Exploring Socio-Cultural Barriers to Facility-Based Childbirth in Sub-Saharan Africa: A Semi-Systematic Literature Review

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Abstract

Introduction:

Globally, approximately 300 000 women die of preventable pregnancy-related causes each year. 95 percent of these maternal deaths occur in low and lower-middle-income countries,[1] with sub-Saharan Africa accounting for roughly two thirds of the global maternal mortality ratio.[2] Most maternal deaths can be prevented if births take place at a health facility and are attended by skilled health personnel.[3] However, despite global efforts to increase institutional delivery-service utilization in sub-Saharan Africa, the region continues to exhibit low rates of skilled birth attendance.[2]

Socio-cultural factors are known to influence healthcare-seeking behaviors.[4] Hence, it is the aim of this semi-systematic literature review to identify research examining the influence of socio-cultural factors on institutional delivery-service utilization in sub-Saharan Africa. By analyzing scientific findings on this topic, this review aims to explore how socio-cultural factors may act as barriers to facility-based childbirth and thus potentially contribute to high maternal mortality in sub-Saharan Africa.

Research question:

What socio-cultural factors act as barriers to facility-based childbirth in sub-Saharan Africa?

Methods:

For this research project, a semi-systematic literature review was conducted. The online databases PubMed, BMC, and EMBASE were scanned for scientific studies on the topic of interest by using relevant search terms. Studies that fit the predetermined inclusion criteria were assessed for their quality by using the Standards for Reporting Qualitative Research (SRQR) checklist.[5] Relevant findings were extracted and synthesized by coding reoccurring themes and subthemes.

Results:

This review features qualitative findings from 24 qualitative and 4 mixed-methods studies that were conducted between 2014 and 2022 and present data from 10 sub-Saharan African countries. The main socio-cultural factors that were identified as barriers to facility-based childbirth in sub-Saharan Africa include limited female autonomy, traditional gender norms, the influence of religious beliefs, the value of traditions and customs related to childbirth, culturally unacceptable practices at health facilities, compromised quality of facility-based care, fears surrounding facility-based childbirth, and knowledge gaps related to childbirth.

Conclusion:

The findings presented in this literature review illustrate that socio-cultural factors may pose significant barriers to the utilization of institutional delivery services in sub-Saharan Africa (SSA). Many of the identified socio-cultural barriers were found to be reinforced by gender norms and women's lower status in society. Hence, a reduction of socio-cultural barriers to facility-based childbirth requires targeting gender inequalities and promoting the empowerment of women and girls across SSA. The present literature review also found an alarmingly high number of studies describing women having to endure severe mistreatment by health workers during facility-based childbirth. These findings indicate that the most detrimental barriers to institutional delivery-service utilization may be created within those very institutions. In light of these findings, this review argues that an increase in the proportion of facility-based deliveries in SSA cannot be achieved until the quality of care provided at health facilities has significantly improved.

Table of Contents

Acronyms and abbreviations

ANC	Antenatal care
Appx.	Appendix
cont.	continued
FGD	Focus group discussion
HEW	Health extension worker
IDI	In-depth interview
IDP	Internally displaced person
KII	Key informant interview
MMR	Maternal mortality ratio
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
SBA	Skilled birth attendant
SDGs	Sustainable Development Goals
SRQR	Standards for Reporting Qualitative Research
SSA	Sub-Saharan Africa
TBA	Traditional birth attendant
WHO	World Health Organization

Glossary

Antenatal care (ANC)

- the medical care women receive during pregnancy which provides monitoring and regular follow-up of maternal and fetal health[6]

Facility-based childbirth / Institutional delivery

- childbirth which takes place at a health facility and is assisted by a skilled birth attendant

Demand-side barriers

- individual, household, or community factors that may inhibit the utilization of health services[7]

Gender roles / Gender norms

- "social and behavioral norms which, within a specific culture, are widely considered to be socially appropriate for individuals of a specific sex." [8]

Home birth / home delivery

- childbirth which takes place in the pregnant woman's own home or the home of others

Maternal mortality ratio (MMR)

- "the number of maternal deaths during a given time period per 100,000 live births during the same time period."[9]

Obstetrics

- "the branch of medical science concerned with childbirth and caring for and treating women in or in connection with childbirth."[10]

Patriarchy

- "a social system in which power is held by men, through cultural norms and customs that favor men and withhold opportunity from women."[11]

Postpartum

- the time after childbirth which is typically considered to end after 6 weeks[12]

Primigravida

- a woman who is pregnant for the first time[13]

Skilled Birth Attendant (SBA)

- an accredited health professional who has been formally trained and possesses the knowledge and skills to manage uncomplicated pregnancies, deliveries, and the early postnatal period, is able to identify obstetric complications and perform necessary interventions.[14,15] Although SBA services can also be provided in the home setting, this literature review will refer to skilled birth attendance as the delivery care provided by SBAs at health facilities.

Sub-Saharan Africa (SSA)

- the geographical area of the African continent that lies south of the Sahara.[16] SSA consists of 48 countries: Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Democratic Republic of Congo, Republic of Cote d'Ivoire, Equatorial Guinea, Eritrea, Eswatini (Formerly Known as Swaziland), Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.[17]

Supply-side barriers

- characteristics of the health system that may pose barriers to the utilization of health services and that are beyond the control of health service users[7]

Traditional Birth Attendant (TBA)

- a community-based provider of obstetric care, who assists women during labor, childbirth, and the early postpartum period.[18] TBAs usually have no formal training and are thus generally not recognized as medical practitioners. Most TBAs have acquired their knowledge and skills from other TBAs or are self-taught.[19]

1. Introduction

1.1 Background

Maternal mortality continues to pose a major challenge to health systems across the globe. In 2020 approximately 287 000 women died of largely preventable causes following pregnancy and childbirth, with 95 percent of these deaths having occurred in low and lower middle-income counties.[1] Sub-Saharan Africa (SSA) was found to account for nearly two thirds of the world's maternal deaths[1] and can thereby be considered the global region with the worst maternal health outcomes.[2] In 2020, the maternal mortality ratio (MMR) for SSA was estimated at 545 per 100,000 live births[20] – a ratio more than twice as high as the global average and 40 times higher than the MMR in Europe.[2]

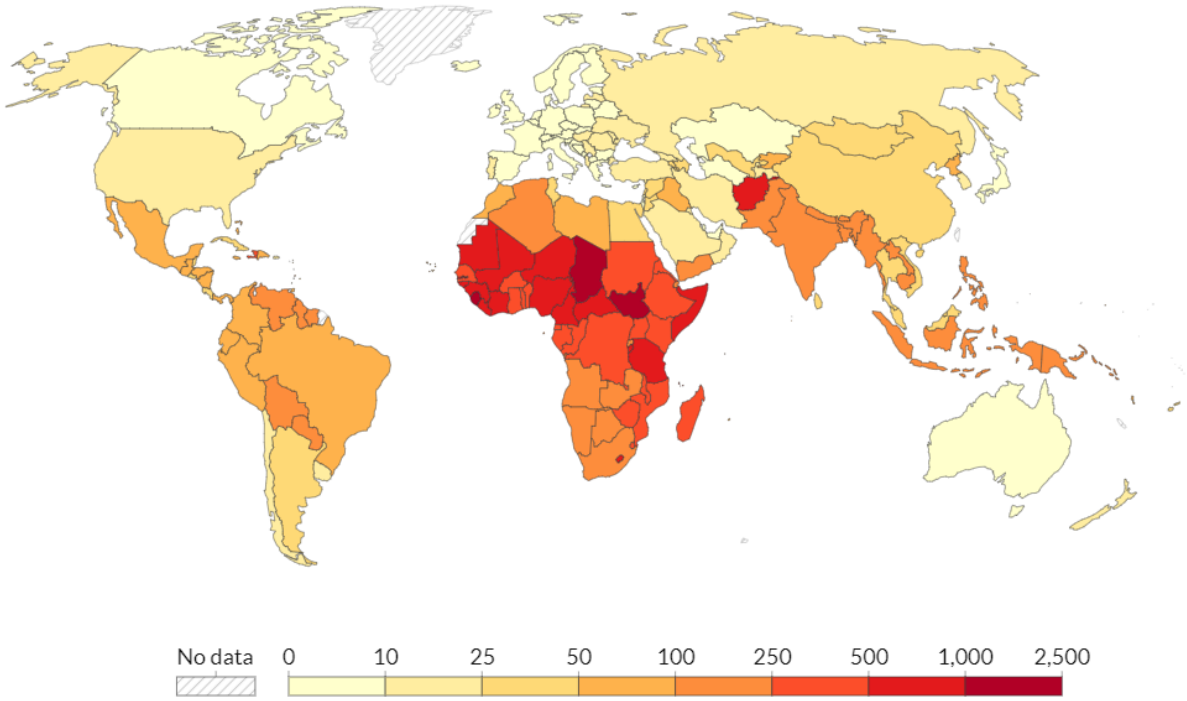


Figure 1[21]: Maternal mortality ratio per 100 000 live births, 2020

The importance of reducing maternal mortality is addressed in the Sustainable Development Goals (SDGs) – 17 global goals that aim to create a better and more sustainable future for all by the year 2030. SDG Target 3.1 directly addresses maternal mortality and aims to reduce the global MMR to less than 70 per 100,000 live births with no country having an MMR higher than 140 per 100,000

live births by 2030.[22] Many developing global regions have already made substantial progress toward reaching this target. Between the years 2000 and 2020, South Asia achieved a reduction of the MMR from 408 to 136 per 100,000 live births.[1] SSA has also made significant progress, but despite managing to reduce the MMR by roughly 33 percent between 2000 and 2020 the region continues to exhibit disproportionately high maternal mortality compared to the rest of the world.[1]

1.2. Causes of maternal mortality

Maternal mortality is defined by the World Health Organization (WHO) as the death of a woman from pregnancy-related causes during or within 42 days after pregnancy.[23] The leading causes of maternal mortality have been identified as postpartum hemorrhage (severe bleeding after birth), (pre-)eclampsia (high blood pressure during pregnancy), sepsis (infections), obstructed labor, as well as complications brought on by unsafe abortions.[1] Although some obstetric complications may arise unexpectedly, most of them are preventable or treatable, if detected and managed in time.[1,20] Hence, the setting in which expectant mothers give birth may significantly influence maternal health outcomes. Evidence suggests that facility-based childbirth attended by skilled health personnel significantly increases the chances of a safe delivery.[24] As nearly two thirds of maternal deaths occur during childbirth or in the early postpartum period, the presence of a skilled birth attendant is crucial in preventing obstetric complications from becoming life-threatening.[25]

1.3. Skilled birth attendance

A skilled birth attendant (SBAs) is defined by the WHO as, "an accredited health professional — such as a midwife, doctor or nurse — who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns."[26] Skilled birth attendance consists of two key components: the presence of an SBA and an environment that provides necessary medical equipment as well as a functioning referral system.[27] According to the WHO most maternal deaths can be averted, if deliveries are attended by skilled health personnel, as they are equipped with the necessary training and tools to provide quality obstetric services, recognize and treat potential complications, and ensure a safe birth.[20] Skilled birth attendance during labor and delivery has even been named "the single most important factor in preventing maternal deaths."[28]

The importance of increasing skilled birth attendance through higher rates of facility-based childbirth is echoed throughout scientific literature. According to Dako-Gyeke et al. (2013), access to health facilities as well as timely and appropriate interventions may prevent 90 percent of maternal deaths.[3] Nakua et al. (2015) also state that a substantial proportion of maternal deaths can be prevented through improved access to health facilities and higher rates of skilled birth attendance.[29]

In SSA, the underutilization of skilled delivery services has been named one of the major barriers to reducing the MMR of the region. Hence, global strategies targeting maternal mortality have largely focused on increasing the proportion of institutional deliveries under the care of skilled health personnel.[30] However, despite these efforts SSA continues to exhibit low rates of institutional deliveries. With only 63 percent of births having been attended by skilled health personnel in 2019[31], SSA continues to be the global region with the lowest proportion of skilled birth attendance.[2]

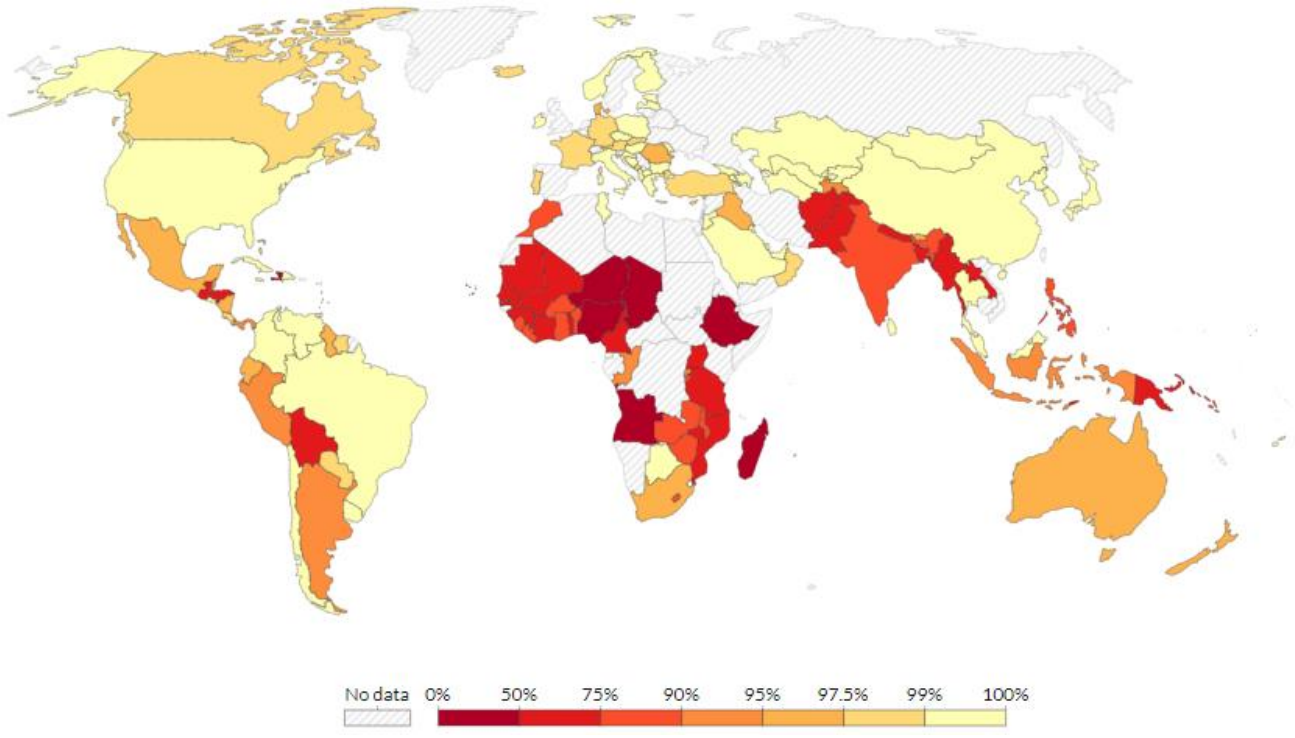


Figure 2[32]: Share of births attended by skilled health staff, 2020

1.4. Barriers to facility-based childbirth

Low rates of skilled birth attendance exhibited by many sub-Saharan African countries can be attributed to a number of barriers that prevent women from utilizing maternal health services including facility-based childbirth.[4] Evidence also suggests the prevalence of these barriers to be higher in rural settings, as women from rural sub-Saharan African communities were found to be significantly less likely to give birth at a health facility compared to women from urban areas.[33]

1.4.1. Structural barriers to facility-based childbirth

Findings across scientific literature illustrate numerous barriers to maternal health services that heavily influence institutional delivery-service utilization in SSA. Tanou et al. (2021) name limited geographical accessibility of health services as one of the key barriers to facility-based childbirth.[34] The Atlas of African Health Statistics 2022, on the other hand, highlights the high cost of health services and low availability of qualified health personnel as major contributors to the low proportion of skilled birth attendance in SSA.[2] Qualitative findings also suggest that the perceived poor quality of health services may be deterring women from giving birth at health facilities.[24] Such barriers are often indicative of poorly functioning health systems and may largely be regarded as 'structural barriers' to health services.

'Structural' or 'systemic' barriers can be defined in a number of different ways. However, in the context of the present literature review, structural barriers refer to largely quantifiable obstacles to the utilization of health services that are beyond the control of service users. Such barriers may include low numbers of health facilities or qualified personnel, long distances to health facilities, limited availability of ambulances or medical supplies, or the high cost of health services.

Although structural barriers are regarded as the most detrimental obstacles to increasing facility-based childbirth in SSA,[2,34] evidence suggests that the reduction of structural barriers alone may not be enough to ensure universal utilization of institutional delivery services. Ethiopia, for example, is still exhibiting low rates of institutional deliveries despite having significantly increased the number of health facilities in the country.[35,36] Similarly, Ghana continues to experience high maternal mortality and low rates of skilled birth attendance despite having reduced financial barriers to health services by implementing the user-fee exemption

policy.[37] These findings indicate that the utilization of institutional delivery services in SSA may be hindered by more than just structural barriers.

