

# Protocol for Scoping Review of Mediators of Women's Care-seeking Behaviour During Infectious Disease Outbreaks in Sub-sahara Africa (SSA)

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Protocol

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# Abstract

Globally, there continues to be a surge in infectious disease outbreaks. While old diseases are re-emerging, new ones are also emerging. This speed of emergence and re-emergence is accelerated by human development, changes in demographics, population, and the environment. We continue to see new patterns of disease infections from their natural hosts to humans, with pathogens now travelling beyond traditional vector areas and spreading to previously unaffected environments. Lessons from Ebola tell us that women and children will be disproportionately affected by infectious disease outbreaks. A mother's health-seeking behaviour has direct implications for the health of her children and the entire family. The way women reach health decisions could be the deciding factor in whether they or their children live. The broad objective of this review of the literature is to explore, identify, and map gaps in the literature on factors resulting from infectious diseases outbreak that could impact women's health care decision-making. The review will compare health-seeking behaviour in sub-Saharan Africa during outbreak and non-outbreak periods, to generate a comparative analysis of the health behaviour of women of reproductive age and factors impacting on their health-seeking behaviour when there is an outbreak versus no outbreak. It is anticipated to be of interest to sub-Saharan Africa governments, national and international policymakers, and researchers, seeking to expand their attention to mothers and their children's needs in emergency preparedness.

## Introduction

Globally, there continues to be a surge in infectious disease outbreaks [1]. While old diseases are re-emerging, new ones are also emerging [1,2]. This speed of emergence and re-emergence is accelerated by human development, changes in demographics, population, and the environment. We continue to see new patterns of disease infections from their natural hosts to humans, with pathogens now travelling beyond traditional vector areas and spreading to previously unaffected environments [1]. The recent emergence of new variants of infectious diseases such as Severe Acute Respiratory Syndrome Virus (SARS), SARS COV-2, H1N1 pandemic influenza, and Ebola indicates that we will continue to see more of these diseases [2–4]. For health systems in the sub-Saharan Africa (SSA) region with persistent resource constraints, responding promptly to health system disruptions resulting from these outbreaks is particularly challenging. It is even more complex when considered in relation to individual needs and behaviour towards health care. Lessons from Ebola tell us that women and children will be disproportionately affected by infectious disease outbreaks [5–8]. However, this evidence does not clarify why and how infectious diseases affect women's health-seeking behaviour for themselves and their children during an outbreak.

A mother's health-seeking behaviour has direct implications for the health of her children and the entire family. The way women reach health decisions could be the deciding factor in whether they or their children live. According to recent reports, the global burden for maternal and child health mortality was nearly halved in the last two decades [9–11]. However, in the SSA region, which accounts for more than half of these maternal and child deaths, the progression has been slow [12–14]. We know from studies

that biomedical, social and economic factors influence maternal health-seeking behaviour [15–17]. These studies emphasized behavioural factors resulting from a woman's social and economic capital to determine facility-level access to care. Accessibility, therefore, has repeatedly been explained with the three delays to care, which posits that a woman with adequate capital can and will seek care for herself and her family [11,18–20]. However, we do not know whether other identifiable factors could influence a woman's decision to seek care when there is a global disruption in the environment, such as infectious disease outbreaks.

The broad objective of this review of the literature is to explore, identify, and map gaps in the literature on factors resulting from infectious diseases outbreak that could impact women's health care decision-making. The review will compare health-seeking behaviour in sub-Saharan Africa during outbreak and non-outbreak periods, to generate a comparative analysis of the health behaviour of women of reproductive age and factors impacting on their health-seeking behaviour when there is an outbreak versus no outbreak. Health-seeking behaviour is described as the act of seeking care for identified ailments or illnesses for self and others [21–23]. Results from the scoping review will serve to situate the findings of an original qualitative research for on health-seeking behaviour of women during the COVID-19 pandemic. As such, it is anticipated to be of interest to sub-Saharan Africa governments, national and international policymakers, and researchers, seeking to expand their attention to mothers and their children's needs in emergency preparedness.

## Methodology

This protocol is for a scoping review of existing literature reporting findings on women's health-seeking behaviour during infectious disease outbreaks in sub-Saharan Africa. There are several reasons to conduct scoping reviews, from identifying new and emerging evidence, mapping existing evidence, identifying areas for further systematic inquiry, and clarifying concepts in the literature [24]. The scoping review method was selected for its capacity to synthesize different types of evidence, including completed, published and unpublished literature on the area of interest (Arksey & O'Malley, 2005). However, the main objective of scoping literature in the area of interest is to determine the volume of literature existing on maternal health behaviour during infectious diseases outbreak and identify areas for further research. This review will also use the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for scoping reviews (PRISMA-ScR) checklist which details 20 essential reporting items with two additional optional items [26]

Arksey and O'Malley's [25] methodological framework enhanced by Levac et al. [27] will guide this review. Thus, the following five steps will be followed in this scoping review; 1) clarify and linking the purpose and research question; 2) balance feasibility with breadth and comprehensiveness of the scoping process; 3) use an iterative team approach to selecting studies; 4) extract data; 5) incorporate a numerical summary and qualitative thematic analysis, reporting results, and considering the implications of study findings to policy, practice, or research; 6) incorporate consultation with stakeholders as a

required knowledge translation component of scoping study methodology. The final step will include two consultations with a policymaker and health professional in sub-Saharan African countries.

