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Barriers, Levers, and Contrasts in Complex Care Pathways: The Case of Cancer amongst People Living with a Severe Mental Illness

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The excess mortality of people living with a mental illness has been recognised as a public health issue for a decade in France. However, concrete initiatives to address it are still limited and require a better understanding of the complex somatic care pathways of this population, who presents multiple vulnerabilities. Leveraging an analysis of cancer care pathways – based on a dual qualitative and quantitative approach –, this research highlights disparities for people living with a severe mental illness, relating in particular to the receipt of recommended diagnostic tests, timeliness between diagnosis and treatments, post-treatment follow-up, and risk of death, while underlining the heterogeneity of the situations experienced. The differences identified in the care pathways could be linked with adaptations to the specific circumstances of individuals and their choices, but also with preconceptions about the difficulties associated with mental illness and inadequate care organization, which could be improved by dedicated public policies.

ecent research has objectified the excess mortality of persons living with a severe mental illness (SMI) in the French national context. Their life expectancy at the age of fifteen is reduced on average by thirteen years for women and sixteen years for men, with a fourfold rate of premature death compared with the general population. Contrary to preconceptions, this premature mortality is not only attributable to a higher risk of suicide but, above all, to causes of death that are similar to the most frequent causes of mortality in the French population (especially cancers and cardiovascular disorders), which, amongst individuals

with SMI, are linked with higher mortality rates (Coldefy and Gandré, 2018).

Despite having been highlighted for many years in Anglo-Saxon settings, the excess mortality of people with SMI—and the need to improve their somatic care pathways— has only been considered a public health issue over the last decade in France, mentioned for the first time in the 2011-2015 National Mental Health and Psychiatry Roadmap. However, there are still few concrete initiatives to tackle this excess mortality. The issue of the physical health of people with SMI has long been neglected and seen as less of

a priority than their mental health: a deteriorated health status is still often attributed to risky individual behaviours (sedentary lifestyle, unbalanced diet, substance abuse, etc.) or directly attributed to mental illness (distorted body perception, social anxiety, disorganisation, etc.), which would prevent affected individuals from identifying warning symptoms, from resorting to care, or from complying with their treatment.

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However, studies into the mechanisms involved in this excess mortality underline the existence of health inequalities that arise from a combination of factors, which are not solely linked to individual behaviours or the direct consequences of mental illness (Gandré et al., 2022). Initial research conducted on the receipt of general physical healthcare in France has highlighted that people with SMI have less access to preventive and specialist care, and experience more avoidable hospitalisations compared with individuals who do not suffer from mental disorder (Gandré and Coldefy, 2020). This suggests that the healthcare system fails to address their specific needs. Although people with SMI are particularly exposed to precarity, the economic and social factors - as measurable in the available data - do not suffice in themselves to explain the care differences they face (Gandré and Coldefy, 2020). In addition, stigmatising behaviours amongst somatic or mental healthcare professionals have been reported in the literature (Le Glaz, 2021; Prouteau and Valery, 2021), and may delay seeking care. Nevertheless, questions persist about encountered barriers and available resources throughout the somatic care pathways of people with SMI, and studies focusing on care for specific physical health disorders remain necessary to gain a greater understanding of these issues.

In this context, the Canopée research project (see Context) focused on the example of cancer, which is one of the most common causes of death amongst people with SMI, and for which the mortality rate is twice that of the general population (Coldefy and Gandré, 2018). Leveraging an in-depth anal-

ysis of cancer care pathways, based on a dual qualitative and quantitative approach, this research aims to identify potential disparities faced by individuals with SMI throughout their physical healthcare pathways, the stages which are particularly affected, and what facilitates or impedes these care pathways.

An accumulation of vulnerabilities

While mental disorders constitute in themselves a factor of vulnerability, people with SMI also face a combination of difficulties which are associated with the most complex care pathways identified in the qualitative interviews. On a national scale, in the quantitative data, 97,760 women received treatment for an incident breast cancer in 2013 or 2014. Of these, 1,581 had a pre-existing SMI. They were characterised by a more frequent inclusion in the financial schemes aimed at improving access to care for vulnerable population groups (state-subsidized complementary health insurance (Couverture maladie universelle complémentaire, CMU C) or allowances to help purchase a complementary health insurance (Aide à l'acquisition d'une complémentaire santé, ACS): for 16% of them versus 6%. In addition, women with SMI more frequently lived in deprived areas. These indicators, used in the adjustment to identify socio-economic vulnerability, did not include a measure of social isolation (not available in the data), which appeared as a major factor in care pathway disparities in the qualitative interviews - as presented hereinafter. Women who were followed-up for a preexisting SMI also had clinical vulnerabilities: they more often had a metastatic breast cancer at presentation, and had more somatic comorbidities at the beginning of their cancer care pathway.

