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Protocol for a scoping review of African health histories

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Manuscripts

Protocol for a scoping review of African health histories

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15 Abstract

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40 17 Introduction

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42 18 The history of African health is closely entwined with the history of the continent itself – from pre-colonial
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44 19 times to the present day. A study of African health histories is critical to understanding the complex interplay
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46 20 between social, economic, environmental, and political factors that have shaped health outcomes on the
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48 21 continent. Furthermore, it can shed light on the successes and failures of past health interventions, inform
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50 22 current health care policies and practices, and guide future efforts to address the persistent health challenges
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52 23 faced by African populations. This scoping review aims to identifying existing literature on African health
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54 24 histories.

54 25 Methods and analysis

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3 26 The Arksey and O'Malley's framework for conducting scoping reviews will be utilized for the proposed
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5 27 review, which will be reported in compliance with the Preferred Reporting Items for Systematic reviews and
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7 28 Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines. The main review question is
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9 29 "What literature exists on the history of health practices and health care delivery systems in Africa from the
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11 30 pre-colonial era through to the Sustainable Development Goal (SDG) era?" Key words such as Africa, health,
12
13 31 and histories will be used to develop a search strategy to interrogate selected databases and grey literature
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15 32 repositories such as PubMed, Scopus, Web of Science, and WHOLIS. Two authors will independently screen
16
17 33 titles and abstracts of retrieved records. One author will extract data from articles that meet the inclusion
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19 34 criteria using a purposively designed data charting. The data would be coded and analyzed thematically, and
20
21 35 the findings presented narratively.

21 36 **Ethics and dissemination**

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23 37 The scoping review is part of a larger project which has approval from the WHO AFRO Ethics Research
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25 38 Committee (Protocol ID: AFR/ERC/2022/11.3). The protocol and subsequent review will be submitted to the
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27 39 integrated African Health Observatory (iAHO) and published in a peer-reviewed journal.

28
29 40 **Protocol registration number:** <https://osf.io/xsaez/>

31 41 **STRENGTHS AND LIMITATIONS OF THIS STUDY**

- 32 42
- 33 43 ➤ To the best of our knowledge, this will be the first review to provide cohesive information on the
34 44 evolution and development of health practices and systems in Africa.
 - 35 45 ➤ The search strategy will be optimized to search journal websites, online search engines, and grey
36 46 literature repositories as applicable.
 - 37 47 ➤ Reporting the review in accordance with the Preferred Reporting Items for Systematic Reviews
38 48 and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines will ensure
39 49 methodological rigor.
 - 40 50 ➤ As this will be a scoping review, no meta-analysis is planned for this scoping review neither will
41 51 the quality of included studies be appraised.
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53 53 **KEYWORDS:**

54 54 Health, health systems, health histories, health history, Africa

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55 INTRODUCTION

56 Prior to the arrival of explorers and subsequent colonialists, different African communities had indigenous
57 concepts of health, ill health, and good health. The treatment of various health issues were understood and
58 addressed, howbeit, in diverse ways, which could range from the oral administration of boiled mixture of herbs
59 and tree barks to the performance of elaborate ceremonies and rituals, or a combination of two or more of the
60 processes. The effectiveness or otherwise of these practices is still a subject of debate till date, nevertheless
61 they were sufficient and accepted by the ‘patients,’ ‘practitioners,’ and general society of the time.

62 Then came first the explorers, then missionaries and, subsequently, the colonialist who brought with them their
63 own ‘medicines’ and methods of healing. These two health systems co-existed together during the explorer
64 and early missionary settlers’ times, with curious and cautious mutual respect[1]. During this period, both
65 ordinary Europeans and Africans often adopted the use of each other’s medicines and practices in a symbiotic
66 kind of medical pluralism, though leading ‘practitioners’ of both systems strongly believed their system to be
67 superior[2].

68 At the turn of the 19th Century, as the violent conquest and colonization of the continent spread, the dominance
69 of imperial medical knowledge also grew. Nevertheless, European medicine never had complete dominance
70 nor did it fully replace African traditional medicines or practices[2], which still co-exist with it till date, and
71 in many areas on the continent is the only available (and sometimes even the preferred) means of health care.
72 Both African and European health care practices and systems underwent various changes during the colonial
73 era, which included inter alia, the suppression and even in some cases, the prohibition of certain aspects of
74 African healing practices labelled as “witchcraft” [2–4]. The two world wars, particularly World War II,
75 changed political alignments of Western nations, which had direct bearing on the operations of missionary
76 hospitals and health care posts, and new developments in the understanding and practice of Western
77 biomedicines in Africa [2–4].

