Exploring the Inverse Care Law in Benin: Health Expenditures, Needs, and Preferences

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Abstract

Understanding whether healthcare use and out-of-pocket (OOP) expenditures reflect underlying health needs is essential for assessing progress toward Universal Health Coverage (UHC), particularly in low- and middle-income countries where financial barriers remain substantial. In Benin, persistent inequalities in access to care, widespread reliance on self-medication and traditional healers along with the recent introduction of a social insurance programme create a unique context to revisit the Inverse Care Law. Using microdata from the 2024 ESRS survey ($N \approx 3{,}150$), we construct multidimensional latent scores of health needs and socioeconomic position through generalized structural equation modelling, and cross-classify individuals into four profiles capturing intersecting medical and socioeconomic vulnerability. We then estimate a two-part model studying the probability of any out-of-pocket expenditures and a gamma-log GLM for conditional spending to examine whether expenditures rise proportionately with need and whether this gradient varies by socioeconomic position or insurance status.

Results indicate that neither access to care nor intensity of care increases proportionately with health needs. Individuals in poor health do not have significantly higher probabilities of spending, and conditional expenditures are largely insensitive to health needs once care is sought. The social gradient in health expenditures is strong, and social insurance enrollment only modestly reduces the probability of paying without substantially lowering expenditure levels among users. These findings point to a persistent pattern of disproportionate, and in some cases inverse care whereby the poorest and sickest remain least able to translate their health needs into actual healthcare utilisation. Strengthening financial protection, reducing administrative barriers to social insurance enrollment, and improving service availability are essential to achieve proportional care and meaningful progress toward UHC in Benin.

Keywords: Health expenditures, Health need, Socioeconomic inequalities, Inverse Care Law, social insurance programme, Universal Health Coverage, Benin