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Maternal perceptions of the quality of Care in the Free Maternal Care Policy in sub-Saharan Africa: a systematic scoping review



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Abstract

Background: The world aims to achieve universal health coverage by removing all forms of financial barriers to improve access to healthcare as well as reduce maternal and child deaths by 2030. Although free maternal healthcare has been embraced as a major intervention towards this course in some countries in sub-Saharan Africa (SSA), the perception of the quality of healthcare may influence utilization and maternal health outcomes. We systematically mapped literature and described the evidence on maternal perceptions of the quality of care under the free care financing policies in SSA.

Methods: We employed the Arskey and O'Malley's framework to guide this scoping review. We searched without date limitations to 19th May 2019 for relevant published articles in PubMed, Google Scholar, Web of Science, Science Direct, and CINAHL using a combination of keywords, Boolean terms, and medical subject headings. We included primary studies that involved pregnant/post-natal mothers, free maternal care policy, quality of care, and was conduct in an SSA country. Two reviewers independently screened the articles at the abstract and full-text screening guided by inclusion and exclusion criteria. All relevant data were extracted and organized into themes and a summary of the results reported narratively. The recent version of the mixed methods appraisal tool was used to assess the methodological quality of the included studies.

Results: Out of 390 studies, 13 were identified to have evidence of free maternal healthcare and client perceived quality of care. All the 13 studies were conducted in 7 different countries. We found three studies each from Ghana and Kenya, two each in Burkina Faso and Nigeria, and a study each from Niger, Sierra Leone, and Tanzania. Of the 13 included studies, eight reported that pregnant women perceived the quality of care under the free maternal healthcare policy to be poor. The following reasons accounted for the poor perception of service quality: long waiting time, ill-attitudes of providers, inadequate supply of essential drugs and lack of potable water, unequal distribution of skilled birth attendants, out-of-pocket payment and weak patient complaint system.

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Conclusion: This study suggests few papers exist that looked at maternal perceptions of the quality of care in the free care policy in SSA. Considering the influence mothers perceptions of the quality of care can have on future health service utilisation, further studies at the household, community, and health facility levels are needed to help unearth and address all hidden quality of care challenges and improve maternal health services towards attaining the sustainable development goals on maternal and child health.

Keywords: Free maternal healthcare, Maternal health, Pregnant women, Post-natal mother, Healthcare financing, Free healthcare policy, Perceptions, Quality of care, Sub-Saharan Africa

Background

Maternal healthcare is a global health priority. Evidence shows that the launch of the Millennium Development Goals (MDGs) in 1990 in response to the global health challenges had contributed to the reduction of maternal deaths by 1.6% per annum in Sub-Saharan Africa (SSA) [1]. The world targeted to reduce maternal mortality by 90% in the MDG era [2]. To achieve the set target, some SSA countries implemented various interventions including free maternal healthcare financing policies [3]. Free maternal healthcare refers to a health financing policy that enables pregnant women to receive antenatal care (ANC), skilled delivery, and post-natal services from health facilities at no cost to the mothers or their families [4, 5]. In Ghana, the free maternal healthcare policy is integrated into the Nation Health Insurance Scheme (NHIS) which finances the provision of drugs and supplies as well as services including caesarean section, and other family health services at no cost to the mother [6]. Despite this, maternal mortality remains a major challenge to date, especially in SSA. Evidenced shows that 99% of all maternal deaths still occur in low-and-middle-income countries, of which 66% occur in SSA [7, 8]. Hence, maternal health issues have once again been captured as part of the sustainable development goals (SDGs).

In the present SDG era, the world targets to reduce maternal deaths to less than 70 per 100,000 live births by 2030 (SDG 3.1) [9] and free maternal healthcare services remain vital to achieving this goal [10]. Free maternal healthcare is in line with the World Health Organization's (WHO) call for countries to eliminate financial barriers and improve access to healthcare for all who need it irrespective of where one lives, work, and income level [11, 12]. Free maternal healthcare financing policy can help drive the achievement of the SDG 3.1 which stipulates the reduction of maternal mortality to less than 70 per 100,000 live births by 2030 [12]. Nonetheless, the introduction of free maternal healthcare policy has its own challenges [13, 14] particularly, with regards to the quality of care delivered to clients [13–15] though the goal of the free care policy might not to improve the quality of care, but just to increase the numbers of mothers seeking care at health facilities [16].

