Women’s perceived barriers to giving birth in health facilities in rural Kenya: A qualitative evidence synthesis

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**Abstract**

*Background:* In Kenya, uptake of skilled care during birth remains lower in rural areas when compared to urban areas, despite efforts by the government to encourage facility-based births by abolishing maternity fees in public health facilities.

*Objective:* To synthesise published and unpublished qualitative research that explores women’s perceived barriers to facility-based birth in rural Kenya. *Design:* Qualitative evidence synthesis

*Data* *sources:* Multiple electronic databases (MEDLINE, EMBASE, PsycINFO, POPLINE, CINAHL, Web of Science and ProQuest), grey literature searches, citation chaining and checking of reference lists.

*Review* *methods:* Studies were screened by title, abstract and full text, after which a standardised qualitative checklist was used to assess study quality. Synthesis of extracted data followed the ‘best-fit’ framework method enhanced with a pathway-based model for the improvement of maternal and newborn care.

*Results:* Sixteen eligible studies were identified. Key themes were: (i) knowledge, attitudes and practices, including past experiences of health facilities and community beliefs about facility services; (ii) insufficient demand for professional care caused by the perceived advantages of seeking alternative care during birth and the disadvantages of facility-based births; (iii) limited access to services, especially in rural areas, because of poor infrastructure (iv) misconceptions regarding labour characteristics and, (v) poor awareness of labour outcomes.

*Conclusions:* Important factors can be characterised as ‘push’ factors (those pushing women away from facilities) and ‘pull’ factors (those related to the relative advantage of facility-based births). However, key to an individual woman’s decision are factors relating to knowledge, attitudes and practices and awareness of labour outcomes. While a critical tension exists between government policy and consumer choice, the prevalence of inadequate awareness and the dominance of past experiences and community beliefs offer significant obstacles to a woman in making an informed choice about her preferred place of giving birth.

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# **Introduction**

Kenya is an East African country whose maternal mortality ratio was 510 deaths per 100,000 live births in 2015 (WHO et al., 2016 ). Maternal mortality was the fifth of the World Health Organisation’s Millennium Development Goals (MDGs), a set of eight quantified development targets to be achieved by all countries by 2015 (UN General Assembly, 2000). This was especially important in sub-Saharan Africa, where half of all maternal deaths were reported to occur (Rogo et al., 2017 ). As such, despite a modest decrease in the number of maternal deaths from 687 deaths per 100,000 live births in 1990 (WHO et al., 2016), maternal mortality remains a leading public health concern in Kenya.

Skilled care during birth involves the presence of skilled birth attendants (SBAs) – trained professionals capable of recognising childbirth complications and subsequently providing essential obstetric care (De Bernis et al., 2003; Koblinsky et al., 2006) or referring women for further care (Kenya National Bureau of Statistics (KNBS); ICF Macro, 2014). Since such provision is dependent on the availability of resources and adequate infrastructure, rural areas, especially those in developing countries, are typically at a disadvantage when compared with urban areas. Maternal health in Kenya is a case in point - according to the 2014 Kenya Demographic and Health Survey (KDHS), only 49% of live births in rural areas happened in a health facility as opposed to 82% of those in urban areas (Kenya National Bureau of Statistics (KNBS); ICF Macro, 2014).

In a bid to lower the number of home births, the Kenyan Government abolished maternity fees in all public health facilities on 1st June 2013. This strategy had previously been employed in other African countries such as Ghana, Burkina Faso and Niger (Yates, 2009). However, recent reports indicate that, although the number of facility-based births in Kenya subsequently increased, maternal mortality remains unacceptably high (Anonymous, 2015; Merab, 2016). This suggests that cost is not the sole barrier to facility-based births, a situation accentuated in rural parts of the country.

Due to its exploratory nature, qualitative research is well placed to capture women’s own perceptions of the determinants or factors that influence these choices. Previous systematic reviews that have addressed the low uptake of facility-based births have been primarily quantitative (Moyer and Mustafa, 2013) or have tended to assimilate evidence from different geographical regions or countries (Bohren et al., 2014; Gabrysch and Campbell, 2009). As an alternative approach, this context-specific qualitative evidence synthesis aimed to review qualitative research that explores the barriers to giving birth in health facilities, as perceived by women in rural Kenya.

The prior existence of a qualitative evidence synthesis that explores barriers to facility-based birth in low and middle-income countries (LMICs) (Bohren et al., 2014) in general offers a unique opportunity to compare the respective value of context-specific versus multi-context syntheses for decision-making (Hannes and Harden, 2011). The published synthesis only included two studies originating from rural Kenya (Mwangome et al., 2012; Turan et al., 2012), with a further two Kenyan studies set in an exclusively urban setting. Our context-specific review aimed to increase the coverage and richness of included studies while focusing on the specific considerations relating to facility-based birth in a rural context.

## Methods

This synthesis was conducted to answer the question: ‘What factors do women in rural Kenya regard to be barriers to giving birth in health facilities?’ This approach applies the principles of systematic reviewing to qualitative research studies – studies are systematically identified, evaluated for quality, then included data are extracted and synthesised to derive insights into the perspectives of service users and their decision-making processes.

*Identification* *of* *eligible* *studies*

The comprehensive search strategy for this review was informed by previous reviews that sought to analyse the reasons why women in LMICs choose not to give birth in facilities (Bohren et al., 2014; Moyer and Mustafa, 2013). Published qualitative studies were systematically identified from multiple sources. The electronic databases searched in July/August 2016 were MEDLINE, EMBASE, PsycINFO, POPLINE, CINAHL, Web of Science and ProQuest. Using a combination of free text and Subject Headings, the searches were adapted for different databases including the use of qualitative filters to increase the specificity of the results (Supplementary A). Both reviewers followed up the reference lists of eligible studies and conducted citation searches to identify additional relevant papers. Grey literature was identified through Google Scholar and POPLINE.

*Study* *selection*

Two reviewers independently applied inclusion and exclusion criteria related to the objectives of this review to each of the identified studies (Table 1). Study selection was based on the Setting, Perspective, Interest (phenomenon of), Comparison, Evaluation (SPICE) framework (Booth, 2004). Included studies were required to utilise recognised methods of qualitative data collection and data analysis. Screening proceeded initially by title and abstract, then by reading the full texts of selected studies.

**Table** **1** - Review inclusion and exclusion criteria.

|  |  |
| --- | --- |
| Inclusion criteria  | Exclusion criteria  |
| Primary research only Qualitative studies (or mixed-methods studies if qualitative results reported separately) Rural areas of Kenya  | Studies set in urban regions  |
| Women of child-bearing age Focus on the peripartum period  | Focus on the antepartum or  |
| Peer-reviewed articles or grey literature published in English Relevant grey literature  | postpartum periods  |

*Appraisal,* *data* *extraction* *and* *synthesis*

Eligible studies were independently assessed for quality by both reviewers using the Critical Appraisal Skills Programme (CASP) Qualitative checklist - this is a well-known and readily available quality assessment tool used to assess qualitative research for rigour, credibility and relevance through ten questions (Critical Appraisal Skills Programme, 2016). Using checklist criteria, we rated each study as being of high, moderate or low quality. Any disagreements were resolved through discussion. In addition to undertaking CASP assessments, we conducted a secondary analysis using journal impact factors to explore a possible trade-off between more complete data and diminishing study quality.