1.4.2. Female autonomy and maternal healthcare-seeking

In SSA, persisting gender inequalities have been found to prevent many women from making informed and independent decisions surrounding their health and well-being.[38] These inequalities can have a substantial impact on maternal health outcomes, which are known to largely depend on access to timely and appropriate obstetric care.[3,29] In societies governed by deep-rooted gender inequalities, access to maternal health services may be hindered by a number of barriers related to women's lower status in society as well as limited female autonomy. These barriers can range from discriminatory societal norms, cultural beliefs and practices to legislations prohibiting women from accessing reproductive health services without prior permission from the head of the family.[38] In some parts of SSA, the authority to make decisions surrounding maternal healthcare lies not with the woman herself but with a senior member of her family, such as her spouse, father-in-law, or mother-in-law. According to Gupta et al. (2015), this practice creates significant barriers for women trying to access maternal health services, and thus may also contribute to high maternal mortality in SSA.[39]

1.5. The Three Delays Model

The Three Delays Model, developed by Thaddeus and Maine (1994)[4], is a framework often used to analyze the circumstances surrounding maternal mortality. This model suggests that pregnancy-related deaths are mostly due to delays in **(1)** deciding to seek appropriate care; **(2)** reaching a health facility; and **(3)** receiving adequate care at said facility.[4] The Three Delays Model explores barriers surrounding the utilization of maternal health services both on the structural as well as socio-cultural level, making it highly significant for the present literature review.

Type 2 and type 3 delays largely reflect the previously discussed consequences of a poorly functioning health system. Type 2 delays refer to potential access barriers, such as distance to the health facility, transportation costs, available modes of transportation, as well as travel time. Type 3 delays include factors such as the timely delivery of health services, effectiveness of the provided care, availability of supplies and equipment, competence of the staff, and the overall quality of care.[4,40] These potential delays primarily represent supply-side barriers and highlight the

importance of strengthening health systems from within. Type 1 delays, however, are different, as they are created by a complex web of structural, political, financial, societal, cultural, interpersonal, and other individual factors that may hinder maternal healthcare-seeking.[4,40] These 'socio-cultural' factors also include previously discussed gender inequalities. Type 1 delays can occur irrespectively of the availability of health services and thus cannot be solved by strengthening health systems solely on a structural level. They can, however, be influenced by type 2 and type 3 delays. For example, in cases where women experience poor quality of care at a health facility (type 3 delay), they might hesitate to utilize health services in the future (type 1 delay).[4,40] This interplay of different factors is what makes it difficult to quantify the impact socio-cultural barriers can have on maternal healthcare-seeking. However, as type 1 delays have been found to significantly contribute to maternal mortality,[4,41] exploring the socio-cultural factors behind these delays may be crucial to understanding maternal healthcare-seeking behaviors in SSA.

1.6. Socio-cultural factors and maternal healthcare-seeking

The term 'socio-cultural' refers to the interplay of various societal and cultural factors that influence the thoughts, feelings, and behaviors of an individual or a collective. These factors can include race, ethnicity, gender, language, and religion as well as traditions, customs, values, attitudes, beliefs, and practices present in a population group[42,43]. As society and culture are believed to shape human cognition, socio-cultural factors make up a considerable part of what creates a person's reality and drives their actions.[43] Hence, the socio-cultural background of an individual may also significantly influence their healthcare-seeking behaviors. Gonzalez and Birnbaum-Weitzman (2020) state that socio-cultural factors have been found to impact numerous health outcomes as well as health behaviors including the utilization of health services.[42] These findings once again highlight the importance of exploring socio-cultural barriers to maternal healthcare-seeking including the utilization of institutional delivery services.

2. Rationale

Maternal mortality remains a major challenge to health systems in low and lower middle-income countries, with Sub-Saharan Africa (SSA) representing the global region with the worst maternal health outcomes.[1] Early detection and treatment of obstetric complications are essential in the

prevention of maternal deaths.[25] Hence, increasing the proportion of institutional deliveries under the care of skilled health personnel is considered crucial to the reduction of maternal mortality.[3,29] SSA, however, continues to exhibit low rates of institutional deliveries, with only 63 percent of births having been attended by skilled health personnel in 2019.[31] Thus, identifying the underlying factors that hinder expectant mothers from utilizing institutional delivery services is of utmost importance when combating high maternal mortality in SSA. Evidence suggests that socio-cultural factors may play a significant part in maternal healthcare-seeking behaviors.[4,41,42] As there are no recent systematic literature reviews examining the relationship between socio-cultural factors and institutional delivery-service utilization in SSA, it is the purpose of this research project to conduct a semi-systematic literature review on the topic.

3. Objectives and Research question

3.1. Objectives

The objective of this semi-systematic literature review is to identify research examining the influence of socio-cultural factors on institutional delivery-service utilization in SSA. By analyzing scientific findings on this topic, this review aims to explore how socio-cultural factors may act as barriers to facility-based childbirth and thus potentially contribute to high maternal mortality in SSA. In doing so, this review seeks to highlight the importance of considering socio-cultural factors when designing interventions aimed toward increasing institutional delivery-service utilization in SSA.

3.2. Research question

What socio-cultural factors act as barriers to facility-based childbirth in SSA?

4. Methods

The present literature review was conducted using a semi-systematic approach as described by Snyder (2019)[44]. A systematic literature review is a type of review that identifies, critically appraises and synthesizes scientific research conducted on a specific topic. This process is carried out in a highly systematic and rigorous manner to ensure transparency and reliable results.[44,,45] A thorough and well-conducted systematic literature review can provide researchers with a solid foundation for advancing knowledge and facilitating the development of new theories.[1] Compared to a single study, systematic literature reviews are more effective at providing answers to research questions, as they synthesize the findings of more than one study.[46] Although systematic literature reviews are regarded as reliable sources of information, the process of data extraction and synthesis can be time-consuming and error-prone. Thus, systematic literature reviews are generally conducted by more than one researcher.[47]

The semi-systematic approach is designed for research projects which present constraints that would render a fully systematic approach unfeasible.[44] As the present literature review was carried out by only one researcher, the execution of a fully systematic literature review could not be ensured. Hence, a semi-systematic approach was chosen for this review.

4.1. Table 1: Typical phases and activities of systematic literature reviews[44]

Phase	**Activities in each phase**
Phase 1: Plan review	1. Specify research questions 2. Develop a review protocol
Phase 2: Conduct review	3. Identify and select relevant studies 4. Extract the required data 5. Synthesize data
Phase 3: Report	6. Write the resulting paper

4.2. Preliminary literature search

A preliminary literature search was conducted between January 2022 and March 2022. Initial insights into the influence of socio-cultural factors on maternal healthcare-seeking behaviors in SSA were gathered by skimming scientific literature published on this topic. Relevant studies were found in online databases by using the search terms "socio-cultural", “factors”, “barriers”, “maternal healthcare-seeking”, “healthcare-seeking behaviors”, “facility-based childbirth”, “institutional delivery”, “skilled birth attendance” and “sub-Saharan Africa” in connection with the Boolean operators “AND” and “OR”. Next, the research question as well as the inclusion and exclusion criteria were determined. The review protocol was submitted in May 2022.

4.3. Defining study variables

The present literature review set out to explore socio-cultural barriers to facility-based childbirth in sub-Saharan Africa. However, prior to commencing the search for relevant scientific literature, the study variables had to be defined in more detail. The process of defining socio-cultural barriers proved to be more difficult than expected, as the width of the term ‘socio-cultural’ is largely open for interpretation. Moreover, most socio-cultural factors can never be fully separated from structural influences, much like many structural barriers to facility-based childbirth may be perpetuated by certain socio-cultural factors. Hence, the definition of socio-cultural barriers to facility-based childbirth largely depends on the individual perspective.

This semi-systematic literature review opted to exclude socio-demographic as well as socio-economic variables, such as maternal age, marital status, level of education, religious affiliation, income, and occupation. Whilst acknowledging that these variables are closely connected to socio-cultural factors and may even be regarded as such in some contexts, the author of the present review chose not to regard these factors as variables of interest.

4.4. Table 2: Eligibility criteria

Inclusion criteria	Exclusion criteria
Variables; phenomena: • socio-cultural barriers to: ➢ facility-based childbirth ➢ skilled birth attendance ➢ maternal healthcare-seeking • socio-cultural facilitators of: ➢ home birth ➢ traditional birth attendance	Type of publication: • review articles • case reports • case series • unpublished studies
Population group: • pregnant women and mothers • family members • birth attendants • health workers • other key informants	
Setting: • sub-Saharan Africa	
Type of publication: • qualitative studies • quantitative studies • mixed-method studies	
Publication period: • 2014 to 2022	
Language: • English	

4.5. Identification and selection of relevant studies

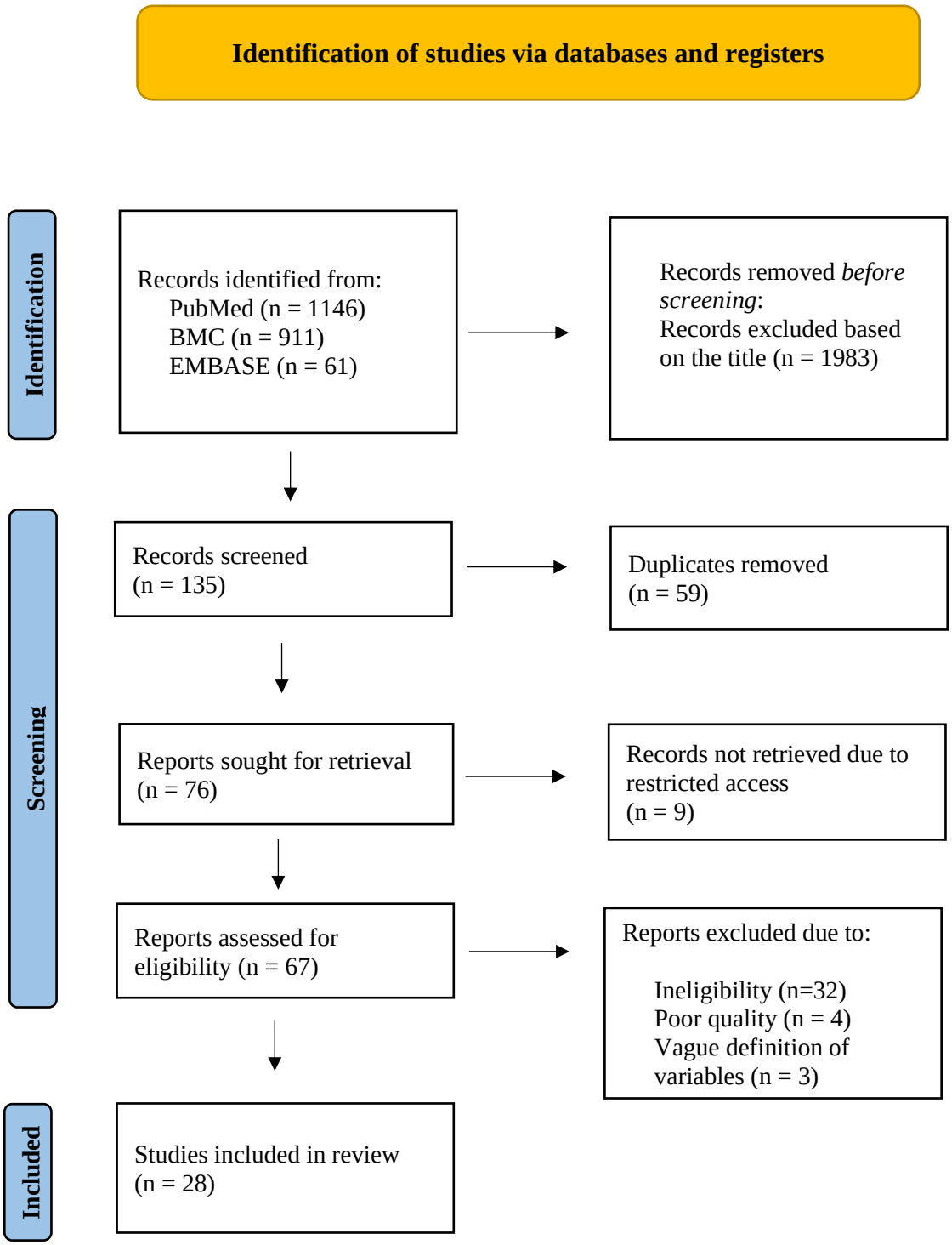
The search for scientific studies that met the predetermined inclusion criteria started in August 2022. Three online databases were scanned for literature by using relevant search terms. (Appx. 1) The initial search generated a total of 2118 potentially relevant studies from the online databases PubMed (1146), BMC (911), and EMBASE (61). The eligibility of these studies was determined through multiple steps, which are illustrated in the PRISMA Flow Diagram[48] (Figure 3). First, all studies identified by the search engines were scanned solely by their title. Next, the studies with relevant titles were scanned by reading their abstracts. If both the title and abstract matched the inclusion criteria, the study was marked as potentially relevant. This process was repeated in all three online databases. Next, all studies marked as potentially relevant were scanned for duplicates. After the duplicates and studies with restricted access had been removed, 67 studies remained to be reviewed in their entirety. 32 studies did not meet the predetermined eligibility criteria and were hence excluded. Another 2 qualitative and 5 quantitative studies had to be removed due to poor methodology and/or vague definitions of the variables, rendering the remaining selection of studies to feature only qualitative and mixed-methods designs. A total of 24 qualitative and 4 mixed-methods studies remained to be featured in this literature review.

4.5.1. Non-exhaustive sampling

The question of how many studies are to be included in a systematic review of qualitative data has attracted much debate in the scientific community. Too few studies may weaken the soundness of the results, whereas too many studies may impair the systematic analysis of the findings, as researchers might find it difficult to maintain control over the large amount of data.[49] According to Booth (2016), researchers should aim for a sample size of between 6 and 14 studies when conducting a qualitative systematic review.[49] Other researchers have advised limiting the number of included studies to around 40.[49] These suggestions indicate that exhaustive sampling may not always be feasible for systematic reviews of qualitative data, as the findings of qualitative studies are often “richer”, “thicker”, and more complex than the data featured in quantitative research.

As the present literature review was conducted by only one researcher and features a semi-systematic design, non-exhaustive sampling was applied when identifying and selecting studies to be included in this review. Hence, the search for further literature was suspended after the 28 selected studies had been deemed rich in relevant data.

4.6. Figure 3: PRISMA Flow Diagram[48]



4.7. Quality assessment

The 28 studies chosen to be included in this review were assessed for their quality using the Standards for Reporting Qualitative Research (SRQR) checklist.[5] (Appx. 2) The quality of the included studies was found to range from high (100 % – 85%), over medium (84% – 69%) to poor (< 69%) (Table X). Sixteen studies were found to be of high quality, as they met most of the criteria listed in the critical appraisal tool. A further 10 studies were deemed to be of medium quality, and two studies scored poorly on the SRQR checklist.

4.7.1. Table 3: Quality assessment

Author, year	Study design	Quality assessment tool	Max. score	Score	%*
Ababor et al., 2019[54]	Qualitative	SRQR	21 – 100%	17.5	**83%**
Adatara et al., 2020[55]	Qualitative	SRQR	21 – 100%	17	**81%**
Ahmed et al., 2019[56]	Qualitative	SRQR	21 – 100%	17.5	**83%**
Akeju et al 2016[57]	Qualitative	SRQR	21 – 100%	11.5	**55%**
Alatinga et al., 2021[58]	Qualitative	SRQR	21 – 100%	19	**90%**
Anastasi et al., 2015[59]	Mixed-Methods	SRQR	21 – 100%	19	**90%**
Boah et al., 2020[60]	Mixed-Methods	SRQR	21 – 100%	19.5	**93%**
Caulfield et al., 2016[61]	Qualitative	SRQR	21 – 100%	18	**86%**
Ganle et al., 2014[62]	Qualitative	SRQR	21 – 100%	17.5	**83%**
Higi et al., 2021[63]	Qualitative	SRQR	21 – 100%	18.5	**88%**
Hill et al., 2020[64]	Qualitative	SRQR	21 – 100%	19	**90%**
Ibrhim et al., 2018[65]	Qualitative	SRQR	21 – 100%	15.5	**74%**

Author, year	Study design	Quality assessment tool	Max. score	Score	%*
Jebena et al., 2022[66]	Mixed-Methods	SRQR	21 – 100%	18.5	**88%**
Karanja et al., 2018[67]	Mixed-Methods	SRQR	21 – 100%	17	**81%**
Kea et al., 2018[68]	Qualitative	SRQR	21 – 100%	16.5	**79%**
Konje et al., 2020[69]	Qualitative	SRQR	21 – 100%	18	**86%**
Mohamed et al., 2021[70]	Qualitative	SRQR	21 – 100%	18	**86%**
Naanyu et al., 2020[71]	Qualitative	SRQR	21 – 100%	16	**76%**
N'Gbichi et al., 2019[72]	Qualitative	SRQR	21 – 100%	17.5	**83%**
Nigusie et al., 2022[73]	Qualitative	SRQR	21 – 100%	20.5	**98%**
Shiferaw et al., 2020[74]	Qualitative	SRQR	21 – 100%	20	**95%**
Sialubajne et al., 2015[75]	Qualitative	SRQR	21 – 100%	18	**86%**
Tabong et al., 2021[76]	Qualitative	SRQR	21 – 100%	20	**95%**
Toja et al., 2022[77]	Qualitative	SRQR	21 – 100%	19.5	**93%**
Treacy et al., 2015[78]	Qualitative	SRQR	21 – 100%	18	**86%**
Tukur et al., 2015[79]	Qualitative	SRQR	21 – 100%	13.5	**64%**
Van der Land et al., 2018[80]	Qualitative	SRQR	21 – 100%	17.5	**83%**
Wilunda et al., 2016[81]	Qualitative	SRQR	21 – 100%	19	**90%**

* Rounded up to zero decimal places

4.8. Data analysis

The process of data analysis commenced in November 2022. Data was extracted from all 28 studies chosen to be presented in the literature review. However, as the quantitative data featured in the mixed-methods studies did not reveal any relevant findings, only qualitative data was extracted from the included studies.