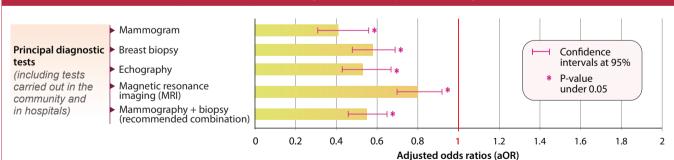
Lower odds to undergo recommended diagnostic tests and less timeliness between diagnosis and treatment

Hence, differences in cancer care were observable from the diagnostic phase onwards. In the quantitative approach, women with breast cancer and pre-existing SMI who were matched (n=1,346) with three controls with similar clinical and socio-demographic characteristics were systematically less likely to undergo all main diagnostic tests (mammogram, breast biopsy, echography, and MRI). Overall, they received a lower number of diagnostic tests and were less likely to receive the most recommended combination of tests (mammogram and breast biopsy) than their controls (see Graph 1) - despite their financial coverage by the French statutory health insurance.

In the qualitative interviews, late or fortuitous diagnoses appeared to sometimes be attributable to complaints which were not very specific (such as tiredness, headaches or stomach ache, weight gain or loss) and did not lead to dedicated consultations or examinations. This phenomenon is identified in the literature under the concept of "diagnostic overshadowing" (Gandré et al., 2022): somatic complaints are seen as symptoms of the mental illness or as a consequence of its treatment, without always leading to complementary examinations (blood analysis, periodic measurement of the waist cir-

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Association between the presence of a pre-existing SMI and receipt of main diagnostic tests for breast cancer+



- + After matching and additional adjustment for other clinical characteristics (synthetic index of somatic comorbidities) and socio-economic characteristics (status with regard to CMU-C and ACS schemes, and FDep quintile at the place of residence when they were significant in the univariate analyses.
- * Statistically significant (P-value < 0.05).

Scope: Women with a pre-existing SMI and treated for breast cancer (of a non-metastatic invasive type with or without lymph node involvement) incident in 2013 or 2014, and who were matched (n=1,346) with three female controls who had no pre-existing SMI, and these controls.

Source: The National Health Data System (Système National des Données de Sante, SNDS).

Reading: Women with a pre-existing SMI treated for breast cancer had lower odds to receive the main diagnostic tests than their controls matched on age, local area (département) of residence, type of breast cancer at presentation, and the year of its incidence, and after taking into account the adjustment variables.

nd Download the data

cumference, pain treatments, etc.). Hence, a father described the situation of his son who spoke about his great fatigue. The latter had been attributed to his mental illness or to the side effects of its treatment, which delayed a blood test that would have provided an early diagnosis of leukaemia. In addition, people with SMI also indicated that the psychotropic drugs they were given had an effect on their perception of pain, which was less clearly expressed, and could lead to healthcare professionals not being alerted.

Furthermore, based on indicators of the quality of cancer care pathways developed in France (see Sources and Method Inset, p. 6), the quantitative results show that the differences between the women with pre-existing SMI and their controls were particularly significant for the process indicators relating to diagnosis and the initiation of treatments. Hence, they were less likely to receive their first cancer treatment in an adequate timeframe after the recommended diagnosis tests, and to have a biopsy before the first treatment, even after taking into account the adjustment factors (see Sources and Method Inset, p. 6) [see Table, p. 4]. This suggests that care pathways after the diagnosis phase also need to be precisely analysed.

Different therapeutic strategies: increased use of invasive treatments and less intensive treatment combinations

In terms of treatments, the example of breast cancer, used in the quantitative approach, points to the use of more invasive treatments for women with SMI as they were more likely to undergo mastectomy and less likely to benefit from conservative surgery (lumpectomy) than their controls, even though they had the same type of breast cancer at presentation (see Graph 2).

Women with SMI were also given less intensive treatments as they were more likely to have received operative treatment only and less likely to have received a combination of operative and radiotherapy and chemotherapy (including hormone therapy) treatments (see Graph 2), while such combinations have the potential to increase the odds of favourable outcomes and to reduce the odds of cancer recurrence.