Both reviewers extracted data onto a spreadsheet using a framework developed for an earlier unpublished qualitative synthesis (Supplementary B). This framework was derived from a thematic synthesis of factors influencing facility-based births in rural Kenya, albeit from a less comprehensive sample of studies than this review. Any additional data derived from the study results were analysed inductively with additional themes being added to the framework, in line with the ‘best fit’ framework synthesis method (Carroll et al., 2011). This method was developed to combine the virtues of descriptive and interpretive techniques of reviewing qualitative data (e.g. thematic synthesis and meta-synthesis, respectively), to derive actionable information that is crucial in improving health care services (Booth and Carroll, 2015).

During the review, we discerned the absence of an essential temporal dimension within the existing best fit framework. We, therefore, identified a pathway of care for improving maternal and child health from a comparable country (Makowiecka, 2016) as a further lens for exploring how the identified factors influence population health outcomes (Fig. 1).

## Results

*Literature* *search*

In total, 2245 citations were identified; following removal of 288 duplicates, 1899 articles were excluded through title and abstract sifting. Of the remaining 58 articles that were fully read, 16 studies met the inclusion criteria (Fig. 2).

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| **Fig.** **1.** Pathway to improved maternal and newborn health (adapted from Makowiecka, 2016 ).  |

*Study* *characteristics*

Sixteen studies were selected for inclusion following, title, abstract and full-text sifting (Table 2), four of these comprised grey literature – three study-linked reports (Carter, 2010; Moore et al., 2002; Naanyu et al., 2011) and one dissertation (Kagia, 2010). Whereas most studies were represented by a single report, one study was reported in two papers (Byrne et al., 2016; Caulfield et al., 2016) and findings from these papers were thus combined. Of the 16 studies, only two eligible papers (Mwangome et al., 2012; Turan et al., 2012) had been previously included in a multi-context qualitative evidence synthesis of the facilitators and barriers to facility-based maternity care in low- and middle- income countries (Bohren et al., 2014).

*Quality* *appraisal*

Eight studies were found to be of high quality, with a further five being of moderate quality and the remaining four being judged low quality, with no direct relationship between study quality and whether the source was peer-reviewed journal or grey literature source (Table 2). Two studies (Moindi et al., 2015; Onono, 2015) had been published in journals identified as ‘predatory’ – open-access publishers that are prone to questionable practices such as conducting little, if any, peer-review (Beall, 2015). However, given the thematic similarities among the included studies, study quality was not used as a basis for exclusion.

*Synthesis* *of* *data*

*Knowledge,* *attitudes* *and* *practice*

This theme relates to: (i) the levels of awareness that women have regarding childbirth; (ii) their beliefs about labour and giving birth in health facilities, (iii) their own and others’ experiences of childbirth in the past, and (iv) social influence as a determinant of the place of giving birth.

Past experience of self (e.g. previous pregnancies or ANC). Previous experience of the woman, or of others in her family or the community, was often influential in the decision on whether to use health facilities for birth. For example, Byrne et al. (2016) describe how “experiences of poor quality care and dissatisfaction with care were reported by several women – some accounts were of personal experiences and others were descriptions based on anecdote”. It is often difficult to identify from these narratives, expressed as generalities, whether these attitudes are based on personal experiences, derived from another woman’s single anecdote or multiple stories from different women. In any case, these are frequently articulated as a generalised expectation rather than as an account of an isolated past occurrence.

Experience of, or anecdotes regarding, delays at health facilities may also influence the use of facility-based birth. Echoka et al. (2014) describe such delays, involving long queues and doctor unavailability. The effect of delays in antenatal care on subsequent perceptions of birth-related care is well-illustrated by:

*“I* *visited* *antenatal* *clinic* *in* *my* *local* *health* *centre* *and* *was* *delayed* *for* *hours* *before* *being* *attended* *to* *so* *during* *delivery,* *I* *decided* *not* *to* *go* *there* *based* *on* *the* *experience* *before.* *I* *feared* *being* *left* *unattended* *during* *labour”* (Kagia, 2010).

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| **Fig.** **2.** PRISMA flow diagram.  |

*Past* *experience* *of* *others.* Some evidence suggests that a social narrative around a specific facility or health facilities, in general, was influential in deterring mothers from seeking facility-based maternal care (Byford-Richardson et al., 2013; Caulfield et al., 2016). In one study mothers described hearing stories from women giving birth in health facilities that caused them to be fearful of seeking

care themselves. Such narratives were shared in social settings and, specifically, “generated fears of harsh treatment from nursing staff and of being forced into surgery.” Subsequently, fears generated by such social exchanges became influential in discouraging mothers from accessing health care at the time of birth:

*[W]hen* *she* *[was]* *delivering* *her* *first-born,* *she* *feared* *going* *to* *the* *hospital* *because* *she* *was* *hearing* *from* *some* *mothers* *[things]* *like,* *you* *are* *being* *beaten* *or* *maybe* *.* *.* *.* *when* *you* *are* *giving* *birth,* *you* *will* *put* *your* *legs* *improperly* *.* *.* *.* *so* *she* *feared* *coming* *to* *the* *hospital.* *.* *.* *.* ( Byford- Richardson et al., 2013 )

Interestingly, the same informant then proceeded from this specific instance to describing a more generalised experience, perhaps hinting at how such social narratives are constructed:

*Some* *just* *fear* *coming* *to* *the* *hospital* *because* *maybe* *there’s* *some* *feedback* *from* *those* *who* *have* *been* *coming* *to* *the* *hospital,* *that* *there’s* *nurses* *that* *don’t* *take* *care* *of* *them* *well* *(Lwak* *Mission* *Hospital,* *translation)* (Byford-Richardson et al., 2013 )

It is possible that expressing these fears as a second-hand narrative (e.g. “the women say”) (Caulfield et al., 2016) allows a woman to legitimise her own preference, and its implied criticism, without identifying herself as the direct source of an expressed attitude.

*Influence* *of* *others.* Caulfield et al. (2016) report that some women identified men’s ignorance of women’s health during pregnancy as a potential obstacle to women receiving formal health care, as husbands usually decide where their wives should seek care:

*Women* *don’t* *refuse* *to* *go* *to* *hospital;* *it* *is* *their* *husbands* *who* *don’t* *want* *them* *to* *go.* (Caulfield et al., 2016)

Elaborating on this, Naanyu et al. (2011) record that some husbands insisted on “natural” and cheaper home births that also ensure wives recuperate more speedily and resume their chores. The authors attest to the complicated decision-making process involved when selecting the site of birth:

*She* *must* *weigh* *the* *advice* *from* *health* *care* *providers,* *friends,* *and* *family.* *There* *are* *culturally* *laden* *gender* *roles* *that* *empower* *family* *members* *to* *make* *this* *decision* *more* *than* *the* *mother* *herself.* *Further,* *when* *the* *larger* *social* *network* *is* *involved* *in* *making* *delivery* *decisions,* *delays* *can* *occur* *and* *the* *mothers* *may* *end* *up* *delivering* *at* *home.* (Naanyu et al., 2011)

Female relatives were also reported to influence the place of giving birth, especially those that were TBAs themselves:

*A* *woman* *was* *traditionally* *considered* *more* *courageous* *– ‘a* *real* *woman’* *– if* *she* *gave* *birth* *at* *home.* *They* *claimed* *that* *the* *traditional* *birth* *attendants,* *female* *relatives* *and* *husbands* *preserved* *traditions* *and* *refused* *to* *adapt,* *thus* *affecting* *the* *choice of* *where* *to* *have* *the baby.* (Dahlberg et al., 2015)

Table 2 Characteristics of Included studies.

