APPLICATION OF CRITICAL RATIOS IN THE DETERMINATION OF HEALTH CONDITION INDEX

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The health inequalities may be inferred from the covariance of quantitative traits among different geographical locations. This study aims to assess the association between health inequalities based on health condition indicators and geographical distribution of communities across the Kingston Metropolitan Area, Jamaica. Data for these indicators were drawn from the national census and the hospital incident data recorded in the Jamaica Injury Surveillance System. Quantitative data were then used to determine the critical ratios in accordance with health condition indicator being considered among communities. Further computations were carried out using critical ratios for each health condition indicator with Geographical Information System to determine a Health Condition Index (HCI) in accordance with community being considered in each case. Classification of communities was done using quintiles. The highest values represent those areas with less need, and vice versa for those with lower values on an ordinal scale. Higher quintiles for HCI were obtained for communities with favourable health condition indicators. There was an association between the representation for HCI and health inequalities. This study shows that health inequalities are significant contributors to HCI in different geographical locations. This suggests the need for appropriate interventions and health promotion strategies in those communities with lower quintiles.