78 Eventually, most African countries gained independence in the 1960s, an era that saw rapid and diverse
79 changes in governance and policies that affected all facets of life, including the provision of health care
80 services. A notable example is the transfer of missionary health care facilities from the founding and (mainly)
81 funding missions to the control of newly formed governments [3]. In addition, the immediate post-
82 independence period saw many of the countries migrating from a fee-for-service model to a cost recovery
83 health care system model, making Western biomedicine-based health care services unaffordable for many

84 people of low socio-economic status, further strengthening their dependency on traditional medicine and
85 influencing their health-seeking behavior.

86 The next decade witnessed a rise in the influence of global health actors such as the World Health Organization
87 (WHO) and United Nations Children's Fund (UNICEF) on the policies and provision of health care services.
88 African governments also placed emphasis on the provision of free basic health services through the expansion
89 of primary health care coverage from the 1970s to the 1990s. On the other hand, the Millennium Development
90 Goals (MDGs) era, which spanned the years 2000 to 2015, saw emphasis shift to the targeting of specific high
91 morbidity and mortality communicable diseases such as tuberculosis, malaria, and acquired immune
92 deficiency syndrome (AIDS) in a bid to reduce the burden of such diseases. This achieved an appreciable level
93 of success both in terms of improved health outcomes and better management of health care service delivery.
94 However, in the current Sustainable Development Goals (SDGs) era, the emphasis has shifted once again.
95 Now, the focus is to tackle the full range of challenges affecting the health and well-being of all – and to do
96 so in a sustainable way, which includes implementation of the comprehensive and revitalized Primary Health
97 Care (PHC) approach to investing in health systems. This method recognizes and attempts to correct the
98 shortcomings of the previous efforts, including (1) moving from a focus on basic services to essential services
99 that people need, across the entire life course; (2) moving from equality to equity, where the focus is on
100 identifying and removing barriers to use; and (3) moving from a focus on treatment to addressing the full
101 spectrum of public health functions, from health promotion, to preventative care, diagnostics, curative care,
102 rehabilitative care, all the way to palliative care.

103 WHO defines health as a state of complete physical, mental and social well-being, and not merely the absence
104 of disease or infirmity[5]. The attainment of the lofty goals embedded in this definition is the foundational
105 motivation for the WHO Regional Office for Africa (WHO AFRO). Documenting African health histories as
106 experienced and shared by knowledgeable African principal actors in the field of healing and health will offer
107 valuable insights into the organization, management and delivery of essential services, but also help to
108 establish a repository of African health histories that should be safeguarded. In preparation of this project,
109 investigating the literature and mapping available evidence against the objectives of the project necessitates
110 the proposed scoping review.

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112 **METHODS AND ANALYSIS**

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3 114 One of the goals of the integrated African Health Observatory (iAHO) is to facilitate the sharing of best
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5 115 practices and knowledge in Africa and across the world. Through this platform, the WHO AFRO intends to
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7 116 document stories about the evolution of health practices and systems from the pre-colonial era to the SDG era,
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9 117 as reported by interviewed key informants from Member States of the WHO Africa Region. Towards
10
11 118 achieving this goal, knowledge of what exists around this topic in extant literature is required. Scoping reviews
12
13 119 have proven to be useful tools in identifying main evidence sources and mapping key concepts, particularly in
14
15 120 complex and heterogeneous areas of research[6–8]. A preliminary search of PubMed and Google confirmed
16
17 121 the heterogeneity and complexity of this research area, thus justifying the use of scoping review methodology.
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19 122 The five mandatory steps of the six-step framework proposed by Arksey and O’Malley in 2005[8] will be
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21 123 followed in conducting the scoping review. The consultation exercise, the optional sixth step, though not
22
23 124 considered relevant to the objective of the proposed review at this stage, may be conducted during the review
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25 125 if warranted. Recommended improvements aimed at boosting the methodological rigor of scoping reviews
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27 126 proffered by Levac [9] and the Joanna Briggs Institute (JBI) [10] will be incorporated in the conduct of the
28
29 127 review, as appropriate. The publication of a review protocol *a-priori* is an example of such recommendations.

