INPLASY

Global Health and Sustainable Development

Corresponding author:
Vladimir Gavranic

22imc11012@imc.ac.at

Author Affiliation:
IMC Krems - University of Applied Science.

Gavranic, V.

ADMINISTRATIVE INFORMATION

Support - None.

Review Stage at time of this submission - The review has not yet started.

Conflicts of interest - The author declare no financial or non-financial competing interests. This scoping review is undertaken solely as part of a Master's thesis for the degree in International Business & Economic Diplomacy and receives no external funding or support beyond standard university resources.

INPLASY registration number: INPLASY202560068

Amendments - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 17 June 2025 and was last updated on 17 June 2025.

INTRODUCTION

*R*eview question / Objective Review question: "How and through which pathways do documented health disparities impede progress toward Sustainable Development Goal targets in low-income countries?"
Objectives:
1) Map the full range of evidence linking specific health disparities to economic, social, and environmental SDG outcomes.
2) Classify the mechanisms described (e.g., labour-productivity loss, educational disruption).
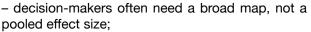3) Identify SDG targets with sparse or absent evidence to guide future research.

Element: Population; Operational definition: Individuals or communities residing in low-income countries (World Bank classification, at study year or current). |

Element: Concept; Operational definition: Health disparities – systematic differences in morbidity, mortality, service coverage, financing, or social determinants between population groups.
Element: Context; Operational definition: Sustainable development as framed by the 17 SDGs and 169 targets (2000 – 2024).

Rationale Achieving the SDGs requires equitable health, yet low-income countries experience deep, multi-layered health disparities that may stall or reverse development. While numerous reports describe individual links (e.g., maternal mortality reducing female labour supply), no evidence map shows how various disparities collectively hinder SDG progress or which pathways matter most.

A scoping review is appropriate because:
– the evidence is heterogeneous (epidemiological, economic, qualitative, policy);

– decision-makers often need a broad map, not a pooled effect size;
– the review will inform international business and economic-diplomacy strategies by pinpointing high-impact inequities and research gaps.

Condition being studied The condition is the existence of health disparities in low-income countries. These include mortality or morbidity gaps across socio-economic, geographic, gender, or ethnic lines; unequal coverage of essential services (e.g., vaccination, skilled birth attendance); inequities in social determinants such as sanitation or education. Disparities are treated as risk-exposure conditions whose downstream effects may undermine SDG achievement.

METHODS

Search strategy Following databases are included: Scopus, PubMed, EconLit, and World Bank Repository.
Terms used: global health disparities, health inequality, sustainable development, SDGs, sustainability, low-income countries, developing countries, global south, economic impact, development outcomes, health and development.

Participant or population Population of low-income countries according to the World-Bank-classification, any age or sex, in any setting (community, facility, national).

Intervention Not applicable.

Comparator When present, then internal subgroup with less disparity (e.g., richest quintile); external benchmark (higher-income country/region); absence of a comparator will not exclude studies.

Study designs to be included All primary and secondary designs - observational, interventional, economic modelling, qualitative, mixed-methods and authoritative agency syntheses. Conference abstracts excluded unless full data available.

Eligibility criteria Published ≥ 2000; At least one low-income country in focus: Explicit link between a health disparity and an SDG-related outcome; Exclude opinion pieces without data.

Information sources Electronic databases.

Main outcome(s) SDG domain affected (economic, social, environmental) with specific target number.
Direction and magnitude of reported impact (qualitative statement, effect size, cost estimate).

Mechanism linking disparity to outcome (productivity loss, fiscal drain, etc.). Timing and effect measures captured as reported.

Additional outcome(s) Geographic distribution of evidence; Frequency of study designs used; Stated research or policy gaps.

Data management Results will undergo de-duplication. Data charted in structured template. Files backed up to encrypted university provided online storage.

Quality assessment / Risk of bias analysis Quality assessment will not be performed.

Strategy of data synthesis 1. Data Preparation: Export the finalized charting sheet - including PCC fields, SDG codes, disparity types, mechanism descriptions, quality ratings, and grey-literature indicators, and apply data cleaning.
2. Descriptive Mapping:
a) Calculate frequencies by year, region, study design, disparity category, and SDG pillar.
b) Construct a disparity × SDG target matrix. Apply conditional color grading to generate a heat map that visualizes evidence density.
c) Create a bubble plot (studies by pillar; bubble size represents the proportion with quantitative impact).
3. Mechanism-Based Narrative Synthesis
a) Import explanatory text into NVivo and conduct thematic analysis using the Braun & Clarke approach to identify key mechanisms (e.g., labor productivity loss, fiscal impacts, school absenteeism).
b) Structure the narrative by SDG pillar, supporting themes with direct quotes or quantitative examples.
4. Quality Integration
a) Integrate each study's quality rating into the evidence matrix, using traffic-light icons to indicate the proportion of high-quality sources.
b) Highlight in the narrative when a theme is predominantly supported by lower-quality evidence.
5. Sensitivity Analyses
a) Repeat mapping and synthesis after (a) excluding grey literature and (b) removing studies rated as low or limited quality. Qualitatively describe any observed changes.
6. Gap Analysis
a) Identify matrix cells with one or fewer studies, SDG targets lacking any associated mechanisms, and under-represented regions.
b) Translate these gaps into actionable research and policy recommendations.
7. Outputs

a) Tables: Study characteristics; heat-mapped evidence matrix.
b) Figures: Heat map, bubble plot, conceptual diagram.
c) Narrative Synthesis: Approximately 5–7 pages, supplemented by a concise list of key leverage points.

Subgroup analysis Where feasible, stratify findings by world region, rural/urban status, disparity type, and SDG domain.

Sensitivity analysis
Re-run syntheses:
– excluding grey-literature sources and
– including only studies rated high quality to test robustness of mapped pathways.

Language restriction Search in English language.

Country(ies) involved Austria.

Other relevant information n.a.

Keywords health disparities; sustainable development; SDG; low-income countries; global health equity; economic diplomacy; scoping review.

Dissemination plans The findings of this scoping review will be disseminated as part of a Master's thesis submitted to IMC Krems in the International Business and Economic Diplomacy program. Upon completion, the thesis will be made publicly available through the university's digital repository.

Contributions of each author
Author 1 - Vladimir Gavranic - Vladimir Gavranic is a single author if the Scoping review as part of the Master's thesis submitted to IMC Krems, Austria in the International Business and Economic Diplomacy program.
Email: 22imc11012@imc.ac.at