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COMMENTARY

Putting late-onset psychosis into context

Commentary on "Overview of Late-Onset Psychosis" by Devanand *et al.*

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The paper by Devanand and colleagues (2024) continues *International Psychogeriatrics*' tradition of providing new research on schizophrenia in older adults (e.g., see Volume 33 – Special Issue 2 – February 2021). Here, Devanand *et al.* proffer a useful update on psychotic disorders in later life. To the authors' credit, they have provided many citations from the past 5 years, although the reader is struck by the paucity of new high-quality research, especially regarding therapeutics. It is troubling that virtually all the research has been from Western countries. My aim in this commentary is to provide a complementary contextualized – i.e., social, cultural, and cross-national – gaze on this topic, which seems pertinent for an international journal.

Psychosis has different patterns

Devanand *et al.* focused primarily on Western diagnostic categories of psychotic disorders and psychoses in later life. However, psychosis is more nuanced and complex (Laroi *et al.*, 2014). There are three predominant patterns of psychoses: (1) Serious psychotic symptoms that occur continuously or many times daily that are not shared by others; this is observed across cultures and coincides with the Western nosology of mental disorders, although culture may shape the content, meaning, and severity of symptoms. (2) Brief, occasional, typically not unpleasant psychotic symptoms (usually auditory or visual hallucinations) in the general population; most relevant to older people are the hallucinations seen in bereavement, as much as 80% in European Americans and 90% in Japan. (3) Hallucinations or circumscribed delusions that can resemble those occurring in schizophrenia but have no serious comorbid symptoms such as cognitive deficits or affective flattening. This type is seen in ritual practices and might include the use of psychoactive substances.

Psychotic symptoms are common and vary markedly cross-nationally

Devanand *et al.* provide a short section on isolated auditory or visual hallucinations. This section deserves more attention since psychotic symptoms are not rare in later life among the general population and vary cross-nationally and cross-culturally. The authors indicated that these hallucinations occur in 2%–3% of older adults. These percentages, from a study by Badcock and colleagues (2017), belie a wide range of rates of between 0.4% and 37% that were found in these mostly Western countries. Moreover, their focus was on hallucinations and did not include delusions. When delusions are also included, the prevalence of psychotic symptoms may increase. A review of 11 studies found the prevalence of psychotic symptoms in non-dementia older people to be between 1% and 13.4% (Sigström and Gustafson, 2019). More notably, using a national sample in the United States, the 12-month prevalence of any psychotic symptoms (hallucinations or delusions) was 11.6% and 10.8% among persons 45–64 and 65+, respectively (Cohen and Marino, 2013).

Two broad-age range cross-national studies produced conflicting results. A WHO World Health Survey data from 52 nations found a wide range in prevalence and types of symptoms (Nuevo *et al.*, 2012). Overall, 12.5% (range: 0.66%–45.8%) of the sample reported experiencing at least one psychotic symptom in the past 12 months. The prevalence rate was 8.8% in high- and medium-high-income countries versus 12.9% in low- and medium-low-income countries. Contrary to these findings, using different measurements and exclusion criteria, a WHO study from 18 countries found that the prevalence rates of psychotic symptoms were significantly higher in middle- and high-income countries than in low-income countries (McGrath *et al.*, 2015).

Although there is some evidence that the prevalence of psychotic symptoms is lower in older age groups (Linscott and Van Os, 2013), it is still common, may vary cross-nationally and cross-culturally, and may reflect underlying distress. Moreover, rates may begin to rise after age 65 (Östling *et al.*, 2013). Longitudinal studies are needed to determine their relationship to the subsequent development of late-life psychotic disorders such as schizophrenia, delusional disorder, or the psychoses in affective disorders or dementia.

The age cutoff at age 40 is problematic from a sociocultural perspective

The International Late-Onset Schizophrenia Group's consensus paper was the product of 17 experts of whom only two were working in developing countries (Howard *et al.*, 2000). The group observed that a cutoff age for late schizophrenia had varied in the literature, ranging from ages 40 to 60. The consensus group selected the cutoff of age 40, which was originally advanced by Manfred Bleuler in mid-20th century Switzerland. This is the cutoff selected by Devanand *et al.* Apart from an overrepresentation of women, very few consistent differences have been found between those developing late-onset disorder before age 40 and those developing the disorder between ages 40 and 60. Proposing a delineation based on age rather than a clinical picture becomes especially problematic since life trajectories vary considerably by nation and social class. Thus, it is unlikely that the age of 40 in Chad or Nigeria, where mean life expectancy is in the mid-50s, is the same biologically, socially, or psychologically as those in developed countries where life expectancy is in the 80s. Likewise, in developed countries, lower life expectancy and more co-occurring illnesses are characteristic of the lower social classes (Gutin and Hummer, 2021). Thus, decontextualizing age within the diagnostic criteria is problematic.

Race and ethnicity affect the prevalence of psychosis

Race is an important determinant of mental health and is not discussed in the Devanand and coauthors' paper. Compared to Caucasians, Blacks in the United States and the UK are, respectively, 2.5 times and over 5 times more likely to be given a diagnosis of schizophrenia (Anglin, 2023; Halvorsrud *et al.*, 2019). Also, in the United States, Blacks have higher rates of psychotic symptoms in the general population. An epidemiological study of persons aged 55 years and over in Brooklyn, NY found Blacks were more than twice as likely as Whites to experience paranoid ideation (21% vs 9%), three times more likely to report psychotic symptoms (7% vs 2%), and twice as likely to experience psychotic symptoms and/or paranoid ideation (24% vs 10%) (Cohen *et al.*, 2004). Elderly ethnic minorities, in general, may be prone to psychotic symptoms. A study in Singapore of older adults found Malays had 2.6 times more psychotic symptoms than Chinese (Subramaniam *et al.*, 2016). In the case of schizophrenia, the reason for these racial differences may reflect the differential effects of societal racism, lower incomes, prenatal factors, and other social stressors as well as racial biases in rendering a diagnosis. Some of these findings may also reflect migrant status, which is discussed in the next section. There has been no systematic research on racial differences in late-life schizophrenia among native-born minorities or the impact of higher levels of psychotic symptoms in Black or other ethnic minority populations on the subsequent development of schizophrenia or psychotic disorders in later life.