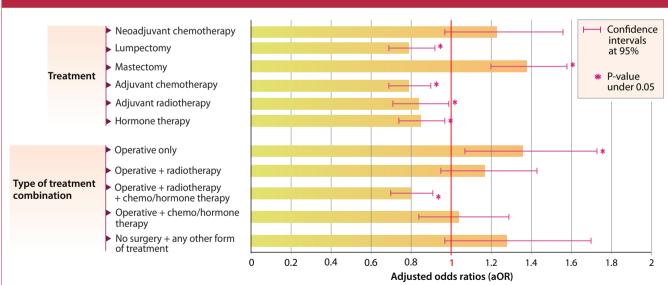
The less intensive treatments for cancer amongst women with SMI may, however, be partly attributable to clinical factors which

were not available in the data used, such as the cancer grade, its histological sub-type, or the presence of some biomarkers, which may play an important role in the decision to use – or not – certain treatments in a context in which knowledge is constantly evolving. Furthermore, with regard to the indicators of the quality of breast cancer care pathways, while those relating to the treatments given were further away from the ideal target



This study is part of the research project "Cancers amongst people treated for a severe mental illness: what difficulties arise in the care pathways? (Canopée)". It is coordinated by IRDES, conducted in collaboration with the French school of public health (École des hautes études en santé publique, EHESP), the University Hospital Group (GHU) Paris Psychiatry and Neurosciences and the universities of Nantes and Nanterre. It was funded in the frame of the 2019 call for projects: "Projets libres de recherche sur le cancer en sciences humaines et sociales, épidémiologie et santé publique" [Open research projects on cancer in the humanities and social sciences, epidemiology and public health fields] of the French National Cancer Institute (INCA). It has already led to some publications (Gandré et al., 2022; Seppänen et al., 2023).





- + After matching and additional adjustment for other clinical characteristics (synthetic index of somatic comorbidities), socio-economic characteristics (status with regard to the CMU-C) and ACS schemes, and FDep quintile at the place of residence), and type of hospital where most of the breast cancer treatment was carried out when they were significant in the univariate analyses.
- * Statistically significant (P-value under 0.05).

Scope: Women with a pre-existing SMI treated for breast cancer (of a non-metastatic invasive type with or without lymph node involvement) incident in 2013 or 2014, matched (n=1,346) with three female controls who had no pre-existing SMI, and these controls.

Source: The National Health Data System (Système National des Données de Sante, SNDS).

Reading: On the whole, women with a pre-existing SMI treated for breast cancer had less access to conservative surgery and less intensive treatments than their controls matched on age, local area (département) of residence, type of breast cancer at presentation and the year of its incidence, and after taking into account the adjustment variables.

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Indicators of the quality of breast cancer care pathways for women with or without SMI

Indicators of the quality of care pathways	With SMI % (n/d)	Without SMI % (n/d)	Target threshold∞	Alert threshold∞	Multivariable analysis + aOR (with vs. without SMI) [95% CI]				
Indicators of diagnosis (process)									
Proportion of women undergoing their first treatment (surgery, chemotherapy or hormone therapy) within six weeks post-mammogram #	39.1 (422/1,079)	46.5 (1,659/3,565)	≥ 90%	< 80%	0.75* [0.65-0.87]				
Proportion of women undergoing biopsy within 2 weeks post- mammogram #	<mark>62.7</mark> (677/1,079)	66.1 (2,355/3,565)	≥ 90%	< 80%	0.91 [0.79-1.06]				
Proportion of women undergoing their first treatment (surgery, chemotherapy or hormone therapy) within four weeks post-biopsy #	34.8 (376/1,079)	41.5 (1,479/3,565)	≥ 90%	< 80%	0.78* [0.67-0.91]				
Proportion of women undergoing biopsy prior to first treatment (surgery, chemotherapy or hormone therapy) ##	87.8 (1,080/1,230)	92.1 (3,580/3,886)	> 98%	≤ 95%	0.65* [0.52-0.80]				
Indicators of diagnosis and treatment (process)									
Proportion of women without lymph node involvement undergoing sentinel lymph node excision without axillary dissection	24.3 (263/1,083)	26.2 (849/3,245)	> 95%	< 90%	0.82* [0.67-0.99]				
Indicators of treatment (process)									
Proportion of women undergoing radiotherapy after breast- conserving surgery	91.8 (780/850)	94.2 (2,676/2,840)	> 95%	< 90%	0.79 [0.58-1.09]				
Proportion of women undergoing adjuvant radiotherapy within 12 weeks post-surgery	82.1 (536/653)	85.0 (1,659/1,952)	> 95%	< 90%	0.88 [0.69-1.11]				
Proportion of women undergoing adjuvant chemotherapy within 6 weeks post-surgery	47.3 (185/391)	50.6 (703/1,390)	> 90%	< 85%	0.86 [0.69-1.08]				
Proportion of women undergoing radiotherapy within 6 weeks post-adjuvant chemotherapy	74.9 (250/334)	77.5 (907/1,171)	> 95%	< 90%	0.90 [0.68-1.20]				
Indicators of treatment (outcomes)									
Proportion of women not treated with neoadjuvant chemotherapy undergoing breast reintervention	17.0 (149/875)	14.2 (405/2 848)	< 10%	> 20%	1.22 [0.99-1.49]				
Indicators of follow-up (process)									
Proportion of women who have had their first follow-up mammogram	52.5 (604/1,151)	58.5 (2,155/3,682)	> 98%	< 95%	0.81* [0.71-0.93]				

