Maternal and Child Health Journal (2019) 23:872–879
https://doi.org/10.1007/s10995-018-02712-1

FROM THE FIELD

Adapting the 2015 Mother–Baby Friendly Birth Facility Guidelines for Semi-nomadic Pastoralist Communities in Laikipia and Samburu Counties of Kenya

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Published online: 9 January 2019

Abstract
Purpose To adapt the 2015 International Federation of Gynecologists and Obstetricians (FIGO), International Confederation of Midwives (ICM), White Ribbon Alliance (WRA), International Pediatric Association (IPA), and WHO auspiced Guidelines on Mother–Baby Friendly Facilities to a particular sub-population; seminomadic pastoralist communities of Laikipia and Samburu Counties, Kenya. We anticipate an increased utilization of childbirth services by improving their acceptability. *Description* We drafted a Pastoralist Friendly Birthing Facility Checklist based on the FIGO/ICM/WRA/IPA/WHO guidelines and previous research in this context. We employed mixed methods to finalise the adaptation: a workshop with 27 local stakeholders; interviews with ten health planners and skilled birth attendants (SBAs); and ten focus group discussions (FGDs) with health committee members, community health workers, mothers and traditional birth attendants (TBAs). A facility audit of dispensaries across five group ranches was also undertaken. *Assessment* The final Checklist was divided into: characteristics of care and the environment; care during labour and birth; post-partum care; and community staff relationships. It was endorsed by the Ministries of Health in the relevant counties, and by women, SBAs and TBAs. No facility currently satisfies all the criteria specified in the Checklist. *Conclusion* The FIGO/ICM/WRA/IPA/WHO Guidelines were successfully adapted and can be used to ensure health facilities meet the needs of pastoralist women.

Keywords Maternal health · Kenya · Mother–Baby Friendly Facility Guidelines · Quality care · Checklists · Pastoralists

Significance

The significance of this study is the provision of a step by step guide on how to contextualise international guidelines to develop a locally adapted and endorsed checklist for a particular population.

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Purpose

An estimated 40 million people deliver each year without skilled birth assistance. For many this is a choice based on negative experiences or beliefs regarding the quality of care at health facilities (Freedman and Kruk 2014) High quality is defined as care that is safe, effective, and provides a good experience for the patient (Godlee 2009). To address the last of these characteristics, the International Federation of Gynecology and Obstetrics (FIGO), the International Confederation of Midwives (ICM), the White Ribbon Alliance (WRA), the International Pediatric Association (IPA), and the World Health Organization (WHO), published the Mother–Baby Friendly Birthing Facility Guidelines in 2015, outlining the criteria necessary for respectful birthing care (Table 1) (FIGO 2015; Miller and Lalonde 2015). The Guidelines are a form of criterion based audit, that can be monitored by a checklist.

Checklists are increasingly recognised as a mechanism for ensuring the safety of populations accessing health services,

Table 1 FIGO Mother–baby friendly birthing facility checklist (FIGO 2015)

Criteria	Criteria indicators
Adopt preferred positions in labor for women and provide food and beverages	Written policy and implementation
Non-discriminatory policy for HIV-positive women, family planning, and youth services	Implementation of Checklist for HIV-positive women, family planning, and youth services
Privacy in labor/delivery	Curtains, walls, etc.
Choice of birthing partner	Accommodation of partners
Culturally competent care	Training, posters, policies
No physical, verbal, emotional, or financial abuse	Written policy, display Chart of Human Rights
Affordable cost, free maternity care	Costs in line with national Checklist
No routine practice	Evidence-based interventions
Nonpharmacological and pharmacological pain relief	Training on pain relief
Skin-to-skin mother–baby care, breastfeeding	Provide combined care for mother/baby, breastfeeding

and to standardise care according to the best evidence of effectiveness. They are applicable where a set sequence of actions ensures optimal outcomes, and are particularly popular in surgical settings. More recently they have been introduced to promote safe childbirth (Patabendige and Senanayake 2015; Spector et al. 2013). A checklist to support the introduction of the Mother–Baby Friendly Birthing Facility Guidelines is an example of a checklist that applies to a health system, rather than a particular clinical procedure.

The primary assumption under-pinning the checklist is that every woman has the right to a positive birth experience attended by knowledgeable, skilled, compassionate providers who provide respectful, dignified care. The checklist is guided by the following principles:

- Adheres to national and international standards of care
- Promotes evidence-based practices
- Be consistent with the guidelines for the prevention of disrespect and abuse
- Be endorsed by all stakeholders (government, communities, SBAs).

