BMJ Open

Scoping review of African health histories: a protocol

Humphrey Cyprian Karamagi ,[1] Elizabeth O Oduwole ,[2,3] Sokona Sy,[1] Abdu A Adamu,[3,4] Aminata B W Seydi,[1] Charles S Wiysonge[5]

To cite: Karamagi HC, Oduwole EO, Sy S, *et al*. Scoping review of African health histories: a protocol. *BMJ Open* 2023;**13**:e075787. doi:10.1136/bmjopen-2023-075787

► Prepublication history for this paper is available online. To view these files, please visit the journal online (http://dx.doi.org/10.1136/bmjopen-2023-075787).

Received 18 May 2023
Accepted 03 October 2023

[1]Data, Analytics and Knowledge Management team, World Health Organization Regional Office for Africa, Brazzaville, Congo
[2]Global Health, University of Stellenbosch Department of Interdisciplinary Health Sciences, Cape Town, Western Cape, South Africa
[3]South African Medical Research Council, Cochrane South Africa, Tygerberg, Western Cape, South Africa
[4]Centre for Evidence-based Health Care, Division of Epidemiology and Biostatistics, Department of Global Health, Faculty of Medicine and Health Sciences, Stellenbosch University, Stellenbosch, Western Cape, South Africa
[5]Epidemiology and Biostatistics, University of Cape Town, Rondebosch, South Africa

Correspondence to
Dr Humphrey Cyprian Karamagi; karamagih@gmail.com

ABSTRACT

Introduction The history of African health is closely entwined with the history of the continent itself—from precolonial times to the present day. A study of African health histories is critical to understanding the complex interplay between social, economic, environmental and political factors that have shaped health outcomes on the continent. Furthermore, it can shed light on the successes and failures of past health interventions, inform current healthcare policies and practices, and guide future efforts to address the persistent health challenges faced by African populations. This scoping review aims to identify existing literature on African health histories.

Methods and analysis The Arksey and O'Malley's framework for conducting scoping reviews will be utilised for the proposed review, which will be reported in compliance with the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews guidelines. The main review question is 'What literature exists on the history of health practices and healthcare delivery systems in Africa from the precolonial era through to the sustainable development goal era?' Keywords such as Africa, health and histories will be used to develop a search strategy to interrogate selected databases and grey literature repositories such as PubMed, Scopus, Web of Science and WHOLIS. Two authors will independently screen titles and abstracts of retrieved records. One author will extract data from articles that meet the inclusion criteria using a purposively designed data charting. The data would be coded and analysed thematically, and the findings presented narratively.

Ethics and dissemination The scoping review is part of a larger project which has approval from the WHO AFRO Ethics Research Committee (Protocol ID: AFR/ERC/2022/11.3). The protocol and subsequent review will be submitted to the integrated African Health Observatory and published in a peer-reviewed journal.

Registration details https://osf.io/xsaez/

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ To the best of our knowledge, this will be the first review to provide cohesive information on the evolution and development of health practices and systems in Africa.
⇒ The search strategy will be optimised to search journal websites, online search engines and grey literature repositories as applicable.
⇒ Reporting the review in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews guidelines will ensure methodological rigour.
⇒ As this will be a scoping review, no meta-analysis is planned for this scoping review neither will the quality of included studies be appraised.

INTRODUCTION

The objective of this protocol and proposed scoping review is to provide an overview of the nature of evidence documented about the evolution of healthcare practices and systems in Africa across six time blocks, ranging from the precolonial era through to this current era of sustainable development goal (SDG). The other four time blocks in between are: (a) the colonial era, which varied across the continent, generally spanning the late 19th century until the mid-20th century, (b) the immediate postindependence era, a period generally corresponding to the 1960s for many African countries, (c) the primary healthcare (PHC) era generally corresponding to the 1970s through the 1990s and (d) the millennium development goal (MDG) era, from 2000 to 2015.

The WHO defines health as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.[1] Similarly, it defined health system as consisting of all organisations, people and actions whose primary intent is to promote, restore or maintain health (WHO, 2007).

Prior to the arrival of explorers and subsequent colonialists, different African communities had indigenous concepts of health, ill health and good health. The treatment of various health issues was understood and addressed, howbeit, in diverse ways, which could range from the oral administration of boiled mixture of herbs and tree barks to the performance of elaborate ceremonies and rituals, or a combination of two or more of the processes. The effectiveness or otherwise of these practices is still a subject of debate

until now, nevertheless, they were sufficient and accepted by the 'patients', 'practitioners' and general society of the time.