⁺ After matching and additional adjustment for other clinical characteristics (synthetic index of somatic comorbidities), socio-economic characteristics (status with regard to CMU-C and ACS schemes, FDep quintile at the place of residence), and place of treatment (type of hospital where most of the breast cancer treatment was carried out, except for the diagnostic indicators) when they were significant in the univariate analyses.

n: numerator; d: denominator.

Scope: Women treated for a pre-existing SMI and breast cancer (of a non-metastatic invasive type with or without lymph node involvement) incident in 2013 or 2014, matched (n=1,346) with three female controls who had no pre-existing SMI, and these controls. Certain indicators relate to a specific sub-population in this scope, specified in the definition of the indicator.

Source: The National Health Data System (Système National des Données de Santé, SNDS).

Reading: The consensual target thresholds were not met for any of the indicators of the quality of breast cancer care pathways amongst women with a pre-existing SMI (the percentages in red underline that the alert threshold was met and those in orange exceeded the alert threshold but did not meet the target threshold). Nevertheless, this was also observed for their controls matched on age, local area (département) of residence, type of breast cancer at presentation, and year of incidence. After taking into account the adjustment variables, a lesser average quality of treatment was observed amongst women with pre-existing SMI for all the indicators of quality of care, but statistically significant differences with their controls were only observed for indicators associated with the diagnosis and post-treatment follow-up.

[#] Calculated for women who underwent a mammogram and a biopsy.

^{##} Calculated for women who underwent a mammogram.

^{*} P-value < 0.05.

 $[\]infty$ In the frame of the national definition of indicators of the quality of breast cancer care pathways, a target to attain and a level of alert were defined by the experts (Houzard et al., 2022).

thresholds for women with pre-existing SMI (see Table), these thresholds were not attained for the controls or in the general population either, including in the more recent data published by the French National Cancer Institute (INCA) [Houzard et al., 2022]. Lastly, in the quantitative analyses, the most significant differences with the controls were found for the indicators relating to the diagnostic phase, mentioned previously, and the post-treatment follow-up indicator, rather than for the treatment indicators themselves, for which the differences were on the whole not statistically significant (see Table).

There may be a correlation between the use of more invasive treatments and less intensive treatment combinations. Radiotherapy is an obligatory component of treatment when undergoing conservative surgery, but is not always recommended after a mastectomy, which occurs more frequently amongst women with SMI. However, this raises questions about care equity in relation to the more invasive nature of this operation and regarding how doctors determine priorities when vulnerable women require treatment. Healthcare professionals may underestimate the consequences of a mastectomy for this population as well as the importance of preserving an attribute associated with femininity, in a balance between "benefit and risk", in which the crucial issue is considered in the light of the perceived difficulties associated with other treatment methods. Hence, the choice of different therapeutic strategies may be associated with certain concerns expressed by doctors during the qualitative interviews relating to the ability of people with SMI to cope with multiple medical consultations or unpleasant treatments or examinations. Other research has shown that concerns relating to treatment adherence in specific populations may prompt healthcare professionals to avoid providing chemotherapy, hormone therapy, or radiotherapy as a result of the planning required for these treatments (Loretti, 2021). Concerns were also expressed about the side effects of cancer treatments for persons with SMI - whether they were isolated at home or a hospitalisation was considered complicated, for fear of patient disruptive behaviours or of aggravating the mental illness (see Inset 1, p. 6).

An increased risk of specific mortality associated with these suboptimal care pathways

The suboptimal breast cancer care pathways observed in the quantitative analyses amongst women with pre-existing SMI (less intensive diagnostic and therapeutic approaches, less

timeliness between diagnosis and treatment, use of more invasive forms of surgery, and less post-treatment follow-up) was associated with an excess mortality from cancer in comparison with their controls; when taking into account their increased competitive risk of dying from other causes – as a result of the over-incidence of the main chronic physical health disorders in this population (Gandré and Coldefy, 2020) [see Graph 3]. This suggests that suboptimal cancer care pathways do play a role in the worst cancer outcomes observed for people with SMI.