Although causes of this worrying situation of maternal mortality in SSA countries are multifaceted, the quality of maternal healthcare services rendered to pregnant women under the various types of free maternal healthcare financing policies may be a contributory factor [17, 18]. Perceived service quality (PSQ) from the client's point of view is an assessment procedure through which the client makes a comparison to the prior expectations to his or her perception about the quality of service rendered to him or her [19]. Mothers perception of the quality of maternal healthcare is partly linked to future healthcare utilization decisions and overall trust in the health system which may have severe implications on maternal health outcomes [20]. Thus, efforts to maintain the quality of care are highly essential [3, 16, 17]. However, to the best of our knowledge, no study has examined literature and described evidence focusing on maternal perceptions of the quality of maternal healthcare in relation to free maternal healthcare financing policies. According to The Lancet Global Health Commission "changing health needs, growing public expectations, and ambitious new health goals are raising the bar for health systems to produce better health outcomes and greater social value. What is needed are high-quality health systems that optimise healthcare in each given context by consistently delivering care that improves or maintains health, by being valued and trusted by all people, and by responding to changing population needs" [21]. With this in mind, we systematically explored literature aimed at providing evidence on maternal' perceptions of the quality of care in the free maternal care policy in hoping that the findings will influence policy decisions towards improving maternal healthcare delivery in SSA, identify literature gaps for future research.

Methods

Purpose of the scoping study

We explored evidence on the implementation of free maternal healthcare financing policies and pregnant women's perception of the quality of care using a scoping review methodology and presented evidence reported in SSA. A scoping review was more suitable and assisted the documentation of research gaps by mapping

literature on a research question of choice as recommended by the enhanced 2005 Arksey and O'Malley's framework and the Joanna Briggs Institute guidelines [22–24]. A scoping review study prior to the conceptualization of a primary research question or a systematic review and meta-analysis may also be useful [22]. We followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses modified for Scoping Reviews (PRISMA-ScR) [22, 24–26] to report the study results.

Identifying the research questions

The research question for this study was: What evidence exists on maternal perceptions of the quality of care in the free maternal care policy in SSA?

Population, content, and context (PCC) framework was used to determine the eligibility of the scoping review question as shown in Table 1.

Literature search

We searched five electronic databases with no date limitations up to 19th May 2019 including PubMed, Google Scholar, Web of Science, Science Direct, and CINAHL with full text via EBSCOhost using a combination of the following keywords: “free maternal healthcare financing”, “healthcare financing”, “maternal healthcare”, “delivery”, “health service”, “pregnant women”, “client”, “women”, “expectant mothers” and “mothers”, “perception”, “perspectives”, “quality” “quality of care”. Boolean terms (AND/OR) were used to separate the keywords and medical subject headings (MeSH) terms included. Language and study design restrictions were removed. The full electronic search strategy can be viewed in Supplementary file 1. We also searched the reference list of the included articles for eligible studies.

Eligibility criteria

Inclusion criteria

The inclusion criteria for this review were as follows:

- Articles presenting evidence in SSA
- Articles that included pregnant women and/or post-natal mothers
- Articles presenting evidence on free maternal healthcare/financing policy

- Articles reporting evidence on quality of care/perceived quality of care
- Articles reporting evidence on the relationship between free maternal healthcare and perceived quality of care
- Quantitative, qualitative, and mix methods study designs

Exclusion criteria

The exclusion criteria for this review were as follows:

- Studies conducted in Africa but not classified among the WHO African Region
- Studies targeting all women in reproductive age who are not pregnant or lactating
- Studies reporting evidence on quality of care from funders perspective or representatives of health financing institutions
- Studies reporting evidence on quality of care from providers or health managers perspectives
- Other types of reviews

Study selection

Guided by the eligibility criteria, MAM conducted the database search and performed the title screening. Following the electronic databases search, duplicates were removed, and the abstracts and full articles independently screened by MAM and FID. Discrepancies at the abstract screening stage between MAM and FID were resolved by discussion among the review team, and DK independently resolved the discrepancies that arose between MAM and FID at the full-text stage.

Charting the data

The selected studies were thoroughly read for data extraction of bibliographic details: Author and date, study title, study aim, country of study, study setting, study design, study population, type of maternal healthcare financing policy study findings and relevant study finding. Data extraction was first piloted by two independent reviewers (MAM and DK) using five included articles. Discrepancies were discussed and the data extraction form amended then, MAM extracted data from the remaining eight articles.

Table 1 PCC framework for defining the eligibility of the studies for the primary research question

P-Population	Pregnant women and post-natal mothers.
C-Concept	Free maternal healthcare services: refers to any health financing policy that allows women the entitlement to receive maternal services during pregnancy, delivery, and post-natal period from health facilities at no cost to the mother or her family [4, 5].
C-Context	Quality of care: an assessment through which the client makes a comparison to the prior expectations to her perception about the quality of service rendered to him or her [19]. For example; availability and supply of essential drugs for free, good provider-client relationship, short waiting times and patients' satisfaction.

Quality appraisal of study methods

We used the 2018 version of the mixed methods appraisal tool (MMAT) to appraise the methodological quality of all included primary studies. MMAT has two compulsory screening questions and five sets of questions for each of the study designs included (non-randomised control, qualitative, mixed-methods, and quantitative descriptive studies) as shown in supplementary file 2. Each included study was appraised using the appropriate study design section recommended in the MMAT. MAM appraised the studies and was guided by DK. We obtained the percentage score for each study by adding all the items rated divided by seven and multiplied by hundred. A quality percentage score of ≤50%, 51–75%, 76–100%, was interpreted as below quality, average and high quality respectively [27].