28 128 **Step 1: identifying a research question**

29 129 The main research question for the proposed scoping review is ‘What literature exists on the history of health
30
31 130 practices and health care delivery systems in Africa from the pre-colonial era through to the SDG era?’ This
32
33 131 research question is broad, as the review seeks to provide an overview of the nature of evidence documented
34
35 132 about the evolution of health care practices and systems in Africa across six time-blocks, ranging from the
36
37 133 pre-colonial era through to the SDG era. The other time blocks are: (a) the colonial era, which varied across
38
39 134 the continent, generally spanning the late 19th century till the mid-20th century, (b) the immediate post-
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41 135 independence era, a period generally corresponding to the 1960s for many African countries, (c) the primary
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43 136 health care era generally corresponding to the 1970s to the 1990s, and (d) the MDG era, from 2000-2015. The
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45 137 scope of the review, as indicated in the research question is, therefore, unavoidably broad.

45 138 **Step 2: identifying relevant studies**

46 139 Electronic databases such as PubMed, Scopus, Web of Science, and Africa-Wide Information, and grey
47
48 140 literature repositories such as WHOLIS and academic institutions’ thesis databases, will be searched. The
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50 141 preliminary searches conducted in PubMed and Google using the phrase ‘African Health Histories’ and each
51
52 142 individual word as key words and the Boolean operators AND/OR (in PubMed only) retrieved numerous
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54 143 diverse records. The tentative screening of the titles and abstracts led to a classification of many of the records
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56 144 as irrelevant. The search terms will be refined and used to build search strings reflective of the review question.

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3 145 These will be adapted for use in other databases as required and documented in the full review. Hand searching
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5 146 of the reference lists of selected relevant articles will also be conducted at this stage to locate other possible
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7 147 relevant records. This step will be undertaken by one or more review authors with the assistance of a seasoned
8
9 148 librarian.

11 149 Inclusion and exclusion criteria

12 150 Any record documenting any aspect of health practices and health systems utilized and/or developed during
13
14 151 any of the periods outlined in Step 1 above in a historical context will be included. There will be no restrictions
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16 152 based on time, language of publication, or study design (for peer-reviewed studies).

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18 153 Records not documenting aspects of health practices and health systems utilized and/or developed in any of
19
20 154 the WHO Africa Member States in a historical context will be excluded from the review. Records about
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22 155 Africans in diaspora, Afro-descendants including citizens of: North America, Central America, and South
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24 156 America; and Caribbean populations will be excluded.

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26 157 The population under consideration is people that lived or are living on the African continent during the
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28 158 selected time-blocks; the concept is health care practices and health care systems; and the context is their
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30 159 evolution from indigenous roots to current times.

31 160 Step 3: study selection

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33 161 The number of records retrieved from each database will be recorded, and where possible, all retrieved records
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35 162 will be exported to a web-based bibliographic manager such as the latest version of EndNote. Alternatively,
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37 163 records will be screened on retrieval, and titles and abstract that align with the objectives of the review will be
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39 164 selected for export to EndNote for deduplication of all records from all sources. Screening of titles and
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41 165 abstracts of the remaining records will be conducted independently by two review authors. Any differences in
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43 166 the study selection process will be resolved by discussions or if necessary, by consultation with a third review
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45 167 author. The number of records removed and the reasons for their removal will be documented and presented
46
47 168 in a PRISMA diagram as stipulated in the Preferred Reporting Items for Systematic reviews and Meta-
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49 169 Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines. Records retrieved from grey literature
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51 170 repositories such as WOHLIS will be processed in a similar fashion to the one described above. In the case of
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53 171 search engines such as JURN and Google, only the first one hundred results will be screened on retrieval as
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55 172 these have been documented to have the greatest probability of containing information relevant to the
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57 173 enquiry[11,12]. All records meeting the inclusion criteria will be included in the review.

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174 **Step 4: charting the data**

175 A purposively designed data charting form agreed on by all review authors will be used to guide the extraction
176 of relevant information from included sources. The form will be pre-tested on a number of selected records
177 and will be amended in the course of the review as necessary or as new information is obtained from included
178 studies. Information to be extracted will include, inter alia: name of first author, year of publication, country
179 and sub-region of the continent concerned, 'time-block' (one or more of the six time-blocks described in Step
180 1 above), and key information that relates to the review objectives, e.g., information relating to either health
181 practices, health systems, or both, their development, response to 'outside' influences, etc.

