Depression and physical health multimorbidity: primary data and country-wide meta-analysis of population data from 190,593 people across 43 low- and middle-income countries


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Background. Despite the known heightened risk and burden of various somatic diseases in people with depression, very little is known about physical health multimorbidity (i.e. two or more physical health co-morbidities) in individuals with depression. This study explored physical health multimorbidity in people with clinical depression, subsyndromal depression and brief depressive episode across 43 low- and middle-income countries (LMICs).

Method. Cross-sectional, community-based data on 190,593 individuals from 43 LMICs recruited via the World Health Survey were analysed. Multivariable logistic regression analysis was done to assess the association between depression and physical multimorbidity.

Results. Overall, two, three and four or more physical health conditions were present in 7.4, 2.4 and 0.9% of non-depressive individuals compared with 17.7, 9.1 and 4.9% among people with any depressive episode, respectively. Compared with those with no depression, subsyndromal depression, brief depressive episode and depressive episode were significantly associated with 2.62, 2.14 and 3.44 times higher odds for multimorbidity, respectively. A significant positive association between multimorbidity and any depression was observed across 42 of the 43 countries, with particularly high odds ratios (ORs) in China (OR 8.84), Laos (OR 5.08), Ethiopia (OR 4.99), the Philippines (OR 4.81) and Malaysia (OR 4.58). The pooled OR for multimorbidity and depression estimated by meta-analysis across 43 countries was 3.26 (95% confidence interval 2.98–3.57).

Conclusions. Our large multinational study demonstrates that physical health multimorbidity is increased across the depression spectrum. Public health interventions are required to address this global health problem.

Received 14 October 2016; Revised 27 January 2017; Accepted 8 February 2017; First published online 4 April 2017

Key words: Depression, low- and middle-income countries, multimorbidity, physical health, psychiatry.