Factors influencing the uptake of skilled birth attendance in Tanzania; a literature-review

Illustration: from the author

Myrrith Hulsbergen

The Netherlands

55th Master of Science in Public Health/ International Course in Health Development

KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam (VU)
September 2019

FACTORS INFLUENCING THE UPTAKE OF SKILLED BIRTH ATTENDANCE IN TANZANIA; A LITERATURE REVIEW

A thesis submitted in partial fulfilment of the requirement for the degree of
Master of Science in Public Health

by

Myrrith Hulsbergen,
The Netherlands

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Where other people's work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

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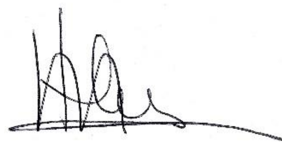
Signature 

55th Master of Science in Public Health/International Course in Health Development
17 September 2018 – 6 September 2019
KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam
Amsterdam, The Netherlands

September 2019

Organised by:

KIT (Royal Tropical Institute)
Amsterdam, The Netherlands

In co-operation with:

Vrije Universiteit Amsterdam/ Free University of Amsterdam (VU)
Amsterdam, The Netherlands

Acknowledgement

It would have been difficult, if not impossible, to write this thesis without the support of several people around me. I would like to thank all who have stimulated me by reading and giving comments, by keeping up the spirit when thesis-writing felt like an endless story, and by making sure that I could study by taking care of daughter Dewi and me when necessary.

My thesis advisor made me happy by repeatedly saying that she enjoyed reading the drafts. She provided many useful comments and advises, like “let the chapters talk to each other”, which helped me to visualize which direction I had to go. Support of my back-stopper was always positive. She tried to reduce stress when necessary, helped me to understand unreadable articles and gave important remarks. My uncle was great by reading my draft twice and giving useful comments.

Without the other ICHD students, I would not have come this far. What’s apps, phone calls and meetings were very stimulating. Studying together with Valeria in classroom 2 at KIT, newly named “the quiet room”, felt like the secret towards passing. Thank you big ICHD family, wish you all the best for the future and hope to stay in touch.

The acceptance from my Dutch friends that I was always busy and had hardly any time to spend together, is worth a compliment.

Incredible that my parents accepted my stay in France for 2 weeks. They provided me with food, snacks, great weather and care for my daughter, their grandchild. These two weeks gave energy for the finishing touch.

Thank you Risto, soulmate forever, for accepting my mood-swings and stress around deadlines and for ensuring that I could study when necessary.

And of course, my sweetheart Dewi, I have tried not to let you suffer too much, working mainly while you slept or went to school. You have been great accepting my studying. You are fantastic.

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List of Abbreviations

ANC	Antenatal Care/Clinic
(A)OR	(Adjusted) Odds Ratio
BEmONC	Basic Emergency Obstetric and Neonatal Care
BRN	Big Results Now
CEmONC	Comprehensive Emergency Obstetric and Neonatal Care
CSC	Client Service Chart
DHS	Demographic and Health Survey
FANC	Focused Antenatal Care
FYDP II	Five Year Development Plan II
e-/mHealth	electronic/mobile Health
HSSP IV	Heath Sector Strategic Plan IV
ICT	Information and Communication Technology
LMIC	Low- and Middle-Income Countries
MDG	Millennium Development Goals
MMR	Maternal Mortality Ratio
MoHSW	Ministry of Health & Social Welfare
MSD	Medical Stores Department
OBD	Open Birth Days
PMTCT	Prevention of Mother-to-Child Transmission
RMC	Respectful Maternal Care
SBA	Skilled Birth Attendance
SES	Socio-Economic Status
SDG	Sustainable Development Goals
SMS	Short Message Service
TBA	Traditional Birth Attendant
TFR	Total Fertility Rate
USD	US Dollar
WHO	World Health Organization

Glossary

Disrespect and abuse in childbirth: interactions or facility conditions that local consensus seems to be humiliating or undignified, and those interactions or conditions that are experienced as or intended to be humiliating or undignified (1).

Health seeking behaviour: individual's deeds to the promotion of maximum well-being, recovery and rehabilitation; this could happen with or without health concerns and within a range of potential to real health concerns (2).

Health(care) system: all organizations, people and actions whose *primary intent* is to promote, restore or maintain health (3).

Maternal care: all interventions to avert avoidable maternal deaths (4). *Adapted by the author:* the care given to women during pregnancy, labour and after delivery. This should be given in respect of the sexual and reproductive rights and needs to be safe and of good quality.

Maternal mortality ratio: the annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births, for a specified year (5).

Quality of care: the extent to which health care services provided to individuals and patient populations improve desired health outcomes. In order to achieve this goal, health care must be safe, effective, timely, efficient, equitable and people-centred (6).

Respect: The treatment of others with deference in daily interactions, weighing their values, views, opinions and preferences (7). Synonyms: consideration, thoughtfulness, attentiveness, politeness, courtesy, civility, deference.

Respectful maternal care: care organized for and provided to all women in a manner that maintains their dignity, privacy and confidentiality, ensures freedom from harm and mistreatment, and enables informed choice and continuous support during labour and child birth (8).

Skilled birth attendance rate: Proportion of births attended by skilled health personnel (%) (9).

Skilled birth attendant: competent maternal and newborn health (MNH) professional educated, trained and regulated to national and international standards (9).

Traditional birth attendant: a person who assists the mother during childbirth and initially acquired her skills by delivering babies herself or through apprenticeship to other traditional birth attendants (10).

Vulnerability: the degree to which a population, individual or organization is unable to anticipate, cope with, resist and recover from the impacts of disasters (11).

Abstract

Introduction Increasing skilled birth attendance (SBA) is expected to reduce maternal mortality in low- and middle-income countries. Uptake of SBA is only 64% and maternal mortality ratio is 398/100.000 women in Tanzania. This thesis explores the factors influencing uptake of SBA in Tanzania and best practices on respectful maternal care, to give recommendations to the Ministry of Health & Social Welfare (MoHSW) and engaged local stakeholders to increase skilled birth attendance.

Methodology This literature review used the "person-centered care framework for reproductive health equity" from Sudhinaraset. Academic databases, search engines and websites were consulted, and snowball technique was used.

Results Uptake of SBA was influenced by gender and power-imbalances, ethnicity and discrimination, low knowledge of danger signs and inadequate birth preparation. Quality of maternal care was below standards due to bad management, shortage of resources, low levels of integrated care and an inadequate referral system. Rural facilities suffered most. Widespread disrespectful care was linked to working circumstances of the healthcare providers, but also to provider's intrinsic bad attitude and discrimination towards patients. Responses of dissatisfied patients were quiet acceptance of abuse, delivering at home with a traditional birth attendant (TBA) or bypassing to other facilities.

Discussion Multi-component interventions are needed, with strong management and accountability at all levels. TBA participation in counselling and referral can be considered. Upcoming ICT might add to improved quality of care. Recommendations on policies, interventions and research are made.

Key terms quality of maternal care, respect, Tanzania, skilled birth attendance, human rights.