Migrant status is associated with more psychotic disorders

Worldwide, there are about 280 million international migrants. All migrants experience some changes in their sociocultural context. There is compelling evidence that older migrants experience more psychotic disorders than the native population. Several investigations in the United Kingdom found that African and Caribbean-born elders had a significantly higher incidence than their British-born counterparts, although findings for Asian-born elders were less consistent (Mitter *et al.*, 2004; Reeves *et al.*, 2001). Rates were higher for immigrant women. Similarly, a study of very-late onset schizophrenia (VLOS) found higher incidence rates among migrants when compared to the native-born Swedish population (Stafford *et al.*, 2019).

There are many other social factors affecting psychotic diagnosis and outcome

Lower social class and persistence of low income are associated with a diagnosis of schizophrenia (Cohen, 1993; Fond *et al.*, 2023). Other social factors affecting outcome include access to housing, the availability of rehabilitation services and social benefits, the development of specific policies for individuals with severe mental disorders, and the level of social stigma about mental illness (Haro *et al.*,

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2011). Moreover, there are historical changes in safety net programs and funding for psychiatric services that have been thought to impact the prevalence of mental illness. All these items should be explored in future studies of late-life psychotic disorders.

There are cross-national differences in psychotic disorders

The only cross-national study of late-life schizophrenia was a meta-analysis of studies in adults aged 65 years and over, all from developed countries (Stafford *et al.*, 2018). The authors found considerable variations in the incidence rates of VLOS by country (3.0–39.9 per 100,000 person-years). Saha and colleagues' (2005) cross-national review of mixed-age studies from 46 countries found that the combined prevalence rates of schizophrenia per 1000 persons were lowest in the least developed countries (3.05) as compared to emerging economies (5.69) and developed countries (5.82). It is unknown whether this distribution pattern persists in later life. The reasons for these diagnostic differences between countries may reflect the differential effects of culture and social stress, biological and health elements, and diagnostic methods.

Outcomes may vary across cultures and countries

The International Study of Schizophrenia (ISoS), a longitudinal study in 14 countries (inpatients and outpatients), found that 60% of individuals in the prevalence group (mean age of 51) were "recovered" or "virtually symptom-free". Those in developing countries had better outcomes compared to developed countries (Harrison *et al.*, 2001). Also, the Worldwide Schizophrenia Outpatient Health Outcomes (W-SOHO) study conducted in 37 countries (mean age 34.5 years) found that rates of clinical remission was lower in the three European regions than in East Asia, Latin America, North Africa, and the Middle East (Haro *et al.*, 2011). However, the rates of functional remission (i.e., good social functioning for 6 months) were inconsistent across regions, ranging from 17.8% to 35%. Here again, it is not known whether people with late-onset schizophrenia follow similar trends.

Culture impacts on the content of psychotic symptoms

Devanand *et al.* state that in LOS "persecutory delusions, delusions of reference, and third person and running-commentary auditory hallucinations are more common." However, cross-cultural and cross-national studies suggest that symptom presentation is dependent on culture. In broad-age samples, more persecutory, grandiose, religious, sexual, and fantastic delusions were observed among those from African and West Indian backgrounds versus those with European, Middle Eastern, and Asian backgrounds (Ndetei and Vadher, 1984). Another study found auditory and visual hallucinations were more frequently reported by West African countries compared with subjects from other regions (Bauer *et al.*, 2011). On the other hand, cenesthetic hallucinations were least prevalent in West Africans and most common in Austrians. The authors concluded that culture had an appreciable impact on the prevalence of the types of hallucinations, albeit other factors like age, age at onset, and duration of illness influenced the rates of hallucinations.

Luhrmann and coinvestigators (2015) found that both the content of the voices and their affective tone differed between cultures. Voices in non-Western countries were commonly less harsh and more relational than in the West. These differences may have implications for outcomes, especially given that people in developing countries have better clinical outcomes than in developed nations.

There are cultural differences in the use of alternative treatments

Devanand *et al.* focused on Western treatment, primarily pharmacological, whereas alternative treatment is used widely across cultures, especially among older adults. In Sub-Sahara Africa, patients with schizophrenia who were over age 40, less educated, resided in rural areas, and practiced African traditional religion were more likely to use the services of traditional healers (James *et al.*, 2018). In Asia, older Japanese patients with schizophrenia were more apt to use traditional medicine (Tatsumi *et al.*, 2019). A WHO study in China estimated that 14% of individuals aged 50 years and older utilized traditional Chinese medicine (TCM) (Aw *et al.*, 2019). Those aged 65 years and over were more likely to use TCM as were those living in rural areas. Across many cultures, people frequently use a hybrid strategy that combines Western and traditional medicine. Western psychiatry is often blind to indigenous healing so that care provided by alternatives to psychiatry is ignored or not counted as ''treatment'' within the constraints of evidence-based definitions (Lovell *et al.*, 2019). Researchers should include these alternative treatments when assessing appropriate care for older adults with psychotic disorders, especially cross-culturally.

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Conclusion

In summary, I propose expanding the narrowly focused, typically decontextualized, Western view of late-onset psychoses that has dominated the medical literature. A broader perspective will add new insights to our understanding of the etiology, course, outcome, and treatment of these conditions.

Conflict of interest

None.

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