating flow of information about places for HIV testing, availability of language assistance, and ensuring confidentiality of HIV testing.

Projets européens ou internationaux

TABLEAU RECAPITULATIF DES PROJETS

Intitulés des projets	Pays
FRA Human right commission Agence des droits fondamentaux de l'Union européenne	Europe
Union européenne : Projet RE-HEALTH	Europe
Union européenne : Projet GRAMMA Pas retrouvé : 2022/09	Europe
European Commission–United Nations Joint Migration and Development Initiative (JMDI)/Clandestino	Europe
European Migration Network (EMN) - European Best Practices in Access, Quality and Appropriateness of Health Services for Immigrants in Europe (EUGATE)	Europe
European Union Agency for Fundamental Rights (FRA) - ITSAL Project	Europe
EU Border Care	Europe
International Organization for Migration (IOM) - Europe Health and Social Care for Migrants and Ethnic Minorities in Europe (HOME) Pas trouvé : 2022/09	Europe
European Union (EU) European Programme for Integration and Migration (EPIM) https://epim.info/	Europe
Expert Panel on effective ways of investing in Health (EXPH)	Europe
Mig Health Care	Europe
Platform for International Cooperation on Undocumented Migrants (PICUM)	Europe
Quality in and Equality of Access to Healthcare Services (HealthQUEST) -Accès des country reports	Europe
Undocumented Workers Transitions (UWT)	Europe
Enquête Médecins du Monde - Europe - Access to health care for undocumented migrants	Europe
International Organization for Migration (IOM) – Projet Migration, développement durable 2030	International
Medicines du Monde (Doctors of the World) Health care in Nowhereland	International

Medicines Sans Frontiers (Doctors Without Borders) Health for Undocumented Migrants and Asylumseekers (HUMA) Network	International
Migrants Rights Network (MRN) MIGHEALTHNET	International
International Network for the Demographic Evaluation of Populations and Their Health (INDEPTH) Network]	International

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http://fra.europa.eu/sites/default/files/fra-2011-fundamental-rights-for-irregular-migrants-healthcare_fr_0.pdf

Arora, A., Quesnel-Vallee, A., Lessard, D., et al. (2020). "Barriers and facilitators associated with steps of the HIV care cascade for migrants in OECD countries: a systematic mixed studies review protocol." *BMJ Open* **10**(11): e040646.

<https://bmjopen.bmj.com/content/bmjopen/10/11/e040646.full.pdf>

Introduction In 2019, the United Nations signalled a substantial rise in the number of international migrants, up to 272 million globally, about half of which move to only 10 countries, including 8 member nations of the Organization for Economic Co-operation and Development (OECD). Migrants in OECD countries are often at higher risk for acquiring HIV and have a higher frequency of delayed HIV diagnosis. The barriers and facilitators that migrant people living with HIV (PLWH) in OECD countries face in relation to HIV care are insufficiently understood. The five-step HIV Care Cascade Continuum (HCCC) is an effective model to identify gaps, barriers and facilitators associated with HIV care. The purpose of this study is to generate a comprehensive, multilevel understanding of barriers and facilitators regarding the five steps of the HCCC model in OECD countries by migration status. Methods and analysis A systematic mixed studies review using a data-based convergent design will be conducted. Medline, Embase, Scopus, CINAHL and the Cochrane Library will be searched on 25 March 2020. Screening and critical appraisal will be conducted independently by the first author. Authors 3–5 will act as second reviewers, each independently conducting 33% of the screening and appraisal. Quantitative data will be transformed to qualitative data and be synthesised using thematic analysis. The Mixed Methods Appraisal Tool will be used for quality assessment. An advisory committee, composed of four migrant PLWH, will be involved in screening and appraising 5% of articles to build knowledge and experience with systematic reviews. They will also be involved in analysis and dissemination. Ethics and dissemination Ethics approval was obtained from the McGill University Health Centre (15-188-MUHC, 2016-1697, eReviews 4688). Publications arising from this study will be open-access.

Bozorgmehr, K., Biddle, L., Rohleder, S., et al. (2019). What is the evidence on availability and integration of refugee and migrant health data in health information systems in the WHO European Region?, Copenhagen: OMS

<https://apps.who.int/iris/handle/10665/328634>

L'augmentation rapide et récente des mouvements transfrontaliers de population met en avant l'importance de disposer de données fiables sur la santé des réfugiés et des migrants pour la planification de la santé publique. Ce rapport exploratoire examine les bases factuelles sur la disponibilité et l'intégration des données relatives à la santé des réfugiés et des migrants dans les systèmes d'information sanitaire de la Région européenne de l'OMS. Si ces données sont disponibles dans 25 des 53 États membres de la Région, on observe des différences quant à la disponibilité, aux types de données et aux principales sources de collecte de données. À l'exception des pays disposant de registres de la population, les principales sources de données sont les dossiers médicaux, les dossiers spécifiques aux maladies et les données de notification. L'intégration des données est souvent limitée, et les enquêtes de suivi sanitaire et les méthodes de mise en relation des données sont insuffisamment utilisées. On mentionnera parmi les considérations politiques l'harmonisation des définitions des migrants, la promotion de la coordination/gouvernance de la collecte de données, le suivi de la performance des systèmes d'information sanitaire, la promotion de l'échange de données d'expérience entre les pays, l'exploitation de la mise en relation des données, le développement de la surveillance sanitaire existante, la réduction des obstacles aux soins de santé, ainsi que le renforcement des systèmes généraux d'information sanitaire.

Bradby, H., et al. (2015). Public health aspects of migrant health: a review of the evidence on health status for refugees and asylum seekers in the European Region. Health Evidence Network synthesis report ; 44. Copenhagen OMS: 46 , tab., graph., fig.

https://www.euro.who.int/_data/assets/pdf_file/0004/289246/WHO-HEN-Report-A5-2-Refugees_FINAL.pdf

Chauvin, P., et al. (2009). Access to healthcare for undocumented migrants in 11 eleven countries : 2008 survey report. Paris Médecins du Monde: 156, tab., graph., fig.

The 14 organisations within the Médecins du Monde international network work with the most vulnerable populations throughout the world and in their own societies. Through the national programmes, they meet people in Europe who have fled extreme poverty, violent armies and police forces, conflict areas and disasters. A tiny minority of the children, women and men whom we try to support when they work in their countries end up coming here. After migration journeys which are very often long, dangerous and exhausting, many find themselves without permission to stay in the country, forced into the shadows of our towns and cities. At home, as abroad, Médecins du Monde aims to provide some support and tries to help this population protect what is often the only thing they have left—their health. This study shows how undocumented migrants' living conditions are harmful to their health and prevent them from building, or rebuilding, their lives. This is despite the fact that these children, women and men are in particular need of support, given what they have lived through and the migration journeys they have undertaken.

Chauvin, P., Parizot, I., Drouot, N., et al. (2007). Enquête européenne sur l'accès aux soins des personnes en situation irrégulière. HAL.

<https://www.hal.inserm.fr/inserm-00416004v1/document>

Constant, A. F. et Milewski, F. (2020). Self-selection in physical and mental health among older intra-European migrants. *Working paper series : 2020-037*. Maastricht UNU-MERIT: 46 , fig., tabl., annexes. <https://www.merit.unu.edu/publications/wppdf/2020/wp2020-037.pdf>

The Healthy Immigrant Paradox found in the literature by comparing the health of immigrants to that of natives in the host country, may suffer from serious cultural biases. Our study evades such biases by utilizing a destination-origin framework, in which we compare the health of emigrants to that of their compatriots who stay in the country of origin. Isolating cultural effects can best gauge self-selection and host country effects on the health of emigrants with longer time abroad. We study both the physical and mental dimensions of health among European-born emigrants over 50, who originate from seven European countries and now live elsewhere in Europe. We use the Survey of Health, Ageing and Retirement in Europe and apply multi-level modeling. Regarding the physical health we find positive self-selection, beneficial adaptation effects, and effects from other observables for some but not all countries. With the notable exception of the German émigrés, we cannot confirm selection in mental health, while additional years abroad have only weak effects. Overall, living abroad has some favorable effects on the health of older emigrants. The economic similarity of countries and the free intra-European mobility mitigate the need for initial self-selection in health and facilitate the migration experience abroad.

Communauté Européenne, C. (2018). Benchmarking Access to Healthcare in the EU. Report of the Expert Panel on effective ways of investing in Health (EXPH). Luxembourg Publications Office of the European Union: 78 , tabl., fig. https://ec.europa.eu/health/sites/default/files/expert_panel/docs/opinion_benchmarking_healthcare_access_en.pdf

Faced with growing evidence that some groups within European Union Member States have been unable to achieve access to necessary healthcare, the European Union has committed to action to reduce levels of unmet need, most recently as an element of the European Pillar of Social Rights. In response, the Expert Panel on Effective Ways of Investing in Health has been requested to propose a series of quantitative and qualitative benchmarks for assessing progress in reducing unmet need for healthcare and to discuss means by which EU funds or other mechanisms might be used to improve access to healthcare.

Dauvrin, M., Detollenaere, J. et De Laet, C. (2019). Asylum seekers in Belgium: options for a more equitable access to health care. a stakeholder consultation. *KCE Report; 319B*. Bruxelles KCE: 450 , fig., tabl., annexes.