4.8.1. Working with qualitative data

Qualitative research methods are employed to observe and describe non-quantifiable phenomena, such as the experiences, perceptions, and behaviors of individuals or population groups.[50,51] According to Moen and Middelthon (2015), qualitative research methods enable researchers "to discover and examine the ways in which interconnected people encounter, perceive, understand, and bring into being processes, practices, and phenomena."[51] Qualitative research is considered essential in "generating knowledge grounded in human experience"[52] and has thus established itself as a valuable part of empirical research.

As the number of qualitative studies continues to grow, so does the need for high-quality systematic reviews to synthesize said research. However, due to the complex nature of non-quantifiable data, there is much ongoing debate as to what the best approach to systematically review qualitative research really is.[49] Contrary to quantitative data, the extraction of qualitative findings for a systematic literature review is not always a linear process. Authors might need to move between the phases of data extraction and data synthesis in multiple cycles as new themes are likely to emerge throughout the review process. Thus, the extraction of qualitative findings often requires a more flexible approach that allows the researchers to fully immerse themselves in the data.[51,53] Nevertheless, this process needs to be approached in a methodical manner to ensure the soundness and quality of the resulting review.[45,52]

4.8.2. Extraction of qualitative data

Several different methods for the extraction of qualitative data are used in the scientific community.[46] This semi-systematic literature review draws from the method of thematic analysis. Thematic analysis is an approach used to identify and report themes or patterns of meaning found within a qualitative data set.[50] Although this method is commonly used to analyze the raw data of primary qualitative research, it can also be applied to qualitative systematic reviews.

According to Braun and Clarke (2006), thematic analysis consists of six interactive phases: 1) familiarizing oneself with the data, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes, and 6) producing the report.[50]

The present literature review adapted the phases of thematic analysis to better accommodate the large amount of qualitative data found in the included studies.

The first phase of the data extraction process involved reading through the findings and marking all relevant data. During this process, the findings were also scanned for reoccurring themes. The data was then divided into "major themes" and "subthemes". Each new finding represented a subtheme, which was then matched to one of the major themes. If a finding did not fit any of the existing categories, a new one was created.

4.8.3. Coding of the data

The coding of the data was done by hand. To make the synthesis of the data as systematic as possible, each major theme was assigned a number, whereas each subtheme was assigned a letter in addition to the number of its corresponding theme. The themes and subthemes were documented in a table along with their assigned codes. This table is provided in the appendix to better illustrate the applied method as well as to ensure transparency. (Appx. 3)

4.9. Data synthesis

As mentioned above, the phases of qualitative data extraction and data synthesis are likely to follow a non-linear process and thus cannot always be regarded as separate phases of the research process.[53] During the phase of data synthesis, some of the preliminary themes were renamed, others were combined or divided. The initial codes were also revised multiple times. The primary studies were often revisited to ensure that the findings were categorized correctly and that no relevant data was missed. As new findings emerged far into the process of data extraction, the preliminary themes were constantly updated to ensure they accommodated every individual finding. Hence, the themes and subthemes were finalized only after the point of data saturation had been reached.

4.10. Data Saturation

Data saturation refers to the point in the research process when further data collection is not expected to generate new findings or information.[49] In primary qualitative research, the point of

data saturation may be reached when no new topics or ideas emerge during a discussion amongst study participants. In systematic literature reviews, however, the point of data saturation largely depends on the "richness", "thickness", and overall quality of the included studies.[49]

The present literature review considers the point of data saturation to have been reached during the review of the 23rd study, as no new findings emerged after that point. Still, the final five studies were highly significant to consolidate the findings and ensure that the extracted data was saturated. As most of the included studies were rich in relevant data, it was also determined that no additional literature was necessary to confidently answer the research question.

All themes and subthemes that were generated throughout the process of data synthesis are illustrated in the appendix. (Appx. 4)

5. Characteristics of the included studies

5.1. Study designs

The studies included in this semi-systematic literature review feature qualitative and mixed-methods research designs. Twenty-one of the studies employ only qualitative methods, whereas four feature a mixed-methods design. The remaining three studies present findings collected through qualitative methods, however, they do not state a clear study design, as they all feature data collected as part of larger studies. Qualitative data was largely collected through focus group discussions (FGDs), key informant interviews (KIIs), and in-depth interviews (IDIs). Quantitative data collection employed questionnaires and surveys. However, as the quantitative results did not feature relevant socio-cultural factors, they were excluded from this review.

5.2. Study settings

This semi-systematic literature review features articles from the following sub-Saharan African countries: Ethiopia (10); Ghana (5); Kenya (4); Nigeria (3); Sierra Leone (1); Somalia (1); South Sudan (1); Tanzania (1); Uganda (1); and Zambia (1).

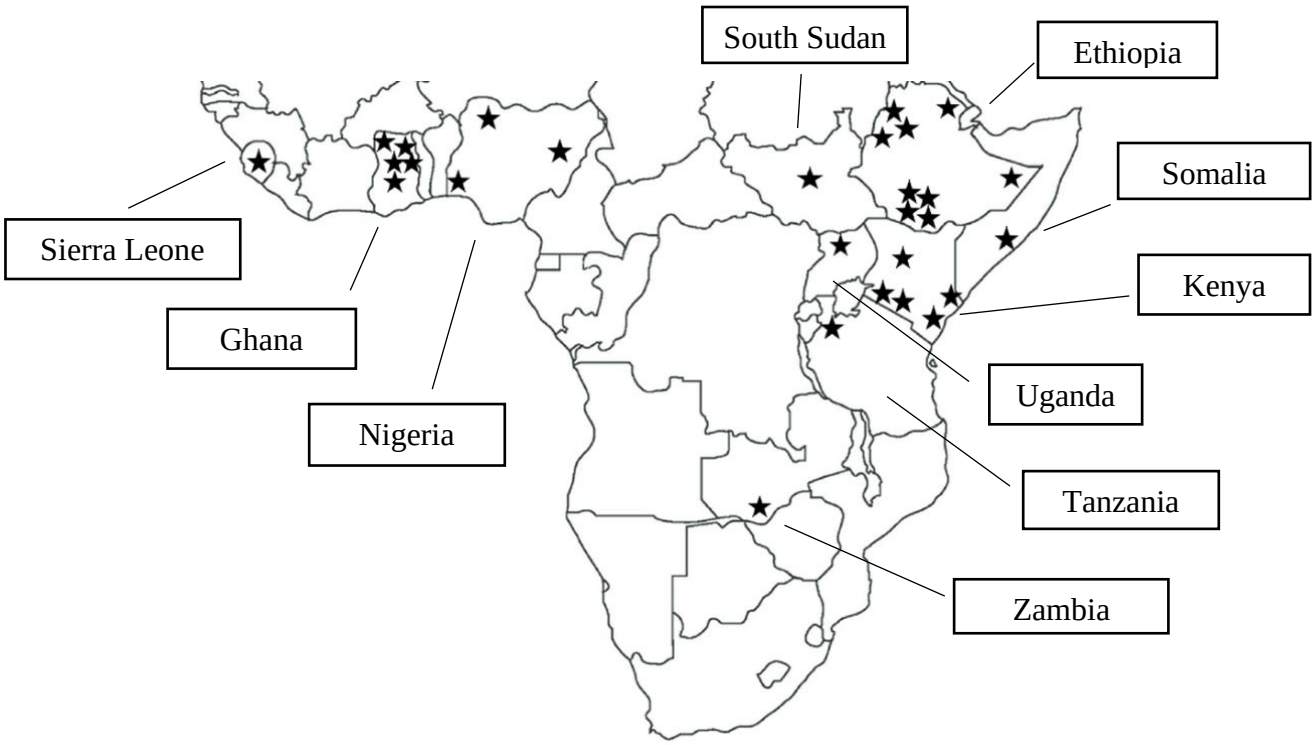


Figure 4: SSA, study locations

Ethiopia

Out of the ten studies conducted in Ethiopia eight were carried out in rural settings and/or pastoral communities.[54,56,65,66,68,73,74,80] One study was carried out in areas that had implemented the Optimizing Health Extension Program[63] and the final study chose districts with the lowest number of health facility births relative to other districts as their study setting.[77]

Ghana

The research carried out in Ghana includes three studies conducted in rural settings[55,58,60], one study that chose regions with a high number of TBA-assisted births[76], and one study that features findings from areas with varying levels of prosperity.[62]

Kenya

Out of the five studies conducted in Kenya two feature rural settings[67,71], one was carried out in pastoral communities[61], and the final study chose locations with functioning community units (CUs) overseen and served by Community Health Volunteers (CHVs).[72]

Nigeria

The research conducted in Nigeria features one study that was carried out in rural communities[64], one that explores both rural and suburban communities[79], and one study that features rural, suburban, as well as urban settings.[57]

Sierra Leone, Tanzania, Zambia, Somalia, Uganda, South Sudan

The studies from Sierra Leone[78], Tanzania[69], and Zambia[75] were all carried out in rural settings, whereas the studies from Somalia[70] and Uganda[59] were conducted in IDP (internally displaced person) communities. The research from South Sudan was carried out in pastoral communities.[81]

5.3. Study topics

Most of the included studies explore the topic of this review in a more general sense, by presenting barriers and facilitators to maternal healthcare service utilization. Only four studies focus specifically on the influence of socio-cultural factors on the place of childbirth. Other featured topics include reasons for preferring home birth to facility-based childbirth, factors influencing

low levels of skilled birth attendance (SBA), determinants of healthcare-seeking behavior, as well as decision-making processes related to childbirth.

5.4. Study populations

The study populations include mothers with delivery experience, (pregnant) women, fathers, men, grandmothers, in-laws, male decision-makers, male tribal leaders, religious leaders, Imams, community volunteers, neighborhood health committee members, policymakers, heads of the Women's Affairs Bureau (Ethiopia), district health office experts, district health managers, community Development Committee members (Kenya), local government representatives, Ministry of Health representatives (Kenya), representatives of women's organizations, Community Health Committee members (Kenya), members of the county assembly (Kenya), Female Health Development Army Staff (Ethiopia), County Health Department staff (South Sudan), TBAs, SBAs, health facility personnel, healthcare providers, health administrators, health extension workers, community health workers, local kebele administrators (Ethiopia), IDP camp leaders (Somalia), as well as other community-level stakeholders and key decision influencers.*

*The author of the present literature review acknowledges that some of the mentioned terms (such as 'tribal leaders') may be outdated. However, as these terms were used by the authors of the primary studies, the present literature review has opted not to change them when describing the characteristics of the included studies.

5.5. Table 4: Characteristics of included studies

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Ababor et al., 2019[54]	Exploring the influence of socio-cultural beliefs and practices on institutional delivery-service utilization	**Ethiopia:** Afar; Somali; Beni-shangul-Gumuz	rural setting; areas with low utilization of institutional delivery services	**Qualitative:** FGDs; KIIs	-78 women, who gave birth within three years prior to the study -4 health extension workers (HEWs) -9 community leaders -6 TBAs -3 midwives -2 social mobilizers -7 relevant office representatives at District level	-culturally unacceptable practices at health facilities -fear of medical interventions -fear of mistreatment by health workers -lack of parent engagement -male health workers	-preference for TBAs -preference for home setting -value of traditional birthing rituals
Adatara et al., 2020[55]	Exploring the reasons behind women choosing to give birth at home	**Ghana:** Upper East Region	rural setting; areas with low utilization of skilled birth attendance	**Qualitative:** semi-structured interviews	-10 women, who gave birth at home within six months prior to the study and utilized TBA care	-poor quality of care -poor conduct of SBAs -lack of privacy -lack of support	-preference for TBAs

* Number of participants not clearly specified
** Unclear if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Ahmed et al., 2019[56]	Exploring socio-cultural factors favoring home delivery	**Ethiopia:** Afar Region	pastoral community	**Qualitative:** FGDs; KIIs	-60 mothers, who gave birth within two years prior to the study -48 grandmothers -56 male tribal or religious leaders -6 district health office heads -6 Women's Affairs Office heads -12 TBAs	-lack of support -male health workers -fear of medical interventions	-lack of female autonomy -childcare and household chores -childbirth seen as a natural process -trust in TBAs -religious beliefs
Akeju et al., 2016[57]	Describing healthcare-seeking practices in pregnancy as well as the socio-cultural factors that influence these practices	**Nigeria:** Ogun State	rural, urban, and suburban settings	**Qualitative:** FGDs; interviews	-79 pregnant women -95 mothers -35 male decision-makers -68 community/ opinion leaders -36 TBAs -59 HEWs -31 nurses/ midwives -key informants*	-health facilities only considered in case of complications -fear of medical interventions	-preference for traditional providers -trust in traditional medicine -trust in TBAs -patriarchal influences

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Alatinga et al., 2021[58]	Exploring the institutional and socio-cultural factors that motivate women to give birth at home	**Ghana:** Upper West Region	rural setting	**Qualitative:** semi-structured interviews	-23 women, who attended ANC but delivered at home -7 husbands -10 midwives -3 TBAs -3 chiefs -4 Assembly members	-myths surrounding facility-based childbirth -unfriendly attitudes of health workers -fear of c-sections	-beliefs about marital fidelity -religious beliefs -illiteracy -lack of female autonomy
Anastasi et al., 2015[59]	1) Identifying reasons behind high ANC attendance and lower rates of facility-based childbirth 2) examining the association between ANC advice and place of delivery; 3) investigating whether ANC links women to SBA services	**Uganda:** Northern Region	IDP Camp	**Mixed-Methods:** Quantitative: structured interviews Qualitative: semi-structured interviews; FGDs	Quantitative: -136 women, who utilized ANC services ** Qualitative: -36 women, who received ANC and delivered within two years prior to the study** -10 health workers -10 policymakers -20 husbands -20 TBAs -20 women**	-fear of maltreatment by health workers -past negative experiences -unequal treatment -undesirable birthing position -lack of respect for traditions	-lack of support from partner -preference for TBAs -value of natural birth

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Boah et al., 2020[60]	1) Estimating the percentage of births occurring at home; 2) examining factors associated with home birth	**Ghana:** Upper East Region	rural setting; area with a declining proportion of institutional deliveries	**Mixed-Methods:** Quantitative: semi-structured questionnaires Qualitative: FGDs	Quantitative: -423 women, who had delivered within six months prior to the study Qualitative: -33 women with delivery-care experience (different sample)	-poor attitude of health workers	-facility-based childbirth seen as taboo -lack of family approval
Caulfield et al., 2016[61]	Investigating socio-demographic factors as well as cultural beliefs and practices that influence the place of childbirth	**Kenya:** Laikipia County; Samburu County	pastoral community	**Qualitative:** IDIs; FGDs	-7 SBAs -8 Community Development Committee members -2 district health managers -2 health workers - TBAs* - community health workers* - women, who had delivered in the past two years* - husbands*	-maltreatment -lack of support -lack of privacy -facilities only considered in case of complications	-lack of female autonomy -preference for TBAs -home birth seen as tradition -value of medically unassisted births -domestic chores

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Ganle et al., 2014[62]	Exploring socio-cultural factors that inhibit women's access and use of skilled maternal and newborn healthcare services	**Ghana:** Ashanti Region; Northern Region	regions with varying levels of prosperity; areas with low access to antenatal, delivery, post-delivery and newborn care services compared to the national averages	**Qualitative:** FGDs, KIIs	-185 expectant/ lactating mothers -20 healthcare providers	-male health workers -lack of privacy -maltreatment -previous successful home deliveries	-lack of female autonomy -faith in religion -religious norms -value of medically unassisted births -beliefs about marital fidelity -shame surrounding marital status
Higi et al., 2021[63]	Exploring the perceptions and experiences of health extension workers on facilitators and barriers to maternal and newborn health services	**Ethiopia:** Oromia; Amhara; SNNPR	districts where the Optimizing Health Extension Program has been implement-ted	**Qualitative:** IDIs; FGDs	-60 health extension workers (HEWs)	-negative experiences -lack of privacy -undesirable newborn care practices -negative rumors about health facilities -poor attitudes of health workers	-previous successful home birth -domestic chores -lack of female autonomy -religious norms

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Hill et al., 2020[64]	Identifying barriers and facilitators to facility-based childbirth	**Nigeria:** Gombe State	mostly rural and agrarian settings	**Qualitative:** Narrative interviews; IDIs; FGDs	-12 mothers with children under 3 months of age (narrative interviews) -12 mothers with children under 6 months (IDIs) -4 mothers with children under 12 months (FGDs) -4 grandmothers -4 fathers -4 health workers	-maltreatment -perceived poor quality of care -undesirable birthing position -male health workers -frequent vaginal examinations	-lack of family approval -faith in religion -home birth seen as tradition -lack of female autonomy
Ibrhim et al., 2018[65]	Exploring why women in the Afar pastoralist community prefer to give birth at home	**Ethiopia:** Afar Region	rural setting; pastoral community	**Qualitative:** FGDs; KIIs	-60 mothers -48 grandmothers -54 male tribal or religious leaders -6 heads of the Women's Affairs Bureau -6 district health office heads -12 TBAs	-health facilities only considered in case of complications -lack of trust in health workers -lack of privacy	-lack of knowledge and information -home birth seen as the norm -trust in TBAs -customs related to birth