Wordcount thesis: 12464

Introduction

Despite the worldwide reduction of maternal mortality, huge disparities exist between countries, whereby low-income countries face the highest burden. Lifetime risk of maternal death is 1:36 in sub-Saharan Africa, compared to 1:5700 in high income countries (12). Reason for high maternal mortality is thought to be the low skilled birth attendance rate in low- and middle-income countries. But why is the skilled birth attendance rate low? Which factors influence uptake of skilled birth attendance? Many factors are thought to affect uptake: societal and community factors, the quality of maternal care and whether the provided care is given with respect for the pregnant woman (13). The provision of good quality maternal care is closely connected with respecting human rights; these rights are the base of life and need to be appreciated in a provider-patient relationship (14).

Maternal health is a major topic in Tanzania. The reduction of maternal mortality is slower than originally targeted according to the MGDs and now the SDGs (5). Despite strategies on quality of care, the uptake of skilled birth attendance is still low and improvement of quality of care is inadequate. Working in Tanzania and other countries in Eastern Africa, I encountered several challenges to ensure quality of care as well as the resulting undesirable maternal outcomes. At that time, but also now, I am aware that changes are difficult to achieve possibly due to local societal factors, shortage of resources and the lack of overall management at facilities as well as good governance at government level.

Facing these unequitable perspectives between women in Tanzania compared to women in my home country, the Netherlands, I feel the need to react and try to make a change by exploring the factors around uptake of skilled birth attendance in Tanzania. I will try to recommend on how to improve policy and practice. Without equitable perspectives for all women, the SDG targets in 2030 will never be reached.

Structure of the thesis

Chapter 1 describes the background of Tanzania, with general information as well as information on the health system and on relevant health indicators. Chapter 2 contains problem statement and research objectives. Chapter 3 explains the methodology and analytical framework. The results are described in chapter 4-7, focussing on influencing factors on the uptake of skilled birth attendance and on the provision of quality and respectful maternal care in Tanzania. Best practices towards respectful maternal care are explored to roll out in Tanzania. Hereafter the discussion in chapter 8 reviews the explored findings and best practices as well as limitations of the used framework and the thesis. Chapter 9 closes the thesis with the conclusion and recommendations for the MoHSW and engaged local stakeholders, to improve policy and practice to increase skilled birth attendance

1 Background on Tanzania

This chapter presents background information on Tanzania. The chapter describes general demographic issues, the healthcare system and important health indicators related to maternal health, quality of maternal care and skilled birth attendance.

1.1 General

The United Republic of Tanzania is the largest country in the Eastern part of Africa, just South of the Equator. Tanzania is surrounded by eight countries: Kenya and Uganda, Rwanda, Burundi and the DRC, Zambia, Malawi and Mozambique. The coastline in the East is bordered by the Indian ocean. The country is crossed by the Rift Valley, a mountainous area running from South to North. The Mount Kilimanjaro is the highest mountain in Tanzania respectively Africa with 5,895 metres of altitude and serves as an important attraction for tourists. In general, the countries altitude is mainly above 1000 metres (15).

Tanzania measures 943,300 km2, 16% being covered by inland water (15,16). The country knows two rainy seasons, of which the main rainy season is recognized from March to May, and the shorter rainfall from October to December. Nowadays rainfall seems to become less predictable, which has influence on agriculture and as a result on income and health of the rural population, since 80% of the population ears its income by agriculture (15,17).

The population counts 60 million in 2019, of which 70% lives in rural areas (18). Literacy is low, 23% of the women is unable to read or write, with big differences between urban and rural living women (11% versus 30%) (15). Almost 15% of women have no education and only 22% manages to finish form 4 in secondary school. In 2015, 22.8% of the population lived below the poverty line of 1.90 USD/day (19).

1.2 Healthcare system

Tanzania is divided in 27 administrative regions, 133 districts and 162 governments or councils. The local governments are highly important for the running and implementation of public services (16).

The healthcare pyramid (Annex 1) shows the different levels of the healthcare system where healthcare is provided in Tanzania. In 2014 the public sector had 269 hospitals, 614 health centres and 5,819 dispensaries. In the private sector, 39 hospitals, 78 health centres and 1123 dispensaries were available (16). Since primary healthcare facilities (dispensaries and health centres) count 77% of the total amount of facilities and are mainly public services, these serve as gatekeeper within the formal healthcare system and are responsible for uncomplicated maternal care and necessary referrals (20). These primary facilities have been extended and upgraded to improve coverage since independence, however still disparities exist within the country (15,20,21). The nearest primary healthcare facility should be within five kilometres distance for around 90% of the population. Hospitals are more difficult to reach, especially for people living in rural areas (22). The World Health Organization (WHO) gives recommendations on the acceptable travel time towards health facilities, which is interpreted by authors as between 30 and 60 minutes (23). According to this, the Tanzanian government developed a strategy to place a dispensary in every village and a health centre in every local ward to increase access to care, including maternal health care (15,20,24). However, precise data on the geographical distribution of these primary healthcare facilities are not available (25).

Strategic plans in Tanzania have been aiming at reaching the Millennium Development Goals (MDGs), and at present concentrate on the Sustainable Development Goals (SDGs). However, only around 9% of the total national budget is spent on health by the Tanzanian government, much lower than the Abuja target of 15% (26). (27). One Plan II (2018-2022) is directed towards the reduction of preventable morbidity and mortality for women and their children by ensuring quality of equitable care, skilled attendance and a continuum of care by facility and community level (26). The Health Sector Strategic Plan 2015-2020 (HSSP IV) aims on quality improvement of primary health care, equitable access to services, community partnerships in service delivery and management, innovative partnerships and intersectoral collaboration according to the Big Results Now (BRN) initiative (16). Also, information and communications technology (ICT) is described to improve efficiency and access to care, targeting at 100% coverage of the hospitals and 25% of the primary healthcare facilities in 2020 (16). Additionally, the (draft) National eHealth Strategy 2013-2018 aims to increase the use of electronic devices in order to improve health by healthcare promotion and appointment reminders (22). In March 2019, nearly 44 million Tanzanians used a mobile phone and more than 23 million of the population had access to internet, with continuous increase since years (28). This means that, despite the increased use of mobile phones and internet, the services are not available for the entire population yet. Lastly, the Five-Year Development Plan II (FYDP II) aims on economic development. Underlying policies of Tanzania are Vision 2025, National Health Policy, National Population Policy and National Youth Development Policy (29–32).

The national clinical practice guidelines, which should be available at all health facilities, are inspired by the WHO/UNICEF guidelines (6,8,17,33–36). Examples of the Tanzanian guidelines are "Focused Antenatal Care (FANC)", "Emergency Obstetric Job Aide" and the "Antenatal Card" which are meant as base of good quality and equal maternal care (17,37). The Focused Antenatal Care Program (FANC) of the WHO, which has been adopted by Tanzania, focuses on informing women about risks and diseases, as well as prevention and treatment with an attendance frequency of minimum 4 visits (17,38).

Healthcare is a human right which needs to be fulfilled by the Tanzanian government. But services are inadequate without availability of resources, putting women and healthcare workers at risk (4). Human resources are insufficient as mentioned in several strategic plans of the MoHSW, despite initiatives to upgrade workforce (15,16,27,39). From 2010-2015, 99.000 additional health care providers were trained (16). Minimum required medical personnel conform WHO standards is 23/10.000 doctors, midwifes and nurses (40). However, in Tanzania the total density of workforce in 2014 was 14,5/10.000 people, of which 0,45/10.000 medical doctor or specialist, 0,37/10.000 assistant medical officer and 1,42/10.000 clinical officer or assistant. Rural areas are in higher need of medical staff compared to urban areas (15,16,27). Also, it is shown that the performance of staff in rural government settings is worse compared to urban settings due to lower motivation and accountability (39). Furthermore, since there is no system of re-accreditation or quality assurance yet, quality of the health workers stays behind at all levels (16). Lastly, shortage of equipment and supply is a continuous problem, mainly due to poor planning and organisation at facility level and/or bad procurement (16). All these factors influence quality of care and might have effect on the motivation of the health worker.