We report on the development of one of the first checklists to adapt the Guidelines to a particular context and population group, i.e. semi-nomadic pastoralist women resident in the counties of Laikipia and Samburu, in the central highlands of Kenya.

Kenya is transitioning to a greater proportion of facility-based deliveries, with the national levels increasing from 44% in 2008–2009, to 62% in the most recent Demographic and Health Survey in 2014 (DHS) (Kenya National Bureau of Statistics et al. 2015). Yet, in rural Kenya the majority of women continue to deliver at home, and government efforts to scale up the proportion of women delivering in health facilities by placing skilled birth attendants (SBAs) in dispensaries accessible to more remote communities has not led to the anticipated improvement in the uptake of facility-based deliveries. Neonatal and maternal mortality remains high in these communities, and < 30% of semi-nomadic pastoralist women reported a facility-based delivery in the 2014 DHS.

Recent research undertaken identified a number of factors contributing to the persistence of home-based deliveries despite more accessible services, including: distance, cost, unfriendly and disrespectful staff, and cold and ill equipped facilities (Byrne et al. 2016; Kermode et al. 2017). Preference for traditional birth attendants (TBAs) over SBAs was attributed to the care and companionship provided by TBAs throughout labour and delivery, while acknowledging their inability to manage a complicated birth. Combining the personal care of TBAs with the clinical effectiveness of SBAs has the potential to increase the acceptability of health facilities for childbirth and reduce maternal and newborn deaths.

By adapting the Mother–Baby Friendly Birthing Facility Guidelines, we developed an evidence-based Pastoralist Friendly Birthing Facility Checklist. The following outlines the steps in producing the checklist for health facilities serving pastoralist communities in Laikipia and Samburu counties of Kenya.

Description

The fieldwork was a mixed methods approach undertaken in January 2016 across five group ranches in two sub counties, where the majority of residents are semi nomadic pastoralists. The process involved the following: a consultation with government and non-government stakeholders who support maternal health services in the two counties (27 participants); five focus group discussions (FGDs) with mothers and five FGDs with community leaders, involving 111 participants in total; six in depth interviews with SBAs working in five group ranches (sub county administrative unit) in semi-nomadic pastoralist communities in the two counties

of Laikipia and Samburu; and a facility audit of each of the dispensaries sited in five group ranches (Chumvi, Makurian and Moropusi in Laikipia County, and Kirimon and Longewan in Samburu) county. Interviews with health workers were conducted in English by the lead author, and FGDs were conducted in the local language by locally trained facilitators. All interviews and FGDs were recorded, and transcribed and translated into English. Thematic analysis using the domains of the Mother Baby Friendly Checklist Guidelines was the framework employed.

The process to develop and adapt the Checklist involved six steps:

1. A draft checklist was developed incorporating findings from prior research in the two counties and the FIGO/ICM/WRA/IPA/WHO checklist (Byrne et al. 2016; Caulfield et al. 2016; Reeve et al. 2016).
2. A workshop with Ministries of Health (MoH) staff, SBAs and program staff involved in improving maternal, newborn and child health services was conducted to examine and refine each of the items in the Checklist.
3. Consultations with women, TBAs, community health workers and health facility management committee members on the Checklist components were conducted (ten FGDs, involving a total of 111 participants) (see Table 2).
4. Facility audits of dispensaries in five group ranches of Laikipia and Samburu were undertaken to identify gaps between existing infrastructure and supplies, and the Checklist requirements.
5. Interviews with SBAs currently working in five dispensaries serving pastoralist communities were held to review the Checklist components for their feasibility and acceptability.
6. Finally, the revised Checklist was reviewed and endorsed by county MoH in Laikipia and Samburu.

A similar question guide was used to review the checklist in the workshop, the interviews and the FGDs. The checklist was discussed according to its five domains (characteristics of the care of women, the environment, particular care during labour and immediate postpartum period, postnatal care, and communication systems between health workers and community members). Participants were asked to reflect on the acceptability and feasibility of the checklist and to recommend any changes. In addition the MoH and SBAs were also asked to consider what system changes would be required to fulfil the checklist, while women and community health workers were invited to discuss those aspects of care that are most sought after by pastoralist women and their families.

During the stakeholder workshop participants were divided into five groups (MoH staff, referral level hospital staff, dispensary level staff in each of the two counties, and program staff of NGOs working across both counties). Groups completed a worksheet on the feasibility, acceptability and system requirements for each of the 19 draft checklist items. These worksheets, and detailed notes from the plenary discussion were used in the data analysis. The interviews and FGDs were conducted in the relevant local languages (English with the SBAs and Kiswahili, Maa or Samburu for the FGDs), audio-recorded, and later translated and transcribed into English. Thematic analysis was conducted according to the major components of the checklist (care, environment, and communication). For the facility audit, 39 items required for the delivery of basic essential obstetric care services (including infrastructure, drugs and supplies and recording systems) were checked for availability.