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| **Author, Year**  | **Setting** | **Participants**  | **Sampling method**  | **Data collection**  | **Major Findings**  | **Quality (CASP)** |
| Byford-Richardson et al. (2013)  | Asembo Bay, western Kenya | Women of child-bearing age | Snowballing; n = 34 | Interviews; Focus group | The main barriers to accessing maternity care were related to HIV testing/disclosure as well as gender dynamics and negative perceptions of health facility staff as treating mothers harshly. | Moderate |
| Byrne et al. (2016) Also: Caulfield et al. (2016)  | Laikipia and Samburu counties  | Women who had given birth: (i) with a TBA, or (ii) with an SBA, or (iii) unattended, in the past two years  | Purposive sampling; n = 116  | Focus groups  | Skilled birth attendants in the health facilities were perceived to mistreat mothers, so despite their ability to manage obstetric complications, the women preferred traditional attendants.  | High |
| Dahlberg et al. (2015)  | Rural Busia, western Kenya  | Mothers of children under the age of two years; Female relatives  | Purposive sampling; n = *>* 37  | In-depth interviews; Focus groups  | Sociocultural pressures from both families and communities prevent women from giving birth in health facilities, especially the perception that ‘a real woman’ would not do so. Also, facility staff lack training in some of the preferred practices of traditional attendants. | High |
| Echoka et al. (2014) | Malindi district | Female residents who experienced an obstetric “near miss”/severe acute maternal morbidity and were treated at the district hospital  | Purposive sampling; n = 30  | In-depth interviews | Insufficient birth preparedness and poor infrastructure in the area were found to result in delays in seeking emergency obstetric care in health facilities. | High |
| Essendi et al. (2015)  | Kitonyoni and Mwania sub-locations Makueni County, eastern Kenya  |  Women aged 18–24 years, 25–40 years and of 41–59 years | Purposive sampling; n = 106 | Focus groups Interviews  | Key infrastructural challenges such as bad roads and inadequate water and electricity were perceived as the main barriers to accessing maternity facilities. | Moderate |
| Kagia (2010)  | North Kinangop and South Kinangop   | Women aged 15 to 49 years and who had recently given birth while in the study area | Purposive sampling; n = 20 | Focus group | Home births were preferred chiefly because the mothers disliked hospital procedures such as episiotomy, felt more comfortable giving birth at home, lacked means of transport to the health facilities and felt that it was unnecessary to seek skilled care. | Low |
| Mason et al. (2015)  | Asembo Bay, western Kenya  | Women aged 15 – 49 years | Purposive sampling; n = 73 | Focus groups  | Prohibitive costs, poor infrastructure, gender roles and staff attitudes prevented women from giving birth in health facilities, even though they preferred facility-based antenatal care. | High |
| Moindi et al. (2015)  | Kilifi County  | Women who had given birth and reported to clinic for immunisation of their children  | Purposive sampling; n = 48  | Focus groups  | The respondents gave intrapartum examinations, gender Low dynamics, inadequate means of transport, HIV testing and high costs as the main factors that encouraged home births over facility-based care. | Low |
| Moore et al. (2002)  | Homa Bay district (now County)  | Women who had a normal birth within the past six months or had obstetric complications  | Purposive sampling; n = > 24  | In-depth Interviews; Focus groups | Both common barriers (transport, cost, accessibility), as well as other factors such as severely inadequate birth preparedness and poor quality of care in health facilities, were found to influence place of childbirth. Traditional attendants were also reported to be kind and caring. | Low |
| Mwangome et al. (2012)  | Msambweni district, south-eastern Kenya | Women in the community  | Purposive sampling; n = 80  | Interviews; Focus groups  | The women had insufficient monetary and infrastructural resources to access health facilities. They also lacked knowledge regarding the maternity period and reported adverse incidents involving facility staff.  | Moderate |
| Naanyu et al. (2011) Naanyu et al. (2011) | Port Victoria, western Kenya | Women who received ANC and gave birth at home or a facility  | Purposive sampling; n = 112  | Interviews; Focus groups  | Facility births were perceived to be costly, inaccessible and intimidating. Community members also influenced the place of giving birth, and some women had earlier negative experiences in the facilities. | High |
| Nangendo (2006)   | Got Agulu sub-location of Bondo District, western Kenya | Pregnant and non-pregnant Luo women | -; n = 50  | Interviews | Home births were relatively cheap and culturally appropriate. In contrast, the closest dispensary was far away, expensive, staff members were said to be abusive, and hospital births were perceived to be culturally prohibited by some. | Moderate |
| Njuki et al. (2013) Njuki et al. (2013) | Kitui, Kiambu and Kisumu districts (now counties) | Women who were currently or had been voucher users or had never used vouchers | Purposive sampling; n = 123  | Focus groups  | The voucher system encouraged health-seeking behaviour among community members, but the health facilities were difficult to access due to distance, poor infrastructure, discrimination of voucher users by facility staff and the perception that Caesarean sections were performed unnecessarily. | Moderate |
| Onono et al. (2015)  | Migori, Kisumu, and Homa Bay counties  | HIV-infected mothers of infants aged six weeks to 6 months interviews  | Purposive sampling; n = 33 | In-depth interviews | Barriers to health-seeking behaviour as it relates to the prevention of mother to child transmission of HIV/AIDS are determined by one’s social environment. The themes identified in this study fit into the socio-ecological model and include quality of care, HIV-related stigma and the support of family members. | High |
| Turan et al. (2012)  | Migori and Rongo districts in Nyanza Province  | Pregnant or postpartum women who did not use facility-based maternity services  | Purposive sampling; n = 16  | In-depth interviews  | This study found that, due to HIV stigma in the community, giving birth in a health facility increased the likelihood that a woman would be assumed to be HIV-positive. This was caused by the perception that complicated births (e.g. HIV-positive mother) were best managed in health facilities.  | High |
| Carter, 2010  | Malindi town, Marikebuni and Mambrui  | Women who had given birth and women seeking antenatal care  | -; n = 53 | Semi-structured interviews | The uptake of skilled care during birth was negatively influenced by cost, inadequate transport resources, fear of both medical procedures and mistreatment by facility staff. Preference for traditional practices offered by traditional attendants, such as herbal medicines and massage, was also reported. | Low |

SBA – Skilled Birth Attendant; TBA – Traditional Birth Attendant.