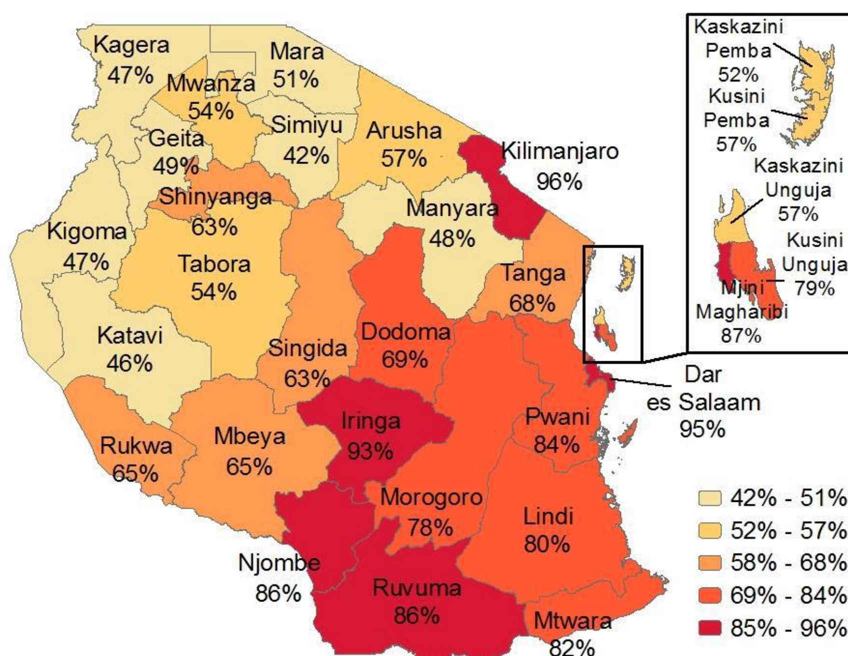
1.3 Health indicators

The maternal mortality ratio (MMR) has reduced to 398/100.000 live births in 2015, coming from 842/100.000 live births in 2000 (5,41,42). Despite this reduction, the MMR is still far above the global level of 210/100.000 live births, as well as above the MDG 5 target, which aimed to reduce the MMR with 75% (43). To reach the 2030 SDG 3.1 target, reducing the

maternal mortality ration to less than 70/100.000 live births, an accelerated reduction needs to take place (44). Total fertility rate (TFR) is 5,2 children/woman, but the difference between rural and urban areas is high, namely 6.0 versus 3.8 children/woman (15). The adolescent fertility rate was 115/1000 women aged 15-19 years in 2017 (45). Additionally, only one third of married women of 15-49 years use modern contraceptives in 2015 and half of the women of 19 years of age are either pregnant or have given birth (15). Population growth has been 2.7% annually over the last years (15,16). The trends of TFR and modern contraceptive use show some improvement: TFR is slowly reducing (5.7 children/woman in 2004 and 5.4 children/woman in 2010) and the modern contraceptive use is on the rise, from 20% of the married women in 2004 to 27% in 2010 and upward (15).

In Tanzania 64% of the deliveries were assisted by a skilled attendant in 2015-2016, which is improving when we compare with 2010 and earlier in 1999 (51% and 36%) (15). However, when we compare the capital Dar es Salaam with rural areas, the differences in skilled birth attendance (SBA) are enormous with 95% attendance in Dar es Salaam till only 42% skilled birth attendance in rural Tanzania (Figure 1) (15). The skilled birth attendance rate in developing countries only increased from 56% in 1990 to around 68% in 2012-2017, in contrast to 81% SBA globally (6,46). Interesting is the difference between SBA and antenatal care (ANC) attendance. Antenatal care is attended by more than 95% of the pregnant women in Tanzania at least once during their pregnancy, but this does not reflect in skilled childbirth at health facilities (20,38,47–50). But ANC attendance reduces during pregnancy; just above 50% of the women visits ANC four or more times as is recommended by the FANC guidelines (15).

Figure 1 Skilled assistance at delivery by region: Percentage of live births in the 5 years before the survey assisted by a skilled provider; source DHS Tanzania (2015) (15).



Around 1970, the first attention towards respectful care arose in the United States and Canada (51). Reviews like Bowser and Hill and Bohren categorized disrespectful care in different components, corresponding with the universal rights of childbearing women and including environment and health system (52–54). The so-called disrespectful maternal care is found everywhere in the world, however in underserved countries like Tanzania, incidence is higher with more severe types of maltreatment (51,52,54–56). Between 15-70% of the childbearing women in Tanzania were confronted with disrespectful behaviour by healthcare workers during their delivery in 2013 (54,57). More recent estimations are not available. Despite this, official documents like the Health Sector Strategic Plan and the National Five Year Development Plan as well as the Demographic and Health Survey (DHS), only mention quality of care improvement, without focussing on the importance of respectful care (15,16,27).

MMR:	398/100.000 live births in 2015 (5)
SBA:	64% of deliveries in Tanzania are assisted by a skilled attendant (15)
ANC:	>95% of women visit ANC at least once (20,38,47–50)
Disrespect:	15-70% of the childbearing women experience any disrespectful care (54,57)

2 Problem statement and objectives

This chapter introduces the difficulties Tanzania encounters in reaching good maternal outcomes conform the global targets. Since there is a link between maternal outcome and skilled birth attendance (SBA), focus will be on factors influencing the uptake of SBA. The general and specific objectives will be presented.

2.1 Problem statement

Despite efforts to improve health coverage within the low government budget of 9% on health, skilled birth attendance is still too low and maternal mortality too high (26). In 2015, the maternal mortality ratio (MMR) in Tanzania was still 398/100.000 live births in 2015 (5). Most common causes of maternal death are complications during or after childbirth like haemorrhage, hypertensive disorders, sepsis, complications due to abortions, thromboembolism and obstructed labour. Of these complications, 70% are preventable (58,59). An increase in uptake of SBA in order to prevent or give early treatment to complications during childbirth, is expected to reduce maternal mortality (9,59). However, only 64% of deliveries in Tanzania are assisted by a skilled attendant and the gap between first ANC attendance and facility delivery is enormous (15,20,38,47–49).

Despite strategic plans and interventions to reduce maternal mortality and increase skilled birth attendance, women often choose to deliver at home with a traditional birth attendant (TBA) or a family member, who is observing progress and facilitating the delivery (16,60–62). A TBA is untrained and has initially acquired her skills by delivering babies herself or through training from other traditional birth attendants. A TBAs can have joined some short skills-training however, TBAs are generally called unskilled and as a consequence are not part of the formal health care system (10). This in contrast to the skilled birth attendant, who is a professional competent in maternal and newborn health (MNH) and mostly working in formal healthcare facilities (9).