Ethics approval was granted by the University of Melbourne Human Research Ethics Committee (ID1545664) and local permission was provided by the Ministry of Health, Laikipia North sub county.

Table 2 Characteristics of participants of the focus group discussions

Group Ranch	TBAs	Mothers	Female CHWs	Male CHWs	Female CHCs	Male CHCs	Female HFMC	Male HFMC
Chumvi	4	6	4	0	2	3	2	0
Makurian	4	5	6	4	2	3	0	1
Moropusi	4	8	2	3	2	3	0	0
Kirimon	5	5	4	4	2	2	0	2
Lori gewa	4	6	1	0	2	2	**2**	**2**
Total (111)	21	30	17	11	10	13	4	5

TBA traditional birth attendants, *CHWs* community health workers, *CHCs* Community Health Committee members, *HFMC* Health Facility Management Committee Members

Assessment

The results are organised and synthesised within the five domains of the proposed checklist: characteristics of the facility environment; characteristics of all care at the facility; specific care during labour and the immediate postnatal period; post partum care; and the relationship between health workers and community. Our Checklist builds on the Mother–Baby Friendly Birthing Facility Guidelines but is expanded to provide more details for particular components, and adapted to reflect what is important to women in this particular context. For example, reflecting the FIGO Guidelines indicator of evidence-based interventions we specified uterotonic administration and newborn cord care. The final version of the Pastoralist Friendly Birthing Facility Checklist is reproduced in Table 3.

Characteristics of Care

All participants endorsed the principle of mutual respect and the majority of respondents reported that mutual respect, confidentiality and non-discriminatory care was practiced in all but one of the facilities. The exception was a clinic where staff encouraged women to go directly to the nearby hospital for childbirth, and refused to attend women presenting outside daytime clinic hours.

Table 3 Pastoralist friendly birthing facility checklist

Characteristics of care
An atmosphere of mutual respect is maintained—no physical, verbal, or emotional abuse of staff, patients or families is permitted
All procedures are explained and informed consent obtained
All practices are evidence-based (including episiotomy, induction, management of complications, mother–baby bonding, infection control)
All care is non-discriminatory regardless of HIV status, marital status, age, financial status, education level, and ethnicity
Local customs, non-harmful practices, and values related to birth (including stillbirth) are respected
Health facility staff will include personnel proficient in the local language[a]
Confidentiality is maintained at all times
Care is affordable and all costing of services is transparent
Visiting hours have few restrictions, especially for immediate family members[b]
Characteristics of the environment
The health facility is adequately equipped and supplied to provide skilled birth attendance
Food and beverages are provided, or if not, facilities for food and beverage preparation are available
Clean water is available
The health facility is clean and adequately furnished
Toileting and hand-washing facilities are available
The labour room is kept warm
Care during labour and delivery
Women are free to eat, drink, walk, stand and move about during first stage, and allowed to adopt their preferred position for delivery
Women are allowed their choice of birthing companion so they are never left alone—this can be husband (if culturally appropriate), friend, relative or TBA
Privacy is maintained during labour and delivery
Non-pharmacological and pharmacological pain relief is provided
Labouring women are kept warmly clothed
A uterotonic drug is administered immediately after the baby is born
Immediate skin-to-skin mother–baby care is encouraged
Breastfeeding within 30 min of birth and ongoing breastfeeding support provided
Post-partum care
Cord care is provided for all babies
Mother and newborn are monitored by SBA for at least 24 h after delivery, and a system for follow-up monitoring is in place
Post-partum family planning advice is provided
Community-SBA relations
Regular review meetings with SBAs, CDC and TBAs are conducted
The SBA notifies the local communities when she is going to be absent

[a]Items added after community consultation

[b]Relevant for first level referral facilities only

As one health worker explained when discussing confidentiality.

> When a woman comes [for an antenatal visit] who I know is HIV positive I just manage so that she can be seen after the others without it being obvious, as if she comes in early and takes a long time (to address the HIV concerns) then others may guess, so I manage to keep her back and that works to avoid accidental disclosure

In contrast women in a different group ranch were unhappy with the care

> All women I know want to go to the clinic but sometimes nurses don't speak very well and sometimes they get angry if we haven't been coming for check-ups according to the schedule.
> Woman FGD Group Ranch 3

One characteristic that was added during the consultations was the need to have a staff member at the health facility who could speak the local language (Maa or Samburu). Many SBAs are seconded staff who do not speak the local language and women prefer explanations of care, particularly practices such as internal examinations to monitor cervical dilatation, to be in their language.