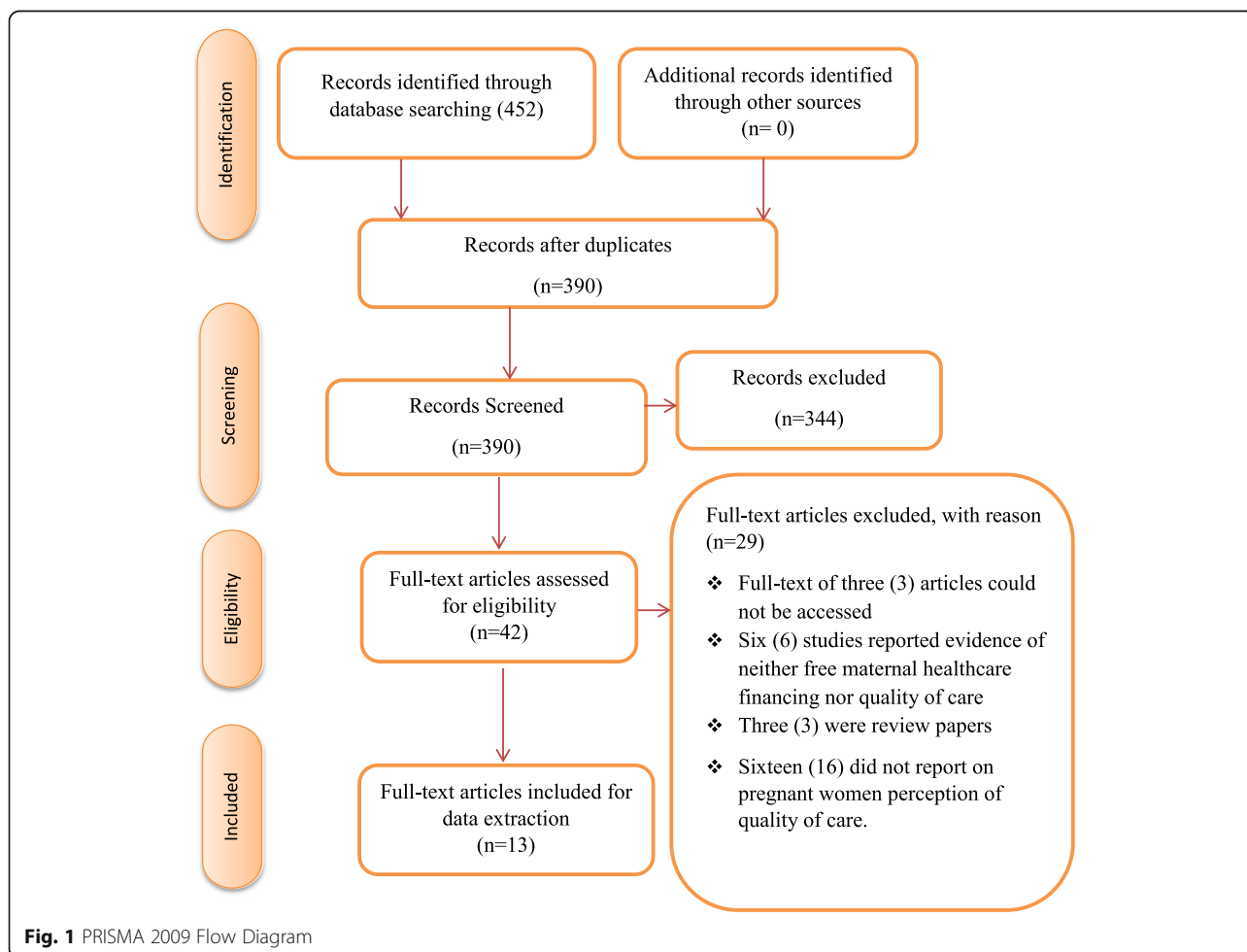
Results

Out of the 452 eligible articles obtained from the database search, 62 duplicates were removed. Subsequently, 344 and 29 articles were excluded following the abstract and full article screening stages (Fig. 1). Reasons for

exclusion following full article screening were: inability to access the full text of 3 studies [28–30]; one was a protocol [31]; six studies did not present any evidence on free maternal healthcare policy [32–37]; three were review papers [19, 38, 39]; and 15 articles did not report on clients’ perspective of the quality of maternal healthcare [1, 13–15, 20, 40–49]. There was a moderate to a substantial level of agreement between the reviewer’s responses at full article screening stage (Kappa statistic = 0.80, *p* < 0.01).