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Jebena et al., 2022[66]	Exploring barriers and facilitators to the utilization of maternal health services	**Ethiopia:** Oromia Regional State	pastoral community	**Mixed-Methods:** Quantitative: household survey Qualitative: review of literature; FGDs; KIIs; Participatory Ethnographic Evaluation Research (PEER)	Quantitative: -1499 women of reproductive age ** Qualitative: -health extension workers (HEWs)* -health workers * -local administrators* -community and religious leaders* -women of reproductive age* **	-fears and negative rumors surrounding institutional delivery -previous negative experiences -maltreatment -younger health workers -male health workers -undesirable birthing position -lack of cultural competency among health workers	-lack of knowledge regarding facility-based childbirth -lack of female autonomy -lack of family support

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Karanja et al., 2018[67]	Determining barriers and facilitators to facility-based childbirth	**Kenya:** Kajiado county	rural setting	**Mixed-Methods:** Quantitative: Survey Qualitative: FGDs, IDIs	Quantitative: -200 women, who gave birth within two years prior to the study Qualitative: -8 women, who gave birth in a health facility -8 women, who gave birth at home -key decision-influencers* -TBAs* -community health volunteers* -provincial administrators* -health workers*	-fear of medical interventions -male health workers -undesirable birthing position -disrespect/abuse by health workers -poor quality of care	-lack of female autonomy -lack of birth plan -birth seen as natural process -previous successful home births

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Kea et al., 2018[68]	1) Exploring factors affecting maternal health service utilization; 2) providing context-specific information on experiences and delays in care-seeking	**Ethiopia:** Southern Ethiopia	rural setting	**Qualitative:** FGDs, IDIs	-18 women, who were pregnant or had recently given birth -2 male community members -6 TBAs -3 local *kebele* administrators -24 health workers -5 Health Extension Program coordinators	- health facilities considered only in case of complications -maltreatment by health workers -fear of medical interventions -lack of privacy -negative experiences	-lack of knowledge surrounding (institutional) childbirth -value of medically unassisted births - previous successful home birth -birthing rituals -trust in TBAs -lack of female autonomy
Konje et al., 2020[69]	Exploring elements of the local social, cultural, economic, and health systems that influence the use of health facilities for childbirth	**Tanzania:** Northwest Tanzania	rural setting; area with low utilization of maternal health services	**Qualitative:** FGDs; KIIs	-33 women, who had recently given birth -5 husbands/ partners -28 community health workers -2 TBAs	-health facility only considered in case of complications -young/male health workers -undesirable birthing position -poor quality of care -fear of medical interventions	-low risk perception -traditional birthing practices -previous successful home birth -lack of approval -domestic chores

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Mohamed et al., 2021[70]	Understanding barriers to the use of maternal and child healthcare services	**Somalia:** Banaadir	IDP camp	**Qualitative:** IDIs; FGDs	-32 lactating/ pregnant mothers -32 health workers -8 IDP camp leaders -TBAs*	-fear of unfamiliar setting -lack of support -lack of privacy -male health workers -previous negative experiences	-lack of female autonomy -trust in TBAs -lack of knowledge of pregnancy danger signs -birth seen as natural process -traditional practices
Naanyu et al., 2020[71]	Exploring barriers to facility-based childbirth	**Kenya:** Kaloleni; Bomachoge-Borabu	rural setting	**Qualitative:** KIIs; FGDs	-66 women -30 men -27 Community Health Committee members -8 health workers -4 religious local leaders -4 government representatives -4 Ministry of Health representatives -4 representatives of local women's organizations	-maltreatment by health workers -fear of medical interventions -lack of privacy -lack of support	-shame surrounding the age of the mother -limited spousal approval -observance of birthing traditions -lack of knowledge on the importance of facility-based childbirth

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
N'Gbichi et al., 2019[72]	1) Exploring key barriers to facility-based childbirth; 2) informing interventions on specific needs of the community	**Kenya:** Garissa	locations with community units overseen by Community Health Volunteers	**Qualitative:** FGDs; KIIs	-6 women, who had given birth within five years prior to the study -6 husbands -1 member of the County Assembly -3 Imams -3 clan leaders -5 health managers	-male health workers -perceived poor quality of care	-lack of female autonomy -lack of awareness and information on the importance of skilled birth attendance
Nigusie et al., 2022[73]	Exploring barriers and enablers to institutional delivery care-seeking	**Ethiopia:** Northwest Ethiopia	rural setting	**Qualitative:** IDIs; KIIs	-18 women, who had given birth within one year prior to the study, and their significant others* -12 key informants (leaders of the Female Health Development Army (HDA) and health extension workers (HEWs)) *	-fear of maltreatment by health workers	-childbirth seen as a normal process -preference for home birth -birth seen as the duty of a woman -trust in TBAs -domestic chores -family influence

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Shiferaw et al., 2020[74]	Exploring and describing reasons why women do not use skilled delivery care	**Ethiopia:** Northwest Ethiopia	rural setting; area with low skilled delivery-service utilization	**Qualitative:** FGDs	-71 mothers, who had given birth within one year prior to the study -62 pregnant women	-negative experiences -lack of respect -lack of support -fear of medical interventions -lack of privacy -fears and rumors surrounding health facilities	-home birth seen as a valuable tradition -importance of traditions related to birth -lack of family acceptance
Sialubanje et al., 2015[75]	Identifying factors that motivate women to give birth at home and seek the help of TBAs	**Zambia:** Southern Province	rural setting; areas with the lowest institutional delivery rates in the district	**Qualitative:** FGDs; IDIs	-100 women, who had given birth within one year prior to the study (FGDs) -5 TBAs -5 nurse-midwives -4 women (IDIs)** -4 husbands -4 headmen -4 Neighborhood Health Committee members -4 health workers	-maltreatment by health workers -young age and male gender of health workers	-lack of knowledge/ information regarding childbirth -low risk perception -previous successful home birth -trust in TBAs

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Tabong et al., 2021[76]	Exploring the reasons for TBA service utilization despite the availability of health facilities	**Ghana:** Northern Ghana	districts with a high number of TBA deliveries	**Qualitative:** IDIs	-31 women, who gave birth at TBA facilities	-maltreatment by health workers -fear of medical interventions -undesirable birthing position -perceived poor quality of care -previous negative experiences	-preference of TBAs -value of natural births
Toja et al., 2022[77]	Exploring and describing why women end up giving birth at home after full ANC follow-up	**Ethiopia:** Southern Ethiopia	districts with the lowest health facility deliveries in the region	**Qualitative:** IDIs; FGDs	-9 women, who gave birth at home after attending four or more ANC appointments (IDIs) -10 healthcare providers -9 mothers (FGDs) -8 fathers -8 community leaders	-perceived poor quality of care -lack of privacy	-trust in TBAs -tradition of home birth -lack of knowledge about facility-based childbirth -lack of community acceptance -previous successful home birth -lack of female autonomy

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Treacy et al., 2015[78]	Exploring the perceptions and decision-making processes of women and their communities during childbirth	**Sierra Leone:** Northern Province	rural setting; area with low skilled birth attendance	**Qualitative:** FGDs; IDIs; informal interviews	-10 women, who gave birth within one year prior to the study (IDIs) -12 women, who gave birth within one year prior to the study (FGDs) -4 women, who gave birth within one year prior to the study (final FGD) -13 older women, who had recently attended a birth -13 men -3 TBAs -1 village chief -4 health workers -4 motorbike drivers ***	-facilities considered only in case of complications -fear of medical interventions	-lack of female autonomy -value of medically unassisted births -home birth seen as culturally acceptable -preference for traditional remedies -low risk perception -secrecy surrounding the onset of labor -religious beliefs

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Tukur et al., 2015[79]	Exploring the reasons behind women deciding to give birth at home despite the availability of facility-based delivery care at a minimal cost	**Nigeria:** Northwest Nigeria	suburban and rural settings	**Qualitative:** KIIs; FGDs	-women, who did not attend ANC and did not give birth at a health facility* -women, who attended ANC but gave birth at home* -women, who gave birth at a health facility once but did not return for subsequent births* -in-laws* -husbands/ partners* -6 TBAs -6 healthcare providers ***	-maltreatment by health workers -lack of privacy -male health workers -lack of support -fear of medical interventions	-religious beliefs -facility-based childbirth seen as unnecessary -lack of community support -preference for TBAs

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

Author, year	Study objective	Study context		Study design	Participants	Socio-cultural barriers to facility-based childbirth	
		Country Region	Setting			Health facility factors	Community factors
Van der Land et al., 2018[80]	Investigating the perceptions and decision-making processes of pastoralist women from Afar regarding home birth and institutional childbirth	**Ethiopia:** Afar Region	pastoral community	**Qualitative:** IDIs	-13 women, who gave birth within four years prior to the study	-mistrust towards health facilities -male health workers	-religious beliefs -home birth seen as culturally acceptable -birthing traditions -lack of support -low risk perception -domestic chores -lack of female autonomy -trust in TBAs
Wilunda et al., 2016[81]	Identifying barriers to institutional delivery service utilization	**South Sudan:** Rumbek North County	mainly pastoral community	**Qualitative:** FGD; KIIs	-169 women, who gave birth within one year prior to the study -45 husbands -18 key informants (community leaders, health workers, TBAs, County Health Department staff)	-undesirable birthing position -lack of privacy -male health workers -fear of medical interventions -perceived poor quality of care -neglect by health workers	-lack of female autonomy -domestic chores -childbirth seen as a normal and natural process -home birth seen as valuable tradition -low risk perception

* Number of participants not clearly specified
** Unclear, if taken from the same sample of participants
*** Inconsistencies within the study

6. Findings

The present literature review identified a multitude of socio-cultural barriers to facility-based childbirth in SSA. These findings were categorized into 7 main themes: 1) gender roles and values, 2) traditions and customs related to childbirth, 3) the influence of religious beliefs, 4) culturally unacceptable practices at health facilities, 5) compromised quality of care at health-facilities, 6) fears and myths surrounding facility-based childbirth, and 7) knowledge surrounding childbirth.

6.1 Gender roles and values

The first major theme identified as a socio-cultural barrier to facility-based childbirth relates to gender. This theme encompasses a number of gender-related barriers that limit women's access to facility-based childbirth. These barriers were broadly divided into two categories: female autonomy and gender norms.

6.1.1. Female autonomy

Limited female autonomy

Limited female autonomy in healthcare decision-making was identified as a key barrier to facility-based childbirth. A substantial number of studies found that women are oftentimes not the final decision-makers when it comes to choosing where to give birth.[56,57,58,61,62,63,64,66,67,68,70,72,75,78,79,80,81] Husbands were most frequently named as the ones holding the ultimate decision-making power. However, grandmothers[56,64] and mothers-in-law[56,62,73] were also named as key decision-makers, showcasing that decision-making authority is not solely dependent on gender. As the findings demonstrate a general preference for home birth amongst key decision-makers, expectant mothers are often left with no choice but to give birth at home. This is illustrated by the following quote:

"Most women fail to go to deliver at the clinic because of their husbands. They depend on their husbands to allow them"[75] (p. 7)

Another form of limited female autonomy was identified in the practice of collective decision-making. The findings describe how, in some cases, decisions surrounding childbirth are made in conjunction with relatives, close friends, husbands, mothers-in-law, grandmothers, women with home birth experience, as well as TBAs.[56,77,78] The extent to which expectant mothers themselves

get to participate in the decision-making process remained unclear. What these findings do show, however, is the amount of external influence expectant mothers are confronted with when deciding on where to give birth. Collective decision-making may render young women with no prior experience in childbirth particularly vulnerable to forfeiting their decision-making autonomy and following the advice given to them by the family or community. This may pose a significant barrier to facility-based childbirth, as home birth was found to largely be preferred by older and more influential community members. This is illustrated by the following quote:

"I really want the old woman to take me to the hospital to deliver, but when the other people told me to stay here, and wait for a time, that is why I stay. (…) I don't have any understanding about delivering; they are the ones that have the experience. So anything that they tell me, I need to listen to them"[78] (p. 5)

Lack of support

As previously described, female autonomy in healthcare decision-making can be actively limited when husbands or other family members hold the ultimate decision-making power. However, a number of studies illustrate that female autonomy can also be hindered passively, by husbands, families, or community members refusing to support expectant mothers in their decision.[58,59,60,61,63,64,69,70,71,74,77,79,80] Pregnant women, planning to give birth at a health facility, often have to rely on others to organize and pay for transportation, deliver meals to the health facility, take care of the household in their absence, or offer childcare. If the mother's wish to give birth at a health facility is deemed unnecessary or unacceptable by the husband, family, or community, they might simply refuse to offer support, thereby forcing the mother to give birth at home.

These findings suggest that lack of support – whether it be physical, financial, logistic, or emotional – inhibits a woman's decision-making autonomy and may thus pose a barrier to facility-based childbirth.

"Unsupportive communities regarding institutional delivery posed a particular problem to women who were in favor of utilizing health facility care. When these women elucidated their plan to leave the community for delivery purposes, community members refused to take over the full responsibility for household and herding tasks, so the women ended up staying at home."[80] (p. 56)

6.1.2. Gender norms

Domestic chores

Women's domestic responsibilities were identified as yet another gender-related barrier to facility-based childbirth.[61,63,69,73,80,81] Domestic chores such as caring for children and animals, fetching water, and preparing food for the family, were found to hinder women from leaving the home to give birth at a health facility. One study found that women preferred to give birth at home as they felt responsible for taking care of the household.[81] Other findings highlight the difficulties women in favor of facility-based childbirth encounter when trying to find community members willing to take care of the household in their absence.[63,80] The findings also show that men generally do not assume any domestic responsibilities, mainly due to their own heavy workload or the traditional view of domestic chores as the duty of a woman.[63,69,81]

"…we are too busy with domestic activities. We go to get water, we got to the animals and we go to prepare the food for the family members. So, we are too busy. That's why we have no time to go to [a health facility] and to deal with our health or baby's health."[80] (p. 55)

Childbirth seen as the duty of a woman

In many parts of the world, a woman's value and status in the community is often measured by her ability to have children. A number of studies found childbirth to be considered the main duty of a woman, and the ability to give birth without needing medical assistance was highly praised in the community.[59,61,62,68,73,78] These studies illustrate how women, who had successfully given birth at home were considered brave and courageous.[61] In contrast, women, who had given birth at a health facility were called weak for being unable to 'bear up with the pain' or scolded for lacking moral character.[62,68,78]

"They will say you are weak or irresponsible if you go to the hospital to deliver your baby. That is why some women do not go to hospital to deliver."[62] (p. 8)

These findings illustrate that women may experience immense societal pressure to successfully give birth at home. Hence, the cultural value placed upon medically unassisted births can be considered a barrier to facility-based childbirth.

Shame related to age or marital status

The final gender-related barrier touches upon societal norms surrounding the marital status or age of the expectant mother.[62,71,75] One study found that unwed mothers often decide to keep their so-called illegitimate pregnancy a secret by giving birth at home. This is done to prevent gossip and negative judgments from circulating in the community, as children born out of wedlock are considered shameful.[62]

"I gave birth at home. I didn't go to hospital. Why? I was very ashamed. You see I'm not married, and in this community once you are not married and you become pregnant, people will say you are immoral…"[62] (p. 9)

Another study found that the age of the expectant mother can pose a similar barrier to facility-based childbirth, should it fall outside of societal norms. The findings show that female adolescents as well as older women may experience hostility and discrimination as a result of falling pregnant at an age deemed inappropriate by the community. Consequently, these women often decide to keep their pregnancy a secret and end up giving birth at home.[71]

These findings show that the judgment and discrimination women experience for failing to fulfill societal expectations pose a significant barrier to facility-based childbirth.

6.2. Traditions and customs related to childbirth

Sub-Saharan Africa is rich in traditions, customs, and rituals surrounding childbirth. This review found that the observance of traditional birthing practices still holds great value in many communities. However, the findings also show that traditions and customs related to birth may pose a significant barrier to facility-based childbirth.

This review identified a number of traditions, customs, rituals, beliefs, and norms surrounding childbirth that may deter expectant mothers from giving birth at a health facility. These potential barriers were broadly divided into two categories: 1) values and norms surrounding home birth, and 2) traditions related to childbirth.

6.2.1. Values and norms surrounding home birth

Home birth perceived as the norm

A substantial number of studies found that many rural communities in SSA still perceive home birth as the norm.[56,59,61,65,66,70,73,75,78,79,80,81] The findings show that childbirth is commonly referred to as a normal life event that can easily be 'handled' at home. Study participants also described childbirth as an easy and natural process that does not require going to a health facility.[80] Another mentioned belief was that a safe delivery is one that occurs at home.[78] Interestingly, childbirth was often described as an 'easy' and 'natural' process specifically by male study participants.[56,70,73]

"In my opinion, the main reason for home delivery (for not going to a health facility) is that most of the community, including me, thinks delivery is a normal event…"[73] (p. 6)

These findings illustrate low risk perception surrounding pregnancy and birth which might pose a significant barrier to facility-based childbirth.