Tout migrant qui arrive sur le sol belge et y demande l'asile reçoit automatiquement un accès aux soins de santé pendant le temps que durent les procédures. Or plusieurs rapports belges et internationaux ont souligné que l'accès à ces soins n'est pas égal pour tous les demandeurs d'asile. Il a été demandé au Centre fédéral d'Expertise des Soins de Santé (KCE) de proposer des pistes pour remédier à cette situation, qui met la Belgique en porte-à-faux avec les traités internationaux qu'elle a signés. L'essentiel du problème réside dans le fait que le financement de ces soins de santé dépend d'instances différentes selon que le demandeur d'asile est hébergé dans un centre d'accueil collectif ou dans une Initiative locale d'accueil gérée par un CPAS. Le KCE propose de simplifier l'organisation de l'accès aux soins en intégrant tout dans une

même enveloppe globale. Qui va gérer cette enveloppe ? Différentes options sont possibles ; le KCE les a analysées, mais la décision finale revient au pouvoir politique.

De, Vito., E., et al. (2015). Public health aspects of migrant health: a review of the evidence on health status for undocumented migrants in the European Region, Copenhagen : OMS Bureau régional de l'Europe
http://www.euro.who.int/_data/assets/pdf_file/0004/289255/WHO-HEN-Report-A5-3-Undocumented_FINAL-rev1.pdf?ua=1

Undocumented migrants are people within a country without the necessary documents and permits. They are considered at higher risk for health problems because of their irregular status and the consequences of economic and social marginalization. A systematic review found 122 documents that suggested policies and interventions to improve health care access and delivery for undocumented migrants. Undocumented migrants mostly have only access to emergency care across Europe, and even in the countries where they are fully entitled to health care, formal and informal barriers hinder their access. This raises concerns for both public health and migrant care. On the basis of findings, policy options are suggested regarding data collection, research, entitlement to health care, information and communication, training and intersectoral approach.

Duracinsky, M. (2020). "Good acceptability of HIV, HBV, and HCV screening during immigration medical check-up amongst migrants in France in the STRADA study." Int J Environ Res Public Health **15**(6): e0235260.

INTRODUCTION: The prevalence of HIV, hepatitis B, and hepatitis C amongst migrants in France is high. Thus, effective screening and follow-up is needed. The mandatory medical check-up for residency application is an opportunity to offer rapid HIV and hepatitis testing. The main objective of the STRADA study is to create a feasible and acceptable screening strategy for migrants. Within the STRADA study, this qualitative research examined the acceptability of conducting screening tests in the context of residency application. **METHODS:** We conducted a qualitative study amongst legal migrants over 18 years of age with sufficient knowledge of the French, English, or Arabic language. Interviews were performed following a semi-structured interview guide of open-ended questions. Interviews were transcribed verbatim and subsequently analyzed through thematic analysis. **RESULTS:** We interviewed 34 migrants. Mean age was 32.6 (min-max: 19, 59) years. The participants' region of origin was mostly Sub-Saharan Africa and the main reason for migrating to France was family reunification. Migrants' acceptability of HIV and hepatitis testing was high. Participants who accepted testing indicated a benefit for individual health and to avoid transmission. Most preferred rapid tests; reluctance was related to anxiety about the immediate results and the perceived reliability of rapid tests. Migrants' knowledge about HIV was satisfactory, but inadequate for hepatitis. Screening in the context of a compulsory medical visit did not present an obstacle for acceptability. Some expressed concern in the case of HIV but when explained, the independence between obtaining the residence permit along with screening and access to medical care was well understood. **DISCUSSION:** Medical check-ups at immigration centers is an opportunity to screen for HIV and hepatitis which is considered acceptable by migrants. Informing migrants that test results do not affect residency applications, and incorporating their preferences, are all important to optimize the acceptability of screening.

European Union Agency for Fundamental Rights (2012). Migrants in an irregular situation: access to healthcare in 10 European Union Member States. Vienne FRA Bruxelles Office des publications de l'Union européenne: 76 , tab., graph., fig.

<http://fra.europa.eu/en/publication/2012/migrants-irregular-situation-access-healthcare-10-european-union-member-states>

his report explores the access to healthcare granted to irregular migrants in 10 EU Member States. It focuses on migrants who are present in an irregular situation, namely those who do not fulfil conditions for entry, stay or residence.

Gerritsen, A., et al. (2013). "Health and demographic surveillance systems: contributing to an understanding of the dynamics in migration and health." Glob Health Action **6**: 21496.

BACKGROUND: Migration is difficult to measure because it is highly repeatable. Health and Demographic Surveillance Systems (HDSSs) provide a unique opportunity to study migration as multiple episodes of migration are captured over time. A conceptual framework is needed to show the public health implications of migration. OBJECTIVE/DESIGN: Research conducted in seven HDSS centres [International Network for the Demographic Evaluation of Populations and Their Health (INDEPTH) Network], published in a peer-reviewed volume in 2009, is summarised focussing on the age-sex profile of migrants, the relation between migration and livelihoods, and the impact of migration on health. This illustrates the conceptual structure of the implications of migration. The next phase is described, the Multi-centre Analysis of the Dynamics In Migration And Health (MADIMAH) project, consisting of workshops focussed on preparing data and conducting the analyses for comparative studies amongst HDSS centres in Africa and Asia. The focus here is on the (standardisation of) determinants of migration and the impact of migration on adult mortality. RESULTS: The findings in the volume showed a relatively regular age structure for migration among all HDSS centres. Furthermore, migration generally contributes to improved living conditions at the place of origin. However, there are potential negative consequences of migration on health. It was concluded that there is a need to compare results from multiple centres using uniform covariate definitions as well as longitudinal analysis techniques. This was the starting point for the on-going MADIMAH initiative, which has increased capacity at the participating HDSS centres to produce the required datasets and conduct the analyses. CONCLUSIONS: HDSS centres brought together within INDEPTH Network have already provided strong evidence of the potential negative consequences of migration on health, which contrast with the beneficial impacts of migration on livelihoods. Future comparative evidence using standardised tools will help design policies for mitigating the negative effects, and enhancing the positive effects, of migration on health.

Gray, B. H. et Van, G. E. (2012). "Health Care for Undocumented Migrants: European Approaches." Issues in International Health Policy: 12p.

European countries have smaller shares of undocumented migrants than does the United States, but these individuals have substantial needs for medical care and present difficult policy challenges even in countries with universal health insurance systems. Recent European studies show that policies in most countries provide for no more than emergency services for undocumented migrants. Smaller numbers of countries provide more services or allow

undocumented migrants who meet certain requirements access to the same range of services as nationals. These experiences show it is possible to improve access to care for undocumented migrants. Strategies vary along three dimensions: 1) focusing on segments of the population, like children or pregnant women; 2) focusing on types of services, like preventive services or treatment of infectious diseases; or 3) using specific funding policies, like allowing undocumented migrants to purchase insurance

Griffith, L. E., Gruneir, A., Upshur, R., et al. (2021). "Barriers and Facilitators Affecting the HIV Care Cascade for Migrant People Living with HIV in Organization for Economic Co-Operation and Development Countries: A Systematic Mixed Studies Review." *BMC Health Serv Res* **35**(8): 288-307.

Migrants in countries affiliated with the Organization for Economic Co-operation and Development (OECD) have a higher risk of acquiring HIV, experience delayed HIV diagnosis, and have variable levels of engagement with HIV care and treatment when compared to native-born populations. A systematic mixed studies review was conducted to generate a multilevel understanding of the barriers and facilitators affecting HIV Care Cascade steps for migrant people living with HIV (MLWH) in OECD countries. Medline, Embase, Scopus, CINAHL, and the Cochrane Library were searched on March 25, 2020. Screening, critical appraisal, and analysis were conducted independently by two authors. We used qualitative content analysis and the five-level Socio-Ecological Model (i.e., individual, interpersonal, organizational, community, and policy) to categorize barriers and facilitators. Fifty-nine studies from 17 OECD countries were included. MLWH faced similar barriers and facilitators regardless of their host country, ethnic and geographic origins, or legal status. Most barriers and facilitators were associated with the individual and organizational levels and centered around retention in HIV care and treatment. Adapting clinical environments to better address MLWH's competing needs via multidisciplinary models would address retention issues across OECD countries.

Hjern, A. et Kadir, A. (2018). *Health of refugee and migrant children. Technical guidance*, Copenhagen : OMS Bureau régional de l'Europe
<https://apps.who.int/iris/handle/10665/342285>

Between 2015 and 2017, almost one million asylum-seeking children registered in the European Union, and 200 000 of these arrived unaccompanied by a caregiver. These children faced particular risks, including being exposed to discrimination, marginalization, institutionalization and exclusion. When considering health and health care interventions for migrant children, some areas need specific attention, such as their diverse backgrounds, whether they are unaccompanied and separated from family, whether they have been trafficked and also if they are children who have been left behind. Policy considerations include an intersectoral approach to promote good health and well-being, particularly mental health, in migrant children that target risk factors at the individual, family and community levels. Particular emphasis is placed on how national/local governments have an important role in fostering or hindering living conditions for refugee and migrant children in the areas of housing, health care services and education.

HOPE (2018). *Migrants and refugees : Good practices in hospitals and healthcare services - HOPE Survey*. Bruxelles HOPE: 22, tab., graph., fig.

http://www.hope.be/wp-content/uploads/2018/03/HOPE-SURVEY_Migrants_and_refugees_March-2018.pdf

The increasing mobility and diversity of the population strongly affect healthcare services and hospitals: people on the move face greater health risks, suffer from conditions not commonly found in Europe and have different expectations about health services. Access to adequate health care is further complicated by language barriers and migrants often being socially disadvantaged. Although health services are used to accommodating cultural diversity, European hospitals are facing new challenges. HOPE and its members have been discussing this topic for many years. In the recent context of intensified migratory pressure on some EU countries, it seemed essential to collaborate and share good practices as well as knowledge on the specific health needs of migrants. The HOPE Board of Governors has recently urged members to review and list good practices. The present document is the result of this work.