Characteristics of included studies

Of the 13 included articles, 3 (23.1%) each presented evidence from Ghana and Kenya. Two (15.4%) studies each reported evidence from Burkina Faso and Tanzania, and one (7.7%) each reported from Niger, Sierra Leone, and Nigeria. Eight out of the 13 included studies were conducted in health facility-based settings [4, 5, 17, 50–54], two in a household-based based setting [11, 55], two in community-based settings [56, 57], and one was a national survey [58]. The majority (38%) of the included articles were cross-sectional studies [5, 17, 51, 54, 56],



whilst the minority (8%) was quasi-experimental study design [52] (Fig. 2). Twelve of the included articles reported evidence on clients’ perspective of the quality of maternal healthcare based on free maternal healthcare financing policies [4, 5, 11, 17, 50–56, 58] and one study based on partially free maternal healthcare financing policy [57].

Quality of evidence

Of the 13 included studies, 12 underwent methodological quality assessment using the 2018 MMAT [4, 5, 11, 17, 50–53, 55–58]. All the studies scored between 57.4 and 100%. The majority (33.3%) of the studies scored 71.4% [11, 51, 52, 56] whilst 2 (16.7%) scored the least 57.1% [5, 17]. Figure 3 presents the quality appraisal score per study. One included study did not undergo the quality assessment because it was grey literature [54].

Study findings

Of the 13 included studies, only five (38.5%) reported evidence of high quality maternal healthcare based on pregnant women’s perspective [5, 11, 52–54]. However, in 8 of the studies, pregnant women were not satisfied with the quality of maternal healthcare rendered under the free maternal care policy [4, 17, 50, 51, 55–58]. Table 2 presents a summary of the study findings from all the 13 included studies.

Perceived high quality maternal healthcare

Pregnant women’s perspectives on the quality of care were based on several good services provided to them. A study conducted in Kenya aimed to understand how the implementation of free maternal healthcare policy at the national level resulted in variable effects (coverage of

facility-based deliveries) and reported that there was a comparable decrease in discontinuous care across maternal health continuum [11]. Their study also revealed that more women sought maternal healthcare services during the first trimester and subsequently due to their perceived high quality of the services rendered under the free maternal healthcare policy [11]. A study by Mahamoud (2017) in Tanzania discovered that there was high client satisfaction as pregnant women reported that essential drugs and supplies were always available and women experienced good provider-client relationships [54. Gitobu et al. (2018); Philibert et al.; and (2014) Mahamoud (2017), studies respectively in Kenya, Tanzania, and Burkina Faso revealed that pregnant women were satisfied with the cleanliness of the health facilities environment [5, 52, 54]. Women from Tanzania attested to the fact that there existed: good providers-client relationships, assurance of safe delivery and care, and good nursing care [54]. Gitobu et al. (2018); study showed that 54.5% of the pregnant women were satisfied with the quality of maternal health service in Kenyan health facilities under the free maternal healthcare [5]. Their study further evinced that pregnant women appreciated the explanations on the drug administration process; organized and well-structured drug supply; provision of bed net and warm water supply during their stay in the facility [5]. In Burkina Faso, Philibert and colleagues study found that pregnant women were highly satisfied with the service and quality of care [52]. Pregnant women also indicated that providers gave them assurance, good nursing care, and interaction, and the cleanliness of the environment was good [52]. Ridde and Diarra study in Niger aim to describe the importance of the abolition of user-fee for pregnant women and children under five, also reported that pregnant women