> Since the nurse isn't Maa speaking, it is important if possible that there could be a Maa speaking health worker also at the facility.
> Community leader FGD Group Ranch 4

In first level dispensaries, visiting hours were unrestricted so this component of the Checklist was already in place. However, visiting hours were restricted in referral facilities, and it was not possible for family members to remain with the woman after birth.

> It is not good to have very strict visiting hours because sometimes relatives travel all the way to Maralal hospital only to find that the gate is closed and they aren't allowed to visit until later in the afternoon but they need to go back home as it is far and they end up not seeing her.
> Woman FGD Group Ranch 5

Characteristics of the Environment

Women were very forthcoming when discussing the environment; the room needs to be clean, warm and private, including not being within earshot of other clinic activities. Most first level dispensaries have the delivery room adjacent to the main clinical consulting space with a curtain separating the two spaces, so providing the preferred level of privacy is not currently possible.

> Privacy is important – you need to have a person of your own choice ONLY. Sometimes there are many people and they can hear you while you are in labour and delivering.
> Woman FGD Group Ranch 1

All respondents prioritised electricity supply, running water and sanitation, with access for both staff and patients.

> The [inside facility] toilet should be able to be used by women in labour rather than having to use the outside pit latrine
> Women's FGD Group Ranch 1

In contrast, health workers prioritised more space to enable better access to women while assisting the delivery. The facility audit revealed that most clinics did not have any means of heating, nor did they have blankets or clothes to ensure mothers and newborns are kept warm (see Table 4). While drugs and essential supplies were available in all but one clinic, there was no dedicated place to check a newborn or provide newborn resuscitation, and in three of the five clinics the neonatal manual resuscitator (bag valve mask) was still in the original packaging and stored in a separate room.

Facilities did not provide food for women during labour nor were there cooking facilities for families.

Care During Labour and Immediate Postnatal Period

There was almost universal support from women, TBAs and community members for allowing a companion throughout the labour and delivery; for women to freely move around during labour; and to birth in a position of their choosing. SBAs expressed some reservations at having a TBA or other companion present during second stage because the delivery space was so small. Similarly, in two clinics where the delivery bed was against a wall in a corner of the room with little room to move around, the SBAs indicated that delivery positions other than the lithotomy position, such as delivering on all fours, would be difficult to support.

Many women stated that they would feel reassured if they were able to stay for 24 h after the delivery and if a warm place with cooking facilities was available for them and their family.

> If you could address the cold we would actually like to stay longer but we are encouraged to go.
> Woman FGD Group Ranch 1
> Some of us would like to stay as that would be reassuring, but you cannot light a fire in a facility.
> Woman FGD Group Ranch 2

The criterion of staying 24 h was one of the most discussed by the MoH staff and senior health planners.

Table 4 Facility audit results

Components	Clinics with item present (N = 5)	Additional comments
Delivery sets	4	Only one was sterilized ready for immediate use
Newborn resuscitation set	4	None in delivery rooms and 1/4 packed away in distant room
Stethoscope	5	
Sphygmomanometer	3	
Fetoscope	4	
Thermometer	4	
Baby weighing machine	4	1/4 still packed in storeroom
Oxygen	0	
Separate room for delivery	4	2/4 very small side rooms in clinic
Privacy measures in place	3	
Electricity	4	All solar, one not working
Back up generator/equivalent power source	0	
Running water in the facility	0	Two had outside taps
Toilet	5	All pit latrines far from facility building
Road access to facility	5	Three difficult and weather dependent
Handwashing facilities available	3	Jug and buckets provided
Food preparation for families available	2	
24 h post partum observation available	1	One clinic has a manyatta in the grounds
Labour room has heating	0	
Non lithotomy delivery positions allowed and space available	2	
IV giving sets and fluids	5	
Suture materials	4	
Plain catheter	4	
Chlorine	4	
Gloves	5	
Soap and detergent	3	
Oxytocin	4	Fifth clinic had expired medicine—all kept at room temperature
Ceftriaxone	5	
Metronidazole	4	
Gentamycin	5	
Paracetamol	5	
Local anaesthetic	5	
Magnesium sulphate	4	
Antiseptic solution	5	
Referral vehicle available	0	
Partographs completed	1	Incorrectly completed
Maternity register book	3	Two unable to be located
Contact details for Community Health Workers kept at facility	0	
Financial charges displayed publicly	2	Both in English

Postpartum observation for 24 h is the national standard yet most women leave facilities within 8 h of a delivery. There was discussion about the feasibility of solo SBAs providing post-partum monitoring for 24 h, given that they had already been attending to the woman throughout the labour and birth.