Huma Network (2009). Access to health care for undocumented migrants and asylum seekers in 10 European countries : law and right. Epicum: 192 , tab., graph., fig.

http://www.episouth.org/doc/r_documents/Rapport_huma-network.pdf

In 2007, the Platform for International Cooperation on Undocumented Migrants (PICUM)⁸ issued within the framework of a European project, a documented comparison of eleven countries regarding law and practice and raised the necessity to improve access to health care as an urgent priority in order to guarantee the minimum respect for Human Rights. Two years later, the present report seeks to provide an updated overview of the different systems regulating access to healthcare for undocumented migrants and asylum seekers in ten Member States (Belgium

Ingleby, D. (2010). How health systems can address health inequities linked to migration and ethnicity. Copenhagen WHO Regional Office for Europe: 44.

http://www.euro.who.int/_data/assets/pdf_file/0005/127526/e94497.pdf

[BDSP. Notice produite par SAPHIR R0xksAAB. Diffusion soumise à autorisation]. There are about 75 million migrants in the WHO European Region, amounting to 8.4% of the total population and 39% of all migrants worldwide. Figures for ethnic minorities are not available, because there is little consensus on definitions, but the largest of these groups is probably the Roma, with an estimated population of 12-15 million. There is substantial evidence of inequities in both the state of health of these groups and the accessibility and quality of health services available to them. Differences from the majority population vary, however, according to the specific group studied, the health problems or services involved, and the country concerned. Some groups may in certain respects enjoy health advantages, but it is mainly disadvantages that are documented. This briefing describes how, to tackle such health inequities, health systems must not only improve the services available to migrants and ethnic minorities, but also address the social determinants of health across many sectors. [Ed.].

Jensen, N. K., et al. (2011). "Providing medical care for undocumented migrants in Denmark: what are the challenges for health professionals?" *BMC Health Serv Res* **11**: 154-154.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3150245/>

BACKGROUND: The rights of undocumented migrants are frequently overlooked. Denmark has ratified several international conventions recognizing the right to health care for all human beings, but has very scanty legislation and no existing policies for providing health care to undocumented migrants. This study focuses on how health professionals navigate and how they experience providing treatment for undocumented migrants in the Danish health care system. **METHODS:** The study was carried out as part of an EU-project on European Best Practices in Access, Quality and Appropriateness of Health Services for Immigrants in Europe (EUGATE). This presentation is based on 12 semi-structured interviews with general practitioners (9) and emergency room physicians (3) in Denmark. **RESULTS:** The emergency room physicians express that treatment of undocumented migrants is no different from the treatment of any other person. However, care may become more complicated due to lack of previous medical records and contact persons. Contrary to this, general practitioners explain that undocumented migrants will encounter formal barriers when trying to obtain treatment. Additional problems in the treatment of undocumented migrants include language issues, financial aspects for general practitioners, concerns about how to handle the situation including possibilities of further referrals, and an uncertainty as to whether to involve the police. **CONCLUSIONS:** The health professionals in our study describe that undocumented migrants experience an unequal access to primary care facilities and that great uncertainties exist amongst health professionals as how to respond in such situations. The lack of official policies concerning the right to health care for undocumented migrants continue to pass on the responsibility to health professionals and, thereby, leaves it up to the individual to decide whether treatment can be obtained or not.

Kristiansen, M. (2018). Health of older refugees and migrants. Technical guidance, Copenhagen : OMS Bureau régional de l'Europe
https://www.euro.who.int/data/assets/pdf_file/0003/386562/elderly-eng.pdf

Population ageing caused by consistently low birth rates and increased life expectancy represents a major current social trend across Europe. This technical guidance aims to inform policy and practice development specifically related to improving the health of older refugees and migrants within the European Union and the larger WHO European Region. Both ageing and migration are in themselves complex multidimensional processes shaped by a range of factors at the micro, meso and macro levels over the life-course of the individual, but also with intertwined trajectories. Responding to the needs of older refugees and migrants, therefore, must be integrated into all dimensions of ageing policies and practices across Europe. Relevant areas for policy-making include healthy ageing over the life-course, supportive environments, people-centred health and long-term care services, and strengthening the evidence base and research.

Marques, T. V. (2012). "Refugees and migrants struggle to obtain health care in Europe." *Cmaj* **184**(10): E531-532.

McGarry, K., Hannigan, A., De Almeida, M. M., et al. (2018). What strategies to address communication barriers for refugees and migrants in health care settings have been implemented and evaluated across the WHO European Region? Health Evidence Network synthesis report 62. Copenhagen OMS Bureau régional de l'Europe: x+37.
<https://apps.who.int/iris/handle/10665/326238>

The provision of effective health care to linguistically and culturally diverse migrant populations has been identified as a crucial public health issue. This scoping review examines strategies that have been implemented and evaluated to address communication barriers experienced by refugees and migrants in health care settings across the WHO European Region. Four main types of strategy were identified: cultural mediation, interpretation, translation of health information, and guidance and training for health care providers. These have been used to support access to health care, management of specific diseases and promotion of health across a wide variety of health care settings. Intersectoral collaboration was seen as important in the development and implementation of strategies. Policy considerations include the development of national policies and the promotion of intersectoral dialogue to augment the knowledge base and resolve the common issues identified, such as provision of training and confusion regarding the roles of mediators/interpreters, that affect strategy implementation and evaluation.

McKee, M., et al. (2013). "EU Crossborder health care collaboration. 64." *Eurohealth* **19**(4).
http://www.euro.who.int/data/assets/pdf_file/0003/236811/Eurohealth_v19-n4.pdf

This issue of Eurohealth explores various topics related to the European Directive on the application of patients' rights in cross-border health care. Ten case studies look at specific aspects of EU cross-border health care collaboration, particularly at potential obstacles not fully covered by the Directive. Other articles look at dispensing prescriptions across EU Member States, European public health strategies, oral health in Europe, reporting health care waste in the Netherlands, the chronic care system in Spain, scaling-up e-health in Catalonia and dental health services for migrants in Cyprus.

Médecins du Monde (2017). Synthèse du rapport de l'Observatoire 2017. Les laissés pour compte : l'échec de la couverture santé universelle en Europe. Paris Médecins du Monde: 136 , annexes.
https://medecinsdumonde.be/system/files/publications/downloads/rapport_de_observatoire_2017_version_web.pdf

Le Rapport de l'Observatoire de Médecins du Monde décrit la situation actuelle de ceux et celles qui passent entre les mailles du filet des systèmes de santé européens et appelle les parties prenantes aux niveaux international, européen et national à faire de la couverture santé universelle une priorité. Le rapport 2017 pointe sur les oubliés de cette couverture maladie universelle.

OMS (2018). Report on the health of refugees and migrants in the WHO European Region: no public health without refugee and migrant health, Copenhague : OMS Bureau régional de l'Europe
<https://apps.who.int/iris/handle/10665/311347>

Almost one in 10 people in the WHO European Region is currently an international migrant. Finding work is a major reason why people migrate internationally, although violence, conflict, natural disasters and human rights abuses are also contributors. Migration and displacement are social determinants of health affecting the health of refugees and migrants. The WHO Regional Office for Europe has taken the lead in assisting Member States in promoting refugee and migrant health and addressing the public health aspects of their health. The Regional Office established the Migration and Health programme specifically for this purpose. Gaining an overview of the health status of refugees and migrants and health system response is

paramount in achieving the Sustainable Development Goals and in ensuring universal health coverage, and is in line with the Health 2020 framework. This report, the first of its kind, creates an evidence base with the aim of catalysing progress towards developing and promoting migrant-sensitive health systems in the 53 Member States of the WHO European Region and beyond. This report seeks to illuminate the causes, consequences and responses to the health needs and challenges faced by refugees and migrants in the Region, while also providing a snapshot of the progress being made across the Region. Additionally, the report seeks to identify gaps that require further action through collaboration, to improve the collection and availability of high-quality data and to stimulate policy initiatives.

OMS (2019). *Health diplomacy: spotlight on refugees and migrants*, Copenhague : OMS Bureau régional de l'Europe

<https://apps.who.int/iris/handle/10665/326918>

La question des réfugiés et des migrants fait actuellement l'objet d'un débat politique intense dans le monde entier. Du point de vue de la santé publique, les mouvements de population, y compris les migrations forcées, constituent un phénomène complexe et figurent en bonne place à l'ordre du jour politique et stratégique de la plupart des États membres de l'OMS. La diplomatie de la santé et la santé des réfugiés et des migrants sont intrinsèquement liées. La mobilité humaine concerne tous les pays, et pose d'importants défis en termes de développement durable et de droits humains afin de garantir l'égalité et d'obtenir des résultats à la lumière des objectifs de développement durable. Cet ouvrage s'inscrit dans le cadre de l'engagement du Bureau régional de l'OMS pour l'Europe à œuvrer pour la santé des réfugiés et des migrants. Il présente les bonnes pratiques adoptées par les pouvoirs publics, les acteurs non étatiques et les organisations internationales et non gouvernementales pour tenter de faire face à la complexité de la migration, en renforçant la réactivité des systèmes de santé aux questions de santé des réfugiés et des migrants, et en coordonnant et en élaborant des solutions de politique étrangère en vue d'améliorer la santé aux niveaux mondial, régional, national et local.