It is believed that quality of care is the main cause low uptake of SBA (6). As we have seen in the background, the Tanzanian government puts many efforts to improve quality of care and access, however respectful care is not described and changes on improvement are slow (16,26,27). Human workforce is low, and resources (drugs, supplies) are lacking. Disparities in coverage of workforce and performance exist between facilities, whereby rural areas suffer most (16,27). Tanzania has no legal structure that regulates the registration of public health facilities; this means that there are no minimum norms on the quality of care given (60). A five-star-rating system was established in 2015 to learn about the problems around access and referral amongst the health facilities. The system measures management, accountability, safety and quality of care within the health facilities. Results were confronting because quality of care in healthcare facilities was far below standards (16,60,63).

Patients and healthcare providers can have different opinions about quality of maternal care. Quality is about medical treatment, but also about how a patient is approached in terms of privacy, respect and dignity, autonomy, communication, and supportive care (6,13,59). Tanzania faces a high prevalence of disrespectful care. Both qualitative and quantitative studies have been done on disrespectful and abusive maternal care in Tanzania and elsewhere, since it is expected that this slows down the increase in skilled birth attendance (4,48,55–57,64–67). Some systematic reviews have described disrespectful care, however which interventions which will be most effective in Tanzania is not clear yet (51,52,54–56). But, a global survey among

multiple key-stakeholders about their experiences in the implementation of RMC interventions resulted in the following recommendations: 1) to ensure political commitment at all levels reflected in policies and guidelines, 2) to ensure financial resources, 3) to ensure smooth collaboration of all stakeholders between different levels, with strong leadership and management, 4) to invest in trainings and supervision, 5) to support and encourage health workers to be change agents, 6) to involve the community, and 7) to increase awareness at all levels and identify best practices (51).

Factors influencing skilled birth attendance might be more complex than assumed resulting in low uptake of skilled birth attendance. This thesis aims to explore the underlying factors on uptake of skilled birth attendance and tries to understand the failure of achieving targets, since good health and access to good quality of care are human rights which need to be pursued.

2.2 Objectives

2.2.1 General objective

To explore the factors influencing uptake of skilled birth attendance in Tanzania, in order to give recommendations to the Ministry of Health & Social Welfare and the engaged local stakeholders to improve policy and practice to increase skilled birth attendance.

2.2.2 Specific objectives

1 To describe societal and community factors influencing uptake of skilled birth attendance

2 To explore health seeking behaviour related to the decision to seek skilled birth attendance in health facilities

3 To explore facility quality of maternal care in health facilities, in terms of provision of care and person-centred outcomes

4 To analyse best practices on respectful maternal care from Tanzania and other countries, to implement in Tanzania

5 To give recommendations to the Ministry of Health & Social Welfare and the engaged local stakeholders to improve policy and practice to increase skilled birth attendance

3 Methodology

This chapter gives an overview of the type of study and search strategy, the applied analytical framework and limitations of the study methodology.

3.1 Study type

The methodology of the study is a literature review and desk study, i.e. a review on published and unpublished articles and documents. The study reviews societal and community factors influencing the uptake of skilled birth attendance, health seeking behaviour leading to the decision to seek care and the quality of maternal care including respectful care in Tanzania. Then, best practices on respectful maternal care in Tanzania and comparable countries are selected and analysed. This literature search was performed in the period from February - August 2019.

3.1.1 Search strategy

A systematic overview of the search strategy is shown in 3.1.3, table 1. Academic databases like Pubmed, Medline, Research Gate and the online library of the VU University in Amsterdam were consulted and search engines like Google and Google Scholar were used to find peer-reviewed articles. Grey literature was searched for at different websites: from the Ministry of Health of Tanzania (MoHSW), from unilateral organisations as the World Health Organization (WHO) and World Bank and from academic organizations as Cochrane, the International Federation of Gynaecology and Obstetrics (FIGO) and the Association of Gynaecologists and Obstetricians of Tanzania (AGOTA). Lastly a snowball-technique was used, identifying interesting references during the reading of selected articles.

Main keywords used: Tanzania, quality, maternal care, uptake, access, human rights, health seeking (behaviour), delivery, (dis)respect(ful), distrust, expectation, abuse, attitude, bypassing, TBA, perspective, skilled birth attendance, prevalence, TBA, ethnicity, guidelines, best practice(s), RCT, intervention, outcome. Key terms are defined in the glossary. AND/OR strategy was used depending on the results found.

3.1.2 Inclusion and exclusion criteria

In order to achieve the most important articles and reports without making the search too extensive, peer reviewed publications and grey literature from the last 10 years was searched. To be able to select without making use of translators due to limited time, only English language was included. When interesting publications of an earlier publication date were found by chance, these were included as well.

Inclusion: English language, full text available, publication in the last 10 years and selected important publication of earlier publication date, peer-reviewed, grey literature.

Exclusion: Non-English, only abstract available.

3.1.3 Literature Search

Table 1 Keywords used for search strategy

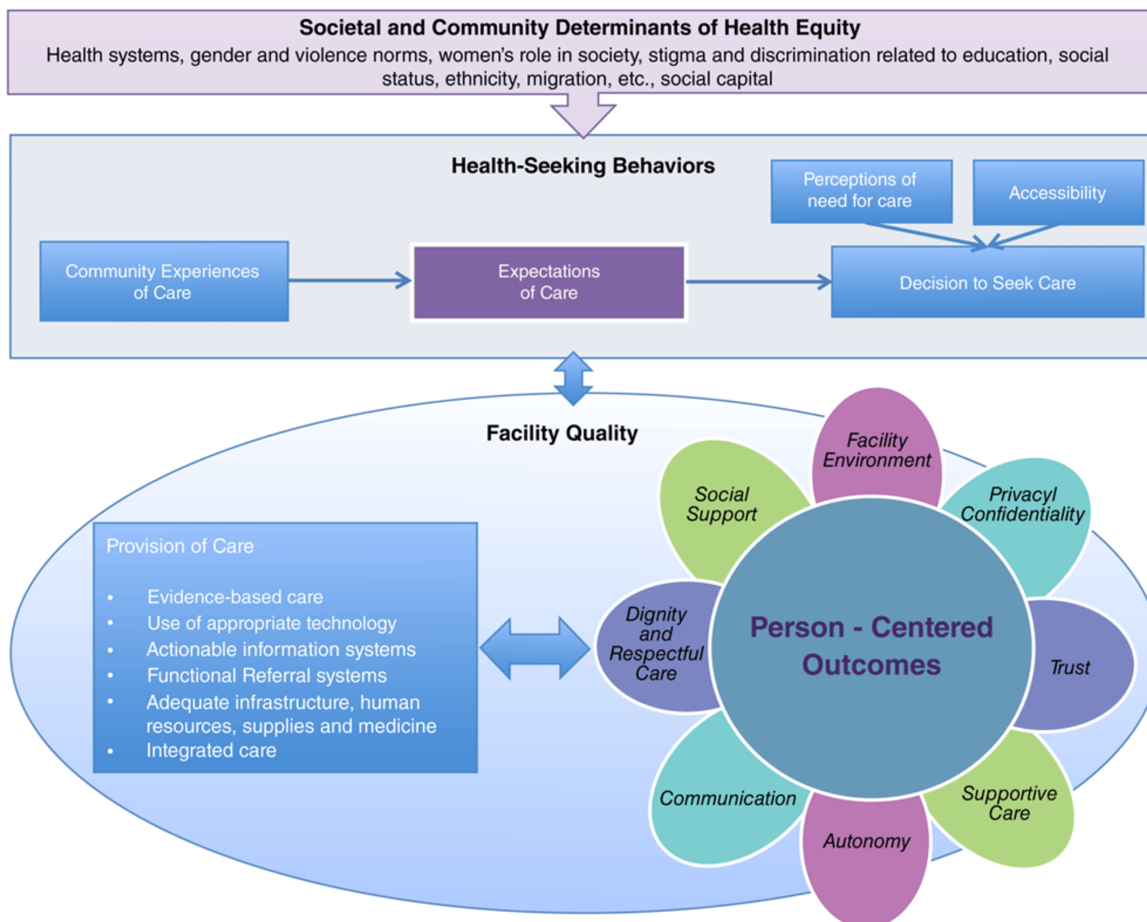
Sources	Keywords used for search strategy			
	Objective 1	**Objective 2**	**Objective 3**	**Objective 4**
Search engine and databases - Google - Google scholar - PubMed - Research Gate - VU Library **Websites** - MoHSW - WHO - World Bank - AGOTA - FIGO - Cochrane	Community Society Age Beliefs Cultural Discrimination Education Ethnicity Expectation Family Gender Married Male-dominance Male-headed Poverty Religion SES Skilled Birth, SBA Socio-economic Stigma Tanzania TBA Traditional Tribe	Health seeking behaviour (HSB) Access(ibility) Antenatal Expectations Family Free service Husband Male Maternal care Perceived need Staff Tanzania TBA Uptake	Quality Acceptance Advise Bypassing Communication Counselling (Dis)respect(ful) Distrust Ethnicity Guidelines Integrated (care) e-/mHealth Perspective(client/ user) Protocols Star-Rating Rights (human) Tanzania TBA Technology	Best Practice(s) (Systematic) review Intervention Abuse Disrespect(ful) Respect(ful) Attitude Measurement Outcome RCT RMC (sub-Saharan) Africa Tanzania

