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Effects of global health initiatives on the quality of care for maternal health services in Sub-Saharan Africa: a scoping review protocol

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ABSTRACT

Introduction Global Health Initiatives (GHIs) have significantly improved access to healthcare globally. However, high maternal mortality rates persist in low- and middle-income countries (LMICs) such as Uganda. Despite heavy investment from the GHIs, there is insufficient evidence on the effects of GHIs on the quality of care of maternal health services and yet this significantly impacts maternal outcomes. Available evidence has focused on outputs such as facility deliveries and utilisation of services. These outputs alone are not a reflection of the quality of care, which is crucial in improving maternal outcomes. Given the inadequate information available, we will conduct a scoping review to collate available evidence on the effects of GHIs on the quality of care of maternal health services. The protocol outlined here describes the scoping review aimed at examining the available evidence on the effects of GHIs on maternal health services quality in Sub-Saharan Africa. The information gathered will be used to inform subsequent studies on the effects of GHI on the quality of care of maternal health services in Uganda and later inform policymakers, programmers and health workers on how best to maximise investments from GHIs through improved quality of care. The findings from this study will mainly be used to inform policy on maternal health services in Uganda.

Methods and analysis The study will use Arksey and O'Malley's enhanced six-stage framework for conducting scoping reviews. The core research question for this review is 'what is the available evidence on the effects of global health initiatives on the quality of healthcare provided for maternal health services in health facilities of Sub-Saharan Africa'. We will consider peer-reviewed and non-peer-reviewed articles, reports and policy documents discussing the effects of GHIs on maternal health services from 2010 to 2023 available in all languages. Relevant databases including Ovid Medline, Embase, Cochrane Library, Centre for Agriculture and Biosciences International Global Health (Ovid), Cumulated Index to Nursing and Allied Health Literature, Scopus and the Joanna Briggs Institute Evidence Synthesis will be used for the search. Grey literature from various sources will also be included. Data on the study design, results and methodology will be extracted using a Google Form. This review's report will follow the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews guidelines. We will employ specific inclusion and exclusion criteria for evidence during the literature screening and mapping process, including study types, focus, timeframe, language and location. The quality of included studies will be assessed using the Critical Appraisal Skills Programme tool and the Mixed Methods Appraisal Tool where applicable. Subsequently, the identified data will be subjected to descriptive analysis and visual representation.

Ethics and dissemination Ethical approval is not required for this review as it only uses literature available in the public domain. The results will be shared via a peer-reviewed journal, conference presentations and stakeholder consultations.

STRENGTHS AND LIMITATIONS OF THE STUDY

⇒ As a major step done in developing the protocol, relevant experts and stakeholders will be consulted throughout the scoping review process to enable the production of reliable findings.
⇒ The review will include grey literature whose validity may not easily be confirmed.
⇒ This protocol will be peer reviewed thereby reducing biases.
⇒ One of the limitations of this study is that it will exclude studies conducted outside sub-Saharan Africa and, therefore, will miss out on this significant context.
⇒ Another limitation may be the inadequate number of studies conducted on this topic.

INTRODUCTION

Global Health Initiatives (GHIs) are collaborative efforts involving various stakeholders including governments, international organisations, non-government organisations and philanthropic foundations that aim to address global health challenges.[1] They can also be defined as a blueprint for financing, resourcing, coordinating and/or implementing disease control at least across several countries in more than one region of the world. They function as pivotal mechanisms

for financing, coordinating and implementing disease control efforts across numerous countries spanning various regions of the world.[2] GHIs have been implemented worldwide to support countries in achieving their health goals. These initiatives provide financial and technical assistance to improve health systems and health outcomes, particularly in LMICs such as HIV/AIDS care, Maternal Health, Combating Malaria and more.[3] Globally, GHIs include the Presidential Emergency Plan for AIDS Relief, Global Finance Facility and government agencies such as United States Agency for International Development. In Uganda, several GHIs, such as the Presidential Emergency Plan for AIDS Relief, the Global Finance Facility and the United Nations Population Fund, focus on maternal health.

Despite these efforts, maternal mortality rates in sub-Saharan Africa remain disproportionately high. This raises questions about the effectiveness of GHIs in improving the quality of maternal health services. Previous research has highlighted challenges such as fragmented funding, weak health systems and limited capacity, which can hinder the optimal impact of GHIs on healthcare quality.[1 2 4–9] Quality of care plays a vital role in achieving sustainable development goals, including promoting healthy lives and well-being for all.[10 11] Assessing the performance of services and identifying gaps in adherence to clinical guidelines are crucial for measuring quality and ultimately assessing the effects GHIs have had on the quality of these services.