In addition, for care pathways resulting in a death, terminal cancer cases that received little support amongst people with SMI were reported during the qualitative interviews, as the healthcare system was not always able to provide a solution for individuals who

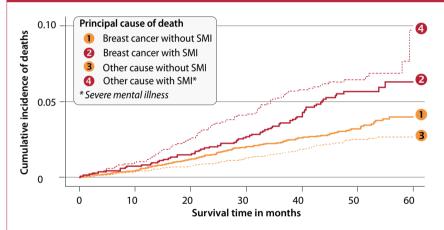
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wished to die at home but who did not have the required social support for the implementation of home hospitalisation. Hence, disparities in cancer care pathways were found up until their final stages.

Some persisting stigmatisation in the care pathways

The primary response of a certain number of oncology professionals during the qualitative interviews was to say that they treated few people with SMI. This may indicate that they did not identify them and therefore did not treat them differently from other patients, but the results are actually more complex. While oncology professionals sometimes only described one or two situations, they did not always relate to mental disorders, includ-

Mortality per cause of death amongst women treated for breast cancer with or without a pre-existing SMI



	Multivariable analyses+		Sensitivity analyses+					
			(1)		(2)			
	aHR (with vs. without SMI)	95% CI	aHR (with vs. without SMI)	95% CI	aHR (with vs. without SMI)	95% CI		
	1.39	1.03-1.87	1.46	1.05-1.94	1.50	1.14-1.99		

- + Adjusted for the synthetic index of somatic comorbidities and the type of hospital where most of the breast cancer treatment was carried out which were statistically significant in the univariate analyses.

 (1) by taking into account all the deaths with a principal cause that corresponded to a cancer (whatever its type) as the primary event.
- (2) by also taking into account deaths in which breast cancer was described as an associated cause amongst the primary event.

Scope: Women with a pre-existing SMI and treated for breast cancer (of a non-metastatic invasive type with or without lymph node involvement) incident in 2013 or 2014, matched (n=1,346) with three female controls who had no pre-existing SMI, and these controls. 424 deaths occurred in the follow-up period: 100 amongst women with SMI (13% of them) and 244 amongst their controls (6% of them). For 90% of these deaths, data-linkage with the causes of death was possible. The median follow-up period for the survivors and the women with censored data (data observed until 2017) was four years. The median survival time for women who died from breast cancer or another principal cause was two years, both for women with SMI and their controls.

Source: The National Health Data System (Système National des Données de Santé, SNDS).

Reading: In the competitive risks analysis, the incidence of specific mortality from breast cancer was higher for women with a pre-existing SMI than for their controls –throughout the follow-up period, as was the incidence of death from other causes.

*Download the data

ing, occasionally, situations of dementia, intellectual disability, or depression in reaction to cancer, demonstrating some confusion amongst physical healthcare professionals regarding what disorders are included in the SMI group. However, when the oncology teams identified that a patient had SMI, they tended to see them as a source of difficulty (relating to treatment understanding and compliance, and even opposition to certain kinds of care), involving an increased workload and sometimes a sense of despondency, even rejection - following missed consultations, for example. One oncologist stated: "When dealing with schizophrenic patients, every invasive procedure is a problem and it is far harder to treat them". On a number of occasions during the qualitative interviews, healthcare professionals tended to generalise the difficulties associated with mental illness: frequent absence from consultations, behaviours seen as disruptive in the care centres, or difficulty in performing certain procedures or examinations. When this did happen, these "deviations" in behaviour compared with that expected of a "good patient" tended to be judged from a moral perspective rather than leading to an adaption of treatment —in a context in which healthcare professionals complained about a lack of time and deteriorating working conditions.

In reality, upon analysis, the reported situations appeared to be contrasted; some individuals had a mental disorder that had become relatively stabilised, and were sometimes very experienced in organising their care (planning consultations, managing medical treatments and their side effects, and communicating with the healthcare professionals), as a result of their personal experience of mental healthcare. Such individuals then had rela-

Source and Method

Study design

This research is based on a mixed-method design with an iterative process. The analysis of quantitative data relating to healthcare use on a large scale was carried out with the aim of objectifying the existence or inexistence of healthcare inequalities in cancer care pathways for the SMI group. It was complemented by a qualitative socio-anthropological approach based on semi-directed interviews to characterise the difficulties faced by people with SMI in these care pathways, and in particular to understand when and how potential inequalities the diversity of actors are established, by taking into account the diversity of the actors, their interactions, and the different spaces that play a role in producing these inequalities (Loretti, 2021).