OMS (2020). *Collection and integration of data on refugee and migrant health in the WHO European Region*. Copenhague OMS: viii + 98.

<https://apps.who.int/iris/bitstream/handle/10665/337694/9789289055369-eng.pdf>

This technical guidance outlines current evidence, knowledge and best practice relating to the integration of migration health data into national health information systems. It highlights key principles, summarizes priority actions and challenges, maps existing international commitments and frameworks and provides practical policy considerations for promoting collection and integration of migration health data. Specific areas for intervention include establishing a multistakeholder working group for overseeing data collection and integration, creating a regulatory framework for preventing unauthorized access and use of health data for non-health purposes, integrating core variables into the data collection system and promoting data linkage. While the main intended audience of this technical guidance series is policy-makers across sectors at local, national and regional levels, the contents of this publication will also be of value for health-care practitioners, health planners and health information specialists and law enforcement officials.

OMS (2022). World report on the health of refugees and migrants: Health for all, including refugees and migrants: Time to act, Genève : OMS
<https://www.who.int/publications/i/item/9789240054462>

Worldwide, more people are on the move now than ever before, yet many refugees and migrants face poorer health outcomes than the host populations. Addressing their health needs is, therefore, a global health priority and integral to the principle of the right to health for all. The key is to strengthen and maintain health systems by ensuring that they are refugee- and migrant-sensitive and inclusive. Health outcomes are influenced by a whole host of determinants. However, refugees and migrants face additional determinants such as precarious legal status; discrimination; social, cultural, linguistic, administrative and financial barriers; lack of information about health entitlements; low health literacy; and fear of detention and deportation. This groundbreaking publication outlines current and future opportunities and challenges and provides several strategies to improve the health and well-being of refugees and migrants. It is an advocacy tool for national and international policy-makers involved in health and migration. Evidence on the health of refugees and migrants remains fragmented – comparable data across countries and over time are urgently needed to track progress towards the health-related United Nations Sustainable Development Goals. With only 8 years until the 2030 target date to transform our world, the time to act is now.

OMS (2018). Spain : assessing health-system capacity to manage sudden large influxes of migrants. Copenhagen OMS Bureau régional de l'Europe: vi+19.
http://www.euro.who.int/_data/assets/pdf_file/0004/373216/spain-report-eng.pdf

The large numbers of migrants arriving from North Africa and the Middle East to Mediterranean countries pose new challenges to the recipient health systems, which must adapt and respond to the needs of both migrants and residents. This requires an efficient policy dialogue between the main stakeholders to share experiences and identify best practices. The WHO Regional Office for Europe provides advice and technical assistance through the Migration and Health Programme. This was established in 2012 as the Public Health Aspects of Migration in Europe project in response to the 2008 World Health Assembly resolution WHA61.17, the 2010 Global Consultation on Migrant Health and Health 2020. An assessment in Spain in 2014 involved all relevant stakeholders with the aim of strengthening the country's capacity to address public health implications of large immigration flows. The WHO toolkit was used during interviews and field visits. This report summarizes the results under the six functions of the WHO health system framework.

Pottie, K., et al. (2015). "Access to healthcare for the most vulnerable migrants: a humanitarian crisis." Confl Health **9**: 16.

A series of Medecins Sans Frontieres projects for irregular migrants over the past decade have consistently documented high rates of 14 physical and sexual trauma, extortion and mental illness amidst severe healthcare, food, and housing limitations. Complex interventions were needed to begin to address illness and barriers to healthcare and to help restore dignity to the most vulnerable women, children and men. Promising interventions included mobile clinics, use of cultural mediators, coordination with migrant-friendly entities and NGOs and integrating

advocacy programs and mental health care with medical services. Ongoing interventions, research and coordination are needed to address this neglected humanitarian crisis.

Rechel, B., et al. (2012). "Monitoring migrant health in Europe: a narrative review of data collection practices." *Health Policy* **105**(1): 10-16.

BACKGROUND: Data on the health of migrants, including on health determinants and access to health services, are an essential pre-condition for providing appropriate and accessible health services to this population group. This article reviews how far current data collection systems in the European Union (EU) allow to monitor migrant health. **METHODS:** We searched the academic literature using PubMed and reviewed the results of recent EU-funded research projects on migrant health. **RESULTS:** Most EU member states lack information on the health of migrants, limiting the possibility for monitoring and improving migrant health. National death registers allow for disaggregation according to migrant status in 24 of 27 EU member states. Registry data on health care utilization by migrant status are available in only 11 of 27 member states, although in most cases this only covers secondary and not primary care. Only few countries collect large-scale survey data on migrant health and health care utilization. **CONCLUSION:** Many EU countries need to step up their organizational and regulatory efforts to monitor migrant health if the current lack of data on migrant health should be overcome. This could be done through the inclusion of improved questions on migration in existing data collection processes.

Rechel, B. (éd.), et al. (2011). Migration and health in the European Union. *European Observatory on Health Systems and Policies Series*. Maidenhead Open University Press: XX+257.
<http://www.euro.who.int/en/about-us/partners/observatory/publications/studies/migration-and-health-in-the-european-union-2011>

Migrants make up a growing share of European populations. However, all too often their situation is compounded by problems with accessing health and other basic services. There is a need for tailored health policies, but robust data on the health needs of migrants and how best these needs can be met are scarce. This book thoroughly explores the different aspects of migration and health in the EU and how they can be addressed by health systems.

Ruspini, P. (2009). Elderly Migrants in Europe: an overview of trends, policies and practices. Lugano University of Lugano: 32, tab., graph., fig.
https://ec.europa.eu/migrant-integration/library-document/elderly-migrants-europe-overview-trends-policies-and-practices_en

Purpose of this report is to shed a preliminary light on elderly migrants and to analyze the available policy solutions and NGOs practices adopted in a sample of European countries. These policy and practices will then be compared and the resulting policy symmetries/asymmetries will be measured to the needs of the target group of elderly migrants. At last, the proposition of selected recommendations will complete the analysis. Our attention will focus on 'elderly migrants' who have grown old in their host countries and those who are already elderly when they emigrate to rejoin their family or return to their country of origin. Elderly migrants forced to emigrate or displaced for humanitarian reasons as well as those with immigrant background (second and third generation) will also be taken into consideration (COE, 2008). Vulnerability of

this elderly category of migrant people is the common dimension for investigation. The lack of information concerning this growing elderly sample calls inevitably for further empirical research. This tendency is reflected by the methodology of this article which gives notice of the available research works through an extensive literature review, collection of best practices and, where possible, contacts with key-informants.

Schober, T. et Zocher, K. (2018). Health care utilization of refugees. Working Paper; 1819. Linz Johannes Kepler University of Linz: 37 , tabl., fig.

European countries experienced significant inflows of migrants in the past decade, including many refugees coming from regions engaged in armed conflicts. While previous research on migrant health largely focused on economic migration, empirical evidence on the health of refugees is sparse. We use administrative data from Austria to differentiate between economic migrants and refugees and analyze their health care expenditures in comparison to natives. The results distinctly show different expenditure patterns. Unlike economic migrants, we find substantially higher expenditures for refugees, most pronounced in the first year upon arrival. The difference is not explained by specific diseases or individual refugee groups, indicating a, generally, inferior health status. Further, by using the quasi-random placement of refugees as a natural experiment, we show that characteristics of the local health care sector do not have a significant effect on expenditure levels.

Simon, J., et al. (2015). Public health aspects of migrant health: a review of the evidence on health status for labour migrants in the European Region, Copenhagen : OMS Bureau régional de l'Europe

Labour migrants form one important subgroup of international migrants. In 2010, labour migrants constituted 7.2–9.5% of the total working population in Belgium, Germany, Greece, Spain and the United Kingdom, and the number of labour migrants in the Russian Federation was estimated at 7–9 million in 2005. With labour migration at such a massive scale, provision of health care for this group has become an increasingly important issue within the WHO European Region. This report focuses on labour migrants specifically, irrespective of documentation status: those seeking work, those employed in the host country, and those who were previously employed or are seeking work but are unable to continue working or find work and remain in the host country. The objective of this report is to address the following question by way of a systematic review of the English language literature: What policies and interventions work to improve health care access and delivery for labour migrants in the European Region?

Sole-Auro, A., et al. (2009). Health care utilization among immigrants and native-born populations in 11 European countries. Results from the Survey of Health, Ageing and Retirement in Europe. Barcelone, University of Barcelona. Department of Econometrics and Statistics: 29p.

This study examines health care utilization of immigrants relative to the native-born populations aged 50 years and older in eleven European countries. Methods. We analyzed data from the Survey of Health Aging and Retirement in Europe (SHARE) from 2004 for a sample of 27,444 individuals in 11 European countries. Negative Binomial regression was conducted to examine the difference in number of doctor visits, visits to General Practitioners (GPs), and hospital stays between immigrants and the native-born individuals. Results : We find evidence those immigrants above age 50 use health services on average more than the native-born populations

with the same characteristics. Our models show immigrants have between 6% and 27% more expected visits to the doctor, GP or hospital stays when compared to native-born populations in a number of European countries. Discussion : Elderly immigrant populations might be using health services more intensively due to cultural reasons.

Stubbe Ostergaard, L., et al. (2017). "Restricted health care entitlements for child migrants in Europe and Australia." Eur J Public Health **27**(5): 869-873.