Home birth seen as a valuable tradition

According to the findings, home birth is not only commonly considered the norm but also a valuable tradition that has been passed down for generations.[54,61,64,65,68,70,71,74,77,80,81] Expectant mothers and mothers-in-law in particular often highlighted the importance of maintaining this tradition, emphasizing the high ceremonial value of home births.[54,71]

"Our ancestors have been giving birth at their home. It is a wonderful tradition"[54] (p. 346)

The high value placed on the tradition of home birth may deter expectant mothers from giving birth at a health facility. However, some study participants did mention that this tradition is slowly fading away as facility-based childbirth is becoming increasingly accepted in some communities.[71]

Home birth viewed as culturally acceptable

The perception of home birth as a culturally acceptable practice was also discussed as a potential barrier to facility-based childbirth.[60,77,78,80] According to Van der Land et al., (2018), negative attitudes towards facility-based childbirth are largely based on cultural reasons.[80] One study found that it was considered taboo for women from certain families to give birth at a health facility.[60]

Other findings featured the social belief that giving birth in places other than the home brings bad luck.[77]

As previously discussed, expectant mothers in favor of facility-based childbirth often depend on the support of their community. If institutional delivery is deemed culturally unacceptable by influential community members, women may be prevented from giving birth at a health facility.

"The community members do not support delivering women to go to health institutions for delivery. Whenever the delivery woman asks for support to go to institutional delivery, they say it is customary that we all gave birth at home safely with no problems and ask questions like "why you go there? What is new in your case?" Even once I asked my neighbor to accompany me to travel to the hospital during labor initiated, she refused to accompany me."[77] (p. 770)

Previous successful home births

Previous successful home births were also found to impact institutional delivery-service utilization.[62,63,67,68,69,73,74,75,78,80] The studies show that women, who did not experience any complications during a home birth, were likely to deem facility-based childbirth unnecessary in their subsequent pregnancies. The findings also illustrate that successful home births may reduce the collective risk perception surrounding pregnancy and birth.

"For women who have been giving birth at home with no experience of complication for the first child, the second child, even more, they don't have any reason to worry about giving birth at home."[69] (p. 4)

Home birth as proof of faithfulness

Another interesting finding was the value of home births as a means to prove the faithfulness of the expectant mother.[58,62,78,81] The studies found that successful home births were seen as a sign of fidelity, as only faithful women were believed to be able to give birth without needing medical assistance. One study described that men would insist on their wives giving birth at home if they suspected them of having been unfaithful. It was believed that if the child belonged to another man, the labor would not progress until the woman mentioned the name of the real father.[81]

"I am compelled to deliver at home, because, in this village, husbands always see you as someone who has ever committed adultery in the course of your marriage, if you deliver in the hospital"[58] (p. 6)

These findings suggest that an expectant mother may feel reluctant to give birth at a health facility, as doing so may have her fidelity called into question.

6.2.2. Traditions related to childbirth

Value of birthing rituals / Inability to practice birth rituals in the facility setting

Birthing rituals were also identified to significantly influence the place of childbirth, as health facilities are largely known to not accommodate or even prohibit certain cultural practices. The findings show that the inability to observe traditional rituals during facility-based childbirth may deter women from giving birth at a health facility.[54,55,56,60,61,63,66,68,69,71,74,76,80,81] A number of studies describe the common belief that certain ceremonies are vital for ensuring a safe birth, a healthy child, or protection from evil spirits,[60,68,69] thereby illustrating the perceived importance of these cultural practices. Other mentioned practices include the burying of the placenta and/or umbilical cord,[56,66,68,69,71,81] the preparation and consumption of traditional food/drinks,[54,55,80] ceremonies surrounding the newborn,[54,56,66] as well as practices related to female circumcision[56] and episiotomies.[54]

"In the culture of this community they don't want to throw the placenta outside their home. Because of this, they don't want to go outside [to health facility] and lose the placenta. If the placenta is not buried inside the home it is considered as bad fortune for the baby. In the health facility, they don't get the placenta to take back to their home and consider it as a big loss, similar as if they lost the delivered baby."[68] (p. 6)

Preference for Traditional Birth Attendants (TBAs)

The preference for TBAs was found to be another significant barrier to facility-based childbirth.[54,55,56,57,61,70,73,75,76,77,79,80] The studies found numerous reasons why TBAs are generally preferred to SBAs, such as their ability to converse in the local language, stronger cultural competence, increased respect for the mother's privacy, as well as willingness to accommodate or

even perform certain rituals related to birth. Study participants also emphasized that TBAs had a more holistic approach to childbirth compared to health facility staff. Additionally, TBAs were believed to be more knowledgeable on childbirth compared to health workers, who were regarded as young and inexperienced. In general, the care provided by TBAs was perceived to be superior to the services rendered at health facilities.

"If you deliver at home by the assistance a TBA or any relative, they will treat you very well. They will praise you and support you to go through the delivery process without feeling any pain. But in the hospital, the nurses will just be behaving as if they don't want you to come to them to deliver. They wouldn't help you, yet they will still insult you in addition. Their behaviour scares most women away from delivering in the health facilities"[55] (p. 5)

Secrecy surrounding the onset of labor

One study found that women would sometimes keep the onset of labor a secret due to the perceived risk of someone with bad intentions toward the mother halting the progression of labor. Some mothers even feared witchcraft being used to kill them or their child. The study found that this belief poses a barrier to facility-based childbirth, as women chose to give birth at home in order to limit the number of people aware of the impending birth.[78]

"If you have been quarrelling with someone before, some of them have hated mind for you, as soon as they heard that "oh this woman she is in labour", they go somewhere else and do witches power. That is why they don't want to circulate the information"[78] (p. 6)

6.3. The influence of religious beliefs

Religion plays an important part in most sub-Saharan African societies, with the vast majority of the population claiming a religious affiliation. Christianity is considered the dominant religion, with around 62 percent of the population identifying as Christian, whereas Muslims account for approximately 31.4 percent of the population.[82] Religion and spirituality in SSA are often also deeply connected to traditional beliefs and practices stemming from indigenous African religions.

This review identified a number of studies that showcase the influence of religion on decisions surrounding pregnancy and childbirth. Some deep-rooted religious beliefs were also found to pose a potential barrier to facility-based childbirth. This review identified 3 main themes surrounding religion and facility-based childbirth: 1) faith in religion; 2) the belief that facility-based childbirth goes against the will of God, and 3) fatalistic beliefs surrounding childbirth.

Faith in religion / trust in God

A small number of studies identified faith in God as another potential barrier to facility-based childbirth.[62,68,79] One study describes that the belief in God helping expectant mothers during labor appeared to encourage women to give birth at home. Another study illustrates how the common notion that the best medicine comes from God prevents expectant mothers from seeking facility-based care during pregnancy and childbirth.

"I haven't gone for check-up yet because I believe the best medicine comes from the creator [God]. As a believer [Christian] I know strongly that there is no medicine that heals better than God's…"[62] (p. 6)

These notions were identified as potential barriers to facility-based childbirth, as expectant mothers sharing those religious beliefs, may find health facility services unnecessary for giving birth.

The belief that facility-based childbirth goes against the will of God

Studies also found that some religious beliefs entirely prohibit facility-based childbirth, thus deterring expectant mothers from utilizing health facility services.[58,62,63,71] Participants of a study conducted in Ghana shared the belief that facility-based childbirth goes against the will of God and mothers, choosing to give birth at a health facility, will suffer negative birth outcomes as a consequence.[58] Another study describes how certain religious groups prohibit women from seeking care at health facilities even in the event of complications.[71]

"You know, there are some of the women, no matter how sick they are, they will never take any ''abrofu duro'' [western medicine] because their faith forbids them from taking medicine or going to a hospital. So for such women, when they are pregnant, they never go for antenatal care let alone think about going to hospital to give birth"[62] (p. 7)

These findings illustrate an important barrier to facility-based childbirth, however, they do not represent beliefs commonly carried by all religious communities in SSA.

Fatalistic beliefs surrounding childbirth

The final, yet most mentioned religious belief related to childbirth is the notion that every pregnancy and birth has a predetermined outcome.[62,64,70,78,79,80] A number of studies illustrate the belief that it does not matter where the expectant mother gives birth, as the outcome has already been predetermined by God. The studies also describe that complications during childbirth are often viewed as being unavoidable regardless of where the birth is taking place.

"If God has marked you to die during that pregnancy, whatever situation you are in, or whatever you choose to do, if God has marked you to die you don't have any other way"[78] (p. 7)

These findings indicate that fatalistic beliefs surrounding pregnancy and birth may pose yet another significant barrier to facility-based childbirth, as they reinforce the perception of health facilities as unnecessary.

6.4. Culturally unacceptable practices at health facilities

Some of the previously discussed findings illustrate the importance of certain rituals related to childbirth and describe how health facilities often hinder these rituals from being practiced. However, a number of findings also showcase the importance of culture as a barrier to facility-based childbirth from a different perspective. Studies identified numerous practices at health facilities that were found to pose significant barriers to facility-based childbirth, as they were deemed culturally unacceptable by expectant mothers or their families.

Male birth attendants

The presence of male birth attendants was found to pose both a cultural and religious barrier to facility-based childbirth. More than half of the included studies found that the provision of delivery services by male health workers was generally considered to go against cultural and/or religious beliefs.[54,56,58,61,62,64,66,67,68,69,70,72,75,79,80,81] Some studies describe that women felt ashamed to expose their naked bodies to male health workers[61,66] or to discuss obstetric symptoms with healthcare providers of the opposite gender.[56] Other studies discuss the traditional belief that only husbands

are allowed to see their wives naked.[58,62] The findings also showcase religious beliefs that prohibit women from receiving obstetric care from male healthcare providers.[54] Husbands and other male decision-makers were also found to disapprove of facility-based childbirth due to the possibility of the women being treated by male health workers.[70,72]

"A woman should be assisted by another female. It is not right for a man to help a mother deliver. When my wife was delivering, I went into the delivery and she was being assisted by a man and to be honest I didn't like it …"[72] (p. 4)

Young age of health workers

The age of health workers was found to pose a similar barrier to facility-based childbirth.[66,69,75] The findings show that some study participants found it unacceptable to be assisted by young health workers, especially if they were also male. One study from Ethiopia describes that culturally, women may be prohibited from exposing their bodies to someone they have not met before and who is younger than them.[66] Another study conducted in Zambia explains that especially older women prefer to give birth at home due to the belief that childbirth should not be assisted by either a young or male healthcare provider.[75]

"Older women (40 years and above) fear to use the health facility because of male health providers who are young in our facilities. The majority of health providers in the labor ward are young men; to convince the older women to come for delivery has not been easy."[69] (pp. 5-6)

Lack of support during childbirth

A number of studies found that women often avoid giving birth at health facilities due to the lack of support offered by health workers.[54,55,56,61,66,68,71,74,79,81] The studies describe that birth attendants at health facilities are known to frequently neglect expectant mothers by leaving them to labor alone. In addition, health facilities in SSA were described to often prohibit family members from being part of the birth, leaving laboring women without any kind of support. Female study participants highlighted the importance of having somebody to provide assistance and encouragement during childbirth and emphasized that this kind of support was not provided at health facilities.

"At home, you can get someone to hold you. In hospital you are beaten, at home you get someone who comforts you until you deliver … At home you get many women attending to you." [61] (p. 5)

Undesirable birthing position

Another culturally unacceptable practice found to deter expectant mothers from delivering at a health facility is the position they are expected to give birth in.[54,55,64,66,67,68,69,76,81] Numerous studies found that the birthing position practiced at health facilities - in which a woman is to lie on her back, was generally perceived as unacceptable for cultural and/or religious reasons. The findings show that women traditionally prefer to give birth in a squatting position and that this preference is not accommodated at health facilities. Some study participants found the position women had to assume at health facilities to hinder a smooth and fast delivery,[76] while others perceived it as unacceptable due to the position exposing a woman's privacy.[54]

'…at health facility women lay on their back to give birth; they hate that very much because their naked body is exposed to people; that is unacceptable in our religion'[54] (p. 347)

Lack of privacy

The lack of privacy associated with the health facilities was found to pose a similar barrier to facility-based childbirth.[54,55,58,61,62,63,65,66,68,70,71,74,77,79,81] The studies identified a number of factors associated with facility-based childbirth that were thought to invade a woman's privacy and thus deemed unacceptable. These factors include the lack of private rooms[58,70], the required birthing position[54,66], as well as the number of people attending the birth.[55,66] Some women also mentioned that having to get undressed and exposing their bodies to strangers during labor and delivery was considered shameful.[61,62,63,68] During home births, TBAs were said to cover women with a blanket to keep women's bodies from being exposed.[61]

"There is privacy when you deliver at home. As for the hospital, there is no privacy. The last time I delivered my second child at the District Hospital, the nurses who were in the delivery room were more than five. Sometimes in the presence of all these people, they would just be insulting and shouting at you"[55] (p. 6)

Vaginal examinations

Vaginal examinations, frequently conducted at health facilities, were also perceived as culturally unacceptable, thus deterring women from giving birth at a health facility.[54,74,77,81]

"When I was pregnant; my intimate community member advised me by saying please do not head to health institutions to give childbirth where you expose your private body to an unknown person, and that they insert their hand frequently which is not our culture."[77] (p. 770)

Other culturally unacceptable practices

The improper handling of the placenta[56], cold temperatures at health facilities[61], as well as certain newborn care practices[54,63], were also mentioned as potential barriers to facility-based childbirth. One Ethiopian study explains that traditionally the placenta is buried in the backyard or close to the home. At health facilities, however, the placenta is simply disposed of, which was seen as culturally unacceptable by the study participants.[56]

"In health facilities, they (health care providers) throw the placenta just anywhere … that is not the right way of disposing a placenta … in our culture, we cover it with a piece of cloth, and bury it in a well-protected pit … proper handling of the placenta is important … we believe that will keep the child thriving in his village/community"[56] (p. 5)

Another study conducted in Ethiopia mentions the recommendation not to bathe the newborn in the first 24 hours after birth as another unacceptable facility-based practice. Study participants explained that some communities perceive the vernix caseosa (white substance on the body of the newborn**)** as a dirty substance and thus may disapprove of the mother bringing home a child with a 'dirty body'.

"…if a newborn is born at a health facility, it is not bathed within 24h unlike that of newborns born at home. So, the community perceives that it comes home with the dirty body" [63] (p. 18)

Finally, a study conducted in Kenya describes that the facility setting was considered unsuitable for giving birth, due to the cold environment. According to the study participants, homes are often intentionally warmed during childbirth, as a warm environment is believed to protect mother and child from illness as well as ensure a quick birth.[61]

"In our culture, we believe that you will deliver quickly when you are in a warm place so that's why many deliver at home"[61] (p. 6)

Standards of care, like the ones mentioned above, may pose significant barriers to facility-based childbirth, as these practices may be deemed culturally unacceptable, thus making home births seem more appealing.

6.5. Compromised quality of care

Compromised quality of care at health facilities was found to pose a major barrier to facility-based childbirth. Although the quality of services rendered at health facilities often depends on structural rather than socio-cultural factors, this review found that the perceived quality of facility-based care may significantly impact healthcare-seeking behaviors, thus making it highly relevant for this review. Negative experiences with health facilities are likely to influence perceptions of facility-based care both on the individual as well as community level, thereby hindering the collective acceptance of health facilities for childbirth.

As this review aims to identify socio-cultural barriers to facility-based childbirth, it will not elaborate on purely structural issues surrounding compromised quality of facility-based care, such as lack of equipment, low number of qualified staff, or long waiting hours.

Mistreatment by health workers

Mistreatment by health workers as a barrier to facility-based childbirth was mentioned in an alarmingly high number of studies.[54,55,58,59,60,61,63,64,66,,67,68,69,71,72,73,74,75,76,79,81] The findings show that health facilities are often associated with physical or verbal abuse, rude behavior, and overall poor treatment by health workers. Study participants mentioned that healthcare providers are known to be unfriendly, use abusive language, and regularly disrespect women during labor and delivery. Some health workers were even said to slap laboring mothers.[55,61,66]

"For delivery barriers, I can say the facility staff—the way they handle these mothers—somebody may harass the mother and… when she goes back she will go with a bad picture and say, 'I can't go back to that facility; they do not handle people properly, they use very abusive words.'"[71] (p. 276)

Such perceptions of facility-based childbirth clearly deter women from utilizing health facility services and justify the continued preference for home births.

Previous negative experiences with facility-based care

Negative experiences with facility-based care were also found to strongly discourage expectant mothers from giving birth at a health facility.[55,59,63,70,74,75,76,77,79,81] The findings show that mothers who have experienced poor treatment during facility-based childbirth are less likely to utilize health facility services in their subsequent pregnancies. Additionally, as these experiences are often shared in the community, other expectant mothers may also be deterred from giving birth at a health facility.

Study participants described how their past experiences of being hurt, neglected, or humiliated during facility-based childbirth discouraged them from utilizing health facilities for the birth of their subsequent children, as they did not want to go through a similar experience again.

"As for me, I delivered at home because I 'didn't want the nurses/midwives to slap me again. When I went to the hospital to deliver my second child, how the nurses beat me when I was delivering my baby and I 'wasn't pushing well"[55] (p. 4)

Perceived inadequate quality of facility-based care

The perceived poor quality of care at health facilities was found to pose a similar barrier to facility-based childbirth. A significant number of studies identified that the quality of care rendered at health facilities was often perceived as insufficient.[55,58,59,61,63,64,65,67,68,69,71,72,74,76,77,80,81] Neglect by health workers was the most commonly mentioned non-structural reason for the low perceived quality of facility-based care. Female study participants frequently described not getting adequate support during facility-based childbirth, as health workers would often leave them to labor alone.