### Identifying the research question

The main research question is, “On what basis do women seek care for themselves and their children during an infectious disease outbreak in sub-Sahara Africa?” The sub-questions are;

- What mediators (contextual, individual, relational factors) are associated with women’s decision to seek or not seek care for themselves and family?
- What patterns and exceptions in health behaviours have been noted in the literature with respect to women’s health-seeking behaviors during infectious disease outbreaks in sub-Sahara Africa?

### Identify relevant studies

A search for published and unpublished (grey) literature in the study area will be conducted in MEDLINE (OVID), EMBASE (OVID), CINHALL, PsycINFO, National Library of Science, and SCOPUS. Articles published before July 2021 that have the Medical Subject Headings (MeSH) terms or keywords “disease outbreak” “infectious disease” or “pandemic” or epidemic,” and “behaviour” or “care-seeking,” and “mediator” or “barriers” or “enablers” “maternal” or “women,” or “mothers” will be identified. To further limit the articles to the geographic focus an additional term “sub-Saharan Africa” or “SSA” will be included in the screening process at the title and abstract stage. During the search, the reviewer will refine the keywords to include specific infectious diseases common to SSA, such as “HIV/AIDS,” “ebola,” “SARS,” “COVID19” “coronavirus” “SARS-COV” “SARS-COV2”. A manual search will be conducted using the ancestry approach to identify relevant studies from references of selected articles to see if there are studies that relate to the research. If they are relevant, the abstracts will be retrieved and reviewed for inclusion or exclusion. The references of these studies will also be perused to see other articles relevant to the study. This iterative process will continue until no new studies are identified. The search for grey literature will be done in additional databases, Worldcat, ProQuest (OVID), OCLC PapersFirst, and WHO.

### Selection of eligible studies

The People, Exposure, Outcome (PEO) framework for qualitative research will guide the screening process to select eligible studies. The PEO framework is below.

Table 1: PEO Framework

<b>People</b>	Mothers with children
<b>Exposure</b>	Infectious diseases outbreaks: “cholera” “Marburg” “malaria” “HIV/AIDS,” “Ebola” “MERS-Cov” “SARS-CoV” “SARS-CoV-2” “coronavirus” “COVID-19” “Dengue” “Influenza” “Chikungunya” “Zika” “Tuberculosis” “Yellow Fever” “MERS”
<b>Outcome</b>	Health seeking experiences, behaviour, daily living

Additionally, predetermined eligibility criteria will guide the final selection of articles to ensure the contents of the selected publications are relevant to the study objectives. The inclusion and exclusion criteria are outlined below.

### **Inclusion criteria**

To include studies, they must meet the following parameters;

- Focus on women of reproductive age between 15-49 years or older
- Report on women's health-seeking behavior during an infectious disease outbreak
- Focus on participants from the SSA block
- Must have been published or written if unpublished before July 2021
- Must be qualitative or quantitative studies

### **Exclusion criteria**

Any study that does not meet the inclusion criteria will be excluded from the review. Additional parameters for exclusion are listed below;

- Studies that do not include countries in the SSA block
- Studies looking at infectious diseases spread and not on their impact
- Studies without available full-text article

The search strategy will be refined and tested to check the appropriateness of keywords and the database in consultation with a librarian. The search results will be presented in a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram. The selected articles will be uploaded into Mendeley to remove duplicates, screen, and extract study characteristics. The selection process will use the recommended approach in the updated Preferred Reporting Items for Systematic Reviews and Meta-Analyses-Extension for Scoping Reviews (PRISMA-ScR) checklist. Articles will be screened in three stages; 1) remove duplicates, 2) screen title and abstract for relevance to study objective 3) screen full article for relevance and extraction of main findings. If there are articles without a full text attached, a web search will be done to retrieve them and work with the librarian to obtain a copy.

### **Charting the data**

The characteristics of the studies selected will also be recorded in two tables. One table will detail the study origin, title, authors, study setting, and study participants, while the second will detail the objectives of the study, methods, and main findings of the study. A sample of the tables is below as tables 2 and 3.

Table 2: Geographical characteristics

Country	Source title	Author(s) name(s)	Study setting	Study participants

Table 3: Study characteristics

Aim	methods	main findings

### **Collating, summarizing, and reporting the results.**

The chosen qualitative synthesis method to present the result is that a narrative report will be produced to summarize the extracted data around the following outcomes: associated factors, region of study, identified behavioural patterns, and gaps for further research.

## **Discussion**

The proposed scoping review will map and identify mediators of women’s health-seeking behaviour in sub-Saharan African. It will highlight the gaps in the literature on women’s health-seeking behaviour, especially during infectious disease outbreaks. Additionally, the review will highlight the periodic comparison of behaviours during an outbreak and when there is no outbreak.

This review will be the first step in understanding women’s behaviours as part of a larger study on the experiences of women who identify as needing to seek or delay care during a pandemic. Having an understanding of the pattern of behaviour of women during an infectious disease outbreak will assist public health planners and policymakers in designing mitigation plans that ensures the continuity of services during future pandemics. This review will create awareness of the need for further research on women’s experiences at a strategic level.

The limitations of the review will include the exclusion of women with children who would have had the need to seek or delay care for themselves or ward, i.e. old children outside of the under-five bracket. The review will also not include an analysis or quality check of findings of articles reviewed.

## **Declarations**

### **Funding**

The authors received no funding for this study.

### **Availability of data and materials**

Data generated or analysed will be included in the final article.

## Ethics approval and consent to participate

This study will not include humans or animals as participants. All data will be sourced from secondary sources.

## Consent for publication

Not applicable

## Competing interests

The authors declare that they have no competing interests.

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