Background: More than 300 000 asylum seeking children were registered in Europe alone during 2015. In this study, we examined entitlements for health care for these and other migrant children in Europe and Australia in a framework based on United Nations Convention of the Rights of the Child (UNCRC). Methods: Survey to child health professionals, NGO's and European Ombudspersons for Children in 30 EU/EEA countries and Australia, supplemented by desktop research of official documents. Migrant children were categorised as asylum seekers and irregular/undocumented migrants. Results: Five countries (France, Italy, Norway, Portugal and Spain) explicitly entitle all migrant children, irrespective of legal status, to receive equal health care to that of its nationals. Sweden and Belgium entitle equal care to asylum seekers and irregular non-EU migrants, while entitlements for EU migrants are unclear. Twelve European countries have limited entitlements to health care for asylum seeking children, including Germany that stands out as the country with the most restrictive health care policy for migrant children. In Australia entitlements for health care are restricted for asylum seeking children in detention and for irregular migrants. The needs of irregular migrants from other EU countries are often overlooked in European health care policy. Conclusion: Putting pressure on governments to honour the obligations of the UNCRC and explicitly entitle all children equal rights to health care can be an important way of advocating for better access to primary and preventive care for asylum seeking and undocumented children in Australia and the EU.

Stubbe Ostergaard, L. et Krasnik, A. (2018). Compendium of health system responses to large-scale migration in the WHO European Region, Copenhagen : OMS - Bureau régional de l'Europe <https://euprimarycare.us14.list-manage.com/track/click?u=8dbddb206d6c9da3559d1d8d8&id=7e7e0d831e&e=607de764c3>

The scale of international migration in the WHO European Region has increased substantially in the last decade. The dynamics of large-scale migration pose specific challenges and opportunities to health systems, and responses will differ from country to country. Strengthening health system responses is one of the priority areas in the 2016 Strategy and action plan for refugee and migrant health in the WHO European Region. Its agreed actions include the identification and mapping of practices for developing and delivering health services that respond to the needs of refugees, asylum seekers and migrants.

Revue de littérature

Bas-Sarmiento, P., et al. (2017). "Mental Health in Immigrants Versus Native Population: A Systematic Review of the Literature." Arch Psychiatr Nurs **31**(1): 111-121.

The relationship between psychopathology and migration presents unresolved questions. OBJECTIVES: To determine whether there is a higher incidence of mental illness among immigrants, to describe the nosologic differences between immigrant and native populations, and to identify the risk factors involved of immigration. METHODS: A systematic review was conducted using the PubMed, Science Direct, ISI, Scopus, Psycinfo, Cochrane, and Cuiden databases. The search strategy was conducted using the MeSH thesaurus for the controlled terms "mental disorders," "mental health," "transients and migrants," "immigrants," and "epidemiology." The quality of the articles was analyzed by using the Equator Guidelines, following checklists according to the methodological design of the studies by two independent reviewers. RESULTS: From a total of 817 studies found, 21 met the inclusion criteria. Out of the 21 studies selected, 13 showed a higher prevalence of mental illness. CONCLUSIONS: Migration represents a major challenge, but it does not lead exclusively to mental distress. Immigrants experience more problems in depression, anxiety, and somatic disorders, pathologies related directly to the migration process and stress suffered. Resources should be oriented to primary and community care.

Batista, R., Pottie, K., Bouchard, L., et al. (2018). "Primary Health Care Models Addressing Health Equity for Immigrants: A Systematic Scoping Review." *J Immigr Minor Health* **20**(1): 214-230.

To examine two healthcare models, specifically "Primary Medical Care" (PMC) and "Primary Health Care" (PHC) in the context of immigrant populations' health needs. We conducted a systematic scoping review of studies that examined primary care provided to immigrants. We categorized studies into two models, PMC and PHC. We used subjects of access barriers and preventive interventions to analyze the potential of PMC/PHC to address healthcare inequities. From 1385 articles, 39 relevant studies were identified. In the context of immigrant populations, the PMC model was found to be more oriented to implement strategies that improve quality of care of the acute and chronically ill, while PHC models focused more on health promotion and strategies to address cultural and access barriers to care, and preventive strategies to address social determinants of health. Primary Health Care models may be better equipped to address social determinants of health, and thus have more potential to reduce immigrant populations' health inequities.

Crede, S. H., Such, E. et Mason, S. (2018). "International migrants' use of emergency departments in Europe compared with non-migrants' use: a systematic review." *Eur J Public Health* **28**(1): 61-73.

Background: International migration across Europe is increasing. High rates of net migration may be expected to increase pressure on healthcare services, including emergency services. However, the extent to which immigration creates additional pressure on emergency departments (EDs) is widely debated. This review synthesizes the evidence relating to international migrants' use of EDs in European Economic Area (EEA) countries as compared with that of non-migrants. Methods: MEDLINE, EMBASE, CINAHL, The Cochrane Library and The Web of Science were searched for the years 2000-16. Studies reporting on ED service utilization by international immigrants, as compared with non-migrants, were eligible for inclusion. Included studies were restricted to those conducted in EEA countries and English language publications only. Results: Twenty-two articles (from six host countries) were included. Thirteen of 18 articles reported higher volume of ED service use by immigrants, or some immigrant sub-groups. Migrants were seen to be significantly more likely to present to the ED during unsocial hours

and more likely than non-migrants to use the ED for low-acuity presentations. Differences in presenting conditions were seen in 4/7 articles; notably a higher rate of obstetric and gynaecology presentations among migrant women. Conclusions: The principal finding of this review is that migrants utilize the ED more, and differently, to the native populations in EEA countries. The higher use of the ED for low-acuity presentations and the use of the ED during unsocial hours suggest that barriers to primary healthcare may be driving the higher use of these emergency services although further research is needed.

Dalla Zuanna, T., Spadea, T., Milana, M., et al. (2017). "Avoidable hospitalization among migrants and ethnic minority groups: a systematic review." *Eur J Public Health* **27**(5): 861-868.

Background: The numbers of migrants living in Europe are growing rapidly, and has become essential to assess their access to primary health care (PHC). Avoidable Hospitalization (AH) rates can reflect differences across migrant and ethnic minority groups in the performance of PHC. We aimed to conduct a systematic review of all published studies on AH comparing separately migrants with natives or different racial/ethnic groups, in Europe and elsewhere. Methods: We ran a systematic search for original articles indexed in primary electronic databases on AH among migrants or ethnic minorities. Studies presenting AH rates and/or rate ratios between at least two different ethnic minority groups or between migrants and natives were included. Results: Of the 35 papers considered in the review, 28 (80%) were conducted in the United States, 4 in New Zealand, 2 in Australia, 1 in Singapore, and none in Europe. Most of the studies (91%) used a cross-sectional design. The exposure variable was defined in almost all articles by ethnicity, race, or a combination of the two; country of birth was only used in one Australian study. Most of the studies found significant differences in overall AH rates, with minorities (mainly Black and Hispanics) showing higher rates than non-Hispanic Whites. Conclusions: AH has been used, mostly in the US, to compare different racial/ethnic groups, while it has never been used in Europe to assess migrants' access to PHC. Studies comparing AH rates between migrants and natives in European settings can be helpful in filling this lack of evidence.

de Jong, L., Pavlova, M., Winters, M., et al. (2017). "A systematic literature review on the use and outcomes of maternal and child healthcare services by undocumented migrants in Europe." *Eur J Public Health* **27**(6): 990-997.

Background: Undocumented migrants, in particular pregnant women and their newborns, constitute a particularly vulnerable group of migrants. The aim of this study was to systematically review the academic literature on the use and outcomes of maternal and child healthcare by undocumented migrants in the European Union (EU) and European Free Trade Association (EFTA) countries. Methods: The databases, MEDLINE, Embase, CINAHL Plus, Global Health and Popline were searched for the period 2007 to 2017. Two independent reviewers judged the eligibility of studies. The final number of included studies was 33. Results: The results of quantitative, qualitative and mixed methods studies were analysed separately due to their differences in study design, sample size and quality. Overall, the quantitative studies found that undocumented women underutilised essential maternal and child healthcare services, and experienced worse health outcomes. Qualitative studies supported these results, indicating that undocumented migrants were hesitant to use services due to a lack of knowledge and fear of deportation. Studies included in the review covered 10 of 32 EU or EFTA countries, making a

European comparison impossible. Conclusions: Despite major methodological differences between included studies, the results of this review indicate that the status of undocumented migrants exacerbates known health risks and hampers service use.

Diaz, E., et al. (2017). "Interventions to improve immigrant health. A scoping review." Eur J Public Health **27**(3): 433-439.

Background: : Disparities in health between immigrants and their host populations have been described across countries and continents. Hence, interventions for improving health targeting general populations are not necessarily effective for immigrants. To conduct a systematic search of the literature evaluating health interventions for immigrants; to map the characteristics of identified studies including range of interventions, immigrant populations and their host countries, clinical areas targeted and reported evaluations, challenges and limitations of the interventions identified. Following the results, to develop recommendations for research in the field. A scoping review approach was chosen to provide an overview of the type, extent and quantity of research available. Studies were included if they empirically evaluated health interventions targeting immigrants and/or their descendants, included a control group, and were published in English (PubMed and Embase from 1990 to 2015). Most of the 83 studies included were conducted in the USA, encompassed few immigrant groups and used a randomized controlled trial (RCT) or cluster RCT design. Most interventions addressed chronic and non-communicable diseases and attendance at cancer screening services, used individual targeted approaches, targeted adult women and recruited participants from health centres. Outcome measures were often subjective, with the exception of interventions for cardiovascular risk and diabetes. Generally, authors claimed that interventions were beneficial, despite a number of reported limitations. Recommendations for enhancing interventions to improve immigrant health are provided to help researchers, funders and health care commissioners when deciding upon the scope, nature and design of future research in this area.