182 **Step 5: collating, summarizing and reporting results**

183 Relevant information obtained from included records will be analyzed, synthesized and presented using both
184 qualitative and quantitative methods. Tables, charts, figures, or flow diagrams will be used to present extracted
185 variables as appropriate, while narrative and thematic analysis will be used to articulate substantive findings
186 of the review. A robust discussion based on a lucid analysis of the findings of the review as they relate to the
187 review question will be conducted. In addition, other issues of interest that may emerge during the review will
188 also be discussed, a summary of which will lead to valid conclusions and pertinent recommendations.
189 No meta-analysis is planned for the review, nor will the quality of evidence of included records be assessed.
190 Nevertheless, a study limitation section will be included to detail any shortcomings of the review.

191 **Step 6: consultation exercise**

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

195 **ETHICS AND DISSEMINATION**

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

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Authors Contributions

HCK led the conceptualization 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, AWS, and CSW provided input and feedback on the methodology and the draft manuscript. This team of six authors give their approval to the publishing of this protocol manuscript.

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Competing Interest

None declared.

Patients consent for publication

None required

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Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	



SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	
Limitations	20	Discuss the limitations of the scoping review process.	
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med.* 2018;169:467–473. doi: 10.7326/M18-0850.



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Protocol for a scoping review of African health histories

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Abstract

Introduction

The history of African health is closely entwined with the history of the continent itself – from pre-colonial 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 health care 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

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3 The Arksey and O'Malley's framework for conducting scoping reviews will be utilized for the proposed
4 review, which will be reported in compliance with the Preferred Reporting Items for Systematic reviews and
5 Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines. The main review question is
6 "What literature exists on the history of health practices and health care delivery systems in Africa from the
7 pre-colonial era through to the Sustainable Development Goal (SDG) era?" Key words such as Africa, health,
8 and histories will be used to develop a search strategy to interrogate selected databases and grey literature
9 repositories such as PubMed, Scopus, Web of Science, and WHOLIS. Two authors will independently screen
10 titles and abstracts of retrieved records. One author will extract data from articles that meet the inclusion
11 criteria using a purposively designed data charting. The data would be coded and analyzed thematically, and
12 the findings presented narratively.
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21 **Ethics and dissemination**

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23 The scoping review is part of a larger project which has approval from the WHO AFRO Ethics Research
24 Committee (Protocol ID: AFR/ERC/2022/11.3). The protocol and subsequent review will be submitted to the
25 integrated African Health Observatory (iAHO) and published in a peer-reviewed journal.
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29 **Protocol registration number:** <https://osf.io/xsaez/>
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31 **STRENGTHS AND LIMITATIONS OF THIS STUDY**

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- 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 optimized 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 (PRISMA-ScR) guidelines will ensure methodological rigor.
 - 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.

51 **KEYWORDS:**

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55 Health, health systems, health histories, health history, Africa
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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 health care practices and systems in Africa across six time-blocks, ranging from the pre-colonial 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 till the mid-20th century, (b) the immediate post-independence era, a period generally corresponding to the 1960s for many African countries, (c) the primary health care era generally corresponding to the 1970s through the 1990s, and (d) the millennium development goal (MDG) era, from 2000-2015.

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 organizations, 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 were 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 till date, 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 co-existed 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 colonization 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 co-exist with it till date, and in many areas on the continent is the only available (and sometimes even the preferred) means of health care. Both African and European health care 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

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3 aspects of African healing practices labelled as “witchcraft” (3–5). This change could be due to
4 misunderstanding on the part of the colonialist as the imperial health care was provided mainly by missionaries
5 whose spiritual understanding and practices differ from those of the natives. On the other hand, the discovery
6 of the germ theory and antibiotics (for example, penicillin)(6-7) brought about changes in the European
7 medicines and medical practices. The two world wars, particularly World War II, changed political alignments
8 of Western nations, which had direct bearing on the operations of missionary hospitals and health care posts,
9 and new developments in the understanding and practice of Western biomedicines in Africa (3–5).