Relatives may also control the finances, where payment for facilities or services is required (Mwangome et al., 2012). In circumstances where the husband is absent, a senior co-wife or primary female family member may be responsible for the ultimate decision (Moore et al., 2002).

However, the women in one study described themselves as mostly self-reliant when preparing for childbirth, thereby fostering a sense of independence from the influence of their relatives and community (Dahlberg et al., 2015).

*Social* *support.* Women’s ability to attend facility-based birth may depend upon their ability to make alternative caring arrangements for their dependents. In one study two mothers with no family support at the time of birth were unable to leave children alone at home and therefore given birth at home (Mwangome et al., 2012).

*Beliefs* *about* *labour.* Many women felt that they had little control over the place of giving birth with it being mostly dependent on circumstances because one could never be sure when or where labour would begin.

*“You* *can’t* *know* *the* *day* *or* *date* *when* *they* *will* *give* *birth” (C2B1).* (Carter, 2010)

However, for some women, this fatalistic attitude was attributed to religion (Mason et al., 2015). Carter (2010) found that for many Muslims and Christians where the baby was to be born was “God’s plan,” and not their own.

Echoka et al. (2014) also noted that some women perceived danger signs to be normal during pregnancy thus delaying their recourse to medical care. They cite two severe cases (a caesarean section birth arising from obstructed labour and cephalo-pelvic disproportion and a woman receiving blood transfusion following severe pre-eclampsia and antepartum haemorrhage). In both cases, the perceived severity of physical experiences such as tiredness after several hours of labour, severe pain, bleeding and passing out precipitated the decision to seek care.

A perception of “normality” was accentuated by a woman’s past experiences of uncomplicated pregnancies ( Moindi et al., 2015 ) with women ignoring the suddenness and unpredictability associated with most labour complications. Mwangome et al. (2012) suggested a need for more comprehensive education and expanded antenatal information programs in addressing this widely-held belief.

Similarly, in a pastoralist community, Caulfield et al. (2016) documented how delaying, or even resisting, medical intervention may be perceived as a form of courage:

*Women* *sometimes* *don’t* *know* *the* *time* *to* *give* *birth* *and* *they* *are* *caught* *unaware.* *These* *women* *are* *not* *cowards.* *We* *have* *those* *[women]* *who* *are* *cowards* *and* *they* *call* *the* *TBA* *immediately.* *(Kirimon,* *FGD* *with* *women delivered* *by* *TBAs)* (Caulfield et al., 2016)

In contrast, those who are well-educated, or whose husbands have money, were typically more inclined to avail themselves of skilled birth attendants. The context of this observation expressed as a preference, not a necessity, suggests a perception of “softness” in contrast to the more stoical attitudes of the pastoralist community as a whole:

*“If* *your* *husband* *has* *money* *or* *if* *women* *are* *educated,* *they* *like* *going* *to* *the* *big* *hospital.” (Tiamamut,* *FGD* *with* *TBAs)* (Caulfield et al., 2016 )

*Beliefs* *about* *facilities.* The belief that home is the natural place for birth is mirrored in the perception that facility-based birth is only required when problems occur ( Kagia, 2010; Moindi et al., 2015; Turan et al., 2012 ):

*“If* *you* *have* *no* *problem,* *and* *child* *has* *no* *problem* *then* *it’s* *not* *a* *big* *deal* . ” ( Moindi et al., 2015 )

This opinion persisted even when the advantages of facility-based birth had been emphasised as part of an intervention (Mwangome et al., 2012). Despite having been advised at several points during the study of the value of supervised birth, some mothers reported they did not see a need to come to the hospital because they expected an ‘easy’ birth.

Other beliefs that militate against the use of facility-based birth include the fear that children can be swapped or exchanged or that women and babies do not return, that unfamiliar medicines are administered, that birthing beds are too high and that health facilities are too cold (Byrne et al., 2016):

*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.* *(Chumvi,* *FGD* *with* *women* *delivered* *by* *TBAs)* (Caulfield et al., 2016)

In other cases, the health facilities are seen as to present structural barriers to the ability to pursue traditional beliefs, e.g. relating to the fate of the placenta, practising certain post-birth traditions, use of herbal preparations or to involve local traditional forms of medicine or religion (Nangendo, 2006).

*Demand* *for* *professional* *care.* This theme relates to the way that pregnant women view the reasons for giving birth in health facilities under the care of health professionals, rather than at home. Their perception of these factors, either as positive or negative, can directly influence their decision-making.

*Relative* *advantage* *of* *facility.* The key benefits associated with facility births were perceived as being the ability of staff to detect and manage birth complications, the availability of blood for transfusions in case of excessive bleeding, other life-saving equipment, prevention of mother to child transmission of HIV/AIDS and aspects of newborn care such as eye care and vaccinations (Mason et al., 2015; Moore et al., 2002; Naanyu et al., 2011).

*Relative disadvantage* *of* *facility.* The respondents in four studies listed the fear of birth-related procedures such as Caesarean births and episiotomies as a deterrent to giving birth in health facilities, chiefly because of pain (Carter, 2010; Caulfield et al., 2016; Kagia, 2010; Moindi et al., 2015). Relatedly, the prospect of giving birth in the facilities while naked and in the lithotomy position encouraged some women to give birth at home instead (Byrne et al., 2016; Moindi et al., 2015 ).

*“During* *the* *labouring* *process,* *there* *are* *many* *doctors* *who* *will* *come* *to* *do* *vaginal* *examinations* *every* *now* *and* *again.* *They* *just* *insert* *their* *fingers* *(into* *the* *vagina)* *now* *and* *then* *say* *not* *yet.not* *yet” (Focus* *group* *discussion* *2)* (Moindi et al., 2015)

*They* *cut* *me* *so* *badly* *(episiotomy)* *during* *my* *first* *delivery* *which* *took* *me* *so* *long* *to* *recover.* *”* (Kagia, 2010)

Some studies also reported that women who had failed to attend antenatal clinics during their pregnancies were said to be turned away at health facilities when they later went there for birth (Moore et al., 2002).

*"….* *But,* *if* *it* *is* *a* *normal* *delivery* *then* *they* *cannot* *help* *you* *because* *you* *have* *not* *been* *going* *to* *clinic* *and* *you* *don’t* *have* *a* *clinic* *card.* *They* *will* *not* *help* *you* *the* *way* *that* *they* *can* *help* *someone* *who* *has* *been* *going* *to* *the* *clinic* *[throughout* *pregnancy];* *they* *will* *just* *abandon* *you* *there."* *(Pregnant* *Woman* *2,* *Ndiwa)* (Turan et al., 2012)

However, as Moindi et al. (2013) and Carter (2010) report, frequent ANC attendance does not directly translate to facility-based birth, an observation confirmed by women in another study ( Naanyu et al., 2011 ).

*HIV* *stigma.* Multiple studies found that because of the social stigma associated with being HIV-positive, many women preferred not to give birth in health facilities to avoid HIV testing, which they believed to be mandatory (Mason et al., 2015; Moindi et al., 2015; Njuki et al., 2013; Onono, 2015; Turan et al., 2012).