The quantitative approach

The quantitative phase of the research focused on persons with a severe and persistent mental illness, preexisting the cancer diagnosis: psychotic disorders and manic and bipolar disorders. It was based on the use of data drawn from the National Health Data System (Système National des Données de Santé, SNDS), which includes healthcare billed to the statutory health insurance fund (Caisse Nationale de l'Assurance Maladie, CNAM), along with the dates and causes of death. This data allows selecting on a national scale persons treated for cancer and previously treated for a SMI - identified via the long-term illness scheme (Affections de Longue Durée, ALD), the reasons for hospitalisation, and the recurrent prescription of psychotropic drugs in the frame of Healthcare Expenditures and Conditions Mapping (CNAM, 2018) - and reconstructing their care pathways. In order to study a homogenous population group in terms of care guidelines, the example of breast cancer was selected -as it is the most prevalent cancer and the one responsible for the greatest number of deaths amongst French women. The women who had the most frequent type of breast cancer (non-metastatic invasive type with or without lymph node involvement), incident in 2013 or 2014, along with a pre-existing SMI (case), were matched with three female controls, who did not have a SMI, but were the same age, lived in the same local area (département), and had the same subtype of breast cancer at presentation and incident in the same year. Receipt of the various diagnostic tests and treatments and their combinations, as well as the conformity of the care pathways with the Healthcare Quality and Safety Indicators (Indicateurs de qualité et de sécurité des soins, IQSS) for breast cancer - developed by the French National Cancer Institute (INCA) [Houzard et al., 2022] - were then compared between cases and controls, including with additional clinical characteristics (synthetic index of somatic comorbidities (MRMI) [CNAM, 2018], socio-economic characteristics (inclusion or non-inclusion in the CMU-C and ACS schemes for people with low incomes and quintile of a community-level deprivation index (FDep) calculated at the residential zip code), and characteristics of the hospital were care was received (type of hospital where most of the breast cancer treatment was carried out: non-profit comprehensive cancer center (Centres de Lutte Contre le Cancer, CLCC), public teaching or general hospital, private non-profit hospital, or private-forprofit hospital). Lastly, an analysis was conducted into the mortality of breast cancer between cases and controls up to 2017, by taking into account the competitive risk of death linked to other causes in the study population (Seppänen et al., 2023). The results of the various multivariable analyses are presented in terms of adjusted odds ratios (aOR) or adjusted hazards ratios (aHR).

The qualitative approach

The qualitative approach combined in a comprehensive way the perspectives of persons treated for SMI and cancer (without limiting this to breast cancer), their relatives, and healthcare professionals on different stages of the care pathways, mainly in Paris and Rennes (France), in order to identify the difficulties encountered in their care pathways and the resources used or potentially available. The interviewed persons were contacted via CLCC centres, hospitals that specialise in mental healthcare, associations of people with SMI or of their relatives, mutual help groups, and by word of mouth. 62 interviews were conducted with 42 healthcare professionals (oncologists, psychiatrists, nurses and auxiliary nurses, advanced practice nurses with a specialization in psychiatry, oncology, or chronic disorder management, and GPs working in psychiatric or oncology departments, sometimes specifically to coordinate care; 14 persons with SMI and cancer (10 women and 4 men between the ages of 41 and 72 years, most of whom had bipolar disorders, but some without a precise diagnosis of their mental illness, or who had a number of diagnoses throughout their life, for example schizophrenia and bipolar disorders, and with various types of cancer), and 6 informal caregivers (partners, relatives, sister). The aim was not to collect different viewpoints about a specific case, but rather to collect information about and study a diverse range of care situations. Hence, this multifocal approach made it possible to analyse the situations of persons with contrasting interactions with healthcare providers (having or not having a GP, having or not having the recommended examinations, followed-up or not by a psychiatric team - public or self-employed - at the time when the cancer was diagnosed), with varied social characteristics (education level, employment situation, social integration, organisation of the assistance around them, etc.). Focus groups were held beforehand with four peer helpers, three of whom also suffered from a mental illness and cancer, and one of whom had a chronic physical illness, in order to discuss their experiences and the research hypotheses.

