

# Poverty, inequality and mental health in low- and middle-income countries: time to expand the research and policy agendas

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There is a growing body of academic research emanating from low- and middle-income countries (LMIC), focusing on the relationship between poverty, inequality and mental health. This includes observational and intervention research (WHO & Calouste Gulbenkian Foundation, 2014), and increasingly nuanced understandings of the mechanisms in these complex relationships (Plagerson, 2014).

The emerging data present a set of pressing challenges for both policy and research. In relation to policy, critical debates are currently raging regarding targets for the new post-2015 United Nations (UN) sustainable development goals (SDGs). A global campaign has been mounted to urge the UN to give greater prominence to the long neglected issue of mental health, namely FundaMentalSDG ([www.fundamentalsdg.org](http://www.fundamentalsdg.org)) (Thornicroft & Patel, 2014). As proponents of the campaign argue, mental health is inseparable from the aspirations of the SDGs, and many of the SDGs will not be attainable without considering mental health.

In relation to research, there are many challenges. Among these, we need more precise measurement of both poverty and mental health in epidemiological research in LMIC; more diversity in the examination of the mental health consequences of poverty; theory-driven studies that focus on hypothesised causal pathways, for example, through longitudinal datasets; examination of more diverse socioeconomic strata; exploration of the mental health consequences of inequality; and intervention research that targets both social causation and social drift pathways (Lund, 2014).

In this issue of *Epidemiology and Psychiatric Sciences* we present two editorials by leading researchers in this field that speak directly to these debates, namely Mary de Silva and Jonathan Burns. Mary de Silva demonstrates the potential contribution of a social determinants framework to the inclusion of

mental health in the SDGs (De Silva, 2015). Such a framework provides an opportunity to design more targeted development programmes that promote mental health and prevent mental illness in LMIC populations, while simultaneously designing mental health interventions that pay attention to social and economic outcomes. De Silva describes several existing initiatives that exemplify these approaches, and calls for a more holistic approach to development that ensures equity for mental health in all development programmes.

De Silva's article speaks to the need for more intervention research targeting the poverty/mental illness cycle in LMIC. Pioneering research by Fernald *et al.* demonstrated the mental health benefits of targeted financial poverty alleviation interventions, for example, showing a reduction in salivary cortisol as a proxy for stress among 2–6 year-old children in households who were beneficiaries of conditional cash transfers in the Mexican *Oportunidades* programme (Fernald & Gunnar, 2009). However, some of the findings on the mental health impacts of other financial poverty alleviation interventions are more equivocal (Lund *et al.* 2011). The next step is to link mental health interventions (including, for example, parenting programmes, brief task sharing counselling interventions and early childhood development interventions) with targeted financial poverty alleviation interventions such as cash transfers. These could be evaluated using randomised controlled trials (RCTs) with factorial designs that allow investigators to assess the relative contributions of each of these broad intervention categories as well as their interactions, and to assess both mental health and economic outcomes.

Jonathan Burns draws attention to the importance of inequality in the poverty/mental health relationship in LMIC (Burns, 2015). In doing so, he provides insights into the role of inequality as a mediator of the relationship between poverty and mental health; the relative utility of current income inequality metrics; and some of the potential mechanisms that underpin the relationship between inequality and mental health. He also points to some of the political, social and economic drivers of global inequality, and shows how a more serious critique of these forces leads us logically to develop a 'political economy of mental health'.

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As Burns argues, the effects of poverty on mental health may be more pronounced in settings marked by higher inequality. Research that is able to investigate the differing effects of, for example individual or household income or asset indices on mental health in differing contexts of inequality may be able to shed more light on these relationships. In the case of the relationship between inequality and mental health, there are dangers of an ecological fallacy whereby the relationship between exposure and disease outcome is conducted at a population level, not individual level. In this instance, confounding factors, operating either within or between the groups under comparison may not be accounted for in the study design. For this reason, as Burns points out, research is needed to test the mechanisms hypothesised to underpin the relationship between inequality and mental health. For example, smaller scale studies may be required to explore the effect of social comparison on mood and workplace performance, or the effect of inequality on cognitive and structural social capital.