*“.* *I* *really* *trust* *myself* *but* *it’s* *my* *husband* *I* *don’t,* *therefore* *I* *fear* *testing* *for* *HIV.* *What* *will* *I* *do* *if* *I* *test* *positive?* *Therefore* *they* *don’t* *come* *to* *the* *clinic* *and* *eventually* *deliver* *at* *home” (Focus* *group* *discussion* *1)* ( Moindi et al., 2015 )

Disclosure of HIV status had the potential to trigger domestic violence and even separation from their husbands and was therefore deemed as too high a risk (Onono, 2015). Even in cases where women were likely to have already contracted the disease, they preferred to remain oblivious to their status:

*‘And* *there* *are* *some* *people* *who* *if* *they* *hear* *about* *VCT* *they* *would* *rather* *die* *even* *if* *they* *are* *positive.* *They* *would* *die* *without* *taking* *the* *drugs’* *P7* *2* *RCPW* ( Mason et al., 2015 )

Nonetheless, some women also reported that HIV was a facilitator for facility births because being pregnant necessitated testing and subsequent prevention of mother to child transmission of the virus (Dahlberg et al., 2015; Mason et al., 2015; Onono, 2015).

*Restrictive* *policies.* Caulfield et al. (2016) found that, in the pastoralist communities that they studied, deterrent facility policies included the inability to have family members present during birth or to make customary announcements once the baby is born. Other policies required that women remain on the hospital bed during labour even though they may have preferred a different birth position (Mwangome et al., 2012 ).

Unlike TBAs, health facilities did not provide the traditional herbal remedies that some women believed to hasten or aid birth (Byrne et al., 2016; Moindi et al., 2015; Nangendo, 2006 ).

However, the safety of traditional herbs was challenged in one study; in one particular case, reliance on herbs subsequently led to the death of both mother and child from profuse bleeding (Carter, 2010).

*Resource* *constraints.* Women reported the absence or lack of doctors in health facilities as another barrier to facility-based births (Echoka et al., 2014; Mwangome et al., 2012). Similarly, whenever the nurses left – for instance, to go on annual leave – the facility would remain closed forcing women to give birth elsewhere (Essendi et al., 2015). Also, staff numbers were usually not sufficient to cater to women’s needs when labour began during the night (Essendi et al., 2015; Moore et al., 2002).

Attendants were forced to use “torch lights, lamps or feeble lights from mobile phones” for light due to the lack of electricity. Furthermore, acute water shortages were reported to occur mainly in the dry season, resulting in significant sanitation and hygiene challenges in the facilities such as the inability to clean birth surfaces or to wash hands (Essendi et al., 2015).

*Negative* *staff attitudes.* Health care staff were widely reported to treat women poorly, be it on reception at the health facilities or during the labour and birth stages (Byford-Richardson et al., 2013; Byrne et al., 2016; Carter, 2010; Caulfield et al., 2016; Dahlberg et al., 2015; Kagia, 2010; Moindi et al., 2015; Moore et al., 2002; Nangendo, 2006; Turan et al., 2012). One study described how staff appeared “to treat women’s presence in their health facility as an inconvenience” (Byrne et al., 2016). Women reported cases of both physical abuse and verbal insults, some stating that this form of humiliation was usually worse from female rather than male staff.

*“… At* *hospitals* *they* *beat* *us.* *People* *are* *beaten.* *Some* *have* *that* *thought* *and* *fear* *going,* *because* *the* *nurses* *beat* *the* *mothers.* *But* *others* *just* *fear. some* *say* *even* *reaching* *the* *hospital* *is* *“war”,* *meaning* *the* *difficulties* *encountered* *on* *reaching* *the* *hospital,* *so* *they* *say* *they* *will* *not* *go.” [E4]* (Moore et al., 2002 )

*“From* *my* *experience,* *female* *attendees* *are* *usually* *harsh* *and* *abusive* *compared* *to* *the* *male* *counterparts* *who* *are* *sensitive.* *Gentle….I* *wonder* *could* *it* *because* *they* *don’t* *experience* *the* *pain.* *” (Focus* *group* *discussion* *3)* ( Moindi et al., 2015 )

Kagia (2010) and Turan et al. (2012) report that socioeconomic status also had a role to play in the way pregnant women were treated at health facilities. As perceived by study participants, poor or uneducated women withstood the worst of staff abuse whereas those from higher social classes did not. Facility staff were also reported to turn away pregnant women.

*“I* *don’t* *think* *I* *will* *ever* *opt* *for* *a* *hospital* *delivery.* *I* *observed* *that* *those* *doctors* *and* *nurses* *only* *treat* *their* *own* *kindly* *and* *the* *rest* *of* *us* *like* *trash”* ( Kagia, 2010 ).

A further factor that discouraged women from giving birth in facilities was the fear of being neglected by staff during labour, an opinion that was expressed in multiple studies ( Byrne et al., 2016; Kagia, 2010; Moore et al., 2002; Nangendo, 2006).

*“I* *was* *left* *alone* *in* *labour* *and* *no* *one* *answered* *my* *call* *for* *help.* *I* *eventually* *delivered* *alone* *though* *in* *hospital”* (Kagia, 2010)

*Relative* *advantage* *of* *TBAs.* As opposed to health facilities which charged women more than they could afford for maternity services, TBAs were mostly reported to provide cheaper, sometimes free, care and negotiable fees (Carter, 2010; Dahlberg et al., 2015; Mason et al., 2015; Moore et al., 2002 ). Another significant benefit was the ability to pay for TBA services in instalments, rather than the lump sum required in health facilities. This practice served to bolster the reputation of TBAs as being cheaper, even when, in actuality, they charged equal or higher fees than health facilities (Mason et al., 2015; Mwangome et al., 2012). TBAs were also reported to allow for more flexible payment plans:

*"The* *other* *thing* *that* *can* *prevent* *me* *from* *going* *to* *the* *hospital* *to* *give* *birth* *is* *because* *they* *will* *demand* *cash* *money* *from* *you.* *But,* *the* *traditional* *birth* *attendants* *will* *sympathize* *with* *you* *and* *let* *you* *pay* *later* *when you have* *money.* *I* *like* *that* *because,* *at* *times,* *delivery* *can* *come when* *you are* *broke* *and* *penniless.* *(Pregnant* *Woman* *2,* *Ogwedhi)* (Turan et al., 2012)

*“A* *TBA* *can* *sympathize* *with* *you* *so* *you* *pay* *small* *fee* *and* *the* *difference* *you* *pay* *later.* *”* [W7] (Moore et al., 2002 )

It was also said to be possible to pay TBAs in other ways such as cloths and domestic animals like chickens (Carter, 2010), tokens such as milk and sugar or naming the newborn baby after them (Nangendo, 2006 ).