A decision taken not to proceed with curative treatment

A case was described by an oncologist concerning Mr B., a man who received care from psychiatric staff at home and who was diagnosed with bladder cancer. Aside from his schizophrenia, which was relatively "stabilised", Mr B. had significant cognitive disorders. The doctor reported that despite her repeated explanations, he neither grasped nor retained the information about his cancer and its treatment. She believed that his cancer was "curable", but also saw it as problematic to start treatments involving chemotherapy with potentially serious side effects: on the one hand, because he could not give his consent, as he did not understand them and was not aware of the consequences, and, on the other, due to his social isolation. The psychiatric staff was unable to provide sufficient support to manage the side effects of the anti-cancer treatment in the person's home, and hospitalisation in an oncology department raised concern amongst healthcare professionals about the potential aggravation of his schizophrenia. Although the oncologist had communicated with the psychiatric home care team, she did not manage to talk directly to the patient's psychiatrist. The curative treatment was not implemented: only palliative treatments were begun, which appears as not unusual for the SMI group in France (Fond et al., 2021). This situation shows the effects of an accumulation of vulnerabilities, combined with mental illness, but which cannot be boiled down to them, on the decision to implement a curative cancer treatment, as well as barriers to the coordination of the various care teams.

tively "standard" cancer care pathways. On the contrary, other persons with SMI had an accumulation of vulnerabilities (a more acute mental disorder, precarity, isolation, etc) and often encountered more barriers in their care pathways, which then needed to be adapted. For example, a healthcare professional explained that there had been a delay in administering treatment for a patient who had been left telephone messages, but who did not know how to operate the answering machine; this is a good example of the issue of technological literacy, which is not specific

to mental illness but which may be associated

with it.

However, the different therapeutic decisions made for persons with SMI were not always an indication of stigmatisation. In some cases, they were taken either at the explicit request of the persons (including refusals of proposed care, which the healthcare professionals or relatives could then continue to discuss, to ensure that there was an understanding of the situation, or that the decision was firm, or to find alternative solutions: see Inset 2). They could also result of assessments of situations that the healthcare professionals described as relating to a balance between such assessments "benefit and risk" and ethical decisions. But such assessments may include projections and preconceptions about what the person is capable of understanding or coping with, or include in the person's situation the absence of complementary public or private resources to help at a specific time of need (to support the person during their consultations, follow a complex schedule, help at home, etc.), and thereby compound a situation of inequality (Loretti, 2021).

Nevertheless, some people with SMI are sometimes seen as "model patients" or are particularly supported by their care teams in both oncology and psychiatry (see an example in Inset 2). In contrast with a less intensive therapeutic strategy, a situation was mentioned by several healthcare professionals in the case of a patient who had no mental illness but an intellectual disability; there was some concern regarding the inverse ethical risk of therapeutic obstinacy out of a "fear of stigmatising a person with a disability", as stated by a doctor working in a supportive care department, in particular in relation to his mother who requested their care - at a point when the person could no longer express their wishes.

But despite the above-mentioned situation, there appears to be a greater risk of subtle and persistent stigmatisation, such as not paying attention to a complaint that results 12)

One person who was actively involved in her own care, with significant support from a psychiatric team

The cancer care pathway of Ms M., who has since passed away from pancreatic cancer and who suffered from an "unlabeled psychosis", was described by her sister. Concerned about her health, Ms. M. had consulted her GP as soon as her symptoms appeared, which rapidly led to a diagnosis and treatment. As involved as her sister was, their conflictual relationship meant that the latter could only provide occasional assistance. The psychiatric team treating Ms M. gradually became more involved by arranging her hospitalisation – not so much for her mental illness, but at one point when she could not stay at home as she was very weak – and accompanying her during her oncology consultations. After a (palliative) surgical intervention, Ms M. refused to follow a curative treatment programme: she was well informed about her cancer, the treatments, and her prognosis, and had spoken about this on a number of occasions with the oncology and psychiatric teams, and with her sister.

in a delayed diagnosis, less optimal therapeutic choices due to perceptions of the mental disorder that are sometimes not reassessed in the person's specific situation, or through an absence of suitable assistance or coordination between the different health professionals.