Provision of a place to stay following delivery was available in only one facility where community members had constructed and furnished a *manyatta* (a traditional home) in the grounds of the dispensary. The four other clinics were in the process of building similar *manyattas* to encourage women to stay for 24 h following the birth. *Manyattas* are

small dwellings with an open fire inside, raising some concern regarding the exposure of newborn infants to smoke inhalation.

> We do not have a maternity manyatta at the health facility and therefore women prefer going home where they can be comfortable and warm with family members and other companions because if she stays at the facility alone she feels lonely
> Woman, FGD Group Ranch 5

Communication Systems Between Health Workers and the Community

The category of community-facility communication systems was additional to the FIGO Checklist. This criterion arose from the previous research, where strengthening the links between community members and facility staff was recognised as a critical step in increasing the acceptability of birthing at a facility. For pastoralist women who sometimes have to travel long distances to reach a health facility, arriving in labour only to find the staff on leave or away from their post undermines the community's trust in the services. Two components were endorsed: the first was to develop an SMS messaging system to inform local community health workers when there is no SBA present at the clinic; the second was to establish a mechanism of mutual accountability for pastoralist friendly health services. The existing dispensary health facility management committees were identified as suitable to fulfil this element of the checklist. In our setting, participants recommended meeting every 6 weeks, matching the routine government reporting calendar, and involving the clinic staff, health facility committee members, and community health workers, to review service acceptability.

> Meetings are very important because we have stayed for long without holding a community meeting & do not know how things are there. If the meetings can be held at least every 1½ months it will give the concerned ample time to prepare reports and addrss previous issues and thereafter the information shared to the community where necessary. In case there will be a pressing issue that required the attention of the community members in-between an emergency meeting will be constituted.
> Community health worker FGD Group Ranch 5

Conclusion

The Checklist development process generated significant discussion about the quality and acceptability of childbirth services, and all stakeholders endorsed the final version of the Checklist. The process of validating the Checklist components with health workers and community members highlighted the differing perspectives and priorities of providers and clients, a finding that is reflected in other research. Providers focused on the supply components of the Checklist, while women were more focused on factors that directly affected their experience of care (Sychareun et al. 2012, 2013).

In other settings, initiatives to promote facility-based deliveries have created tension for traditional providers, who may be fearful of losing power or influence (UN Millennium Project 2005). TBAs in our pastoralist communities often provide care for up to 4 weeks peri partum and their acknowledged role extends beyond the birth (Reeve et al. 2016). There was recognition that TBAs can provide their usual supportive expectant care during labour and birth in the facilities, just as they would at home, if health workers allow them to stay for the birth. Consequently, in this setting, the role of the TBA is not undermined by encouraging more facility-based deliveries.

There are limitations to our study. It was confined to two counties of Kenya and to those group ranches containing both a high proportion of pastoralist communities and a functional health facility providing childbirth services. Consequently, it may not reflect other pastoralist communities in Kenya or pastoralists residing in other countries. Similarly the mothers and TBAs were selected by the CHWs in each group ranch and may not represent all mothers or TBAs in the study area. The context specific nature of our checklist is also its potential strength and while the checklist itself would not transfer to other settings without local consultation, the process can inform those undertaking similar adaptations. Our study also did not extend to the County level secondary referral hospitals, yet women requiring caesarean sections or other comprehensive obstetric services are referred to the County hospitals. While our checklist is primarily focused at making these first and second level health facilities pastoralist-friendly ideally the referral hospitals should be included as well.

Through a consultative, collaborative process we have created an evidence-based, stakeholder-endorsed checklist to promote pastoralist-friendly birthing facilities in Laikipia and Samburu Counties of Kenya. This Checklist can be used by health planners to design health facilities that meet the needs of pastoralist women and their families, and by communities as a tool for ensuring local accountability of the health facilities. The application of this checklist is now being trialled by MUACK through the AACES project, and its effectiveness will be evaluated in terms of feasibility, applicability and impact on the proportion of health facility births. The steps outlined above can be applied in other contexts to ensure that the FIGO Guidelines are a meaningfully adapted to the local needs of diverse settings.

Acknowledgements Funding for this study was provided by the Australian Government Department of Foreign Affairs and Trade, through the Australia Africa Community Engagement Scheme, implemented by Anglican Overseas Aid, The Nossal Institute for Global Health and the Mothers Union of the Anglican Church of Kenya.

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