TBAs were well known in the community and were commonly trusted for their traditional knowledge of the birthing process (Byrne et al., 2016; Caulfield et al., 2016; Moore et al., 2002; Nangendo, 2006). Some women expressed the opinion that TBAs were best for uncomplicated births (Dahlberg et al., 2015; Moore et al., 2002). Naanyu et al. (2011) found that even though TBAs in their study areas repeatedly counselled pregnant women to give birth children in health facilities, some women adamantly disregarded this advice and still opted for home births, at times under the influence of “patronizing husbands, parents, or in-laws”.

Some studies also found that TBAs were perceived to provide better treatment to women during birth than facility staff (Caulfield et al., 2016; Dahlberg et al., 2015; Moindi et al., 2015). TBAs had better interpersonal skills, would hold or comfort these women and sometimes help with household chores in the immediate postpartum period.

*… they* *see* *it* *is* *a* *TBA* *who* *will* *deliver* *them* *well* *– she* *is* *the* *one* *who* *will* *light* *a* *good* *fire* *for* *them,* *she* *will* *clean* *them* *well,* *so* *you* *find* *that* *… the* *majority* *like* *to* *deliver* *[at* *home].* *(Longewan,* *Interview* *with* *female* *CDC* *member)* (Caulfield et al., 2016)

*“She* *will* *make* *sure* *she* *bathes* *you* *with* *warm* *water* *and* *gives* *you* *a* *massage* *till* *you* *fully* *recover* *and* *gain* *strength…….even* *if* *it’s* *a* *whole* *week…she* *will* *wash* *your* *clothes* *and* *take* *care* *of* *the* *newborn* *till* *you* *get* *better* *” (Focus* *group* *discussion* *6)* (Moindi et al., 2015)

Another unique perceived benefit of TBAs was the provision of herbal treatments to alleviate discomfort and pain. Other reported skills included determining the sex of the baby and repositioning the baby by massaging the abdomen (Carter, 2010; Dahlberg et al., 2015). These services were said to be particularly crucial for primigravidae, women in their first pregnancies (Byrne et al., 2016).

*“I* *like* *the* *mkunga* *because* *if* *the* *baby* *comes* *up* *or* *pains* *she* *knows* *how* *to* *help* *by* *giving* *massage* *and* *she* *also* *lives* *nearby” (C2W1).* (Carter, 2010)

*“Traditional* *birth* *attendants* *are* *also* *experienced* *so* *we* *have* *to* *use* *them* *because* *they* *are* *used* *to* *massaging* *[the* *womb]”.* *(Female* *relative,* *FGD* *4)* (Dahlberg et al., 2015)

Availability was another critical facilitator for home births (Essendi et al., 2015). Because of their relative proximity to women in labour, TBAs were perceived to be more available and accessible, especially during the night when it was difficult to get transport to the facilities (Byrne et al., 2016; Moore et al., 2002).

*Relative* *disadvantage* *of* *TBAs.* Although many women participating in these studies had previously given birth with TBAs and fully endorsed the practice, others expressed opposing concerns. These range from the limited ability of TBAs to manage birth complications, due to insufficient or non-existent training, to unsanitary practices such as using dirty razors for cutting the umbilical cord, potentially exacerbating poor maternal and newborn outcomes (Byrne et al., 2016; Carter, 2010; Dahlberg et al., 2015; Kagia, 2010; Mason et al., 2015; Moindi et al., 2015; Moore et al., 2002).

*“A* *TBA* *cannot* *do* *a* *c/s* *(caesarian* *section),* *so* *a* *woman* *can* *even* *bleed* *to* *death in the* *presence* *of a* *TBA,* *she can* *do nothing.* *If* *baby* *is* *too* *big,* *TBA will just* *say* *a woman* *cannot* *push properly* *until* *it* *is* *too* *late* *and the* *baby* *might* *even* *die.” [P77]* (Moore et al., 2002)

*“I* *feared* *the* *risk* *of* *blood* *infecting* *my* *child* *and* *I* *knew* *I* *was* *HIV* *positive* *and* *because* *at* *times* *wakunga* *[traditional* *birth* *attendants]* *don’t* *care.* *They* *can* *use* *the* *same* *equipment,* *such* *as* *gloves,* *mat* *and* *razor-blade* *on* *more* *than* *one* *mother* *and* *this* *can* *cause* *infection* *to* *other* *persons* *who* *do* *not* *even* *have* *HIV.” (HIV-positive* *mother,* *IDI* *4)* (Dahlberg et al., 2015)

*Access* *to* *services*

This theme refers to the ways through which pregnant women in the rural areas gain access to the health facilities, particularly during labour and childbirth.

*Negotiating* *access.* TBAs were reported to occasionally accompany pregnant women to health facilities for birth (Byrne et al., 2016). In some cases, the presence of the attendants seemed to ameliorate the treatment of these women by staff at the health facilities.

*“I* *left* *with* *my* *TBA* *who* *carried* *everything* *that* *would* *be* *required,* *and* *even* *if* *I* *could* *deliver* *on* *the* *way,* *she* *would* *have* *taken* *care.* *When* *we* *reached* *the* *hospital,* *I* *was* *received* *immediately* *and* *they* *took* *good* *care* *of* *me.” [W18B]* (Moore et al., 2002)

Njuki et al. (2013) found that the introduction of a voucher program to encourage women to give birth in health facilities was successful in making services more affordable for the women in the community, thereby reducing the number of home births.

On the other hand, perceived challenges to voucher uptake included a lack of awareness among voucher non-users as to the benefits of the system, HIV testing as well as limited access to accredited facilities that accept vouchers. Also, it was stated that even at the health facilities, a voucher was no match for actual cash and would potentially result in discrimination from the staff.

*“The* *reception* *when* *you* *go* *to* *deliver* *is* *bad.* *Once* *they* *see* *the* *voucher,* *you* *are* *not* *lucky.* *There* *is* *a* *problem* *there* *because* *you* *cannot* *be* *received* *the* *same* *way* *as* *a* *person* *who* *has* *money.* *You* *have* *to* *wait* *until* *they* *serve* *those* *with* *money* *and* *at* *times* *you* *go* *back* *home* *with* *your* *problems* *because* *maybe* *it’s* *late* *and* *the* *doctor* *has* *left.* *They* *take* *the* *voucher* *holders* *lightly”.* *(FGD* *voucher* *user)* (Njuki et al., 2013)

Voucher users were also perceived to be at a higher risk for surgical birth.

*“Some* *fear* *the* *voucher* *because* *in* *most* *facilities* *like* *in* *xxxx,* *most* *people* *are* *taken* *for* *operation* *if* *they* *have* *the* *voucher”.* *(FGD* *voucher* *user)* (Njuki et al., 2013)

*Economic* *considerations.* The cost of maternity services was described as a critical influencing factor in deciding where to give birth. This was particularly true for studies conducted before the policy change in 2013 that made births free in all public health facilities. Moore et al. (2002) found that care in health facilities was said to be delayed until payments were made. Widespread rumours in the community regarding these high costs entirely ruled out facility births for most women.