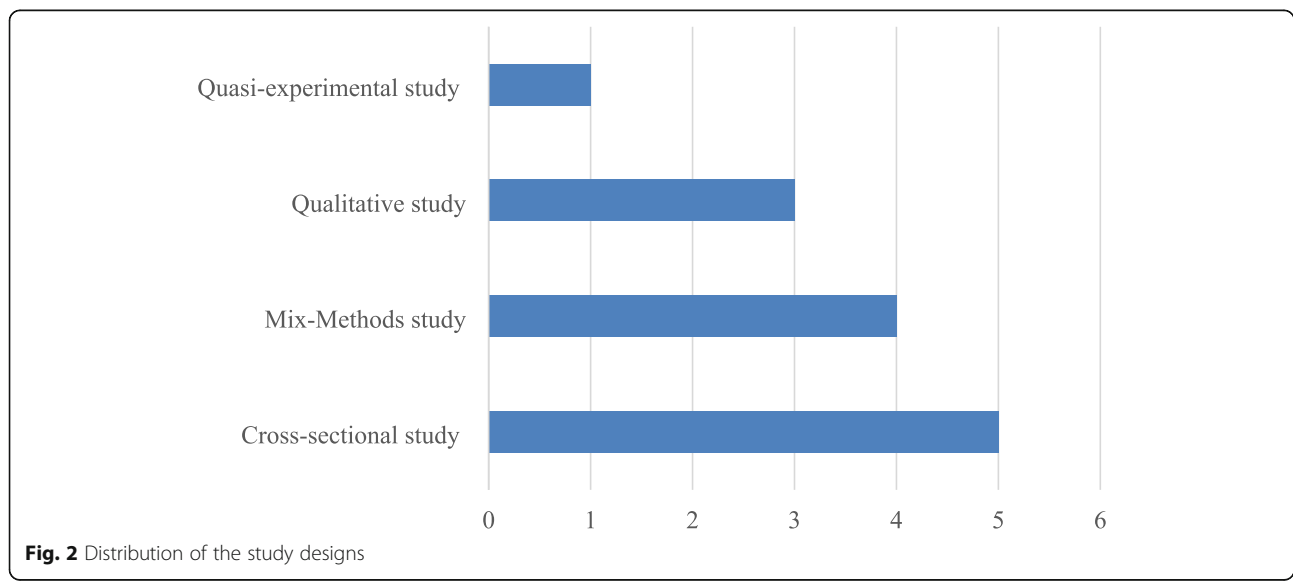
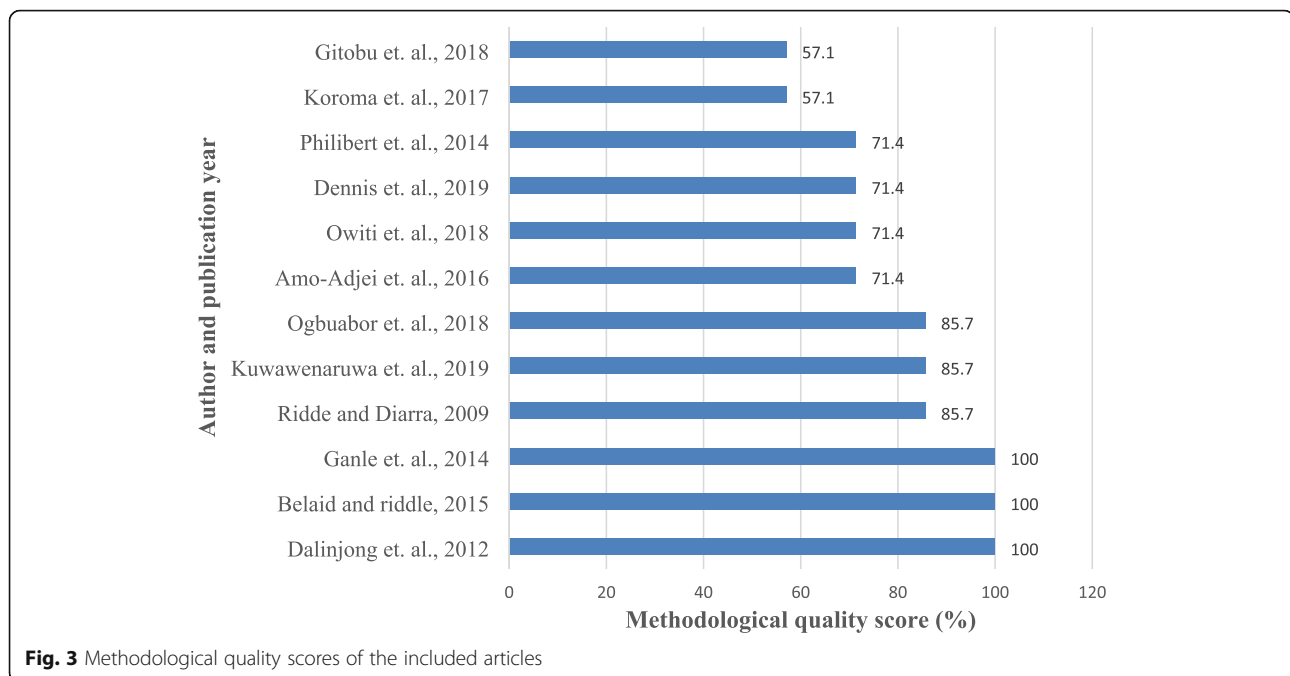


Fig. 2 Distribution of the study designs



indicated that the introduction of the free maternal healthcare policy gave them a peace of mind in seeking healthcare services [53].

Perceived low quality of maternal healthcare

Despite the commendations of the quality of maternal healthcare delivery by pregnant women in some of the included studies, the majority of the included studies revealed low or poor quality of care under the free maternal healthcare policy. In eight of the studies included in this review, pregnant women complained that the quality of services rendered to them under the free maternal healthcare was of low quality owing to several reasons [4, 17, 50, 51, 55–58]. Amo-Adjei et al., and Belaid and Ridde in their respective studies in Ghana and Burkina Faso revealed that out of pocket (OOP) still existed despite the implementation of free maternal healthcare [56, 57]. Amo-Adjei et al. reported that the quality of care rendered to card bearers of the national health insurance scheme (NHIS) including expectant mothers was worse [56]. In Burkina Faso, Belaid and Ridde study revealed that expectant mothers were complaining of fees charged them for some [57] drugs meant to be free and other illegal charges, and poor quality of care. Various studies conducted in Sierra Leone, Kenya, Burkina Faso, and Tanzania revealed that mothers were faced with ill-attitudes of providers [17, 51, 55, 57] just because free maternal insurance is seen as intervention meant for the poor [56]. Not only that women who received free maternal care suffered from verbal abuse [4] and poor reception by providers [17]. Dalinjong et al.; and Ganle et al. in

their respective studies in (2013) and (2014) in Ghana, showed there was an assumption that the huge workload of the providers influenced their unfriendly attitudes towards the insured mothers [4, 50]. Insured mothers experienced long waiting times and discrimination by the providers because an immediate payment was not made by them [4, 50].