An unexpected and paradoxical de-stigmatisation during the cancer care pathways

Alongside these persistent forms of stigmatisation, and quite unexpectedly, some people with SMI reported experiencing de-stigmatisation during their cancer care pathways on a number of levels. Firstly, from a social perspective, the individuals who observed this phenomenon expressed the feeling that cancer is perceived, unlike mental illness, as a visible disease, attested by biological results and imaging. The person's status as someone with an illness is therefore more legitimate: the person is no longer seen as "guilty" or responsible for their illness, which even led one of the patients to say that "cancer is a lesser evil than SMI". They also felt that there was an absence of stigmatisation by the healthcare professionals, who were perceived as "well-meaning" in oncology departments, because the latter did not solely consider them through their mental illness. The oncological facilities were described as more dignified treatment centres (a woman referred to them as "cocoons"), in contrast with their perception of psychiatric units, where some of them had faced deteriorating hospital environments and also what they saw as a form of contempt - even though some of them identified their experience in psychiatry as an important resource for monitoring their mental illness. This result is even more paradoxical as it contrasts with the way in which cancer has been described as a stigmatising and "shameful" disease, associated with guilt and a source of social or familial isolation in other studies (such as the CORSAC study on the coordination of ambulatory care during the initial therapeutic phase of cancer, https://annevega. wordpress.com/current-projects/corsac/). However, the de-stigmatisation associated with a physical health disorder such as cancer is also found in other situations often associated with stigma, such as those linked to a primary illness (for example, AIDS) or social marginalization (e.g., being homeless) [Benoist, 2016]. In this case, dealing with cancer enables the person to find a new social and more legitimate role, in contrast with prior experiences of stigmatisation associated with their mental illness.

A key role of the entourage or of having healthcare professionals on hand to provide support and coordinate care pathways

A major factor associated with differences in care pathways that emerged in the qualitative interviews was the issue of the resources available to provide support for the persons and coordinate their treatment. The presence of relatives and, failing that, healthcare professionals who can if necessary organise the consultations, call the patients, or accompany them during the consultations, is crucial. This is evident for all the care pathways of persons suffering from serious diseases, but is even more important for persons with SMI, who may experience difficulties in remembering their consultations, navigating a complex treatment programme, moving around or dealing with stressful environments. These persons have a greater risk of being isolated or being in precarious situations, and, if they have no relatives, depend on the good will or availability of the healthcare professionals who are treating them. This is also a factor that comes into play when a second opinion is requested or treatment is administered by a healthcare team that is further away from the person's place of residence. Furthermore, in many situations, there are barriers hindering communication and coordination between oncology and psychiatry professionals, which are often wished by some of the healthcare professionals (in either of the specialisations), but who encounter a refusal or lack of response from others. While still marginal, dedicated teams are being established, which may facilitate care pathways at certain key points of the intersection between physical healthcare and psychiatric care: somatic care teams in psychiatry who facilitate access to a GP, systematic screenings, specialists, and eventually help with the communication between psychiatric and oncology healthcare professionals; or psychiatrists who intervene in cancerology facilities, who can help with the understanding of a situation or find solutions for a difficulty, or advanced practice nurses whose mission is to coordinate complex situations. However, these dedicated resources are far from available in every facility, nor are patients and healthcare professionals always aware of their existence.

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The results of this research have highlighted the inequalities present in the cancer care pathways of people with SMI, which concern in particular their access to recommended diagnostic tests, timeliness between diagnosis and treatment, the invasive nature and intensiveness of the treatments, post-treatment follow-up, and risks of specific mortality. These inequalities are associated with complex factors that a combined quantitative and qualitative approach helped to better understand. Indeed, the quantitative results objectified the differences in cancer care pathways between people with or without SMI, while the qualitative findings highlighted some explanatory factors and underlined the heterogeneity of the situations experienced by persons living with such disorders; suggesting that it is necessary to avoid any temptation to unduly homogenise this group. Thus, the differences identified in cancer care pathways may be linked with the initial delays in diagnosis, the adaptations to the specific circumstances of individuals, and their choices, but also to preconceptions about the difficulties associated with mental illness, and inadequate care organization.

These findings already point to potential solutions, by supporting the general follow-up of persons with SMI in primary care (avoiding a focus on the mental illness, with systematic screenings carried out) or specialised care. They could be based on recent developments that are underway in France – for example, the emergence of regional

mental health projects (Projets territoriaux de santé mentale, PTSM) that aim to bring together all the actors involved in the care, including physical healthcare of people living with a mental illness on the local level. They could also draw inspiration from foreign examples - based on the concept of "reverse integrated care", which aims to provide people with SMI with access to physical healthcare coordinated in mental health settings, and its application in the U.S. model of the Medicaid Behavioral Health Homes, which focuses on the most deprived individuals (Kennedy-Hendricks et al., 2021). Hence, it is necessary to create care pathways that are accessible and tailored to each patient, including people who have an accumulation of vulnerabilities or who have characteristics that are not properly taken into account in the current organization of care.

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