The studies also discuss that the perceived poor quality of facility-based care may create a lack of trust toward health facilities. One study found that the low perceived quality of facility-based care made women skeptical toward the reliability, competence, and skills of health workers.[80] According to another study some women fear that giving birth at a health facility may even cost them their lives due to the rude and unconcerned attitude of the health workers.[58] Consequently, expectant mothers may prefer to give birth at home with the help of a TBA.

"If you go to deliver in the health facility, the workers would leave you alone on the bed, when labour starts there would be no one to assist you. That is the reason why some women don't want to deliver at the facility"[64] (p. 6)

Unequal treatment by health workers

Unequal treatment experienced by women giving birth at a health facility was also mentioned in several studies.[59,62,63,64,71,79] The findings show that the quality of care rendered at health facilities may often depend on factors such as financial status, religion, age, or marital status of the expectant mother. One study found that health workers are known to provide services inequitably, giving priority to patients perceived as financially well-off.[63] Another study describes expectant mothers being left to labor and deliver alone due to health workers discriminating against them on the basis of religion or level of income.[64] Health workers were also reported to regularly abuse or discriminate against teenage and unwed mothers.[62]

"The barrier from the health center or hospital side is that the health workers do not provide the service equitably. This means that they provide service judging based on the wearing style of a pregnant woman . . . They provide drugs or other services for those who wear clean clothes but order others to buy from outside…"[63] (p. 19)

The fear of discrimination and unequal treatment may strongly discourage expectant mothers from giving birth at a health facility thereby posing a significant barrier to facility-based childbirth.

Inability to acquire items required for facility-based childbirth

The findings also show that women may face harsh treatment by health workers should they fail to bring certain items to a facility-based delivery.[59,60,76] Several studies describe that expectant mothers are often required by the health facility to purchase a number of items, such as sanitary pads, disinfectant, or newborn clothing. According to the study participants, women, unable to acquire these items, often end up giving birth at home to avoid being scolded or humiliated by healthcare providers.

"Some [expectant mothers] have given the testimony that they went to deliver at a health facility and after the delivery, the midwife asked her to give her [midwife] the pad she brought. When she failed to provide it, the midwife pushed her out to go home (…)"[60] (p. 11)

Lack of information given at health facilities

The lack of information provided by health workers was named as another factor contributing to the poor perceived quality of facility-based care.[69,74,81] Several studies illustrate that health facilities fail to provide expectant mothers and their families with sufficient information during facility-based childbirth. Both female and male study participants expressed receiving no or inadequate information during their stay at a health facility. It was also mentioned that health facilities would often fail to inform pregnant women on what would not be provided at health facilities, hindering them from making prior arrangements.

"We don't receive enough information from health providers when we get to the facility and no respect. They are not involving us in the decision regarding our wives; no information of what is going on with the patients. You are there knowing nothing but expected to follow the instructions."[69] (p. 7)

Poor provision of information by health workers may encourage women to give birth at home, thereby posing yet another barrier to facility-based childbirth.

Lack of confidentiality

Finally, a small number of studies discussed the lack of confidentiality at health facilities as another barrier to facility-based childbirth.[55,58,79] As an example, one describes that some health workers were believed to disclose the positive HIV/AIDS status of expectant mothers to others, thereby diminishing the trust women had towards health facilities.[58]

"In the last month, my friend who is a midwife showed me a pregnant, 18-year-old girl, who was tested positive during their STIs screening. As a result of this, I have decided not to go there for my next ANC, not to even talk about delivering in the hospital"[58] (p. 9)

A lack of respect for the privacy of patients reflects poor quality of care and may discourage women from utilizing facility services for something as intimate as childbirth.

6.6. Fears and myths surrounding facility-based childbirth

In SSA, facility-based childbirth is becoming increasingly common amongst the urban population. However, in many rural and pastoral communities, the tradition of home birth and the lack of trust

in health facilities continue to dominate maternal healthcare-seeking behaviors. This review found a number of fears and myths surrounding facility-based childbirth that may discourage expectant mothers from giving birth at a health facility, thereby posing barriers to facility-based childbirth.

Fear of (involuntary) medical interventions

The fear of medical interventions was the most commonly mentioned fear surrounding facility-based childbirth. A significant number of studies found that women avoid giving birth at health facilities due to the fear of operations and other medical interventions, such as cesarean sections, episiotomies, or the use of ultrasound.[54,56,57,58,67,68,69,70,71,74,76,78,79,81] The fear of c-sections was particularly common amongst study participants for a number of reasons. One study describes that rumors of health workers leaving needles or other surgical materials in the wombs of women are partially to blame for the common fear of c-sections.[58] Anther study found that c-sections may endanger a woman's status in the community, due to the high perceived value of medically unassisted childbirth.[76]

"All women prefer vaginal delivery because that makes you a woman and a mother. If they operate you to remove the baby people do not respect you. Children born through the vagina are also stronger and intelligent."[76] (p. 5)

The fear of medical interventions may pose significant barriers to facility-based childbirth, as health facilities are commonly associated with medical procedures, such as c-sections.

Negative rumors surrounding facility-based care

Negative rumors surrounding the care rendered at health facilities were found to pose yet another barrier to facility-based childbirth.[63,66,70,74,80] The findings show that the bad reputation of facility-based care is often exacerbated by negative rumors circulating in the community. Rumors such as health workers having malicious intent toward pregnant women, or that giving birth at a health facility causes injuries, may discourage expectant mothers from giving birth at a health facility.

"Rumors might be disseminated within the community. For example, if a woman died at a health center or hospital, others might perceive that she died due to going to a health facility or from poor health workers handling. Due to this, they might not go to the health facilities."[63] (p. 18)

Although previous findings indicate that negative rumors surrounding facility-based care may be justified, they still pose a barrier to facility-based childbirth.

Myths surrounding the consequences of facility-based childbirth

One study found that myths surrounding the outcomes of facility-based childbirth may also discourage women from giving birth at a health facility.[58] Myths and misconceptions surrounding facility-based childbirth were said to be passed down from generation to generation, thereby hindering the collective acceptance of health facility services. As an example, the study describes the myth that children born in a health facility are weak and may die under mysterious circumstances.

"In this community, children delivered in hospitals are considered to be weaklings and are not as strong and healthy, as compared to those delivered at home by our grandmothers. Because of this, a majority of us have refused to go to the hospital to deliver"[58] (p. 7)

Myths surrounding the outcomes of facility-based childbirth may significantly weaken the collective trust in facility-based care and discourage expectant mothers from giving birth at a health facility.

Fear of getting injured / being exposed to health risks at health facilities

One study found facility-based childbirth to be associated with the fear of getting injured or being exposed to health risks.[66] The study illustrates that some women fear they might get injured if they give birth at a health facility. The findings also describe the perception that facility-based childbirth exposes the mother as well as the newborn to health risks.

These findings illustrate a lack of trust in health facilities which may deter expectant mothers from seeking facility-based care.

Fear of being videotaped / Fear of disclosure of HIV status

The fear of being videotaped during facility-based childbirth was mentioned by study participants in two of the included studies.[54,70] The findings illustrate that some women fear their birth being secretly videotaped/recorded by health workers and therefore avoid giving birth at health facilities.

"We have information that health workers use videos to record women in labor; in fact, we know that there is no privacy at all in a health facility; that is why we don't want to give birth at a health facility"[54] (p. 346)

The fear of health workers disclosing the positive HIV status of the mother is also mentioned in one of the included studies.[74] The study found that women fear health workers might disclose their HIV serostatus to others, should they have tested positive during facility-based childbirth. As a result, women refuse to give birth at health facilities to avoid the compulsory HIV test. This finding also suggests that health facilities are not trusted to respect the privacy and confidentiality of their patients.

"If I am tested for HIV during labour and delivery, I believe that the maternity care provider who tested me might disclose my results to other people. I know many people who were deterred from giving birth in health institution because of this."[74] (p. 8)

Both of these fears are related to a perceived lack of privacy and confidentiality at health facilities - a topic already discussed in the context of poor quality of facility-based care. However, as these fears may not reflect actual experiences of compromised quality of care they are addressed separately. Nevertheless, fears surrounding facility-based care may pose an equally important barrier to institutional childbirth as actual experiences of compromised quality of care.

6.7. Knowledge surrounding childbirth

Knowledge and information - or the lack thereof play a significant part in healthcare decision-making and thus also influence the utilization of health facility services. The studies included in this review found that limited knowledge on various aspects surrounding pregnancy and birth may pose yet another significant barrier to facility-based childbirth. Additionally, the findings illustrate that limited knowledge may promote certain misconceptions surrounding childbirth, antenatal care, as well as health facility services.

Lack of knowledge / information about facility-based childbirth

Lack of knowledge and/or information about facility-based childbirth was identified as another barrier to the utilization of this service.[65,66,68,70,72,73,74,77,81] The findings show that expectant

mothers are often unaware of the benefits of facility-based childbirth, as they do not have access to adequate information on the importance of skilled birth attendance. One study connected limited maternal knowledge on facility-based childbirth to the lack of ANC follow-up, stating that women, who do not receive ANC are generally unaware of the benefits of skilled birth attendance.[74] Participants of another study argued that some expectant mothers are not even aware of the services provided at health facilities.[70]

"...lack of knowledge about the use and benefit of delivering at the health centre is the main reason; if she had the knowledge and awareness about the importance [of skilled delivery] she wouldn't have given birth at home."[68] (p. 4)

Limited knowledge on the importance of skilled birth attendance may pose a significant barrier to facility-based childbirth, especially if expectant mothers are not aware of this service being provided at health facilities.

Lack of experience with facility-based childbirth

A small number of studies found the lack of experience with facility-based childbirth to also pose a barrier to the utilization of this service.[68,70,74] The findings show that women with no prior experience of facility-based childbirth may be reluctant to seek skilled birth attendance, as the unfamiliar facility setting may seem intimidating. One study highlights that adolescent mothers are least likely to give birth at a health facility, as they do not have experience with facility-based childbirth and thus largely rely on the experience of others.[70]

"Teen mothers have little knowledge regarding general maternal health services. It is very hard for them to attend ANC or delivery for the first time since they were not familiar with the health facility. (...) Their mothers only tell to connect with the TBAs. They have that information so how can they attend unfamiliar settings for the first time."[70] (p. 1154)

These findings indicate that women in SSA do not receive sufficient information on facility-based childbirth, which might make them perceive the familiar home setting as a safer environment for childbirth.

Lack of knowledge/information of the expected date of delivery

Several studies identified that pregnant women may not always know their expected delivery date and end up giving birth at home, due to the unexpected onset of labor.[56,58,61,74,75,80,81] One study connects this to a lack of ANC, stating that expectant mothers, who had no ANC follow-up, were likely to be unaware of their gestational age and due date.[74] However, another study illustrates that the lack of ANC is not the only issue at play. The study found that illiteracy predisposes women to give birth at home, as they may forget the calculated delivery date and are unable to read the information handed to them at ANC visits.[58]

"We resort to delivering at home because we cannot read what is always written in the antenatal books; so, we end up forgetting the expected date of delivery, and are unable to prepare to go to the hospital before labour starts"[58] (p. 8)

These findings not only illustrate barriers to facility-based childbirth but also highlight potential shortcomings in the way health-related information is relayed to expectant mothers in SSA.

The misconception of ANC as insurance for a safe home birth

Another interesting finding related to knowledge surrounding childbirth was documented in three studies.[59,75,80] The studies found that some women attended ANC only to gain assurance that they were having an uncomplicated pregnancy and that the baby was lying in a good position. This information was perceived as insurance for a safe and easy home birth. One study describes that expectant mothers who were assured that the pregnancy was going well during an ANC visit were likely to end up giving birth at home.[75]

"I followed the ANC follow-up and that is why I delivered the children at home."[80] (p. 53)

These findings are highly significant, as ANC is commonly perceived as an important facilitator to institutional childbirth. Although ANC follow-up is undoubtedly vital for promoting facility-based childbirth, providing maternal health education, and reducing maternal mortality in SSA, these findings illustrate that certain aspects of ANC could also pose barriers to facility-based childbirth.

Lack of knowledge about obstetric complications

Several studies found that limited awareness of obstetric complications may also pose a barrier to facility-based childbirth.[68,69,70,78] The findings illustrate that expectant mothers with limited knowledge of the risks surrounding pregnancy and childbirth might misjudge the severity of danger signs and delay seeking facility-based care. One study also highlights that women expecting their first child are particularly vulnerable, as they often have a limited understanding of the birthing process.[78]

"Some of the women give birth at home because of poor knowledge on complications during labor. We don't know enough on complication during childbirth, so we go ahead with home delivery."[69] (p. 4)

Misconceptions surrounding the origin of complications

Three studies found that beliefs surrounding the origin of obstetric complications may pose yet another barrier to facility-based childbirth.[57,63,78] The findings show that some communities perceive pregnancy-related complications to be of supernatural origin and thus requiring spiritual healing rather than facility-based care. According to one study from Ethiopia, some communities believe obstetric complications to be caused by evil spirits. As a consequence, pregnant women experiencing complications are taken to religious leaders instead of a health facility.[63] Similarly, a study from Nigeria describes the belief that pregnancy complications require spiritual intervention by an "Iya l'osha" - a female priest, who is thought to cure complications of supernatural origin.[57] Finally, a study from Sierra Leone describes how some participants believed convulsions during childbirth to be caused by a demon and thus requiring the help of a traditional healer. This study also confirms that the perceived cause of obstetric complications influences the choice of treatment.[78]

"The community also perceives as an evil spirit contracted the women if she faces bleeding (APH) during pregnancy and takes to the religious leaders. Therefore, since the religious leaders and other community leaders are accepted by the community, it affected service utilization."[63] (p. 18)

These findings indicate that false perceptions surrounding the origin of obstetric complications may pose a significant barrier to facility-based childbirth.

The reliance on / preference for traditional remedies

A small number of studies also found that the preference for traditional remedies or spiritual healing may pose yet another barrier to facility-based childbirth.[71,73,76,78] The findings illustrate that in some communities pregnant women experiencing complications may initially turn to traditional healers rather than health facilities. One study describes that in the event of obstructed labor, some women prefer the assistance of TBAs, as they are known to use herbal preparations believed to facilitate a vaginal birth.[76] Another study showcases that family members may prefer women giving birth at home as the home environment allows for traditional remedies to be employed in case the mother starts experiencing bleeding.[73] Additionally, some religious groups were found to recommend spiritual healing in the event of obstetric complications.[71]

"There is cultural influence; the older peoples make influences not to go to the health center. Some people go to witchcraft, everyone is not equal in terms of awareness (…)"[73] (p. 8)

These findings indicate that the reliance on traditional healing practices may pose a significant barrier to facility-based childbirth.

Reliance on TBA suggestions

The findings of three studies show that TBAs might play a significant part in maternal healthcare seeking-behaviors, thereby also influencing institutional delivery service utilization.[65,78,80] The studies illustrate that TBAs are often relied upon to decide whether it is necessary to seek medical attention during childbirth, as laboring women and their families may not recognize obstetric complications in time. One study describes that TBAs are often the ones advising families to take expectant mothers to a health facility if complications arise during a home birth.[65] Another study, however, showcases experiences of TBAs not recognizing obstetric complications or keeping laboring women from seeking facility-based care.[78]

"The TBAs keep the women there for 2 days, 3 days, without communicating to the people that there is a problem, assuming that the women would be able to deliver. (…) Most of the pregnant women who come into hospital (…) will tell you, 'Nurse it's not me, they kept me there for 5 days, they said I will be able to deliver and nothing happens, only when they see that I am about to die they decided to come with me'"[78] (p. 6)

Although the findings do not clearly identify TBA services as barriers to facility-based childbirth, the findings do indicate that in some cases TBAs may cause delays in maternal healthcare seeking.

Perception of health facilities as only necessary for treating complications

Lastly, a substantial number of studies identified that health facilities are commonly perceived as only necessary for treating complications.[57,59,61,65,68,69,70,78,80,81] These studies found that most expectant mothers only considered health facilities as an option if serious complications arose during a home birth. Male study participants seemed to share this perception. Several studies illustrate the common belief amongst male participants that birth is a natural process and does not require facility-based care.[59,68,70] Healthcare providers agreed that expectant mothers are known to only seek facility-based care if they perceive to be at risk of developing complications.[57]

"If there is no clear sickness, they [women] don't come to visit health institutions."[68] (p. 4)

The misconception that health facilities are only there to treat complications poses a significant barrier to facility-based childbirth. Even, if laboring women end up going to a health facility due to obstetric complications, the delay in seeking care may have serious consequences for both mother and child.

7. Discussion

This semi-systematic literature review sought to identify socio-cultural barriers to facility-based childbirth in SSA. The twenty-eight studies included in this review were published between 2014 and 2022 and feature mostly qualitative findings from 10 sub-Saharan African countries. The research was largely conducted in rural settings, as rural sub-Saharan African communities are known to feature lower rates of skilled birth attendance.[33] The studies explored maternal healthcare-seeking behaviors and revealed numerous socio-cultural factors hindering the utilization of institutional delivery services in SSA. This review identified 7 main themes and 52 sub-themes, each representing separate yet often interconnected socio-cultural barriers to facility-based childbirth. (Appx. 4)

The following discussion will address the key findings of this review in the context of the Three Delays Model[4] whilst discussing potential factors that may reinforce socio-cultural barriers to facility-based childbirth in SSA. The discussion will also address the methodological quality of the present literature review by reflecting on the limitations of the applied research methodology as well as discussing the strength and weaknesses of this review. The trustworthiness and transferability of the findings as well as the author's positioning in relation to this review will also be addressed.