Discussion

This scoping review was conducted to explore evidence of free maternal healthcare services and pregnant women's perspectives on the quality of healthcare delivery in SSA. The results revealed limited [13] studies reporting evidence on the perspectives of pregnant women on the quality of care under the free maternal healthcare policy in SSA. We found evidence from seven countries of which six (85.7%) were in West Africa. The study findings also showed the majority (61.5%) of the included studies reported that pregnant women were not satisfied with the quality of care [4, 17, 50, 51, 55–58] rendered under the free maternal care policy.

We found only 13 studies that presented information on the perspectives of pregnant women and the quality of care under the free maternal healthcare policy. Although this is the first study to extensively examine the literature on this topic, our finding suggests there is limited evidence. Pregnant women's perception of the quality of care is a key performance metric of health services hence, it is worth studying since it can influence service utilization [59, 60]. Additionally, as healthcare stakeholders continue to search for initiatives that improve

Table 2 Study findings

Author & Date	Study Pop.	Type of healthcare financing policy	Significant study findings	Perception of the quality of care
Amo-Adjei et al., 2016 [56]	Pregnant women	Free maternal healthcare	The quality of care rendered to card bearers of the National Health Insurance Scheme was worse and some form of illegal out-of-pocket payment was found.	Poor
Dalinjong et al., 2012 [4]	Pregnant women	Free maternal healthcare	Clients experienced long waiting times, verbal abuse, and discriminated by providers.	Poor
Koroma et al., 2017 [17]	Pregnant women and health providers	Free maternal healthcare	Inadequate beds, drug supplies, no potable water, and poor reception of providers and low skilled birth attendants.	Poor
Kuwawenaruwa et al., 2019 [55]	Pregnant women	Free maternal healthcare	Reduction of the financial burden for women, poor attitude of providers, ignorance of clients about the policy	Poor
Dennis et al., 2019 [11]	Pregnant women	Free maternal healthcare	Early initiation of ANC visit	Good
Mahamoud, 2017 [54]	Pregnant women	Free maternal healthcare	Available essential drugs, friendly provider-client relationship, clean environment High satisfaction rate	Good
Ogbuabor and Onwujekwe 2018 [58]	Pregnant women, managers, providers	Free maternal healthcare	Distrustful relationships with policymakers and providers, weak patient complaint system (No suggestions box to put it their grievances)	Poor
Owiti et al., 2018 [51]	Pregnant women	Free maternal healthcare	Low utilization of service due to perceived poor quality of care, ill-attitude of provider, fear of being charged for delivery.	Poor
Philibert et al., 2014 [52]	Pregnant women	Free maternal healthcare	High satisfactory rate of service and quality of care, providers give assurance, good nursing care and interaction, and clean environment	Good
Belaid and Ridde, 2015 [57]	Pregnant women, frontline managers, & Providers	Partially free obstetric care	Clients were charged for some drugs meant to be free, providers ill-attitudes and charging of illegal fees coupled with poor quality of care put clients off	Poor
Ridde and Diarra 2009 [53]	Pregnant women, and healthcare providers	Free maternal healthcare	Clients support user-fees abolition	Good
Gitobu et al., 2018 [5]	Pregnant women	free maternal health policy	More than half (54.5%) of the respondents were satisfied with all indicators, but the majority were unsatisfied with privacy, cleanliness and waiting time.	Mixed perception
Ganle et al., 2014 [50]	Pregnant women & health providers	Free maternal healthcare	Poor quality of care due to long lower staff strength, limited and unequal distribution of skilled workers	Poor

positive pregnancy experiences and outcomes, this study's results have demonstrated the need for more researches to inform policy decisions and improve maternal healthcare [61]. Evidence shows that some forms of free maternal health services exist in 19 SSA countries [62–65]. But based on this study's inclusion criteria, we found evidence from only 7 countries representing about 37% of the countries (Fig. 4). Perhaps, our search strategy in our choice of databases and language limitations is the reason or no published study existed on this study's population, concept, and context in those countries at the time of the literature search for this study. Nonetheless, one recommended intervention to achieve SDG 3 including universal health coverage is the removal of financial barriers to improve access to healthcare to all who require it [9, 27].