Then came first the explorers, then missionaries and, subsequently, the colonialist who brought with them their own 'medicines' and methods of healing. These two health systems coexisted together during the explorer and early missionary settlers' times, with curious and cautious mutual respect.[2] During this period, both ordinary Europeans and Africans often adopted the use of each other's medicines and practices in a symbiotic kind of medical pluralism, though leading 'practitioners' of both systems strongly believed their system to be superior.[3]

At the turn of the 19th century, as the violent conquest and colonisation of the continent spread, the dominance of imperial medical knowledge also grew. Nevertheless, European medicine, which served the expatriates and sometimes the elite class of the natives, never had complete dominance nor did it fully replace African traditional medicines or practices,[3] which still coexist with it until now, and in many areas on the continent is the only available (and sometimes even the preferred) means of healthcare. Both African and European healthcare practices and systems underwent various changes during the colonial era. An example of the change that the African health system underwent is the suppression and, even in some cases, the prohibition of certain aspects of African healing practices labelled as 'witchcraft'.[3–5] This change could be due to misunderstanding on the part of the colonialist as the imperial healthcare was provided mainly by missionaries whose spiritual understanding and practices differ from those of the natives. On the other hand, the discovery of the germ theory and antibiotics (eg, penicillin)[6 7] brought about changes in the European medicines and medical practices. The two world wars, particularly World War II, changed political alignments of Western nations, which had direct bearing on the operations of missionary hospitals and healthcare posts, and new developments in the understanding and practice of Western biomedicines in Africa.[3–5]

Eventually, most African countries gained independence in the 1960s, an era that saw rapid and diverse changes in governance and policies that affected all facets of life, including the provision of healthcare services. A notable example is the transfer of missionary healthcare facilities from the founding and (mainly) funding missions to the control of newly formed governments.[4] In addition, the immediate postindependence period saw many of the countries migrating from a fee-for-service model to a cost recovery healthcare system model. This, among other factors, made Western biomedicine-based healthcare services unaffordable for many people of low socioeconomic status, further strengthening their dependency on traditional medicine and influencing their health-seeking behaviour.

The next decades (1970–1990) witnessed a rise in the influence of global health actors such as the WHO and UNICEF on the polices and provision of healthcare services. African governments also placed emphasis on the provision of free basic health services through the expansion of PHC coverage from the 1970s to the 1990s. On the other hand, the MDGs era, which spanned the years 2000 to 2015, saw emphasis shift to the targeting of specific high morbidity and mortality communicable diseases such as tuberculosis, malaria and AIDS in two times per day to reduce the burden of such diseases. This achieved an appreciable level of success both in terms of improved health outcomes and better management of healthcare service delivery. However, in the current SDGs era, the emphasis has shifted once again. Now, the focus is to tackle the full range of challenges affecting the health and well-being of all—and to do so in a sustainable way—which includes implementation of the comprehensive and revitalised PHC approach to investing in health systems. This method recognises and attempts to correct the shortcomings of the previous efforts, including[1] moving from a focus on basic services to essential services that people need, across the entire life course[2]; moving from equality to equity, where the focus is on identifying and removing barriers to use and[3] moving from a focus on treatment to addressing the full spectrum of public health functions, from health promotion to preventative care, diagnostics, curative care, rehabilitative care, all the way to palliative care.

WHO defines health as a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity.[1] The attainment of the lofty goals embedded in this definition is the foundational motivation for the WHO Regional Office for Africa (WHO AFRO). Documenting African health histories as experienced and shared by knowledgeable African principal actors in the field of healing and health will not only offer valuable insights into the organisation, management and delivery of essential services but also help to establish a repository of African health histories that should be safeguarded. In preparation of this project, investigating the literature and mapping available evidence against the objectives of the project necessitates the proposed scoping review.