In a country like Uganda, maternal mortality remains higher than expected despite numerous interventions by GHIs, development partners and the government resulting in the increased availability of essential medicines and increased skilled birth attendance.[12] Although there has been improvement over time, with an institutional maternal mortality rate of 82 deaths per 100 000 in 2021/2022 compared with 92 deaths per 100 000 in 2020/2021, the figures are still alarmingly high.[13] This may indicate gaps or delays in clinical management for obstetric complications.[12] The situation is no different in many countries in Sub-Saharan Africa.[2] Quality of care plays a vital role in achieving sustainable development goals, including promoting healthy lives and well-being for all.[10 11] Sustainable Development Goal 3.1 targets a global maternal mortality rate below 70 deaths per 100 000 live births, emphasising the need for improved care.[14] Studies conducted in other low-income countries such as Rwanda, Malawi and Nigeria have revealed that increased access to institutional deliveries and antenatal care does not necessarily correlate with reductions in maternal and neonatal mortality[12] often due to the poor quality of care provided.

Although there have been considerable investments in maternal health in sub-Saharan Africa including those targeting the care for mothers, there remains a dearth of scientific evidence regarding the effects of these initiatives on the quality of care of maternal health services. In this review, the term 'effect' will be considered as both the positive and negative changes that GHIs have on the quality of care for maternal health services. We shall therefore review the various papers and highlight what these changes have been in health facilities with any form of support from GHIs. Existing information has been of assessments and evaluations of programmes that have predominantly focused on input and output indicators, such as the number of trained health workers and the number of deliveries conducted, while neglecting the crucial aspect of quality of care essential for enhancing maternal outcomes.[15]Given the insufficient information available, a scoping review has been identified as the most appropriate method to identify available information in new emerging areas.[16] Therefore, this scoping review will identify the existing evidence on the effects of GHIs on the quality of maternal health services in Sub-Saharan Africa. This scoping review aims to address this knowledge gap by systematically examining the available evidence on the effects of GHIs on maternal health service quality in sub-Saharan Africa. By understanding the strengths and weaknesses of current GHI approaches, this review will contribute to evidence-based policy and practice improvements, ultimately aiming to reduce maternal mortality and improve maternal health outcomes in the region, particularly in Uganda.

OBJECTIVES

- To identify the available evidence on the effects of GHIs on the quality of care of maternal health services in Sub-Saharan Africa
- To map and summarise the available evidence on the effects of GHIs on the quality of maternal health services in Sub-Saharan Africa.
- To identify the evidence available on the effects of GHIS on key quality of care standards such as patient's experience of care and adherence to clinical guidelines in Sub-Saharan Africa.
- To identify the evidence available on the effects of GHIs on care outcomes such as maternal mortality in Sub-Saharan Africa.

METHODOLOGY AND ANALYSIS

This scoping review will adhere to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews checklist[17 18] (see online supplemental file 1). The enhanced six-stage methodological framework for scoping reviews of Arksey and O'Malley will be used.[19] The steps involved are given in the next sections.[19]

Identifying the research question

Our review aims to address the question: 'What is the available evidence on the effects of global health initiatives on health care quality for maternal services within health facilities in Sub Saharan Africa?' This question emerged from the recognition of the persistent maternal mortality challenge in the region despite GHI efforts and consultation from key stakeholders and experts on the

impact of GHIs on maternal healthcare in the country. It seeks to understand the complex relationship between GHIs and healthcare quality, considering various factors that may influence their effectiveness.

Identifying relevant studies

A librarian will support in conducting a comprehensive search across relevant databases to identify studies that were carried out from 2010 to date, focusing on the impact of GHIs on the quality of maternal health services. We will perform thorough searches in various databases, including but not limited to Ovid Medline, Embase, Cochrane Library, CABI Global Health (Ovid), CINAHL, Web of Science and JBI Evidence Synthesis, to gather relevant studies pertaining to the impact of GHIs on the quality of maternal health services from 2010 to the present. This search will consider both published and unpublished data, for example, the WHO, Ministry of Health and other reports will be included. Relevant stakeholders will be contacted for additional grey literature where applicable. The ministry of health, specific GHIs, universities as well as the direct beneficiaries of the GHIs will be consulted for any additional grey literature they may have. Eight broad terms such as GHIs, maternal health, quality of health services or quality care, patient care, patient outcomes, maternal outcomes and Sub-Saharan Africa. The search strategy will employ a combination of keywords and subject headings relevant to the research question, including terms such as "global health initiatives," "quality of care," "maternal health," "health facilities," and "sub-Saharan Africa." The search will be limited to studies published from 2010 onwards to capture the most recent evidence on the effects of GHIs on the quality of care of maternal health services. The search will be conducted in the months of September and November of 2024. The process of identification of relevant studies will be displayed using a Preferred Reporting Items for Systematic Reviews and Meta-Analyses flow diagram.[17 18 20]