Ferdous, M., Lee, S., Goopy, S., et al. (2018). "Barriers to cervical cancer screening faced by immigrant women in Canada: a systematic scoping review." BMC Womens Health **18**(1): 165.

BACKGROUND: The objective of this scoping study is to review the published literature and summarize findings related to barriers experienced by immigrant women in Canada while accessing cervical cancer screening. METHODS: Electronic databases of peer-reviewed articles and grey literature were searched using comprehensive sets of keywords, without restricting the time period or language. Articles were selected based on the following criteria: (a) the study population consisted of Canadian immigrant women and healthcare providers and other stakeholders serving immigrant women, (b) the research focused on the barriers to accessing cervical cancer screening, and (c) the study was conducted in Canada. RESULTS: Extracted data were grouped and analyzed, resulting in barriers comprised of six themes: economic barriers, cultural barriers, language barriers, healthcare system-related barriers, knowledge-related barriers, and individual-level barriers. Lack of education, low income, preference for a female physician, lack of knowledge, lack of effective communication, and embarrassment were some of the most common barriers mentioned. CONCLUSIONS: Immigrant access to health services, including cervical cancer screening, is a complex issue concerning a wide range of barriers. Our findings offer insights into barriers to cervical cancer screening in immigrant communities in

Canada that can be used to assist policymakers, healthcare providers, and researchers enhance the health and well-being of these populations by mitigating barriers and improving screening.

George, U., et al. (2015). "Immigrant Mental Health, A Public Health Issue: Looking Back and Moving Forward." Int J Environ Res Public Health **12**(10): 13624-13648.

The Mental Health Commission of Canada's (MHCC) strategy calls for promoting the health and wellbeing of all Canadians and to improve mental health outcomes. Each year, one in every five Canadians experiences one or more mental health problems, creating a significant cost to the health system. Mental health is pivotal to holistic health and wellbeing. This paper presents the key findings of a comprehensive literature review of Canadian research on the relationship between settlement experiences and the mental health and well-being of immigrants and refugees. A scoping review was conducted following a framework provided by Arskey and O'Malley (Int J Soc Res Methodol 8:19-32, 2005). Over two decades of relevant literature on immigrants' health in Canada was searched. These included English language peer-reviewed publications from relevant online databases Medline, Embase, PsycInfo, Healthstar, ERIC and CINAHL between 1990 and 2015. The findings revealed three important ways in which settlement affects the mental health of immigrants and refugees: through acculturation related stressors, economic uncertainty and ethnic discrimination. The recommendations for public health practice and policy are discussed.

Grabovschi, C., et al. (2013). "Mapping the concept of vulnerability related to health care disparities: a scoping review." BMC Health Serv Res **13**: 94.

BACKGROUND: The aim of this paper is to share the results of a scoping review that examined the relationship between health care disparities and the multiplicity of vulnerability factors that are often clustered together. **METHODS:** The conceptual framework used was an innovative dynamic model that we developed to analyze the co-existence of multiple vulnerability factors (multi-vulnerability) related to the phenomenon of the 'Inverse Care Law'. A total of 759 candidate references were identified through a literature search, of which 23 publications were deemed relevant to our scoping review. **RESULTS:** The review confirmed our hypothesis of a direct correlation between co-existing vulnerability factors and health care disparities. Several gaps in the literature were identified, such as a lack of research on vulnerable populations' perception of their own vulnerability and on multimorbidity and immigrant status as aspects of vulnerability. **CONCLUSIONS:** Future research addressing the revealed gaps would help foster primary care interventions that are responsive to the needs of vulnerable people and, eventually, contribute to the reduction of health care disparities in society.

Grosser, A., et al. (2016). "Inclusion of migrants and ethnic minorities in European birth cohort studies-a scoping review." Eur J Public Health **26**(6): 984-991.

BACKGROUND: Migrant and ethnic minority groups constitute substantial parts of European populations. They frequently experience health disadvantages relative to the respective majority populations. Birth cohort studies can help to disentangle social and biological factors producing these health inequalities over the life course. We investigated whether birth cohorts in European countries (i) assess migration history and ethnicity in the study design; and (ii) use this information in data analyses. **METHODS:** A scoping review was performed in which

European birth cohort studies were identified using dedicated web-based registries, MEDLINE and EMBASE. Two reviewers systematically assessed all identified birth cohorts and selected those fulfilling defined inclusion criteria (e.g. enrolment after 1980). Publications and websites were screened for information on the inclusion of migrants and ethnic minorities. To obtain more detailed information, researchers of enrolled birth cohorts were contacted individually. RESULTS: Eighty-eight birth cohorts were identified in 20 European countries, with more than 486 250 children enrolled in total. Sixty-two studies (70.5%) reported collecting data about migration history or ethnic background. Twenty-three studies (26%) used information on migration history or ethnicity for data analyses or plan to do so in future. CONCLUSION: The majority of European birth cohorts assessed participants' migration history or ethnic background; however, this information was seldom used for comparative analyses in trying to disentangle reasons for health inequalities. Also, heterogeneous indicators were used. Better use of data already available, as well as harmonization of data collection on migration history and ethnicity, could yield interesting insights into the production of health inequalities.

Hilario, C. T., et al. (2015). "Migration and young people's mental health in Canada: A scoping review." J Ment Health **24**(6): 414-422.

BACKGROUND: Young people's mental health is a public health priority. Given the influences of migration and resettlement on mental health, synthesis of current research with young people from migrant backgrounds can help inform mental health promotion initiatives that account for and are responsive to their needs. AIMS: This article distils the results of a review of published literature on the mental health of adolescent immigrants (ages 10-19) living in Canada. METHOD: Scoping review methods were used to define inclusion and exclusion criteria; inform the search strategies; and extract and synthesize key findings. RESULTS: Fourteen articles met criteria for inclusion. Analysis of the studies indicate diversity in mental health indicators, e.g., mental distress, emotional problems and behavioral problems, as well as a wide range of influences on mental health from age at migration and length of stay to place of residence, income and discrimination. CONCLUSIONS: Findings support the need to account for the array of influences on young people's mental health in relation to migration and to augment initiatives beyond the level of individual intervention.

Khanlou, N., et al. (2017). "Scoping Review on Maternal Health among Immigrant and Refugee Women in Canada: Prenatal, Intrapartum, and Postnatal Care." J Pregnancy **2017**: 8783294.

The last fifteen years have seen a dramatic increase in both the childbearing age and diversity of women migrating to Canada. The resulting health impact underscores the need to explore access to health services and the related maternal health outcome. This article reports on the results of a scoping review focused on migrant maternal health within the context of accessible and effective health services during pregnancy and following delivery. One hundred and twenty-six articles published between 2000 and 2016 that met our inclusion criteria and related to this group of migrant women, with pregnancy/motherhood status, who were living in Canada, were identified. This review points at complex health outcomes among immigrant and refugee women that occur within the compelling gaps in our knowledge of maternal health during all phases of maternity. Throughout the prenatal, intrapartum, and postnatal periods of maternity, barriers to accessing healthcare services were found to disadvantage immigrant and refugee women putting them at risk for challenging maternal health outcomes. Interactions between

the uptake of health information and factors related to the process of immigrant settlement were identified as major barriers. Availability of appropriate services in a country that provides universal healthcare is discussed.

Klein, J. et von dem Knesebeck, O. (2018). "Inequalities in health care utilization among migrants and non-migrants in Germany: a systematic review." *Int J Equity Health* **17**(1): 160.

BACKGROUND: Despite the growing number of people with migrant background in Germany, a systematic review about their utilization of health care and differences to the non-migrant population is lacking. By covering various sectors of health care and migrant populations, the review aimed at giving a general overview and identifying special areas of potential intervention. **METHODS:** A systematic review was conducted in PubMed database including records that were published until 1st of June 2017. Further criteria for eligibility were a publication in a peer-reviewed journal written in English or German language. The studies have to report quantitative and original data of a population residing in Germany. The appropriateness of the studies was judged by both authors. Studies were excluded if native controls were not originated from the same sample. Moreover, indicators of health care utilization have to assess individual behaviour like consultation or participation rates. 63 studies met the inclusion criteria for a qualitative synthesis of the findings. **RESULTS:** The overall findings indicate a lower utilization among migrants, although the results vary in terms of health care sector, indicator of health care utilization and migrant population. For specialist care, medication use, therapist consultations and counselling, rehabilitation as well as disease prevention (early cancer detection, prevention programs for children and oral health check-ups) a lower utilization among people with migrant background was found. The lower usage was particularly shown for migrants of the 1st generation, people with two-sided migrant background, children/adolescents and women. Due to the methodological heterogeneity a meta-analysis was not feasible. As most of the studies were cross-sectional, no causal interpretations could be drawn. **CONCLUSIONS:** The inequalities in utilization could not substantially be explained by differences in the socioeconomic status. Other reasons of lower utilization could be due to differences in need, preferences, information, language and formal access barriers (e.g. charges, waiting times, travel distances or lost wages). Different migrant-specific and migrant-sensitive strategies are relevant to address the problem for certain health care sectors and migrant populations. **TRIAL REGISTRATION:** The review protocol was registered on PROSPERO (CRD42014015162).

Lommel, L. L. et Chen, J. L. (2016). "The Relationship Between Self-Rated Health and Acculturation in Hispanic and Asian Adult Immigrants: A Systematic Review." *J Immigr Minor Health* **18**(2): 468-478.