*“You* *are* *first* *asked* *for* *cash,* *because* *it* *is* *your* *money* *that* *will* *enable* *them* *to* *assist* *you.* *” [W7]* (Moore et al., 2002)

Women chose to give birth at home because they or their husbands could not afford maternity fees (Carter, 2010; Dahlberg et al., 2015; Echoka et al., 2014; Kagia, 2010; Mason et al., 2015; Moindi et al., 2015; Mwangome et al., 2012; Naanyu et al., 2011; Nangendo, 2006; Njuki et al., 2013; Onono, 2015). Failure to pay for services could result in detention in the facilities or desertion by medical staff (Njuki et al., 2013).

*‘I* *know* *the* *hospital* *is* *the* *best it* *is* *only* *the* *lack* *of money.’P3* *6* *RCPW* (Mason et al., 2015)

The expenses associated with facility births also extended to purchasing any required treatments (Nangendo, 2006) as well as providing sustenance for the mother and newborn child (Moore et al., 2002). The additional cost of obtaining transport to the facilities was perceived as a major barrier:

*Some* *walk* *but* *those* *who* *can’t* *walk,* *they* *hire* *a* *vehicle* *which* *sometimes* *cost* *KSH3000* *or* *more* *depending* *on* *the* *distance.* *When* *you* *go* *to* *Maralal* *it’s* *very* *expensive,* *a* *whole* *cow* *will* *have* *to* *be* *sold.* *(Longewan,* *FGD* *with* *TBAs)* (Caulfield et al., 2016)

Carter (2010) found that, even in dispensaries where care was supposed to be free other than the registration fee, the staff charged extra (unsanctioned) fees, possibly hinting at corrupt practices in some health facilities. Notably, respondents in one study emphatically stated that if the services were free, all births would take place in health facilities.

*We* *would* *go’* *P9* *8* *WOCBA*

*Yes,* *all* *people* *will* *go* *‘P8* ( Mason et al., 2015 )

*Infrastructure.* Almost all studies identified poor infrastructure as a barrier to facility births; this related to distances between the respondent’s villages and the facilities, as well as to the impassibility of roads, especially in poor weather (Byrne et al., 2016; Caulfield et al., 2016; Dahlberg et al., 2015; Kagia, 2010; Mason et al., 2015; Moindi et al., 2015; Moore et al., 2002; Mwangome et al., 2012; Naanyu et al., 2011; Onono, 2015). Mwangome et al. (2012) estimate that, where study participants received subsidised maternity services and provision of transport to enable them to access the hospital, this led to a four-fold increase in the number of hospital births.

*Distance* *to* *the* *health* *facility* *is* *a* *big* *problem* *for* *women* *in* *some* *villages.* *The* *roads* *are* *not* *passable* *during* *rainy* *seasons* *so* *many* *women* *will* *not* *think* *of* *going* *to* *the* *hospital.* *(Longewan,* *FGD* *with* *women* *delivered* *by* *TBA)* (Caulfield et al., 2016)

Many women complained of the unavailability of transport to get them to maternity centres or, even where available, the prohibitive costs associated with obtaining such transport (Carter, 2010; Caulfield et al., 2016; Dahlberg et al., 2015; Echoka et al., 2014; Essendi et al., 2015; Kagia, 2010; Mason et al., 2015; Moindi et al., 2015; Mwangome et al., 2012; Naanyu et al., 2011; Onono, 2015).

*“The* *biggest* *problem* *is* *lack* *of* *transport.* *If* *you* *try* *to* *get* *to* *the* *hospital,* *you* *might* *have* *to* *give* *birth* *on* *the* *way” (C2WA2)* (Carter, 2010)

*‘Getting* *a* *means* *at* *night* *to* *take* *you* *to* *the* *hospital* *may* *be* *a* *bit* *difficult;* *this* *will* *make* *you* *to* *go* *to* *a* *TBA’* *p7* *8* *WOCBA* (Mason et al., 2015)

In the absence of motorised ambulances to ferry pregnant women to the dispensaries and health facilities, the only resort was to hire motorcycles or taxis for the journey. Moreover, because of the rough terrain in the area, the discomfort of using motorcycles to travel to the facilities would often lead to a deterioration of the women’s state (Essendi et al., 2015). Njuki et al. (2013) found that these same factors impact negatively on the distribution of maternity vouchers which were established primarily to improve access to facility-based births.

*Labour*

This theme covers the features of labour and childbirth as perceived by the respondents to influence where they give birth.

*Labour* *characteristics.* Both Moore et al. (2002) and Moindi et al. (2015) found that the timing of the onset (sudden or short labour) and the unpredictability of labour were mentioned widely by participants in their studies:

*“I* *can’t* *say* *so* *much* *there,* *because* *giving* *birth* *is* *just* *like* *an* *accident;* *an* *accident* *can* *occur* *at* *any* *time,* *you* *can’t* *tell* *when* *it* *is* *coming.* *”* [W1] (Moore et al., 2002)

*‘Most of those* *who deliver* *at* *home* *are not* *aware* *of* *their* *dates;* *they don’t* *go* *to* *the* *clinic* *thinking* *they* *will* *deliver* *next* *month* *when* *the* *date of* *delivery* *is* *this* *month’.* *(Focus* *group* *discussion* *1)* ( Moindi et al., 2015 )

A further logistic complication arises when labour begins at night, leaving pregnant women with no other option but to give birth at home (Nangendo, 2006). In some cases, this rapid onset leads to the selection of TBAs as the only option. For this reason, together with the difficulties associated with a lack of transport, the “preferred” care source is often the closest care source.

“*We* *prefer* *nearby* *places.”* [W23] (Moore et al., 2002)

Mwangome et al. (2012) suggested a need for more thorough education and expanded antenatal information programs in making women more aware of the implications of the rapid onset of labour for their birth choices.

A lack of birth preparedness was reported in several studies (Carter, 2010; Kagia, 2010; Moore et al., 2002). For instance, Carter (2010) explains that planning for birth was an unfamiliar concept to most women, even a cultural taboo in some settings. Apparently, husbands explained that, in both Giriama and Swahili culture, it is considered bad luck to prepare for a baby before its birth and that too much preparation could result in a complication such as a stillbirth (Carter, 2010).

In some cases, expectations of delay at the facility caused women to defer their departure to facilities (Moindi et al., 2015):

*“Sometimes* *it* *depends* *on* *the* *pain,* *the* *level* *of* *the* *pain.* *We* *don’t* *come* *to* *hospital* *just* *to* *wait* *to* *deliver.* *We* *wait* *till* *when* *we* *are* *almost…when* *the* *pain* *is* *severe” (Focus* *group* *discussion* *5)*

If encountered, serious complications determine the final care pathway. For example, in the study by Carter (2010) most TBAs responded that they could treat minor issues at home through traditional methods.

*“If* *there’s* *a* *big* *problem* *I* *refer* *to* *the* *dispensary* *but* *I* *know* *how* *to* *help* *with* *things* *like* *a* *piece* *of* *the* *placenta* *remaining* *inside” (C2M1).* (Carter, 2010)

Kagia (2010) found that most mothers acknowledged the potential risks associated with home birth such as retained placenta, obstructed labour, excessive bleeding or even death. The authors used this finding as evidence that it was not ignorance of risks that prompted the choice of birthplace but, instead, poor estimation of the quality of care provided in facilities (Kagia, 2010).