METHODS AND ANALYSIS

One of the goals of the integrated African Health Observatory is to facilitate the sharing of best practices and knowledge in Africa and across the world. Through this platform, the WHO AFRO intends to document stories about the evolution of health practices and systems from the precolonial era to the SDG era, as reported by interviewed key informants from Member States of the WHO Africa Region. Towards achieving this goal, knowledge of what exists around this topic in extant literature is required. Scoping reviews have proven to be useful tools in identifying main evidence sources and mapping key concepts, particularly in complex and heterogeneous areas of research.[8–10] A preliminary search of PubMed and Google confirmed the heterogeneity and complexity

of this research area, thus justifying the use of scoping review methodology. The five mandatory steps of the six-step framework proposed by Arksey and O'Malley in 2005[10] will be followed in conducting the scoping review. The consultation exercise, the optional sixth step, though not considered relevant to the objective of the proposed review at this stage, may be conducted during the review if warranted. Recommended improvements aimed at boosting the methodological rigour of scoping reviews proffered by Levac[11] and the Joanna Briggs Institute[12] will be incorporated in the conduct of the review, as appropriate. The publication of a review protocol a priori is an example of such recommendations.

The full scoping is intended to start in December 2023; the projected completion date is May 2024.

Step 1: identifying a research question

The main research question for the proposed scoping review is 'What literature exists on the history of health practices and healthcare delivery systems in Africa from the precolonial era through to the SDG era?' This research question is broad, as the review seeks to provide an overview of the nature of evidence documented about the evolution of healthcare practices and systems in Africa across six time blocks, ranging from the precolonial era through to the SDG era. The other time blocks are: (a) the colonial era, which varied across the continent, generally spanning the late 19th century until the mid-20th century, (b) the immediate postindependence era, a period generally corresponding to the 1960s for many African countries, (c) the PHC era generally corresponding to the 1970s to the 1990s and (d) the MDG era, from 2000 to 2015. The scope of the review, as indicated in the research question is, therefore, unavoidably broad.

Step 2: identifying relevant studies

Electronic databases such as PubMed, Scopus, Web of Science and Africa-Wide Information, and grey literature repositories such as WHOLIS and academic institutions' thesis databases, will be searched. The preliminary searches conducted in PubMed and Google using the phrase 'African Health Histories' and each individual word as keywords and the Boolean operators AND/OR (in PubMed only) retrieved numerous diverse records. The tentative screening of the titles and abstracts led to a classification of many of the records as irrelevant. The search terms will be refined and used to build search strings reflective of the review question. These will be adapted for use in other databases as required and documented in the full review. Hand searching of the reference lists of selected relevant articles will also be conducted at this stage to locate other possible relevant records. This step will be undertaken by one or more review authors with the assistance of a seasoned librarian.

Inclusion and exclusion criteria

Any record documenting any aspect of health practices and health systems utilised and/or developed during any of the periods outlined in step 1 above in a historical context will be included. There will be no restrictions based on time, language of publication or study design (for peer-reviewed studies).

Records not documenting aspects of health practices and health systems utilised and/or developed in any of the WHO Africa Member States in a historical context will be excluded from the review. Records about Africans in diaspora; Afro-descendants including citizens of North America, Central America and South America; and Caribbean populations will be excluded.

The population under consideration is people that lived or are living on the African continent during the selected time blocks; the concept is healthcare practices and healthcare systems; and the context is their evolution from indigenous roots to current times.

Step 3: study selection

The number of records retrieved from each database will be recorded, and where possible, all retrieved records will be exported to a web-based bibliographic manager such as the latest version of EndNote. Alternatively, records will be screened on retrieval, and titles and abstract that align with the objectives of the review will be selected for export to EndNote for deduplication of all records from all sources. Screening of titles and abstracts of the remaining records will be conducted independently by two review authors. Any differences in the study selection process will be resolved by discussions or, if necessary, by consultation with a third review author. The number of records removed and the reasons for their removal will be documented and presented in a Preferred Reporting Items for Systematic reviews and Meta-Analyses diagram as stipulated in the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews guidelines. Records retrieved from grey literature repositories such as WHOLIS will be processed in a similar fashion to the one described above. In the case of search engines such as JURN and Google, only the first one hundred results will be screened on retrieval as these have been documented to have the greatest probability of containing information relevant to the enquiry.[13 14] All records meeting the inclusion criteria will be included in the review.