Study selection

The review process will be structured into two screening phases: an initial review of article titles/abstracts, followed by a comprehensive full-text review. The first phase will involve two investigators who will independently screen titles and abstracts of identified studies based on predefined eligibility criteria. This will be followed by a second phase that will entail full-text reviews for potentially eligible studies, with disagreements resolved through discussion or consultation with a third reviewer. If a study has multiple publications, the most relevant one will be retained. Before screening, they will go over the inclusion and exclusion criteria for the studies and then independently screen the abstracts. The abstracts will be screened for relevance to the research question. Should any discrepancies arise, they will be reconciled by the team's subject matter expert (CS). Following this, in the second phase, the same pair of investigators will separately evaluate the full-text articles to establish whether they align with the inclusion/exclusion criteria. They will be screened for relevance, methods used, breadth of the study and the outcomes of the study. Only relevant studies will be selected. Disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer. Understanding of the inclusion and exclusion criteria will be assessed through the calibration of a few studies adhering strictly to the Patient Intervention Comparison Outcome criteria.[21]

Eligibility criteria

- **Inclusion criteria:**
  - Studies that examine the effects of GHIs on the quality of maternal health services in Sub-Saharan Africa. This will be in alignment with similar contexts in Uganda.
  - Peer-reviewed and non-peer-reviewed articles, including policy documents, reports and conference abstracts.
  - Studies exhibiting original research study designs such as randomised control trials, case-control studies, prospective or retrospective cohort studies and quasi-experimental studies. We will include mixed, qualitative and quantitative studies in all languages.
  - Studies published in English, Arabic, Spanish, French and Portuguese from 2010 onwards. This will ensure that the evidence identified is relevant and up-to-date evidence.
- **Exclusion criteria:**
  - Studies conducted outside of Sub-Saharan Africa.
  - Studies published before 2010.

Data extraction

A data extraction form adopted from Joanna Briggs Institute's template for data extraction[22] will be used. A specially designed data entry tool using Google Forms will be developed by the researcher. This tool will collect specific information, which includes (1) first author and year of publication, (2) country, (3) study design, (4) conceptual framework used, (5) objectives and methods used and (6) findings on the effect of GHI on the quality of maternal health services. To ensure the validity of the process, the form will be piloted and evaluated against a few studies by two reviewers and a principal investigator then discussed with other coauthors. Two pairs of independent reviewers will then extract the data, and disagreements will be resolved through consensus among the team members. Studies published in French, Arabic, Spanish and Portuguese will be translated before data extraction.

Collating, summarising and reporting results

The extracted data will be analysed descriptively and mapped in visual presentations.[23] A descriptive summary of the studies will be provided, and we will use a narrative synthesis to describe the captured results. Tables and

charts will be used to summarise the methods available and proposed from the various literature.[20 23]

Quality appraisal

The quality appraisal of the primary studies included in the review will be assessed using the Critical Appraisal Skills Programme checklist developed at Oxford University,[24] for quantitative studies, and the Mixed Methods Appraisal Tool developed by Pluye *et al* will be used for mixed-methods studies.[25]

Patient and public involvement

There will be no patients involved in this study. Further still, the public will not be involved in the interpretation of the findings.

ETHICS AND DISSEMINATION

Ethical approval is not required for this review as there will be no human participants involved in the study. We shall disseminate the results to relevant stakeholders, including policymakers, healthcare providers and community organisations, to inform decision-making and practice improvements. The study will also be disseminated through a peer-reviewed journal, conference presentations and consultations with relevant stakeholders in policy and professional settings. These findings may support policy makers and GHI leaders to understand the strengths and challenges of GHIs in addressing gaps in maternal health service delivery and use this information to develop interventions and policies that will address these gaps.

CONCLUSION

This scoping review will inform the development of interventions and policies that address gaps in maternal health service delivery in sub-Saharan Africa, ultimately contributing to improved quality of care and maximising investments from GHIs.

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Contributors Author IA conceptualized the study, drafted the manuscript and developed the search strategies and study selection contributing to 70% of the work. Co-author LA contributed 10%, co-author CS contributed 10% and co-author PSN contributed 10% through critically reviewing the conceptualization and the design of the protocol. All co-authors read, provided feedback and approved the final version of the protocol.Author IA is responsible for the overall content of this manuscript and PSN is the guaranter of this work.

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