*Labour* *outcomes.* Positive outcomes from the birth were associated with standard birth in a home environment but with facility-based birth in the case of complications. Mason et al. (2015) observe that the preference for a health facility birth was primarily due to the understanding that if complications occurred either during the birth or in the postpartum period, this was the only place where they could be managed. Specific complications mentioned included excessive bleeding, retained placenta and having a large or poorly positioned child who would require an operation (Mason et al., 2015).

Data was not available to suggest a relationship between a previous poor outcome (as opposed to a poor experience of the quality of care) and future choice of place of giving birth. However, previous experience of successful births at home was seen to reinforce a need to continue the previously successful care pathway:

*“I* *had* *planned* *to* *deliver* *at* *home,* *the* *same* *way* *I* *did* *with* *my* *two* *children”.* (Echoka et al., 2014)

## Discussion

As revealed in previous studies, we identified complex interactions between diverse factors that collectively impact upon women’s attitudes to giving birth in health facilities. For instance, community preference for TBAs appears inextricably linked to traditionally held superstitions and beliefs and infrastructural deficits, widespread poverty, and paternalistic attitudes towards pregnant women in rural areas. For these women, the alternate side of the balance sheet presents poorly resourced health facilities and the reputation of skilled attendants as harsh, aggressive, and culturally insensitive.

Word-of-mouth further heightens and aggravates this interplay of matters; in several studies, female respondents voiced concerns based not on personal experience but the (verifiable or constructed) reminiscences of family members, neighbours, and friends.

Bohren et al. (2014) suggest that the twenty-year-old framework for the three phases of delay (i.e. delays in seeking care; delays in reaching care; and delays in receiving care) (Thaddeus and Maine, 1994) should usefully be expanded to include perceptions of care and anticipations of disrespect and abuse. Our review supports the importance of specific attitudinal preludes to care-seeking, which may relate to “non-precontemplation” of available care options; whether because of the dominance of certain social narratives, an avoidance of tempting fate or a prevalent fatalism. It also emphasises that these social narratives may relate to personal experience, personal observation, reported experience or observation of individual cases, or collective experience or observation from multiple instances, complicated by translation from the specific to the generalizable or, possibly, from the personal to the reported (in a quest to become non-attributable).

At an aggregative level, we found understandable similarities between findings from our review and those from Bohren et al. (2014). Concerns around access, attitudes of staff and stigma, amongst others, are common to both syntheses. Where a country-specific synthesis has the potential to add value is by adding context-specific nuances to an overall understanding e.g. in this instance of Kenya, the added complications of access during the rainy season and the system-wide impact of the voucher system or by revealing a relative emphasis on some factors when compared with others e.g. the presence of restrictive policies.

*Methodological* *strengths* *and* *limitations*

To the best of the authors’ knowledge, this is the first context-specific qualitative evidence synthesis on the perceived barriers to facility-based births in rural areas. We have demonstrated that concentrating study identification and analysis on a single context, not only determined geo- politically but also by rurality, offers more studies (16 eligible studies as compared to the two eligible studies in the corresponding multi-context review), thicker accounts of surrounding contextual detail and a more nuanced understanding of contextual circumstances, for example changes in government policy and introduction of a voucher scheme.

Methodologically, it is of potential concern that multi-context reviews may be accessing only a mere fraction of the available relevant evidence. Extrapolating from our own experience, and assuming an equal likelihood of urban and rural studies, the four studies included in the review by Bohren et al. (2014) from Kenya (two rural, two urban) may under-represent the appropriate qualitative evidence base, for one country alone, by a factor of eight. If one extends this finding across multiple LMICs, as featured in the multi-context review, not to mention additional countries that yielded zero studies but where similar targeted and intensive study identification might at least reveal the existence of a single study, then the potential deficits in the currently identified evidence base are considerable. The implications for a multi-context review of our preliminary findings on missed studies regarding the richness of data, support for already identified themes, support for potential additional themes and transferability to individual countries remain to be explored.

This review was also subject to limitations. Being a context-specific review, the findings of this synthesis may have limited generalisability to similar settings in sub-Saharan Africa. However, given the congruence of these results to those of the aforementioned multi-context review by Bohren et al. (2014), it could be inferred that a similar range of issues influences the choice of place of giving birth in different regions.

Although most studies were published within three years of 2013 when maternity services were made free in public facilities, we found that little qualitative research had been conducted (and subsequently) published more recently. Therefore, it was not possible to systematically analyse the shifts that may have occurred in women’s perceptions since the policy was introduced. Also, our review focused on the primary stakeholders, the women themselves. Qualitative research from husbands, families, professional and lay care providers and from administrative and policy officials would help to provide a more holistic view of the phenomenon. Incorporating multiple perspectives would be particularly helpful in cases where it was not possible to establish whether findings relate to perceptions or experience.

Studies conducted in urban areas were excluded from this synthesis even though some of these studies may have supported and improved the applicability of our findings to the whole country. Further work is required to explore appropriate conceptions of “relevance”; for example, whether the shared context is best examined geopolitically, as is most frequently the case in systematic reviews, or whether conceptions of rurality, as experienced in proximate countries such as Uganda or Ethiopia are, in fact, potentially more illuminating.

In contrast, a multi-context review may offer more transferable patterns of findings that transcend geopolitical barriers and present the potential for standardised responses, policies and monitoring and evaluation. Isolating local contextual factors, for specific within-country intervention, as revealed by a context-specific analysis, from more universal characteristics, explored by a multi-context review may help country governments in balancing national and international priorities.

## Conclusion

While the above analysis reveals many factors that are similarly explored in the multi-context review (Bohren et al., 2014); distrust of facility-based birth, infrastructure problems and the need for more information on the characteristics and potential benefits of the facilities, we can also detect some specific differences in emphasis. Our context-specific review revealed that women may have an initial intention to give birth in a facility, but this may be overtaken by the sudden onset of labour or become subordinate to the practicalities of transport, particularly at night. Cultural barriers such as the belief that home is the “natural” place for a normal birth, that hospitals are inflexible and do not accommodate cultural practices, that preparation for birth is tempting fate and that ‘whatever happens, happens’ emphasise that more than a “technical fix” is required. While improvements in infrastructure, access to facilities and in the attitudes of healthcare staff are actionable and are likely to offer an incremental path to greater uptake of facilities, the “final mile” is always likely to relate to the knowledge, attitudes and beliefs of the target population.

For the above reasons, it appears that no single type of intervention is likely to resolve this messy real-world problem. Facilities must work on presenting a more welcoming and culturally apposite environment for birth so that they are no longer characterised as the place of last resort, only for when complications arise. Productive partnerships between TBAs and facilities should be developed, such that both parties are identified within a single system rather than as competing alternatives; exemplified by instances where the TBA accompanies the woman to the hospital and may, incidentally, facilitate a more respectful and less abusive response from staff at the facility. Above all, work is required on ensuring that positive stories of birth in facilities compete with the prevailing social narrative to effect a feeling of genuine choice.

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## Supplementary materials

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