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

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20 The next decades (1970 – 1990) witnessed a rise in the influence of global health actors such as the World
21 Health Organization (WHO) and United Nations Children’s Fund (UNICEF) on the policies and provision of
22 health care services. African governments also placed emphasis on the provision of free basic health services
23 through the expansion of primary health care coverage from the 1970s to the 1990s. On the other hand, the
24 Millennium Development Goals (MDGs) era, which spanned the years 2000 to 2015, saw emphasis shift to
25 the targeting of specific high morbidity and mortality communicable diseases such as tuberculosis, malaria,
26 and acquired immune deficiency syndrome (AIDS) in a bid to reduce the burden of such diseases. This
27 achieved an appreciable level of success both in terms of improved health outcomes and better management
28 of health care service delivery. However, in the current Sustainable Development Goals (SDGs) era, the
29 emphasis has shifted once again. Now, the focus is to tackle the full range of challenges affecting the health
30 and well-being of all – and to do so in a sustainable way, which includes implementation of the comprehensive
31 and revitalized Primary Health Care (PHC) approach to investing in health systems. This method recognizes
32 and attempts to correct the shortcomings of the previous efforts, including (1) moving from a focus on basic
33 services to essential services that people need, across the entire life course; (2) moving from equality to equity,
34 where the focus is on identifying and removing barriers to use; and (3) moving from a focus on treatment to
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3 addressing the full spectrum of public health functions, from health promotion, to preventative care,
4 diagnostics, curative care, rehabilitative care, all the way to palliative care.
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7 WHO defines health as a state of complete physical, mental and social well-being, and not merely the absence
8 of disease or infirmity(1). The attainment of the lofty goals embedded in this definition is the foundational
9 motivation for the WHO Regional Office for Africa (WHO AFRO). Documenting African health histories as
10 experienced and shared by knowledgeable African principal actors in the field of healing and health will offer
11 valuable insights into the organization, management and delivery of essential services, but also help to
12 establish a repository of African health histories that should be safeguarded. In preparation of this project,
13 investigating the literature and mapping available evidence against the objectives of the project necessitates
14 the proposed scoping review.
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23 **METHODS AND ANALYSIS**

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27 One of the goals of the integrated African Health Observatory (iAHO) is to facilitate the sharing of best
28 practices and knowledge in Africa and across the world. Through this platform, the WHO AFRO intends to
29 document stories about the evolution of health practices and systems from the pre-colonial era to the SDG era,
30 as reported by interviewed key informants from Member States of the WHO Africa Region. Towards
31 achieving this goal, knowledge of what exists around this topic in extant literature is required. Scoping reviews
32 have proven to be useful tools in identifying main evidence sources and mapping key concepts, particularly in
33 complex and heterogeneous areas of research(8–10). A preliminary search of PubMed and Google confirmed
34 the heterogeneity and complexity of this research area, thus justifying the use of scoping review methodology.
35 The five mandatory steps of the six-step framework proposed by Arksey and O'Malley in 2005(10) will be
36 followed in conducting the scoping review. The consultation exercise, the optional sixth step, though not
37 considered relevant to the objective of the proposed review at this stage, may be conducted during the review
38 if warranted. Recommended improvements aimed at boosting the methodological rigor of scoping reviews
39 proffered by Levac (11) and the Joanna Briggs Institute (JBI) (12) will be incorporated in the conduct of the
40 review, as appropriate. The publication of a review protocol *a-priori* is an example of such recommendations.
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52 The full scoping is intended to start in December 2023; the projected completion date is May 2024.
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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 health care delivery systems in Africa from the pre-colonial 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 health care practices and systems in Africa across six time-blocks, ranging from the pre-colonial 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 till the mid-20th century, (b) the immediate post-independence era, a period generally corresponding to the 1960s for many African countries, (c) the primary health care era generally corresponding to the 1970s to the 1990s, and (d) the MDG era, from 2000-2015. 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 key words 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 utilized 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 utilized 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.

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3 The population under consideration is people that lived or are living on the African continent during the
4 selected time-blocks; the concept is health care practices and health care systems; and the context is their
5 evolution from indigenous roots to current times.
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8 9 **Step 3: study selection**

10 The number of records retrieved from each database will be recorded, and where possible, all retrieved records
11 will be exported to a web-based bibliographic manager such as the latest version of EndNote. Alternatively,
12 records will be screened on retrieval, and titles and abstract that align with the objectives of the review will be
13 selected for export to EndNote for deduplication of all records from all sources. Screening of titles and
14 abstracts of the remaining records will be conducted independently by two review authors. Any differences in
15 the study selection process will be resolved by discussions or if necessary, by consultation with a third review
16 author. The number of records removed and the reasons for their removal will be documented and presented
17 in a PRISMA diagram as stipulated in the Preferred Reporting Items for Systematic reviews and Meta-
18 Analyses extension for Scoping Reviews (PRISMA-ScR) guidelines. Records retrieved from grey literature
19 repositories such as WOHLIS will be processed in a similar fashion to the one described above. In the case of
20 search engines such as JURN and Google, only the first one hundred results will be screened on retrieval as
21 these have been documented to have the greatest probability of containing information relevant to the
22 enquiry(13,14). All records meeting the inclusion criteria will be included in the review.
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33 **Step 4: charting the data**