This study further found that majority of the included studies reported on perceived poor quality of healthcare under the free maternal health financing policy. This

finding calls for concern as this may affect future use of maternal health services at the facilities. Reasons for the perceived poor quality of care include illegal charges by health workers, selling of drugs covered by the free maternal healthcare policy, ill-attitudes of providers, and poor sanitation [17, 50, 51, 55]. Efforts to address these maternal delivery challenges will potentially improve use of maternal healthcare services, and thus improve maternal health outcomes. Whilst delay in the reimbursement of the health facilities may contribute to the perceived poor quality such as an inadequate supply of essential drugs and supplies, and out-of-pocket payment and lack of potable water are essential to explain to clients the basis for any charge or fee to avoid confrontations [66, 67]. Decentralizing maternal health services and resourcing health facilities at the primary healthcare level to enable them render essential services may also help address challenges leading to perceived long waiting times, and lack of privacy during care found by this study [68].

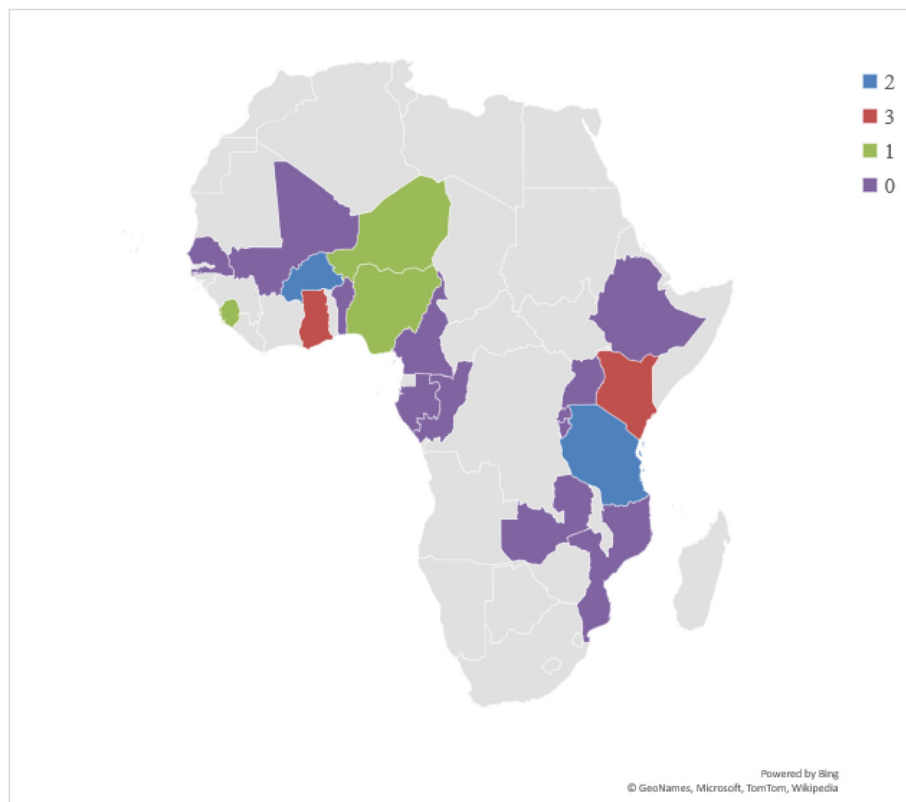


Fig. 4 Geographical locations of SSA countries with some forms of free maternal healthcare policies and the number of studies included in this study. (Note: The Authors generated this map using Microsoft Excel hence, it is freely available to use)

Implication for practice

Our study findings have several implications for practice. Most of the included studies indicated that pregnant women perceived the quality of care as low. This may encourage some pregnant women to patronize the services of traditional birth attendants or other self-acclaimed midwives residing in their communities. Illegal charges and selling of drugs to clients could also result in the general feeling that free maternal healthcare is not a reality and may cause some disaffection for maternal healthcare providers, hospital/clinic managers, and governments. Illegal charges and/or drugs selling may also discourage some women from enrolling for the service where registration is a prior requirement in some countries. Also, the ill-attitudes of care providers reported by some of the included studies may imply that some pregnant women will find it difficult in expressing their sentiments and grievances to the care providers as well as establishing good relationship with them. Delay in complains and access to health providers also account for complications. Moreover, most women in the SSA do not have formal education and are not able to read or understand the patient charter as well as the free

maternal healthcare package [55]. Therefore, women's privacy may be abused, and flexible appointments could not be made. Again, some studies reviewed, reported a shortage of drugs and inadequate supply of essential drugs and supplies [17, 57]. Meanwhile, the provision of essential drugs and supplies is part of the package of free maternal care. This implies that women's standard of care was below standard as pregnant women cannot be provided with drug at the required prescription and at the appropriate time. Also, shortage and inadequacy of drugs will result in OOP [56, 57]. To address these implications for practice and ensure free policies meet the goals, we recommend a regular key stakeholder engagement to openly identify and address challenges confronting the free policy. Frequent monitoring and evaluation of the free policy and how it is yielding the need results by the governments through their implementing agencies and the fund managers would also be beneficial. Also, early reimbursement of health facilities is crucial to avoid stock-outs of medical supplies including medicines in health facilities. We further recommend that realistic prices of medical consumables or cost of services need to be paid to health facilities to prevent top-

up charges demanded by health facilities. Moreover, we recommend that health facilities or health providers who are found indulging in fraudulent activities inimical to the free maternal healthcare policy should be punished to serve as a deterrent to others.