7.1 Key socio-cultural barriers to facility-based childbirth in SSA

Gender roles and values

Gender norms were identified as the first major barriers to emerge from the findings. Various gender-related factors such as limited female autonomy, traditional gender roles, as well as other values and norms attached to womanhood were found to pose significant barriers to facility-based childbirth. The impact of limited female autonomy on the utilization of institutional delivery services was discussed in the majority of the included studies and thereby constitutes one of the key findings. The studies illustrate that women in rural sub-Saharan African communities are oftentimes not the final decision-makers when it comes to choosing the place of delivery. Instead, this authority was described to commonly lie with the husband or other heads of the family/community. Due to the high acceptability and traditional value of home births in rural SSA,

most key decision-makers were found to prefer home births over facility-based childbirth. As a consequence, expectant mothers with limited decision-making autonomy were less likely to utilize institutional delivery services. Similar effects of limited female autonomy on maternal healthcare-seeking behaviors are illustrated throughout scientific literature.[4,39,83] Further gender-related barriers identified in the course of this review include the burden of domestic chores, the perception of childbirth as the duty of a woman, and shame related to the age or marital status of the expectant mother.

These gender-related barriers to facility-based childbirth can largely be attributed to deep-rooted patriarchal structures still dominant in many sub-Saharan African societies. The unequal distribution of power between men and women – often defined by limited female autonomy and discriminatory gender roles – is a manifestation of persisting gender inequalities and limited empowerment amongst many women in SSA.[38]

The findings also illustrate, how gender inequalities may heavily contribute to delays in maternal healthcare-seeking (type 1 delay). Limited female decision-making autonomy, for example, can cause significant delays as women may be required to obtain permission prior to seeking care. Domestic responsibilities may also cause delays in maternal healthcare-seeking, as women might need to arrange for childcare or other support before being able to utilize health services. Values and norms attached to womanhood such as the perception of childbirth as the duty of a woman, may even encourage women themselves to delay seeking health services.

The influence of religious beliefs

The influence of religious beliefs was identified as a further socio-cultural barrier to facility-based childbirth. A number of studies describe the belief that pregnancy outcomes, whether good or bad, are predetermined by God. These findings are highly significant, as fatalistic beliefs surrounding pregnancy and birth may reinforce the perception of facility-based childbirth as unnecessary. Faith in God to ensure a safe delivery or cure obstetric complications was also found to pose a barrier to facility-based childbirth. Not only does this belief illustrate a reliance on spiritual healing, but it may also cause delays to maternal healthcare-seeking, as women might be afraid of their faith being called into question, should they want to seek medical attention (type 1 delay).

Religion in itself is not to be viewed as a barrier to facility-based childbirth. However, religious dogmas reinforcing dangerous misconceptions about pregnancy and birth may significantly hinder institutional delivery-service utilization. This review argues that increased access to education, including health education, may equip expectant mothers as well as their families and communities with the necessary tools to challenge these harmful beliefs and encourage increased responsibility in healthcare decision-making. This argument is supported by research linking higher levels of education to better maternal health outcomes as well as higher rates of institutional delivery-service utilization.[84]

Traditions and customs related to childbirth

The next major theme identified in the review process was the high perceived value of traditions and customs related to childbirth and their impact on institutional delivery-service utilization. A large number of studies found a strong preference for home births amongst the rural population, as the home setting was believed to be more appropriate for childbirth for a number of reasons. The findings show that home births were commonly perceived to bear high traditional value and hence deemed culturally acceptable. Studies also found that home births were often viewed as the norm due to the common perception of childbirth as a normal life event that does not require medical interventions. These notions are indicative of low risk perception surrounding pregnancy and childbirth – a perception that seemed to be only strengthened by previous successful home birth experiences. These findings may further illustrate the traditional perception of childbirth as the main duty of a woman, which, in turn, reinforces the dangerous expectation that all women should be capable of giving birth without requiring medical assistance. As previously discussed, this perception may also prompt women to delay seeking obstetric care (type 1 delay).

These findings may, in some cases, be indicative of persisting gender norms that often dictate a woman's worth in society and promote discriminatory societal expectations. However, these findings may also illustrate women themselves choosing to defy the 'medicalization' of childbirth by approaching it as a normal part of life that does not require medical interventions.

The freedom to practice traditional birthing rituals was identified as another common reason for the preference of home births to facility-based childbirth. As health facilities in SSA are said to largely prohibit traditional birthing rituals from being practiced, many expectant mothers were found to prefer giving birth at home – a place, which allowed them to honor birthing traditions.

The strong preference for TBAs, illustrated in the majority of the included studies, is also closely related to the high value of birthing traditions and the preference for home births. The findings show that TBAs were commonly associated with increased cultural competence, as they allowed or even performed certain birthing rituals. The perception of TBA services as superior to facility-based care constitutes yet another reason for the continued preference for home births in rural SSA. In addition, these findings provide an example of how the decision to seek care and possible delays surrounding that decision (type 1 delays), may be influenced by the perceived quality of care provided at health facilities (type 3 delays).

The high value placed on traditions and rituals surrounding birth may be interpreted as a barrier to facility-based childbirth. However, this review argues that the reluctance of health facilities to allow non-harmful birthing rituals from being observed during facility-based childbirth represents the true barrier to increased institutional delivery-service utilization.

Culturally unacceptable practices at health facilities

In addition to prohibiting traditional birthing rituals, health facilities were also found to be associated with a number of culturally unacceptable practices. The findings show that expectant mothers as well as their families largely perceived health facilities as inappropriate for childbirth due to the many culturally unacceptable practices and regulations. A large number of studies describe that women would avoid utilizing institutional delivery services out of fear of being treated by male birth attendants. The culturally unacceptable birthing position, young age of health workers, lack of family support, and limited privacy were also frequently mentioned factors deterring women from giving birth at health facilities. Other practices perceived as culturally unacceptable include frequent vaginal examinations, improper handling of the placenta, cold temperatures at health facilities, as well as certain practices pertaining to newborn care.

Many of these practices could easily be modified to accommodate the cultural preferences of patients, thereby potentially increasing institutional delivery-service utilization. Similarly, allowing non-harmful birthing rituals to be performed during facility-based childbirth could make health facilities significantly more appealing to the rural population. These adjustments would not compromise the quality of the care provided at health facilities, nor would they require additional funding, which raises the question as to why health facilities have not yet made these changes. This review argues that the answer partially lies in the poor cultural competence of health workers

as well as the routinization of facility-based care. Cultural competence can be defined as "the ability of an individual to understand and respect values, attitudes, beliefs, and mores that differ across cultures, and to consider and respond appropriately to these differences…"[85] The findings of this review indicate that many health workers in SSA may lack sufficient cultural competence, as they do not seem to be responding appropriately to the cultural needs of their patients, nor making it a priority to change that.

Poor cultural competence of health facility personnel may be a result of the routinization of facility-based care, which occurs when the care provided at health facilities is reduced to its most basic components – diagnosis, treatment, and expected outcome.[86] The routinization of healthcare is described by Østergaard et al. (2016) as health workers "processing" patients using standardized diagnostic procedures, treating their symptoms, and enabling them to return to a productive life.[86] This type of care often disregards the individuality of patients and thus pays little attention to their varying cultural needs.

The routinization of healthcare and the consequent poor cultural competence of health workers may be explained by the significant staff shortages experienced by many health facilities across SSA.[87] One could argue that the lack of skilled personnel would lead any health facility to prioritize efficient rather than individualized treatment of their patients. This review agrees that staff shortages as well as other organizational issues may contribute to the routinization of healthcare and the poor cultural competence of health workers. However, this review also argues that the reluctance of health workers to accommodate the cultural preferences of their patients may, in fact, reflect the abuse of power imbalances in the patient-provider relationship.

Power relations between healthcare providers and their patients are often characterized by a degree of asymmetry. Due to healthcare providers being traditionally perceived as figures of intellectual authority, they are generally awarded greater power within the patient-provider relationship.[88,89] This power imbalance is abused when health professionals use their authority to deliberately limit the power and autonomy of their patients. This review argues that some of the previously discussed findings may reflect said abuse of power, as many of the restrictions and practices at health facilities seem to serve no other purpose but to assert dominance over patients.

Compromised quality of facility-based care

Another identified barrier to facility-based childbirth that may reflect power imbalances being abused by health professionals is the compromised quality of facility-based care. An alarmingly high number of studies found health facilities to be associated with verbal and physical abuse, unequal treatment, and neglect by health workers. The findings also illustrate that the overall quality of the care provided at health facilities was perceived as inadequate. Once again, the quality of facility-based care may be influenced by the lack of qualified personnel or other structural factors. However, the mistreatment and neglect by health workers, described in the majority of the included studies, are highly suggestive of health professionals abusing their position of power.

These findings explain the continued preference for home births and TBA services in many rural sub-Saharan African communities and justify women's reluctance to give birth at health facilities. Moreover, these findings provide yet another example of how poor perceived quality of facility-based care or delays in receiving appropriate care (type 3 delay) may prompt women to delay seeking maternal health services (type 1 delay).

Fears and myths surrounding facility-based childbirth

Fears and myths surrounding facility-based childbirth were found to pose further barriers to institutional delivery-service utilization. Negative rumors about facility-based care, myths surrounding the consequences of facility-based childbirth, the fear of getting injured, or fears surrounding breaches of confidentiality were found to deter women from giving birth at health facilities (type 1 delay). In the context of previously discussed findings, some of these fears seem to be justified. Other misconceptions may however be the result of limited knowledge surrounding facility-based childbirth – a topic that shall be explored further into the discussion.

The most common fear surrounding facility-based childbirth was identified as the fear of medical interventions. A large number of studies found that many women preferred giving birth at home, if that meant avoiding medical interventions, such as operations, episiotomies, or the use of ultrasound. The fear of cesarean sections was most commonly mentioned by study participants, as facility-based childbirth was often associated with laboring women automatically being operated on. C-sections are not routinely performed on every expectant mother giving birth at a health facility. However, the perceived connection between facility-based childbirth and high c-section

rates is not entirely unfounded. As many expectant mothers were found to only seek medical attention if complications arose during a home birth, emergency c-sections may often have been necessary upon arrival at the health facility. Hence, the association between health facilities and high c-section rates may oftentimes be a consequence of delays in maternal healthcare-seeking (type 1 delay).

The common fear of c-sections amongst women in rural SSA was found to have a number of reasons. Previous research has shown that c-sections may significantly affect a woman's status in society, as the operation is often believed to impact a woman's fertility and her ability to carry out domestic chores.[58,90] Due to many rural communities measuring a woman's worth by her ability to carry out these duties, c-sections may reduce a woman's perceived value in her community. Moreover, as vaginal deliveries were found to often be regarded as a symbol of womanhood, expectant mothers might choose home birth for fear of failing to fulfill their culturally assigned "duty".[90]

These findings once again illustrate the negative effect traditional gender roles may have on maternal healthcare-seeking. However, the prevalence of misconceptions surrounding c-sections and facility-based childbirth may reflect certain knowledge gaps preventing expectant mothers from making independent and informed healthcare decisions.

Knowledge surrounding childbirth

The impact of knowledge on the utilization of institutional delivery services was discussed in a number of studies and constitutes the final major theme to emerge from the findings. Various factors related to knowledge such as knowledge gaps, limited access to information, or misinformation on pregnancy, birth, or facility-based childbirth were found to pose significant barriers to institutional delivery-service utilization in SSA. Interestingly, some of the findings related to knowledge were found to be closely connected to other themes and sub-themes identified in the course of this review. For example, first-time mothers – or primigravida – were found to often give birth at home, as they lacked the necessary knowledge and/or information to choose otherwise. However, some findings suggest that primigravida may be intentionally deprived of said knowledge by their own family or community in an effort to limit their decision-making autonomy and reinforce the tradition of home birth. These findings indicate that knowledge gaps

surrounding childbirth may be connected to other socio-cultural factors, such as limited female autonomy and the traditional value of home births.

Various findings related to limited knowledge on pregnancy and childbirth were also found to be associated with delays in maternal healthcare-seeking (type 1 delay). Several studies found that expectant mothers often had limited knowledge of obstetric complications which led to them ignoring danger signs and delaying seeking medical attention. Insufficient knowledge of possible obstetric complications was also found to reinforce the reliance on the suggestions and judgment of TBAs. This may further contribute to delays in maternal healthcare-seeking, as some studies described TBAs underestimating obstetric danger signs or even inhibiting women from seeking medical attention. Delayed maternal healthcare-seeking may significantly increase the risk of expectant mothers developing life-threatening obstetric complications. In addition, these delays may increase the probability of a c-section being necessary upon arrival at the health facility, which, in turn, strengthens the previously discussed association of facility-based childbirth with c-sections.

The most common knowledge-related barrier to facility-based childbirth identified in the course of this review is the perception of facility-based care as only necessary in the case of complications. This finding was classified as a knowledge-related barrier, as it may be indicative of limited access to information on facility-based childbirth or insufficient knowledge on the potential dangers of delayed maternal healthcare-seeking. However, this common perception may also be influenced by a number of other factors, such as low risk perception surrounding pregnancy and childbirth or the high cultural value of medically unassisted deliveries. Moreover, the previously discussed bad reputation of facility-based care (type 3 delay) may also contribute to health facilities being considered only in case of complications (type 1 delay).

These findings illustrate that knowledge-related barriers to facility-based childbirth are often influenced by numerous socio-cultural factors and thus should not be attributed to a mere ‘lack’ of knowledge.

7.2. Methodological reflections

7.2.1. Transferability of the findings

The present literature review features the qualitative findings of 28 studies that were conducted in 10 sub-Saharan African countries. The findings provide rich descriptions of numerous socio-cultural factors that may hinder women in SSA from utilizing institutional delivery services. However, as social and cultural contexts may vary greatly across the region, these findings should not be viewed as representative of every part of SSA. Moreover, as the featured data was largely collected in rural communities, the findings are not likely to be transferable to the urban population. Nevertheless, this review identified a number of reoccurring socio-cultural barriers to facility-based childbirth that seem to affect many women from rural communities across SSA. Hence, the presented findings may provide valuable insights into the reasons behind the underutilization of institutional delivery services amongst the rural population. Some of the findings may even be transferrable to other global regions, as studies from India[40,91] and Pakistan[92] identified similar socio-cultural barriers to maternal health services. Nevertheless, one should always be cautious when transferring qualitative findings into other contexts.

The author of the present literature review would also like to note that any statements made by her throughout this review do not claim to be representative of the perceptions and experiences of every woman in SSA.

7.2.2. Trustworthiness of the findings

The studies included in this literature review present a number of strengths that increase the trustworthiness of the findings. Firstly, the majority of the studies scored well on the SRQR checklist,[5] with only two of the 28 studies exhibiting significant methodological deficits. Hence, the overall quality of the included studies can be considered as good. Secondly, all included studies feature direct quotes from study participants, which strengthens the credibility of the primary findings. Thirdly, the included studies largely identified similar socio-cultural barriers to facility-based childbirth, which, in turn, increases the validity of the major themes presented in this review. Finally, all featured studies received ethical clearance to conduct research.

7.2.3. Reflexivity

The author of the present literature review acknowledges that her personal background, experiences, and prior assumptions are likely to have influenced the review process. As the author has not herself experienced the phenomena discussed in this review, her interpretation of the findings may not be entirely representative of reality. Moreover, as the author is not sufficiently familiar with the socio-cultural contexts of the research settings, the impact of certain socio-cultural influences discussed in this review may have been over- or underestimated.

7.2.4. Strengths and limitations

The objective of the present literature review was to identify socio-cultural barriers to facility-based childbirth in SSA and to explore how these barriers contribute to the high maternal mortality in the region. This review succeeded in identifying a significant number of socio-cultural factors that hinder institutional delivery-service utilization in SSA. These findings also enabled the author to confidently answer the research question. In order to examine the impact socio-cultural barriers to facility-based childbirth have on maternal mortality in SSA the present literature review applied the Three Delays Model[4] to the findings. According to this model, most maternal deaths are attributable to delays in 1) deciding to seek care, 2) arriving at the health facility, and 3) receiving appropriate care at said facility.[4] By showcasing how socio-cultural factors contribute to delays in maternal healthcare-seeking, the present literature review was also able to illustrate that socio-cultural barriers to facility-based childbirth may significantly contribute to maternal mortality in SSA.

However, there are also a number of limitations to this literature review. One of the greater limitations proved to be the lack of a second researcher, which may have introduced a number of errors to the review process. As the selected studies proved to be rich in relevant data, the lack of a second researcher made it difficult to ensure no important findings were missed during the data extraction process. A further limitation is the non-exhaustive sampling approach used when identifying and selecting studies to be included in the review. The qualitative nature of the research topic as well as the lack of a second researcher made it impossible to review all of the literature available on this topic. Hence, the search for further literature was suspended after 28 relevant studies had been identified. As a consequence, this review may have missed some relevant findings. Moreover, the non-exhaustive sampling approach as well as the lack of

a second researcher may have exposed the study selection process to evidence selection bias. Finally, by only including studies in English, potentially valuable findings from research conducted in other languages were not included in this review.