Step 4: charting the data

A purposively designed data charting form agreed on by all review authors will be used to guide the extraction of relevant information from included sources. The form will be pretested on a number of selected records and will be amended in the course of the review as necessary or as new information is obtained from included studies. Information to be extracted will include, inter alia: name of first author, year of publication, country and subregion of the continent concerned, 'time block' (one or more of the six time blocks described in step 1 above) and key information that relates to the review objectives, for example, information relating to either health practices, health systems or both, their development, response to 'outside' influences, etc.

Step 5: collating, summarising and reporting results

Relevant information obtained from included records will be analysed, synthesised and presented using both qualitative and quantitative methods. Tables, charts, figures or flow diagrams will be used to present extracted variables as appropriate, while narrative and thematic analysis will be used to articulate substantive findings of the review. A robust discussion based on a lucid analysis of the findings of the review as they relate to the review question will be conducted. In addition, other issues of interest that may emerge during the review will also be discussed, a summary of which will lead to valid conclusions and pertinent recommendations.

No meta-analysis is planned for the review, nor will the quality of evidence of included records be assessed. Nevertheless, a study limitation section will be included to detail any shortcomings of the review.

Step 6: consultation exercise

A consultation exercise, though not planned at this protocol stage, may be conducted during the review if considered necessary.

Patient and public involvement

Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

ETHICS AND DISSEMINATION

Ethics approval is not a requirement for the planned review. All data will be obtained from publicly available documents, and no primary data will be generated. However, the scoping review is a part of the planned 'African Health Stories Histories' research project, an initiative of the WHO Africa Regional Office. The project has obtained ethics approval from the WHO AFRO Ethics Research Committee (Protocol ID: AFR/ERC/2022/11.3).

Twitter Humphrey Cyprian Karamagi @karamagih

Contributors HCK led the conceptualisation of the study. HCK and EOO designed and drafted the protocol. EOO and CSW developed the search strategy and EOO and SS conducted the preliminary searches; EOO, SS, AAA, ABWS and CSW provided input and feedback on the methodology and the draft manuscript. This team of six authors gives their approval to the publishing of this protocol manuscript.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

ORCID iDs

Humphrey Cyprian Karamagi http://orcid.org/0000-0002-6277-2095
Elizabeth O Oduwole http://orcid.org/0000-0002-7192-242X

REFERENCES

1 Constitution of the world health organization. Available: https://www.who.int/about/governance/constitution
2 Mkhwanazi N. Medical anthropology in Africa: the trouble with a single story. *Med Anthropol* 2016;35:193–202.
3 Coghe S, Berlin FU. African therapeutic practices in a Precolonial world. 2022: 1–44.
4 Swiss Network for International Studies. Research project 'history of health systems in Africa. 2010: 1–31.
5 Some lessons from the history of epidemics in Africa | African arguments. Available: https://africanarguments.org/2020/06/some-lessons-from-the-history-of-epidemics-in-africa/
6 Curiosity Digital collections. 2023. Available: https://curiosity.lib.harvard.edu/
7 History of antibiotic development – antibiotics – react. 2023. Available: https://www.reactgroup.org/toolbox/understand/antibiotics/development-of-antibiotics-as-medicines/
8 Oduwole EO, Pienaar ED, Mahomed H, *et al*. Current tools available for investigating vaccine hesitancy: a Scoping review protocol. *BMJ Open* 2019;9:e033245.
9 Stenberg M, Mangrio E, Bengtsson M, *et al*. Formative peer assessment in Healthcare education programmes: protocol for a Scoping review. *BMJ Open* 2018;8:e025055.
10 Arksey H, O'Malley L. Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology* 2005;8:19–32.
11 Levac D, Colquhoun H, O'Brien KK. Scoping studies: advancing the methodology. *Implement Sci* 2010;5:69.
12 The Joanna Briggs Institute. Joanna Briggs Institute reviewers' manual: 2015 edition/supplement methodology for JBI Scoping reviews. In: *Climate Change 2013*. 2015: 1–30.
13 Godin K, Stapleton J, Kirkpatrick SI, *et al*. Applying systematic review search methods to the grey literature: A case study examining guidelines for school-based breakfast programs in Canada. *Syst Rev* 2015;4:138:138.:.
14 Ryan J, Wiyeh A, Karamagi H, *et al*. A Scoping review on research Agendas to enhance prevention of epidemics and Pandemics in Africa. *Pan Afr Med J* 2020;37(Suppl 1):40):40.:.