We systematically reviewed studies to identify the association between acculturation and self-rated health (SRH) and the impact of nativity and language use in Asian and Hispanic adult immigrants. Six electronic databases were searched. Data on nativity and limited English proficiency (LEP) was extracted and analyzed. Nine studies met review criteria. A positive association between acculturation and fair/poor SRH among Asians and Hispanics was found. For both Asians and Hispanics, six out of eight studies showed nativity and all three studies reporting LEP were associated with worse SRH compared to whites. Nativity and LEP were found to be risk factors for reporting worse SRH in Hispanics compared to Asians. The degree of association between nativity and LEP and worse SRH was found to vary by Asian and Hispanic

subgroup. Further studies are needed to accurately assess the health status of these populations, which will be essential to eliminating disparities.

Malmusi, D. et Ortiz-Barreda, G. (2014). "[Health inequalities in immigrant populations in Spain: a scoping review]." *Rev Esp Salud Publica* **88**(6): 687-701.

BACKGROUND: Health differences between immigrants and natives should be analyzed from an equity perspective due to socioeconomic inequality between them. The aim of this study is to know the influence of social determinants of health in the immigrant population in Spain and/or inequalities compared with the Spanish population. **METHODS:** A scoping review of the literature published in the period 1998-2012 was performed. The literature search was conducted on Medline and MEDES-MEDICINA databases. All studies that include the participation of immigrant population from areas such as Latin America, Africa, Asia and Eastern Europe and performed in Spain were selected. **RESULTS:** 27 articles were included. Most of the studies were published in the year 2009 (n=11). Twelve used population health surveys at national (n=6) and autonomous (n = 6) level. A total of 23 studies focused on adult population over 15 years. The most frequently studied indicators were self-rated health (n=9) and mental health (n=7). **CONCLUSION:** The immigrant population is exposed to lower socioeconomic status than natives and, despite a lower prevalence of chronic diseases, it appears to experience more mental health problems and worse self-rated health, especially in women and with longer stay.

Markkula, N., Cabieses, B., Lehti, V., et al. (2018). "Use of health services among international migrant children - a systematic review." *Global Health* **14**(1): 52.

BACKGROUND: Migrant children have specific health needs, and may face difficulties in accessing health care, but not enough is known about their health service use. This study aims to describe patterns of use of health services of international migrant children and differences to respective native populations. **METHODS:** Electronic databases PubMed and Web of Science, references of identified publications, and websites of relevant international agencies were searched. We included observational studies published between 2006 and 2016 that reported use of formal health services by migrant children (0-18 years), including first and second generation migrants. Data on study characteristics, study theme, main outcome and study quality were extracted. **RESULTS:** One hundred seven full texts were included in the review. Of the studies that reported comparable outcomes, half (50%) indicated less use of healthcare by migrants compared with non-migrants; 25% reported no difference, 18% reported greater use, and 7% did not report this outcome. There was variation by theme, so that the proportion of conclusions "less use" was most common in the categories "general access to care", "primary care" and "oral health", whereas in the use of emergency rooms or hospitalisations, the most common conclusion was "greater use". **CONCLUSIONS:** Migrant children appear to use different types of healthcare services less than native populations, with the exception of emergency and hospital services.

Martinez, O., et al. (2015). "Evaluating the impact of immigration policies on health status among undocumented immigrants: a systematic review." *J Immigr Minor Health* **17**(3): 947-970.

Over the past two decades, new anti-immigration policies and laws have emerged to address the migration of undocumented immigrants. A systematic review of the literature was

conducted to assess and understand how these immigration policies and laws may affect both access to health services and health outcomes among undocumented immigrants. Eight databases were used to conduct this review, which returned 325 papers that were assessed for validity based on specified inclusion criteria. Forty critically appraised articles were selected for analysis; thirty articles related to access to health services, and ten related to health outcomes. The articles showed a direct relationship between anti-immigration policies and their effects on access to health services. In addition, as a result of these policies, undocumented immigrants were impacted by mental health outcomes, including depression, anxiety, and post-traumatic stress disorder. Action items were presented, including the promotion of cultural diversity training and the development of innovative strategies to support safety-net health care facilities serving vulnerable populations.

Monge, S., et al. (2015). "[Methodological limitations and recommendations in publications on migrant population health in Spain]." *Gac Sanit* **29**(6): 461-463.

Our objective was to describe the methodological limitations and recommendations identified by authors of original articles on immigration and health in Spain. A literature review was conducted of original articles published in Spanish or English between 1998 and 2012 combining keywords on immigration and health. A total of 311 articles were included; of these, 176 (56.6%) mentioned limitations, and 15 (4.8%) made recommendations. The most frequently mentioned limitations included the following: reduced sample sizes; internal validity and sample representativeness issues, with under- or overrepresentation of specific groups; problems of validity of the collected information and missing data mostly related to measurement tools; and absence of key variables for adjustment or stratification. Based on these results, a series of recommendations are proposed to minimise common limitations and advance the quality of scientific production on immigration and health in our setting.

Papatheodoridis, G. V., et al. (2014). "Barriers to care and treatment for patients with chronic viral hepatitis in Europe: a systematic review." *Liver Int* **34**(10): 1452-1463.

BACKGROUND & AIMS: Despite the availability of effective therapies for hepatitis B (HBV) and C virus (HCV), only a minority of these patients receive treatment. We systematically reviewed published data on barriers to management for chronic HBV/HCV patients in Europe. **METHODS:** Literature search to identify studies including adult patients with chronic HBV/HCV infection from European countries and data on barriers to treatment. **RESULTS:** Twenty-five studies including 6253 chronic HBV and 19,014 HCV patients were identified, of which only two were from Eastern Europe. The mean rate of no treatment in HBV patients was 42% being higher in North-Western European countries than Italy (56% vs. 39%, $P < 0.001$). Immigrants represented the most common barrier to HBV treatment. The mean rate of no treatment in HCV RNA-positive patients was 57%, being highest in Romania (89%), intermediate in France (79%) and lower though still high in other European countries (52%, $P < 0.001$). The predominant barriers to HCV treatment were lack of financial resources in Romania and direct/indirect limitations of interferon-alfa and/or parenteral drug and alcohol abuse in other countries. The mean rate of no treatment was highest in HCV RNA-positive parenteral drug users (72%) and intermediate in those with HCV-HIV co-infection (64%). **CONCLUSIONS:** A substantial proportion of diagnosed chronic HBV and the majority of diagnosed HCV patients remain untreated. The rates and most importantly the reasons of barriers to treatment in chronic HBV/HCV patients vary widely

among European countries supporting the need for country-specific national strategies, resource allocation and implementation of global management policies.

Pulver, A., et al. (2016). "A scoping review of female disadvantage in health care use among very young children of immigrant families." *Soc Sci Med* **152**: 50-60.

Preference for sons culminates in higher mortality and inadequate immunizations and health care visits for girls compared to boys in several countries. It is unknown if the negative consequences of son-preference persist among those who immigrate to Western, high-income countries. To review the literature regarding gender inequities in health care use among children of parents who migrate to Western, high-income countries, we completed a scoping literature review using Medline, Embase, PsycINFO and Scopus databases. We identified studies reporting gender-specific health care use by children aged 5 years and younger whose parents had migrated to a Western country. Two independent reviewers conducted data extraction and a quality assessment tool was applied to each included study. We retrieved 1547 titles, of which 103 were reviewed in detail and 12 met our inclusion criteria. Studies originated from the United States and Europe, using cross-sectional or registry-based designs. Five studies examined gender differences in health care use within immigrant groups, and only one study explored the female health disadvantage hypothesis. No consistent gender differences were observed for routine primary care visits however immunizations and prescriptions were elevated for boys. Greater use of acute health services, namely emergency department visits and hospitalizations, was observed for boys over girls in several studies. Studies did not formally complete gender-based analyses or assess for acculturation factors. Health care use among children in immigrant families may differ between boys and girls, but the reasons for why this is so are largely unexplored. Further gender-based research with attention paid to the diversity of immigrant populations may help health care providers identify children with unmet health care needs.

Ramraj, C., et al. (2015). "Intergenerational transmission of the healthy immigrant effect (HIE) through birth weight: A systematic review and meta-analysis." *Soc Sci Med* **146**: 29-40.

This review examines intergenerational differences in birth weight among children born to first-generation and second-generation immigrant mothers and the extent to which they vary by country of origin and receiving country. We searched MEDLINE, EMBASE, Web of Science, PubMed, and ProQuest from inception to October 2014 for articles that recorded the mean birth weight (in grams) or odds of low birth weight (LBW) of children born to immigrant mothers and one subsequent generation. Studies were analyzed descriptively and meta-analyzed using Review Manager 5.3 software. We identified 10 studies (8 retrospective cohort and 2 cross-sectional studies) including 158,843 first and second-generation immigrant women. The United States and the United Kingdom represented the receiving countries with the majority of immigrants originating from Mexico and South Asia. Six studies were meta-analyzed for mean birth weight and seven for low birth weight. Across all studies, there was found to be no statistically significant difference in mean birth weight between first and second-generation children. However, the odds of being LBW were 1.21 [95% CI, 1.15, 1.27] times greater among second-generation children. Second-generation children of Mexican descent in particular were at increased odds of LBW (OR = 1.47 [95% CI, 1.28, 1.69]). In the United States, second-generation children were at 34% higher odds of being LBW (OR = 1.34 [95% CI, 1.13, 1.58]) when compared to their first-generation counterparts. This effect was slightly smaller in the United

Kingdom (OR = 1.18 [95% CI, 1.13, 1.23]). In conclusion, immigration to a new country may differentially influence low birth weight over generations, depending on the mother's nativity and the country she immigrates to.