8. Conclusion

The present literature review identified numerous socio-cultural barriers to facility-based childbirth in SSA. Interestingly, many of the identified socio-cultural barriers were found to be reinforced by values and norms attached to womanhood, which, in turn, are largely connected to deep-rooted gender inequalities. Hence, this review argues that many socio-cultural barriers to facility-based childbirth can be significantly reduced by targeting gender inequalities and promoting the empowerment of women and girls across SSA. However, although increased gender equality may considerably improve women's access to institutional delivery services, it might not reduce the barriers deterring women from choosing to utilize these services. Many of the findings presented in this literature review illustrate women having to endure severe mistreatment by health workers during facility-based childbirth. These alarming findings indicate that the most detrimental socio-cultural barriers to institutional delivery-service utilization may, in fact, stem from within those very institutions. In light of these findings, this review argues that an increase in facility-based childbirths in SSA cannot be expected until the quality of care rendered at health facilities has significantly improved.

In the context of the Three Delays Model, this review also confirmed that socio-cultural factors can significantly contribute to delays in maternal healthcare-seeking. As timely utilization of health services is essential in preventing maternal mortality, delayed healthcare-seeking can have detrimental effects on maternal health outcomes. Hence, this review urges for increased recognition of socio-cultural barriers to facility-based childbirth as significant contributors to maternal mortality in SSA.

8.1. Recommendations for future research

The recognition of health as a fundamental human right binds states to a legal obligation to respect, protect and fulfill the right to health by ensuring health services are available, accessible, acceptable, and of high quality.[93,94] The findings of the present literature review, however, illustrate

that the utilization of institutional delivery services in SSA is inhibited by limited accessibility, acceptability, and quality of health services. This indicates that many of the identified socio-cultural barriers to facility-based childbirth may be partly attributed to government failures in ensuring women across SSA enjoy equitable access to quality maternal health services. Hence, the author of this review calls for further research exploring socio-cultural barriers to facility-based childbirth in the context of state obligations to respect, protect, and fulfill the right to health. Such research might aid in holding governments accountable for their part in creating and/or perpetuating socio-cultural barriers to facility-based childbirth in SSA and thereby contributing to the high maternal mortality in the region.

9. Ethical considerations

All the studies featured in this review received ethical clearance to conduct research. As the present literature review uses publicly accessible documents, it was not required to seek ethical approval from an institution prior to commencing the research process.

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Appendices

Appendix 1: Search terms

Search element	Socio-cultural factors	Healthcare seeking	Maternal	Sub-Saharan Africa
Free text (for search in title/abstract)	Socio-cultural or sociocultural or social factor* or custom* or tradition* or cultur* or anthropolog* or belief* or hierarch*	(((health care or healthcare) adj3 (seek* or utiliz* or utilis* or access* or accept* or barrier* or delay*)) or (skilled birth attendan*)	Maternal mortalit* or maternal morbidit* or maternal health or pregnan* or prenatal or perinatal or postnatal or birth* or deliver* or childbirth* or labor or labour or childbearing or obstetric* or parturition	See Appendix 2
MeSH (Medical Subject Headings)	Social factors/ or exp Anthropology, Cultural/	Patient Acceptance of Health Care/	Maternal Health Services/ or maternal health/ or Parturition/ or Labor, Obstetric/or Delivery, Obstetric/	Exp South of the Sahara/ or Comoros/ or Madagascar/ or Mauritius/ or Reunion/Africa

Appendix 1 cont.: List of countries

Sub-Saharan Africa
("Sub Saharan Africa" or Sub-Saharan Africa or Africa South of the Sahara or Central Africa or Central African* or Cameroon or Cameroonian* or Central African Republic or Central African* or Chad or Chadian* or Congo or Democratic Republic of the Congo or Congolese or Equatorial Guinea or Equatoguinean* or Gabon or Gabonese or "Sao Tome and Principe" or Sao Tomean* or Santomean* or East Africa or East African* or Burundi or Burundian* or Djibouti or Djiboutian* or Eritrea or Eritrean* or Ethiopia or Ethiopian* or Habesha or Kenya or Kenyan* or Rwanda or Rwandan* or Banyarwanda or Somalia or Somalian* or South Sudan or South Sudanese or Sudan or Sudanese or Tanzania or Tanzanian* or Uganda or Ugandan* or Southern Africa or Angola or Angolan* or Botswana or Motswana or Batswana or Botswanian* or Eswatini or Emaswati or Liswantiati or Swati or Swazi* or Lesotho or Mosotho or Basotho or Malawi or Malawian* or Mozambique or Mozambican* or Namibia or Namibian* or South Africa or South African* or Zambia or Zambian* or Zimbabwe or Zimbabwean* Western Africa or West African* or Benin or Beninese or Beninois or Burkina Faso or Burkinabe or Cabo Verde or Cabo Verdean* or Cote d'Ivoire or Cote d'Ivorian* or Ivory Coast or Ivorian* or Gambia or Gambian* or Ghana or Ghanaian* or Guinea or Guinean* or Guinea-Bissau or Bissau-Guinean* or Liberia or Liberian* or Mali or Malian* or Malinese or Mauritania or Mauritanian* or Niger or Nigerien or Nigeria or Nigerian* or Senegal or Senegalese or Sierra Leone or Sierra Leonean* or Togo or Togolese or Comoro or Comoran* or Comorian* or Reunion or Reunionese or Reunionnais* or Madagascar or Malagasy or Madagascan* or Mauritius or Mauritian*).ti,ab,kf.

Appendix 2: Standards for Reporting Qualitative Research (SRQR) checklist[5]

No.	Topic	Item
	Title and abstract	
S1	Title	Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended
S2	Abstract	Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions
	Introduction	
S3	Problem formulation	Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement
S4	Purpose or research question	Purpose of the study and specific objectives or questions
	Methods	
S5	Qualitative approach and research paradigm	Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/interpretivist) is also recommended; rationale[b]
S6	Researcher characteristics and reflexivity	Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, and/or transferability
S7	Context	Setting/site and salient contextual factors; rationale[b]
S8	Sampling strategy	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale[b]
S9	Ethical issues pertaining to human subjects	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues
S10	Data collection methods	Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale[b]
S11	Data collection instruments and technologies	Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study
S12	Units of study	Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)
S13	Data processing	Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/deidentification of excerpts
S14	Data analysis	Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale [b]
S15	Techniques to enhance trustworthiness	Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale[b]
	Results/findings	
S16	Synthesis and interpretation	Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory
S17	Links to empirical data	Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings
	Discussion	
S18	Integration with prior work, implications, transferability, and contribution(s) to the field	Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/generalizability; identification of unique contribution(s) to scholarship in a discipline or field
S19	Limitations	Trustworthiness and limitations of findings
	Other	
S20	Conflicts of interest	Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed
S21	Funding	Sources of funding and other support; role of funders in data collection, interpretation, and reporting

[a]The authors created the SRQR by searching the literature to identify guidelines, reporting standards, and critical appraisal criteria for qualitative research; reviewing the reference lists of retrieved sources; and contacting experts to gain feedback. The SRQR aims to improve the transparency of all aspects of qualitative research by providing clear standards for reporting qualitative research.
[b]The rationale should briefly discuss the justification for choosing that theory, approach, method, or technique rather than other options available, the assumptions and limitations implicit in those choices, and how those choices influence study conclusions and transferability. As appropriate, the rationale for several items might be discussed together.

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Appendix 3: Coding system

Theme	Subthemes	Corresponding studies*
1. Gender roles and women's status in society	**1a.** Lack of decision-making power **1b.** Collective decision-making **1c.** Value of unassisted childbirth – duty of a woman **1d.** Lack of support from the partner / family / community **1e.** Shame surrounding pregnancy circumstances **1f.** Household duties / Domestic chores	**1a:** 25, 5, 10, 3, 19, 28, 21, 8, 11, 27, 26, 17, 9, 15, 13, 14, 4, 22 **1b:** 25, 3, 24 **1c:** 25, 20, 8, 9, 15, 6 **1d:** 10, 5, 21, 8, 11, 16, 27, 26, 17, 24, 18, 7, 6 **1e:** 18, 9, 22 **1f:** 10, 20, 28, 8, 16, 27
3. Traditions and customs related to childbirth	**3a.** Preference for / trust in Traditional Birth Attendants **3b.** Inability to practice birth rituals in the facility setting **3c.** Secrecy surrounding onset of labor **3e.** Home birth seen as the norm **3f.** Home birth seen as a valuable tradition **3g.** Previous successful home births **3j**. Home birth as proof of faithfulness **3k.** Tradition of unassisted childbirth **3l.** Home birth seen as culturally acceptable **3m.** Newborn care practices	**3a.** 1, 20, 3, 8, 27, 23, 26, 17, 24, 4, 2, 22 **3b.** 1, 10, 3, 28, 21, 8, 16, 27, 18, 15, 13, 7, 2, 23 **3c.** 25 **3e.** 25, 20, 3, 28, 8, 27, 26 17, 13, 12, 6, 22 **3f.** 1, 28, 21, 8, 11, 27, 17, 24, 18, 15, 12 **3g.** 25, 10, 20, 21, 16, 27, 9, 15, 14, 22 **3j.** 25, 5, 28, 9 **3k.** 8, 9, 4 **3l.** 27, 24, 7, 25

5. Influence of religious beliefs	**5a.** Faith in religion **5d**. Predetermined outcome **5f.** Facility-based childbirth goes against the will of the gods / is prohibited	**5a.** 26, 9, 15 **5d.** 25, 11, 27, 26, 17, 9 **5f.** 5, 10, 18, 9
4. Culturally unacceptable practices at health facilities	**4a.** Birthing position **4b.** Lack of privacy **4c.** Male birth attendants **4d.** Lack of support during childbirth **4e.** Newborn care **4f.** Disposal/handling of the placenta **4g.** Cold temperature **4h.** Age of health facility workers **4i.** Vaginal examinations	**4a.** 1, 28, 11, 16, 23, 15, 13, 14, 2 **4b.** 1, 5, 10, 28, 21, 8, 26, 17, 24, 18, 9, 15, 13, 12, 2 **4c**. 1, 5, 3, 19, 28, 8, 11, 16, 27, 26, 17, 9, 15, 13, 14, 22 **4d.** 1, 3, 28, 21, 8, 26, 18, 15, 13, 2 **4e.** 1, 10 **4f.** 3 **4g.** 8 **4h.** 16, 13, 22 **4i.** 1, 28, 21, 24
7. Compromised quality of care	**7a.** Mistreatment by healthcare workers **7b.** Previous negative experiences with facility-based care **7c.** Perceived inadequate quality of care (non-structural) **7d.** Unequal treatment **7e.** Lack of information given at the health facility	**7a.** 1, 5, 10, 20, 19, 28, 21, 8, 11, 16, 23, 26, 18, 15, 13, 7, 14, 6, 2, 22 **7b.** 10, 28, 21, 23, 26, 17, 24, 6, 2, 22 **7c.** 5, 10, 19, 28, 21, 8, 11, 16, 27, 23, 24, 18, 15, 12, 14, 6, 2

	7f. Lack of confidentiality **7g.** Inability to acquire items required for facility-based childbirth	**7d.** 10, 11, 26, 18, 9, 6 **7e.** 28, 21, 16 **7f.** 5, 26, 2 **7g.** 23, 7, 6
2. Fears and myths surrounding facility-based childbirth	**2a**. Fear of (involuntary) medical interventions **2c.** Myths surrounding outcomes of facility-based childbirth **2h.** Rumors surrounding facility services / Bad reputation **2j.** Fear of disclosure of HIV status **2l.** Fear of being videotaped **2m.** Fear of getting injured / being exposed to health risks	**2a:** 1, 25, 5, 3, 28, 21, 16, 23, 26, 17, 18, 15, 14, 4 **2c:** 5 **2h:** 10, 21, 27, 17, 13 **2j:** 21 **2l:** 1, 17 **2m:** 13
6. Knowledge/ Perceptions on childbirth	**6a.** Lack of knowledge / information about facility-based childbirth **6b.** Lack of knowledge about obstetric complications **6d.** Beliefs surrounding the origin of complications **3i.** Reliance on traditional remedies / spiritual healing **6e.** Expected date of delivery (sudden onset of labor) **6g.** Reliance on TBA suggestions **6i.** ANC – perceived as insurance for safe home birth **6j.** Facilities are only there to treat complications	**6a.** 20, 19, 28, 21, 27, 17, 24, 15, 13, 12 **6b.** 25, 16, 17, 15 **6d.** 25, 10, 4 **3i.** 25, 20, 23, 18, **6e.** 5, 3, 28, 21, 8, 27, 22 **6g.** 25, 27, 12 **6i.** 27, 6, 22 **6j:** 25, 28, 8, 16, 27, 17, 15, 12, 4, 6

Appendix 3 cont.: Studies and corresponding codes*

Study	Code / Number
Ababor et al., 2019: Socio-cultural Beliefs and Practices Influencing Institutional Service Delivery Utilization in Three Communities of Ethiopia: A Qualitative Study.[54]	**1**
Adatara et al., 2020: Exploring the reasons why women prefer to give birth at home in rural northern Ghana: a qualitative study.[55]	**2**
Ahmed et al., 2019: Socio-cultural factors favoring home delivery in Afar pastoral community, northeast Ethiopia: A Qualitative Study.[56]	**3**
Akeju et al., 2016: Determinants of health care seeking behaviour during pregnancy in Ogun State, Nigeria.[57]	**4**
Alatinga et al., 2021: Why do women attend antenatal care but give birth at home? A Qualitative study in a rural Ghanaian District.[58]	**5**
Anastasi et al., 2015: Losing women along the path to safe motherhood: why is there such a gap between women's use of antenatal care and skilled birth attendance? A mixed methods study in northern Uganda.[59]	**6**
Boah et al., 2020: "I couldn't buy the items so I didn't go to deliver at the health facility" Home delivery among rural women in northern Ghana: A mixed-method analysis.[60]	**7**
Caulfield et al., 2016: Factors influencing place of delivery for pastoralist women in Kenya: a qualitative study.[61]	**8**
Ganle et al., 2014: Socio-cultural Barriers to Accessibility and Utilization of Maternal and Newborn Healthcare Services in Ghana after User-fee Abolition.[62]	**9**
Higi et al., 2021: Perception and Experience of Health Extension Workers on Facilitators and Barriers to Maternal and Newborn Health Service Utilization in Ethiopia: A Qualitative Study.[63]	**10**

Hill et al., 2020: “Everything is from God but it is always better to get to the hospital on time”: A qualitative study with community members to identify factors that influence facility delivery in Gombe State, Nigeria.[64]	**11**
Ibrhim et al., 2018: Reasons for low level of skilled birth attendance in Afar pastoralist community, North East Ethiopia: a qualitative exploration.[65]	**12**
Jebena et al., 2022: Barriers and facilitators of maternal health care services use among pastoralist women in Ethiopia: Systems thinking perspective.[66]	**13**
Karanja et al., 2018: Factors influencing deliveries at health facilities in a rural Maasai Community in Magadi sub-County, Kenya.[67]	**14**
Kea et al., 2018: Exploring barriers to the use of formal maternal health services and priority areas for action in Sidama zone, southern Ethiopia.[68]	**15**
Konje et al., 2020: Is it home delivery or health facility? Community perceptions on place of childbirth in rural Northwest Tanzania using a qualitative approach.[69]	**16**
Mohamed et al., 2021: Experiences from the Field: A Qualitative Study Exploring Barriers to Maternal and Child Health Service Utilization in IDP Settings Somalia.[70]	**17**
Naanyu et al., 2020: A qualitative exploration of barriers to health-facility-based delivery in Bomachoge-Borabu and Kaloleni, Kenya.[71]	**18**
N’Gbichi et al., 2019: “If there are no female nurses to attend to me, I will just go and deliver at home”: a qualitative study in Garissa, Kenya.[72]	**19**
Nigusie et al., 2022: Community perception of barriers and facilitators to institutional delivery care-seeking behavior in Northwest Ethiopia: a qualitative study.[73]	**20**

Shiferaw et al., 2020: Why do women not use skilled birth attendance service? An explorative qualitative study in north West Ethiopia.[74]	**21**
Sialubanje et al., 2015: Reasons for home delivery and use of traditional birth attendants in rural Zambia: a qualitative study.[75]	**22**
Tabong et al., 2021: Reasons for the utilization of the services of traditional birth attendants during childbirth: A qualitative study in Northern Ghana.[76]	**23**
Toja et al., 2022: Why Home Delivery After Full Antenatal Care Follow-Up in Southern Ethiopia? An Exploratory-Descriptive Qualitative Study.[77]	**24**
Treacy et al., 2015: Exploration of perceptions and decision-making process related to childbirth in rural Sierra Leone.[78]	**25**
Tukur et al., 2015: Why Women Are Averse to Facility Delivery in Northwest Nigeria: A Qualitative Inquiry.[79]	**26**
Van der Land et al., 2018: Socio-cultural perceptions that influence the choice of where to give birth among women in pastoralist communities of Afar region, Ethiopia: A qualitative study using the health belief model.[80]	**27**
Wilunda et al., 2016: Barriers to Institutional Childbirth in Rumbek North County, South Sudan: A Qualitative Study.[81]	**28**

Appendix 4: Themes and subthemes