Implication for research

Our study indicates limited publications specifically on free maternal healthcare financing and quality of care in SSA. Among the 46 SSA countries in the WHO Africa region, only 7 countries have publication on the topic which indicates a wide gap in the literature. Also, most of the studies were also conducted at the health facility level and few of them being at the household and community-levels. We anticipate that this study will motivate other researchers to conduct more primary studies aimed at investigating further on free maternal healthcare financing and pregnant women's perception of the quality of care in SSA. We also recommend that further researches should target interviewing the study participants at the household or community-level to elicit other concerns bothering on the quality of maternal healthcare which probably will be hidden at the facility level. Although this study focused on maternal perceptions of the quality of care in free care policy, it is possible other studies exist that focused on the causal impact of free maternal care policies on outcomes, but they do not focus on quality. Hence, we further recommend a follow-up systematic review and meta-analysis to determine the impact of these free maternal care policies on maternal health outcomes in SSA.

Strengths and limitations

This scoping review is an extensive study to map evidence on free maternal healthcare and the quality of care in SSA. The study established a significant gap in literature relating to free maternal healthcare financing and the quality of care in SSA. The study methodology allows us to include different study designs. Nonetheless, this study has many limitations. We searched few databases for relevant studies; therefore, it is possible other relevant studies that existed in other databases either those we searched were missed. It is also possible other relevant studies on maternal perceptions of quality of care of a free program existed under different terminologies that were not captured by this review electronic search strategy. However, MeSH terms or subject heading and Boolean terms were combined with the keywords appropriately during the electronic search to address this limitation. Additionally, using meta-analysis could provide further information with quantitative studies. Conversely, due to the empirical nature of this scoping review, meta-analysis for quantitative studies was not conducted. Major healthcare stakeholders such

as health providers, managers, health insurance or fund managers, and frontline manager perceptions of the quality of care under the free maternal healthcare policy are also essential but this study was limited to only women's perspective. We recommend future follow-up researches to address these limitations. Despite these limitations, we have provided evidence to guide future researches in SSA.

Conclusion

This study demonstrated limited evidence in the literature. The expectations of pregnant women such as short waiting time, privacy and confidentiality, elimination of out-of-pocket, provision of potable water, friendly attitude of providers, regular drug supply and non-existence of verbal abuse still remain impediments towards achieving quality maternal healthcare. Governments in SSA countries should join hands with key stakeholders such as healthcare managers, policymakers, and financing agencies to address the various challenges in order to render quality services to women. Moreover, problems like long waiting times could be addressed by using paperless systems and software to limit cumbersome procedures involved in the filling of forms and retrieval of folders. Again, healthcare managers should build capacities of maternal healthcare providers in order to strengthen the relationship between caregivers and pregnant women. Lastly, financial assistance should also be made available by the government on a regular basis to meet the challenging demands of health facilities.

Supplementary information

Supplementary information accompanies this paper at <https://doi.org/10.1186/s12913-020-05755-9>.

Additional file 1: Supplementary file 1. Electronic databases search results for title screening.

Additional file 2: Supplementary file 2. Mix Method Quality Appraisal Tool.

Abbreviations

ANC: Antenatal care; MDG: Millennium development goal; MMAT: Mixed method quality appraisal tool; NHIS: National Health Insurance Scheme; OOP: Out-of-pocket; PCC: Population, content, and context; PRISMA-ScR: Preferred reporting items for systematic reviews and meta-analyses modified for scoping reviews; PSQ: Perceived service quality; SDG: Sustainable development goal; SSA: Sub-Sahara African; WHO: World Health Organization

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Adherence to national and international regulations

Not applicable.

Authors' contributions

MAM conceptualized and under the supervision of DK. MAM and FID contributed to the abstract, full article screening. MAM and DK contributed to the quality assessment of the included studies. MAM and DK contributed to the design and data extraction process as well as the synthesis of data. MAM wrote the manuscript and BV, PAM, and DK critically reviewed it. All authors approved the final draft manuscript.

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Availability of data and materials

The data supporting the conclusion of this paper are available through the detailed reference list. No original datasets are present since this is a review of the existing literature.

Ethics approval and consent to participate

This systematic scoping study did not seek ethical approval or consent of participation because it was based on existing literature and no human participation was involved.

Consent for publication

Not applicable.

Competing interests

None declared.

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