3.2 Analytical Framework

The “Person-centered care framework for reproductive health equity” from Sudhinaraset is used for this thesis (figure 1). (13) This framework was developed in 2017 to improve quality of reproductive health care in low- and middle-income countries (LMIC) by putting emphasis on patient-centredness.

The choice for this analytical framework originates from the fact that it has a broader focus on health seeking behaviour of women than the WHO framework for the quality of maternal and newborn health care (6). The framework of Sudhinaraset focuses on societal and community influences beside quality. Also, it pays particular attention to the different patient-centred factors including respectful care. All factors influencing the uptake of skilled birth attendance will be evaluated, to understand the impact of the different factors. The MoHSW and engaged local stakeholders will be recommended to improve policy and practice to increase skilled birth attendance.

Figure 2 Person-centered care framework for reproductive health equity from Sudhinaraset (2017) (13).



3.3 Limitations of the methodology

Search focused on papers and articles written in English language. This excluded literature written in Kiswahili, which is the local language of Tanzania, as well as international studies written in other languages.

Some important documents are written more than 10 years ago. By snowball-strategy, this paper has been able to include important literature from before 2009. However, there might be useful documents that have been left unnoticed.

The author did not manage to retrieve every full article from the above-mentioned search engines, databases and websites.

4 Societal and community factors influencing uptake of skilled birth attendance

This chapter describes how the uptake of skilled birth attendance can be influenced by factors like gender and male dominance, social-economic status, ethnicity, age, education cultural or religious beliefs like witchcraft, stigma and discrimination. These factors are often interrelated. Vulnerable groups like adolescents are more affected by stigma and discrimination (44). Societal and community factors are covered by the upper level of the Sudhinaraset framework.

Attitudes around gender could be cross-cutting in decision-making, grounded on cultural or religious values and beliefs (66,68). Countrywide, only 15.3% of the married women were able to decide themselves about health care (17). In male-headed households the husband often made the final decision whether to seek care (48,59,69). Sometimes the mother (in law), parents, or even sister and aunt had influence (59,61,62). In one study, health care providers mentioned that approval of traditional leaders was even necessary to get skilled care. However, this was not confirmed by the pregnant women (48). But in Kasulu district, agreement between partners was strongly associated in predicting the location of delivery. In case of disagreement, often the opinion of the woman was respected. However, this study did not include power-factors like socio-economic status and control of finances which might have influenced the association, since it has been shown that well-educated women can have more decision-making power (50,70,71).

Due to gender-related responsibilities within marriages, decision-making at the start of labour could delay. Pregnant women, often responsible for the care of the children but also for the cattle as in Ngorongoro, might decide to stay at home instead of leaving for facility delivery (48). But delay in decision-making during childbirth happened as well when men caring for cattle, being out of reach when the woman was in labour (72). Preparation of birth might reduce this delay, as will be discussed in chapter 5.3.1.

The association between age and home or skilled delivery in rural areas differed between studies; two studies associated low age with health facility delivery (50,69), another study indicated the opposite, that young women preferably deliver with at TBA at home (61). In Tanzania, advise is given that women in their first pregnancy deliver in a health facility, who are mainly women of younger age. However, due to stigma around teenage pregnancies and low knowledge, teenagers might decide to deliver at home. Also health services are inadequate for youth, might result in low uptake of SRHR services for pregnant teenagers compared to older and/or married women (31).

Several studies in Tanzania indicated that poor and/or lower educated women seemed to be more tempted to deliver at home (50,61,69,70,73). The link between poverty and home delivery was partly due to costs following facility delivery, however also stigma and discrimination in the health facilities and by community members were of influence on this decision (73–75). Lower education and home delivery could be associated since these women might be poor and tended to live in rural areas or because of lack of education in school as described in chapter 5 (61,70).

Decision making on healthcare, domestic violence against women, controlling behaviour by the male partner and beliefs of how women should behave are all signs of power-imbalance between partners. About 50% of the married women aged 15-49 in Tanzania have ever

experienced domestic violence, and 75% of ever-married women mentioned controlling behaviour (15). Experiences of violence against women, might increase disrespect and abuse in the labour ward due to normalization of violent behaviour and power-imbalance. Norms and beliefs about women's behaviour might increase disrespect and reduce quality of care towards for example unmarried women, pregnant teenagers and women with high parity. This might reduce the uptake in skilled birth attendance (44,76).

Also ethnicity seems to influence the decision on place to deliver: the Yao tribe in southern Tanzania was more likely to deliver in a health facility than the other tribes (69). In Morogoro region the Pogoro tribe faced social stigma and discrimination which negatively influenced the decision to enter formal health care (73) and in Dodoma region, the Gogo tribe had a significant higher participation of men in ANC than the other diverse tribes, which might influence delivery choice as a result due to increased knowledge (68). Wealth of certain tribes plays a role as well having the possibility to pay for transport, like the Watemi in Ngorogoro region (48). No study investigated the reasons why tribes made different decisions or about the involvement of men as labour companions.

Secrecy around pregnancy was induced by fear for witchcraft in rural areas in Singida region and Kilombero valley (74,77). Jealousy of community members about being pregnant or even talking about the current pregnancy, could result in witchcraft with possible complicated outcomes of pregnancy or delivery. Also harmful traditional beliefs could play a role in uptake of skilled birth attendance: prolonged labour which was thought to be caused by having slept with other men than the husband, resulted in the end of marriages in southern Tanzania (69). No studies have been identified that describe the influence of witchcraft on pregnancy and skilled birth attendance in urban areas. This might be because women in urban areas are higher educated and informed about pregnancy and labour, which has put cultural beliefs towards the background.