34 A purposively designed data charting form agreed on by all review authors will be used to guide the extraction
35 of relevant information from included sources. The form will be pre-tested on a number of selected records
36 and will be amended in the course of the review as necessary or as new information is obtained from included
37 studies. Information to be extracted will include, inter alia: name of first author, year of publication, country
38 and sub-region of the continent concerned, 'time-block' (one or more of the six time-blocks described in Step
39 1 above), and key information that relates to the review objectives, e.g., information relating to either health
40 practices, health systems, or both, their development, response to 'outside' influences, etc.
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47 **Step 5: collating, summarizing and reporting results**

48 Relevant information obtained from included records will be analyzed, synthesized and presented using both
49 qualitative and quantitative methods. Tables, charts, figures, or flow diagrams will be used to present extracted
50 variables as appropriate, while narrative and thematic analysis will be used to articulate substantive findings
51 of the review. A robust discussion based on a lucid analysis of the findings of the review as they relate to the
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3 review question will be conducted. In addition, other issues of interest that may emerge during the review will
4 also be discussed, a summary of which will lead to valid conclusions and pertinent recommendations.
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7 No meta-analysis is planned for the review, nor will the quality of evidence of included records be assessed.
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9 Nevertheless, a study limitation section will be included to detail any shortcomings of the review.
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11 **Step 6: consultation exercise**

12 A consultation exercise, though not planned at this protocol stage, may be conducted during the review if
13 considered necessary.
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16 **Patient and Public Involvement: None**

17 **ETHICS AND DISSEMINATION**

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

34 The authors gratefully acknowledge the assistance of Ms. Alvina Matthee for her immense help in
35 conducting the preliminary searches and retrieval of records from numerous sources.
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38 **Authors Contributions**

39 HCK led the conceptualization of the study. HCK and EOO designed and drafted the protocol. EOO and
40 CSW developed the search strategy and EOO and SS conducted the preliminary searches; EOO, SS,
41 AAA, AWS, and CSW provided input and feedback on the methodology and the draft manuscript. This
42 team of six authors give their approval to the publishing of this protocol manuscript.
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48 **Funding Statements**

49 No funding.
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51 **Competing Interest**

52 None declared.
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55 **Patients consent for publication**

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3 None required.
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5 **Provenance and peer review**

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8 Not commissioned, externally peer reviewed.
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10 **Open access**

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15 is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial.
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20 See: <http://creativecommons.org/licenses/by-nc/4.0/>.
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Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Checklist

SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
TITLE			
Title	1	Identify the report as a scoping review.	
ABSTRACT			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives.	
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	
METHODS			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number.	
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	
Information sources*	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated.	
Selection of sources of evidence†	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review.	
Data charting process‡	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators.	
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	
Critical appraisal of individual sources of evidence§	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	



SECTION	ITEM	PRISMA-ScR CHECKLIST ITEM	REPORTED ON PAGE #
RESULTS			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram.	
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (see item 12).	
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	
DISCUSSION			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	
Limitations	20	Discuss the limitations of the scoping review process.	
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	
FUNDING			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review.	

JBI = Joanna Briggs Institute; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

* Where *sources of evidence* (see second footnote) are compiled from, such as bibliographic databases, social media platforms, and Web sites.

† A more inclusive/heterogeneous term used to account for the different types of evidence or data sources (e.g., quantitative and/or qualitative research, expert opinion, and policy documents) that may be eligible in a scoping review as opposed to only studies. This is not to be confused with *information sources* (see first footnote).

‡ The frameworks by Arksey and O'Malley (6) and Levac and colleagues (7) and the JBI guidance (4, 5) refer to the process of data extraction in a scoping review as data charting.

§ The process of systematically examining research evidence to assess its validity, results, and relevance before using it to inform a decision. This term is used for items 12 and 19 instead of "risk of bias" (which is more applicable to systematic reviews of interventions) to include and acknowledge the various sources of evidence that may be used in a scoping review (e.g., quantitative and/or qualitative research, expert opinion, and policy document).

From: Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Ann Intern Med.* 2018;169:467–473. doi: [10.7326/M18-0850](https://doi.org/10.7326/M18-0850).

