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Tracking the developmental course of suicidal ideation in first-episode psychosis to better inform intervention

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Psychotic disorders, particularly schizophrenia, are disabling and relatively common disorders with similar prevalence rates worldwide. In addition to the significant toll they impose on affected individuals and their families, these disorders are also associated with a significant risk of suicide death.[1] Death by suicide in individuals with schizophrenia usually occurs early in the course of the disorder; thus not surprisingly, suicide is the leading cause of premature death in first-admission and new-onset populations.[2] There has been significant interest in identifying factors associated with suicidality in schizophrenia to plan early intervention strategies that may decrease the significant toll of suicide in this patient group.

Previous research has suggested that, in addition to young age and early course of illness, other important clinical predictors of suicide among individuals with schizophrenia include presence of depressive symptoms, male gender, level of education, presence of positive symptoms and illness insight.[1,3] In this issue of Lancet Psychiatry, Madsen and colleagues take the current understanding of the relationship between onset of psychosis and suicidality one step further. Using data from the OPUS trials, they track the course of suicidal ideation in 547 patients aged 18–45 years with a diagnosis on the schizophrenia spectrum presenting for their first treatment (standard versus integrated) in mental health services. Although prior studies have reported on suicidal ideation and suicidal behaviour in this cohort,[4,5] this study takes a different perspective in tracking the developmental course of suicidal ideation by using a latent-class growth modelling approach to derive trajectories.

On recruitment, participants were asked about the frequency of their suicidal ideation during the previous year, and they were asked again one and two years later. The authors took advantage of their longitudinal data to cluster participants on the basis of their suicidal ideation over time. They identified three groups. In the first trajectory group, labelled 'low-decreasing' (60·7% of cohort participants), individuals reported that they thought about suicide 'once to a few times' in the year prior to their recruitment into the study. These individuals' suicidal ideation decreased to almost no suicidal ideation after two years of follow-up. A second trajectory group, termed 'frequent-stable' (33·1%), included participants who reported suicidal ideation 'a few times to many times' in the year prior to study enrolment. Their rate of suicidal ideation remained unchanged in the two following years. The third trajectory group was labelled 'frequent-increasing' (6·2%) and was composed of individuals whose suicidal ideation increased over time. They thought about suicide 'many times' prior to enrolment in the cohort study, and the frequency of their suicidal ideation increased to 'often to very often' after two years of follow-up. Together, approximately 40% of participants of this cohort reported persistent suicidal ideation over the observational period. These patients were more likely to be females, to have attempted suicide previously, and to report more hallucinations at baseline. Importantly for clinical practice, the type of treatment received (standard care versus integrated) did not distinguish the three trajectory groups.

A significant majority of the OPUS trial cohort participants were asked again whether they had suicidal ideation or made a suicide attempt 5 and 10 years after their initial enrolment. Mortality data was also available, and investigators examined the predictive association between the three trajectory groups and suicidality up to a decade later. Patients who were in the 'frequent-stable' or the 'frequent-increasing' groups, the two trajectory groups with more significant suicidal ideation over time, were more likely to report suicidal thoughts and attempts at 5- and 10-year follow-up than those in the 'low-decreasing' group. The magnitude of associations was stronger for the 'frequent-increasing' groups. However, differential trajectories of suicidal ideation were not predictive of suicide or death by other causes at follow-up, despite a non-significantly higher proportion of participants who died at follow up in the 'frequent increasing' (8·7%) and in the 'frequent stable' (5·4%) trajectory groups compared to the 'low decreasing' (4·2%) group. Low statistical power may explain the lack of statistically significant effects since suicide, although important, is a relatively rare event, as is death by other causes given the age of cohort members.

This study points to the importance of studying group or developmental trajectories rather than point associations when investigating predictors of suicidal behaviour. Although trajectory-based methods have already been used to study suicidal behaviour in both epidemiological[6,7] and clinical[8] samples, they have not been previously used to understand variation in the development and risk of suicidal behaviour in schizophrenia. Improved understanding of distinct group trajectories has important implications, as it may help identify individuals who are particularly suited for specific preventive interventions. Madsen and colleagues suggest in this

study that prevention strategies targeting suicidal behaviour in first-episode psychosis should not be universal. Rather, they should target individuals who present frequent suicidal ideation at illness onset, as these individuals are likely to present stable and/or increasing suicidal ideation and suicide attempts. Although the relevance of these findings to death by suicide needs to be determined, interventions that specifically aim to reduce suicidal behaviour could be explored in this group as a preventive strategy.

Declaration of interests

MCG has no conflict of interests to declare
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