5 Health seeking behaviour related to the decision to seek skilled birth attendance

In the Sudhinaraset framework, the second level shows the decision to seek care. This decision is directly influenced by three factors: 1) expectations of care, which are guided by patients own or community experiences, 2) perceptions of the need for care and 3) accessibility (13).

5.1 Expectations of care

Experiences at the antenatal clinic - communication with healthcare providers, examination performance and information provision - or experiences from earlier childbirth, influence expectations of women about the quality of maternal care during the coming delivery (47,50,59,61,62). If former experienced maternal care was not meeting expectations, patients might choose to either deliver at home or to bypass the nearest facility towards a higher level institute as will be described in chapter 6.3 (20,21,61,78). This suggests that expectations of care are strongly related to the experienced quality of maternal care, which will be explored in chapter 6.

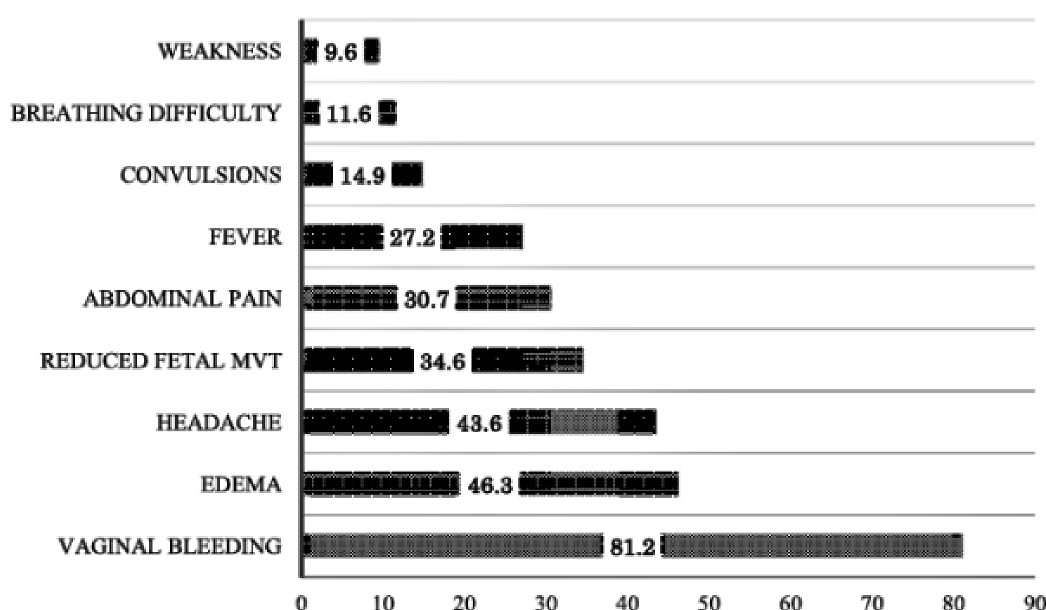
From several studies in Tanzania, it became clear that many women deliver under guidance of traditional birth attendants as described in the problem statement (48,50,59,61,62,69,72,79). Studies which compare the satisfaction of women delivering in health facilities or under the care of TBAs, showed that TBAs are perceived to be closer to the women than facility workers. Also TBAs seemed to offer better supportive care, emotional support and continuum of care (48,59,61,72). This means that women sometimes asked TBAs for second opinion during their pregnancy (59). Women preferred clinical examinations by TBAs because they said it was less painful, and they seemed to be afraid of unnecessary operations and treatments at the health facilities (48).
Nevertheless, in many studies pregnant women felt that health workers had better skills and equipment than TBAs, and the satisfaction of women delivering under skilled birth attendance was higher than of the women delivering at home with a TBA (48,59,61,62,80). The women interviewed in Ngorongoro district who gave birth within a health facility, said to choose a facility birth in the future as well (48). However, the speed of onset and progression of labour, might give women no time to decide to go to a health facility; in this type of situation the women relied on TBA or relatives to support the delivery of their child (69).
Expectations of husbands have hardly been investigated; only one qualitative study indicated that quality of care and respectful care were reasons for the husbands to choose for a certain health facility (80).

5.2 Perceptions of the need for care

Better understanding of health risks of pregnancy, delivery and after delivery, might influence the decision to seek maternal care. In Tanzania, the DHS described that 41% of uneducated women deliver in a health facility, compared to 89% of women who had minimally completed secondary school (15). Studies acknowledged the finding that primary or higher education has positive influence on the chance to deliver in a facility (50,69,73). No studies explained why higher education is associated with facility delivery, for example whether this is due to a different perception of the need for care as a result of access to media (TV, internet, mHealth), or as a result of education in school with an increase of self-identification as well as knowledge on sexual and reproductive health.

Antenatal clinic during pregnancy can be used to inform women about health risks and about the need to deliver under skilled attendance (17,38,50,81). It was shown that women who visited antenatal care at regular intervals, delivered more frequently in the formal health system (75%) than women who did not attend antenatal clinic (32%) (15,50). ANC gave opening to involve husbands in antenatal care including information provision and counselling (17,68,82,83). However, some women saw the antenatal clinic as a private moment between women, to discuss things freely without husbands being around (48).
Why ANC attendance declines sharply from above 95% of pregnant women visiting at least once, to around only 50% of the women visiting the clinic four or more times during their pregnancy as prescribed, has not been explained (70). Quality might be a cause, since Tanzania is suffering high shortage of workforce at all levels which results in lower quality at ANC and other services (16,49). In several studies it is shown that low staffing results in lack of good communication between healthcare provider and pregnant women, as explored in chapter 6 (48,49,81). As a result, the unpredictability of delivery and complications and the importance of skilled birth attendance to respond quickly, is often not known. This results in delay of health seeking or even in the inadequate advise as perceived in Ngorongoro district, namely that institutional deliveries are only necessary for women with risk factors (48).
Although recent studies in Mbeya, Pwani, Dodoma and Ngorongoro region in Tanzania showed that men are increasingly involved in antenatal clinic visits, knowledge on danger signs and understanding the rationale behind preparing for delivery among them was low (48,68,82,83). Several studies showed that knowledge of pregnant women on danger signs during pregnancy and delivery was inadequate as well in both urban and rural areas (38,47,50). Figure 2 shows the sparse results from women trying to recall the nine important danger signs in pregnancy as stated by the WHO (34,38). When women could spontaneous recall four danger signs, they would be graded to have enough knowledge. This graph shows that the women scored low in knowledge, meaning that they did not know which signs might predict complications during pregnancy.

Figure 3 Recall of danger signs during pregnancy (n=335). Vertical: danger signs. Horizontal: percentage of women; source Mwilike (2018) (38).



The difference in knowledge about danger signs during pregnancy between women from urban and rural areas seemed to be large: in Dar Es Salaam only 2.7% of the 384 interviewed women could not mention any danger sign, compared to 64% of 974 women in Mtwara district and 49% of 1118 interviewed women in Rufiji district. Only 31% of the women in the urban area and below 8% in the rural areas could list more than three or four danger signs (38,50). Again, this might be associated with educational level, as mentioned above, or by the fact that urban women have better access to information via media.

5.3 Accessibility

The accessibility of health facilities depends on geographical distribution and distance to be covered, availability of transport and costs.