Burns' paper draws attention to the highly political nature of the study of inequality and mental health. Ultimately the interrogation of the effects of inequality on mental health requires an interrogation of the political and economic order that perpetuates rampant inequity in the distribution of wealth. Thus the call to policy makers to include mental health in development policy agendas is simultaneously a call for a more inclusive and just society that pays attention to uneven resource distribution and its impact on the wellbeing of its most vulnerable populations.

Both articles by De Silva and Burns cast the spotlight on potentially fruitful areas of further enquiry and policy engagement. What these authors amply demonstrate is that this involves expanding the research and policy agendas to promote rapprochement between mental health epidemiologists and development economists. Building the evidence based on the links between poverty, inequality and mental health and investigating what interventions work in breaking the poverty/mental illness cycle in LMIC must therefore involve reaching out to colleagues in fields such as behavioural economics, and developing a shared language and set of methodologies. There are several examples that serve to illustrate this point.

First, there is potential for fruitful theoretical work on the links between conceptualisations of mental health in diverse LMIC settings and development theory, such as Amartya Sen's capabilities framework (Sen, 1999). Plagerson points out the attractiveness of Sen's capabilities framework in that it allows for the location of mental disability in the context of the activity limitations imposed by society (Plagerson, 2014).

Thus mental health is not just the concern of the individual or family, but embedded in society and wider political and economic forces of inclusion or exclusion, tolerance or intolerance, and empowerment or disempowerment. The theoretical rapprochement between conceptualisations of mental health in diverse LMIC settings, and notions of capability, subjective wellbeing and quality of life (Nussbaum & Sen, 1993) merits further exploration.

Second, the work of Abhijit Banerjee and Esther Duflo using randomised controlled trials to evaluate very specific poverty alleviation questions has much in common with intervention research on breaking the poverty/mental illness cycle (Banerjee & Duflo, 2011). For example, the work of the Abdul Latif Jameel Poverty Action Lab (J-PAL) in exploring the impact of developing 'non-cognitive skills' may share intentions and methodologies with RCTs that evaluate the economic consequences of task-sharing evidence-based psychological interventions for poor depressed individuals in LMIC.

Finally, Haushofer and Fehr examine the psychological consequences of poverty and the manner in which poverty-induced stress and negative affect lead to short-sighted and risk averse decision making (Haushofer & Fehr, 2014). By limiting attention and favouring habitual over goal-directed behaviours, these emotional and behavioural consequences of poverty serve to perpetuate poverty. There may be potential for exploring the manner in which the promotion of goal directed behaviours and realistic assessments of risk, commonly used in cognitive behavioural and problem-solving therapies, carry both mental health benefits (in terms of improved mood and functioning) and economic benefits.

Ultimately it is vital that research of this nature contributes to strengthening the evidence for the inclusion of mental health in development policy. As others have shown, poverty and inequality get under the skin, or more accurately in our case into the neural pathways of the brain (Hanson *et al.* 2013), an organ with a high level of plasticity. The resulting cognitive, emotional and behavioural outcomes manifest themselves in increased clusters of symptomatology (what nosological systems classify as 'disorders') that have deleterious effects on the ability of individuals and families to lift themselves out of poverty. Fortunately, these mental or behavioural markers also provide opportunities for interventions that can change cognitive, emotional or behavioural styles sufficiently to lead to improvements in individual and household economic circumstances (Lund *et al.* 2011).

By demonstrating the value of a social determinants approach to mental health and the importance of considering inequality in the poverty/mental health

relationship in LMIC, De Silva and Burns make an important contribution in expanding these policy and research agendas, and increasing interdisciplinary rapprochement in this issue of *Epidemiology and Psychiatric Sciences*.

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