Rodriguez-Sales, V., et al. (2014). "[Scoping review on cancer prevention in immigrants living in Spain]." Rev Esp Salud Publica **88**(6): 735-743.

BACKGROUND: Secondary prevention of breast cancer, cervix and colon is performed by screening. Spain in the last decade has presented a major wave of migration; it is known that immigrants have more inequalities in access to health services compared to the native population. The objective is to review the published studies and identify gaps in research on cancer prevention among immigrants living in Spain. **METHODS:** We have conducted a scoping review. The sources of information were the databases Medline (Pubmed) and MEDES - medicine in Spanish (1998-2012). We used three thematic filters: concerning to Cancer, immigration and geographic. Inclusion criteria were studies of cancer prevention and health of immigrants from Latin America, Africa, Asia and Eastern Europe and developed in Spain. We developed an ad hoc data collection protocol. **RESULTS:** We included five studies of 237 reviewed. The included studies are written in English and published in journals with impact factor. Most studies have used country of origin as the immigration variable 80 % of the studies conducted cross-sectional surveys. Immigrant population had a lower participation of early detection of breast and cervical cancer. Women reported to be sex workers were more likely to be human papillomavirus positive for high risk types. **CONCLUSION:** There is little information on cancer prevention through screening programs in the immigrant population. It is important to evaluate and improve the screening circuits and registries to implement programs to better identify the most vulnerable population groups.

Ronda-Perez, E., et al. (2014). "[General characteristics of the original articles included in the scoping review on health and immigration in Spain]." Rev Esp Salud Publica **88**(6): 675-685.

BACKGROUND: The new socio-demographic reality that came about with the incorporation of the immigrant population in Spain requires an analysis of the needs and priorities generated by this situation in all areas, including research in health. The objective of this study is to determine the general characteristics of a group of articles included in a literature review on the subject, carried out within the framework of the CIBERSP Subprogram on Migration and Health. **METHODS:** Scoping Review of the literature published in the period 1998-2012. Articles in Spanish or English developed in Spain and that fulfil the definition of immigrant from the International Organization for Migration were selected. The literature search was performed in Medline and MEDES. The temporal distribution of the production and main characteristics of the articles are described through absolute and relative frequencies. **RESULTS:** The initial search identified 2.625 articles (Medline 2434; 191 Medes-MEDicina) 311 were including finally. Most epidemiological studies are cross-sectional design with primary data. 69% compared with native population. The main theme has been associated with infectious diseases (n=217, 70%). The period of maximum production is between 2004 and 2011(n=256, 82%). The country of origin is the most common way of classifying immigrants (n=220, 71%). **CONCLUSIONS:** The epidemiology of infectious prevails as the main theme of the studies performed in Spain about the health of the immigrant population. Most of the studies include native population as a comparison group.

Sohail, Q. Z., et al. (2015). "The Risk of Ischemic Heart Disease and Stroke Among Immigrant Populations: A Systematic Review." *Can J Cardiol* **31**(9): 1160-1168.

BACKGROUND: The increasing frequency of global migration to Canada and other high-income countries has highlighted the need for information on the risk of ischemic heart disease (IHD) and stroke among migrant populations. **METHODS:** Using the MEDLINE and EMBASE databases, we conducted an English-language literature review of articles published from 2000 to 2014 to study patterns in the incidence of IHD or stroke in migrant populations to high-income countries. Our search revealed 17 articles of interest. All studies stratified immigrants according to country or region of birth, except 2 from Canada and 1 from Denmark, in which all immigrant groups were analyzed together. **RESULTS:** The risk of IHD or stroke varied by country of origin, country of destination, and duration of residence. In our review we found that most migrant groups to Western Europe were at a similar or higher risk of IHD and stroke compared with the host population. Those at a higher risk included many Eastern European, Middle-Eastern, and South Asian immigrants. When duration of residence was considered, it appeared that in most migrants the risk of IHD worsened over time. In contrast, immigrants overall were at lower risk of myocardial infarction and stroke in Ontario compared with long-term residents of Canada. **CONCLUSIONS:** The risks of IHD and stroke vary widely in immigrant populations in Western Europe. Detailed studies of immigrants to Canada according to country of birth and duration of residence should be undertaken to guide future cardiovascular health promotion initiatives.

Suphanchaimat, R., et al. (2015). "Challenges in the provision of healthcare services for migrants: a systematic review through providers' lens." *BMC Health Serv Res* **15**(1): 390.

BACKGROUND: In recent years, cross-border migration has gained significant attention in high-level policy dialogues in numerous countries. While there exists some literature describing the health status of migrants, and exploring migrants' perceptions of service utilisation in receiving countries, there is still little evidence that examines the issue of health services for migrants through the lens of providers. This study therefore aims to systematically review the latest literature, which investigated perceptions and attitudes of healthcare providers in managing care for migrants, as well as examining the challenges and barriers faced in their practices. **METHODS:** A systematic review was performed by gathering evidence from three main online databases: Medline, Embase and Scopus, plus a purposive search from the World Health Organization's website and grey literature sources. The articles, published in English since 2000, were reviewed according to the following topics: (1) how healthcare providers interacted with individual migrant patients, (2) how workplace factors shaped services for migrants, and (3) how the external environment, specifically laws and professional norms influenced their practices. Key message of the articles were analysed by thematic analysis. **RESULTS:** Thirty seven articles were recruited for the final review. Key findings of the selected articles were synthesised and presented in the data extraction form. Quality of retrieved articles varied substantially. Almost all the selected articles had congruent findings regarding language and cultural challenges, and a lack of knowledge of a host country's health system amongst migrant patients. Most respondents expressed concerns over in-house constraints resulting from heavy workloads and the inadequacy of human resources. Professional norms strongly influenced the behaviours and attitudes of healthcare providers despite conflicting with laws that limited right to health services access for illegal migrants. **DISCUSSION:** The perceptions, attitudes and practices of

practitioners in the provision of healthcare services for migrants were mainly influenced by: (1) diverse cultural beliefs and language differences, (2) limited institutional capacity, in terms of time and/or resource constraints, (3) the contradiction between professional ethics and laws that limited migrants' right to health care. Nevertheless, healthcare providers addressed such problems by partially ignoring the immigrants' precarious legal status, and using numerous tactics, including seeking help from civil society groups, to support their clinical practice. CONCLUSION: It was evident that healthcare providers faced several challenges in managing care for migrants, which included not only language and cultural barriers, but also resource constraints within their workplaces, and disharmony between the law and their professional norms. Further studies, which explore health care management for migrants in countries with different health insurance models, are recommended.

Winters, M., Rechel, B., de Jong, L., et al. (2018). "A systematic review on the use of healthcare services by undocumented migrants in Europe." *BMC Health Serv Res* **18**(1): 30.

BACKGROUND: Undocumented migrants face particular challenges in accessing healthcare services in many European countries. The aim of this study was to systematically review the academic literature on the utilization of healthcare services by undocumented migrants in Europe. METHODS: The databases Embase, Medline, Global Health and Cinahl Plus were searched systematically to identify quantitative, qualitative and mixed methods studies published in 2007-2017. RESULTS: A total of 908 articles were retrieved. Deletion of duplicates left 531. After screening titles, abstracts and full texts according to pre-defined inclusion and exclusion criteria, 29 articles were included in the review. Overall, quantitative studies showed an underutilization of different types of healthcare services by undocumented migrants. Qualitative studies reported that, even when care was received, it was often inadequate or insufficient, and that many undocumented migrants were unfamiliar with their entitlements and faced barriers in utilizing healthcare services. CONCLUSIONS: Although it is difficult to generalize findings from the included studies due to methodological differences, they provide further evidence that

Woodward, A., et al. (2014). "Health and access to care for undocumented migrants living in the European Union: a scoping review." *Health Policy Plan* **29**(7): 818-830.

BACKGROUND: Literature on health and access to care of undocumented migrants in the European Union (EU) is limited and heterogeneous in focus and quality. Authors conducted a scoping review to identify the extent, nature and distribution of existing primary research (1990-2012), thus clarifying what is known, key gaps, and potential next steps. METHODS: Authors used Arksey and O'Malley's six-stage scoping framework, with Levac, Colquhoun and O'Brien's revisions, to review identified sources. Findings were summarized thematically: (i) physical, mental and social health issues, (ii) access and barriers to care, (iii) vulnerable groups and (iv) policy and rights. RESULTS: Fifty-four sources were included of 598 identified, with 93% (50/54) published during 2005-2012. EU member states from Eastern Europe were under-represented, particularly in single-country studies. Most study designs (52%) were qualitative. Sampling descriptions were generally poor, and sampling purposeful, with only four studies using any randomization. Demographic descriptions were far from uniform and only two studies focused on undocumented children and youth. Most (80%) included findings on health-care access, with obstacles reported at primary, secondary and tertiary levels. Major access barriers included fear,

lack of awareness of rights, socioeconomics. Mental disorders appeared widespread, while obstetric needs and injuries were key reasons for seeking care. Pregnant women, children and detainees appeared most vulnerable. While EU policy supports health-care access for undocumented migrants, practices remain haphazard, with studies reporting differing interpretation and implementation of rights at regional, institutional and individual levels. CONCLUSIONS: This scoping review is an initial attempt to describe available primary evidence on health and access to care for undocumented migrants in the European Union. It underlines the need for more and better-quality research, increased co-operation between gatekeepers, providers, researchers and policy makers, and reduced ambiguities in health-care rights and obligations for undocumented migrants