5.3.1 Distribution of health facilities, distance to be covered and transport

The DHS of Tanzania implies that 42% of women perceive the distance to the health facility as too far (15). Several studies show, that closely positioned facilities are not available for all; especially in rural areas the distance is often big (4,20,50,59,61,68,69). Mpembeni emphasized the negative association between distance towards the health facility and the use of skilled (odds ratio (OR) 4.09) which was mentioned in interviews with rural woman in several qualitative studies in Tanga, Mtwara and Arusha region as well (4,48,50,61,69).

The availability of transport in rural villages was reported as problematic by the women, especially at night (48,59,61). Planning of transport and delivery in advance could improve accessibility, and should be part of the information given by health care workers during ANC (4,38,48,50,83). A study in Mtwara rural district showed that planning where to deliver was positively associated with skilled birth attendance (50). However men and women did not seem well prepared for delivery (48,83). The study in Rufiji showed that only 12% of the men showed some preparedness (delivery kit, money, identification of transport) (83). Interviews in Ngorongoro district showed that the women used their cultural background as an excuse that they themselves did not make a delivery plan in advance (48).

5.3.2 Costs

Although Tanzania has committed itself to provide free maternal, neonatal and child services, patients often need to pay for drugs, delivery kit or received services. Next to these by the healthcare workers expected payments, opportunity costs need to be taken into account (16,20,61,65,78,80). These costs reduce the access and uptake of maternal care, so need to be planned for as described above. The payment of delivery kits and other supplies started after the focused antenatal care program (FANC) were introduced (17). Within this program, women were stimulated at the ANC to plan their delivery. Because of shortage of equipment like soap and gloves, women were requested to bring their own materials to ensure availability. However, healthcare providers started to misuse this birth preparation by requesting long lists of supplies to bring. This attitude forced women into costs, despite the fact that services are free of charge (74). One study mentioned that costs reduced the perception of good quality (80). Several studies showed that costs are an important factor in the decision where to deliver (59,61,62,69). As we have seen, the husband or sometimes family members are often the final decisionmakers on place to deliver (48,69). Delivering with or without a TBA at home in rural areas was much cheaper than delivering in a health facility. These low costs seemed, besides other cultural or personal reasons, of influence on the decision where to seek care (48,61,62,74).

6 Quality of maternal care in terms of provision of care and person-centred outcomes

Facility quality is covered in the third level of the Sudhinaraset framework. A skilled healthcare provider is expected to give quality maternal care within the health facility; however, a good working environment and personal attitude are mandatory for good performance.

Quality is split in provision of care and person-centred outcomes, which are described in depth in this chapter. Provision of care is covering technical aspects of care; person-centred outcomes are covering personal and emotional aspects of care. Since quality of care is of influence on skilled birth attendance, all aspects of the Sudhinaraset framework will be discussed to understand which factors make quality fail.

6.1 Provision of care

The Sudhinaraset framework divides provision of maternal care in different technical aspects: adequate infrastructure, availability of drugs and supplies, human resources, evidence-based care and appropriate technology, functionable referral system, actional information systems and integrated care (13). These aspects are interlinked and are meant to ensure provision of good quality care before, during and after childbirth.

A national cross-sectional study in 2015 determined the availability of Basic Emergency Obstetric and Neonatal Care services (BEmONC) in Tanzania (84). Clinical guidelines were only available in under 30% of the facilities, and just around 20% of the facilities had one or more trained providers on BEmONC available. This low coverage, together with shortages of drugs and equipment as shown in figure 3, resulted in substandard quality of care, with differences between dispensaries, health centres and hospitals (84). In multivariate logistic regression, health centres were significantly better prepared than dispensaries and hospitals. Other factors significantly associated with higher preparedness for BEmONC services were monitoring of quality, auditing of death cases and evaluation of views of clients (84). No explanation was found in literature why health centres are better prepared than hospitals; especially the fact that monitoring is significantly associated with better preparedness, would suggest that hospitals would have better outcome on preparedness.

Figure 4 Percentage distribution of seven signal functions for BEmONC services (n=905); source Bintabara (2019) (84).

	Facility type			Managing authority		
Variable	Dispensary/ Clinic n (%)	Health centre n (%)	Hospital n (%)	Public n (%)	Private n (%)	Total n (%)
Parental administration of antibiotic	205 (27.32)	66 (60.01)	37 (83.95)*	242 (32.04)	66 (44.03)*	308 (34.01)
Parental administration of oxytocin	614 (81.77)	100 (90.94)	42 (96.86)*	633 (83.69)	123 (83.16)	756 (83.61)
Parental administration of anticonvulsants	52 (6.96)	35 (31.59)	34 (77.56)*	83 (10.93)	38 (25.63)*	121 (13.35)
Assisted vaginal delivery	511 (68.00)	80 (72.85)	39 (88.94)*	525 (69.50)	104 (70.11)	629 (69.60)
Manual removal of placenta	227 (30.22)	50 (45.34)	30 (69.66)*	248 (32.87)	59 (39.46)	307 (33.95)
Manual removal of retained products of conception	234 (31.10)	56 (51.35)	30 (68.56)*	264 (34.88)	56 (37.79)	320 (35.36)
Neonatal resuscitation	352 (46.78)	80 (73.05)	40 (92.03)*	383 (50.64)	89 (59.76)*	472 (52.14)
Number of facilities providing normal delivery services	751	110	44	756	149	905

*P<0.05 according to type of facility.
The availability of seven functions were based on whether the intervention has been carried out at least once during the past 3 months.

6.1.1 Availability of drugs and supplies

Lack of resources (drugs, equipment) influences quality of care, could demotivate healthcare providers and should be seen as the result of broader health system problems (4,56,64). Since 1993, Medical Stores Department (MSD) is delivering drugs and supplies (exam gloves, partograph paper, suction machines) to healthcare facilities in Tanzania. MSD is working semi-autonomous under the MoH, and drugs and supplies need to be ordered via de District Medical Officer. This chain of ordering is slow and unreliable in both rural and urban areas (4,84,85). No interventional studies were found on improvement of this supply-system, which is remarkable, since this is a very important factor of the provision of quality care.

Basic provisions like electricity and running water are troublesome as well especially in rural areas, which is the responsibility of the government (15,16). According to health workers in two studies, the availability of resources would attract more women towards the health facilities instead of delivering at home (4,85).

6.1.2 Human resources

Several studies from different regions mentioned staffing to be troublesome (4,78,85,86). Because of a lack of skilled healthcare providers, untrained staff (15-18%) was performing tasks at ANC which they were not educated for (85,87). Since antenatal and delivery care might be performed by the same staff, this could have negative impact on the quality of antenatal care. The women mentioned to prefer a female worker, since male healthcare workers were not always accepted to support childbirth due to religious and cultural beliefs (4,61). However, because of low staffing these expectations might not always be satisfied.

Interestingly, in one conflicting study done in five regions in Tanzania, workload of staff was investigated by using a modification of the Workload Indicators of Staffing Need (WISN) method (87,88). Within 60 health facilities, average workload was only around 50% of what was expected to fulfil the job; primary health care facilities showed almost twice the workload of hospitals. Absenteeism and paid training leave were reasons that staff was incomplete, which increased the workload for the available, sometimes untrained, health workers (87). Reasons why healthcare workers were absent were not investigated in this study, however negative working attitudes due to low salaries, lack of training and social circumstances in remote areas in combination with managemental problems might have been underlying factors.

