Evaluating the Clinical Relevance of Psychotic Experiences in Low- and Middle-Income Countries

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Psychotic experiences (PEs) that resemble the positive symptoms of psychotic disorders, yet fall below diagnostic thresholds in terms of severity, persistence, impairment, and distress, have increasingly been recognized as clinically meaningful phenomena. This is primarily based on the research from high-income countries (HICs), and the limited existent research on PEs in low- and middle-income countries (LMICs), home to 80% of the world’s population, has rarely directly compared LMICs to HICs. In this issue, Wüsten et al1 used a network analysis approach to find that adults in 5 LMICs were more likely to report PEs compared to those living in 8 HICs, but that PEs were also less distressing and less interconnected in LMICs, suggesting that PEs are of less clinical relevance in LMICs compared with HICs. We also find in this issue that the prevalence of schizophrenia is relatively uniform across countries regardless of income, and the related health burden appears to be particularly increasing in middle-income countries.2 As such, we must consider whether PEs that are phenomenologically similar may carry varying degrees of clinical significance across cultures and, if so, why this may vary by income.

The Clinical Significance of PEs in LMICs

PEs have primarily been considered clinically relevant for the following 3 potential reasons: (1) they may portend an elevated risk for subsequent development of psychotic disorders; (2) they may be distressing or associated with need for care in and of themselves; and (3) they may be indicators of greater broadly defined psychopathology or disability. Most research in LMICs has focused on PEs as indicators or correlates for other forms of pathology or functional impairment. Data from LMICs in the World Health Organization (WHO) World Health Surveys (WHS) showed that PEs are associated with a greater likelihood of depression,1 poor health,4 sleep disturbances,5 chronic pain,6 and greater perceived stress.7 Findings from the WHO World Mental Health Surveys (WMHS), which included both LMICs and HICs, likewise found PEs to be associated with elevated health needs including suicidal behavior and comorbid mental health conditions.8,9 However, both of these data sets relied on the WHO psychosis screen, which does not assess distress associated with PEs. Therefore, although we have substantial evidence that PEs are correlated with a broad range of physical and mental health adversities in LMICs, we have minimal prior understanding of whether these PEs are subjectively distressing or are predictive of subsequent incident schizophrenia in these countries.

Cross-Cultural Validity of PE Measures

How do we reconcile the findings in this issue, that (1) diagnosed schizophrenia is linked to greatest disability in middle-income countries yet (2) self-reported PEs are reported as less distressing in LMICs? One possibility is that there is wide between-country variability in the threshold at which respondents are likely to self-report PEs, which may not generalize to reporting of schizophrenia and other psychotic disorders. Indeed, this appears to be the case in the WHO survey data: among LMICs in the WHS, prevalence rates for PEs varied from less than 1% in Vietnam to nearly 50% in Nepal. A true 50-fold difference in the prevalence of PEs between these 2 countries would be conceptually unreasonable. It is possible that stigma is less of a deterrent to reporting odd perceptual experiences in some cultures; or, even if a disorder is stigmatizing, symptoms may be talked about in a nonstigmatized or culturally appropriate way,10 and may not share...
the stigma that would otherwise be applied to a diagnosed condition. This would not necessarily mean that PEs themselves are less relevant in LMICs, but rather that our current measures are capturing less relevant forms of PEs in these settings; that is, they may have limited cross-cultural validity. Although both the Community Assessment of Psychic Experience and WHO psychosis screen have been used in many languages and tested for internal consistency within particular settings, there has been minimal testing of their cross-cultural validity. If PEs of lesser severity are more commonly endorsed in some countries, this could simultaneously yield both (1) a higher prevalence of PEs yet (2) less clinical severity, on average, of the endorsed PEs. Such explanations based on cross-cultural measurement validity are arguably more parsimonious than a true variation in the prevalence of PEs across countries. Interestingly, the WMHS also directly compared the prevalence of PEs in LMICs vs HICs, but using the WHO psychosis screen, and found the prevalence of PEs to actually be lower in low-income countries.\footnote{1} However, because this measure does not assess distress, the question remains whether this lower prevalence also carried with it greater distress.

Cross-Cultural Differences in Distress

It is also feasible that PEs of equal severity may be less clinically significant in the context of LMICs, perhaps due to social buffering effects of collectivist cultures, as noted by Wüsten et al.\footnote{1} This idea is appealing and hopeful, given its emphasis on protective rather than risk factors. However, it is possible that the cultural factors underlying observed differences between HICs and LMICs may not be directly related to country-income per se. In our previous studies including 39–44 LMICs, we found a high level of between-country heterogeneity in the associations between PEs (defined as present/absent, due to the absence of a severity index in the WHO screen) and perceived stress\footnote{3} and depression\footnote{3} across LMICs, suggesting that the clinical relevance of PEs may vary widely across countries, even those within the same income bracket. Other studies have shown that income inequality, rather than per capita income, was associated with psychosis prevalence and incidence at both the national and the neighborhood level.\footnote{12,13} Further, both income and income inequality are likely proxies for more complex cultural differences that may underlie between-country differences and may be more directly relevant to the phenomenology and clinical significance of PEs.

Implications of Understanding PEs in LMICs

Although studies in LMICs have informed our understanding of the etiology and clinical significance of sub-threshold psychosis in these contexts, there are hurdles that must be overcome in order to move this field forward. Refining PE measures to focus on distress, and validating them across cultures, would allow the clinical identification of individuals who are in greatest need of early intervention or secondary prevention services. At the population level, we can then more conclusively determine whether the clinical relevance of PEs of equal severity varies across cultures, begin to unpack why this may be so, and use that research to guide public health approaches to reduce the occurrence or clinical impact of psychosis. The explanation may indeed be related to income (ie, LMICs vs HICs), but it may also relate to previously unexplored between-country factors that have not been measured in existing international data sets. Addressing these open questions requires representative samples of HICs and LMICs assessed with uniform data collection methodology. Studies of psychosis from LMICs remain uncommon, however. Our knowledge of psychosis is drawn almost entirely from research in HICs, even though, as Charlson et al.\footnote{2} noted, LMICs are where we find the vast majority of cases of psychosis, the greatest recent growth in psychosis-related health burden, and the greatest gap in availability of services. How we expand upon the findings presented in this issue to further understand psychosis in LMICs will have critical implications for the 80% of the world’s population that resides in these countries.

References


