**From cancer prevention to death: the case for transdiagnostic integrated services for physical health in people with mental disorders, and research agenda**

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In this issue of the Journal, Thomsen et al. present a well-designed cohort study which included all residents in Denmark aged 50 to 74 years old who were invited to a biennial fecal immunochemical testing (FIT) between 2014 and 2018(1). The authors compared rates of participation for FIT, positive FIT screening, adherence, and completion of indicated follow-up colonoscopy among people with and without mental disorders. Men and women with mild/moderate mental disorders had 4.4% (95%CI=4.1-4.7) and 3.8% (95%CI=3.6-4.1) lower respective participation rates to FIT, with larger disparities among those with severe mental disorders, namely 13.8% (95%CI=13.3-14.3) and 15.4% (95%CI=14.9-15.8). The difference in participation for FIT was as high as 19.5% and 19.2% in men and women with schizophrenia spectrum disorders. Moreover, people with mental disorders not only received less FIT screening, but they also had more frequently positive FIT results. Among those with positive results warranting colonoscopy, disparities again separated the general population from those with mental disorders, with the latter undergoing and completing indicated colonoscopy less frequently.

A previous meta-analysis of 47 studies showed that people with schizophrenia were less likely to recieve screening for breast and cervical cancer, with no significant difference for colorectal cancer screening(2). This cohort study from Thomsen et al. extended the findings of that meta-analysis, adding data from a large and representative population, using a solid methodological approach, and advancing the knowledge on gaps in access to care and in physical health throughout the entire care pathway through colorectal cancer screening.

Future studies should aim to replicate this comprehensive focus on the entire trajectory through cancer screening, which is clinically relevant for several reasons. The pattern of unfavorable screening results coupled with the poor adherence to subsequent follow-up procedures might cause a delay in preventive interventions and/or diagnosis of cancer. The hypothesis of delayed or missed diagnosis of colorectal cancer in persons with mental disorders is supported by a meta-analysis that showed a lower incidence of colorectal cancer(3), despite evidence of an increased mortality for colorectal cancer(4). Indeed, a meta-analysis showed premature mortality for colorectal cancer in schizophrenia (RR=1.48, 95%CI=1.01-2.16), which may be related to diagnosis at later stage(4). A delay in diagnosis is also confirmed in a previous meta-analysis which estimated that people with mental disorders had 22% higher odds of metastases at diagnosis(4). Beyond cancer, there is already evidence that disparities in physical health and healthcare in individuals with mental illness extend beyond screening, affecting quality of care for several conditions including cardiovascular disease(5,6) and diabetes. Similarly, a study by Mahar et al. suggests that people with severe psychiatric illnesses are less likely to receive guideline-appropriate cancer treatment than those without, following a diagnosis of colorectal cancer . However, future investigation of care pathways following diagnosis with cancer at other sites is warranted.

Furthermore, factors that can mitigate or increase the gap in cancer screening participation and outcome remain to be identified, and a range of individual-, treatment-, and service-level factors should be investigated. Among individual factors, it is possible that those with more severe symptoms are particularly vulnerable. For instance, social withdrawal, alogia, other negative, cognitive, depressive, and behavioral symptoms that need to be prioritized in emergency settings can all impede access to care. Regarding treatment, a previous cohort study found that people with schizophrenia discontinue medications for chronic conditions less frequently when they are on antipsychotic treatment(7). Better adherence to non-psychopharmacologic interventions for comorbid physical conditions might mediate the association between antipsychotics and delayed cardiovascular mortality among people with mental illnesses (8). Whether this applies to cancer should be explored in future research. Regarding context and health system-specific factors, future studies should be conducted in countries with universal and private insurance-based access to care. Within each country, the focus should be on regional differences, as access to care can differ dramatically by urbanicity and seasonality.

In conclusions, the study by Thomsen et al. calls for urgent development, implementation, and evaluation of transdiagnostic integrated services or pathways to improve preventive screening, and potentially outcomes of cancer and beyond, in people with mental disorders. Such services would involve mental health, physical health specialists, and primary care providers. Reducing the 10-15 years life expectancy gap separating the general population from those with mental disorders should be the priority of governments and funding agencies. Priority should be given to physical conditions, given their importance in premature death among people with mental disorders.

**Conflict of interest**

Marco Solmi has received honoraria/has been a consultant for Angelini, Lundbeck, Otsuka, Abbvie.

Other authors have nothing to declare.

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