

AB011. Disease burden, and temporal trends in schizophrenia in low- and middle-income countries: a global analysis from 1990 to 2019

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Background: Schizophrenia is a psychiatric syndrome that presents with delusions, disorganized speech, hallucinations, and impaired executive functioning. This study aims to evaluate the disease burden of schizophrenia in low- and middle-income countries (LMICs), considering genders and 11 age groups, assessing disability adjusted life-years (DALYs) rate, incidence rate, prevalence rate, and temporal trends.

Methods: This study utilized data from the Global Burden of Disease (GBD) databases to extract DALYs, incidence rate, and prevalence rate associated with schizophrenia

across 173 LMICs or territories from 1990 to 2019. The countries were grouped based on the income classification of the World Bank.

Results: The prevalence rates of schizophrenia for both genders in upper-middle income countries (male: 285 to 359; female: 271 to 341) consistently remained higher than the other two income tiers from 1990 to 2019. Prevalence rates showed a mostly positive correlation with time during this period. The prevalence rate of schizophrenia for males was consistently higher than for females in LMICs from 1990 to 2019. While most trends were increasing, the incidence rates of schizophrenia for both genders in upper-income countries decreased significantly from 2009 to 2019 (male: 20.41 to 18.72; female: 18.40 to 16.32). Burn *et al.* [2013] found that countries with higher income inequality tend to have a higher incidence rate of schizophrenia. The burden of schizophrenia for all measures is positively correlated with the country's income tier, and male burden is always higher than female burden regardless of the measure method and income tier. Countries in East and Southeast Asia, and Eastern Europe tend to have the highest burden of schizophrenia, while African countries have the lowest burden. Social isolation is highly related to schizophrenia, so creating a more inclusive and equal society may help reduce its burden. Further research is needed to investigate risk factors and treatments for schizophrenia.

Conclusions: Schizophrenia is a mental health burden that is prevalent in LMICs in East and Southeast Asia, and East Europe, and is positively correlated with the country's income tier, with males experiencing a consistently higher burden than females, while income inequality and social isolation are contributing factors, necessitating the need for further investigation and a more inclusive society.

Keywords: Schizophrenia; low- and middle-income countries (LMICs); disease burden

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Footnote

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ab011/coif). The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). This study was approved by the Survey and Behavioural Research Ethics Committee, The Chinese University of Hong Kong (No. SBRE-22-0826) and individual consent for this retrospective analysis was waived.

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