Not only quantity of staffing is problematic, also quality has constraints. In several studies, skilled birth attendants barely attended in-service trainings (4,17,35,84,85). As a result, health workers felt behind in knowledge and career-building, which could result in demotivation (4). The alignment of work with skills of the health worker and making full use of the worker's capability, as well as improvement of knowledge by integrating services as discussed below, are also important to motivate healthcare workers and will have positive influence on quality of care (39,89). Differences in working circumstances for female healthcare workers compared to their male counterparts might demotivate female workers, and influence the quality of care they give towards pregnant women (76).

The importance of good management and role distribution was discussed in the review of De Jongh (89). Good managers can ensure good quality maternal care at health facilities by warranting accountability and retention of motivated workers; this will result in less corruption and improvement of equity in the health system (39,64,74,89). But, an observational study in Dar es Salaam concluded that strong organisation of the labour ward was lacking, which made that midwifes did not respond to client's needs and showed immoral behaviour like writing false

observation on checklists (64). A good example of local accountability was reflected in Tanga region, where healthcare workers gave the impression to be fighting to fulfil the needs of the women. They even performed outreach to villages, without financial support from district level (4). Leonard explored the difference in quality of maternal care between public facilities and NGOs in rural areas and blamed management factors and accountability (39). The question why good managers are lacking was not answered by the studies, although it was explained that in NGOs accountability mechanisms play a role (39). Another factor, like lack of training or motivation, was not investigated.

6.1.3 Evidence-based care and appropriate technology

Provision of good quality maternal care also requires the use of clinical practice guidelines based on scientific research (17,33,35,36). However, local availability and use of guidelines were often limited except the antenatal card which is a widely used guiding tool during ANC in several African countries including Tanzania (Annex 2) (17,35,37,49,81,84,90). Reasons mentioned for the limited availability and use of guidelines are the time-consuming development, the distribution to all health facilities and the adherence of health providers to guidelines during their work (37,81). Financial resources are necessary to develop user-friendly guidelines, pre- and in-service trainings of healthcare workers need to be up to date to improve skills and knowledge and infrastructure at the health facility needs to ensure the availability of equipment and drugs. Again this needs strong facility management to overcome the constraints and ensure smooth implementation (37,81). Causal factors of poor performance seemed to be high workload, absenteeism, lack of training and shortage of resources (81). Motivation of health care workers to undertake self-study of guidelines when these are available still needs to be studied.

6.1.4 Referral system and actionable information systems

Since basic and comprehensive emergency obstetric and neonatal care is not available in all settings, a good patient referral system needs to be in place (4,33,84). This requires the availability of transport at low or no costs since we have seen that money for transport is a barrier for patients to be referred (4,59). Also it requires good communication between health care providers at different facilities, as well as between traditional birth attendants and the formal health system (61). But pregnant and labouring women were often referred without a referral letter; resulting in delay and reduced quality at the recipient facility (78). Contrary, the government is supporting ICT as described in the background and many means of communication are available these days, like written letters, phone calls, SMS texting or electronic systems. (16,22,78,91). For example telemedicine is used Kigoma, Pwani and Morogoro region to connect doctors from rural areas to medical specialists, which seemed to increase of uptake of teleconsultation, teleconferencing and e-learning (91,92). Examples of community-based use of mHealth are 1) the use of mHealth by community health workers visiting pregnant women for information and counselling purposes in Singida region, and 2) SMS-texting system by phone or messaging via internet, which can be used to give information on health issues (77,93). A randomized controlled trial at Zanzibar explored the influence of mHealth (SMS text messaging and a free-call system) on ANC attendance, skilled birth attendance in primary healthcare settings in Tanzania (94,95). Significant increase in skilled birth attendance related to urban residency from 50% to 82% (AOR 5.73) and of repeated ANC visits from 31% to 44% (AOR 2.39) were shown. However, most of these modern communication strategies are only available in the context of interventional studies.

6.1.5 Integrated care

Since more than 95% of the women visit ANC at least once during their pregnancy, ANC offers opportunities for counselling, testing and information supply. This might increase uptake of ANC and skilled birth attendance, as well as of other components of healthcare; so-called "integrated care" (16,26,34,35,85,89,96). SBA seemed to be positively associated with an increase in ANC visits (>4), so integrated care might increase uptake of SBA (50,96). Integrated services seemed to be attended best, when available at the same place and day (so called "one-stop shop") (16). Also, the health system should enable integration by ensuring that the other factors of provision of care are in place: adequate and skilled attendants, equipment, supply, financial resources and a good system for data collection and analysis (16,85,89). The focused antenatal care program (FANC, see background) is advising on integration of care (17). Most studies focused on integration of ANC with PMTCT, malaria-prevention, tuberculosis-treatment or nutrition (35,85,89,96). ANC should include extensive information about labour and birth-preparation as well, however as we have seen, staffing is not adequate, which reduces the provision of information. Services on sexual and reproductive health like family planning and gender and empowerment are also important to integrate, however no studies were found.

Effectiveness of integrated care can however easily weaken due to low workforce or lack of supplies, as shown by the difference in provider knowledge and the delivery of messages to patients in Morogoro region (Annex 3) (85).

6.2 Person-centred outcomes

The personal component of quality of maternal care is seen as highly important in the final satisfaction of the patient, also called person-centred outcomes (4,13,66,97,98,51,52,54–57,64,65). The Sudhinaraset framework highlights eight components with direct impact on satisfaction (figure 1). These components are the base of the below described literature analysis, generally described under the label: (dis)respect. This thesis uses the term "disrespect" as a superordinate denomination and will focus in depth on disrespect in the different elements of person-centred care.

Disrespectful care can be seen as a power-imbalance between patient and healthcare provider (55). In several hospitals-based studies in Dar Es Salaam and Tanga region in Tanzania, disrespect was measured in worrisome percentages between 15 and 70% (57,64,65,98). Interesting, repeated interviews some weeks after delivery found higher prevalence of disrespect. This suggests that women reflected more objectively back home (54,57).

Lack of social support was mentioned in several studies (4,56,66,67,86). Healthcare providers in primary healthcare settings in Tanga region admitted that there was no social support available, and said to understand that women might prefer to deliver at home (4). Labour companionship was difficult due to the local healthcare culture which did not seem to accept any companionship yet; but also the infrastructure with often shared delivery rooms was not suitable for labour companions, since privacy could not be guaranteed (4,64).

But the availability of a birth companion seemed to be important since vulnerability of the pregnant woman for disrespectful care might reduce, the companion might serve as a witness towards disrespectful care and might give practical, emotional and physical support (86,99,100). However, implementation needs to be studied thoroughly in combination with improvement of privacy measures (86,99–102). Despite the above mentioned constraints around social support, in some studies support appeared to be stimulated (56,86). In a missionary hospital in rural north central Tanzania social support was stimulated and accepted

by 23/25 women during first stage of labour, which gave the advantage that the companion could inform the nurses about progress of labour (86); in the international study of Rosen social support appeared to be stimulated in 22-43% of the 2164 observed women (56).

Lack of privacy was confirmed in several studies (4,56,57,64), with percentages between 23% and 76% of the cases in the two largest observational studies each including around 2000 women (56,57). This was often due to the infrastructure of the labour room, together with the loud voices and inappropriate language of the healthcare workers.

Women were physical and psychological abused. In interviews and during direct observations they appeared to be slapped or beaten, and verbally intimidated or discriminated (48,56,57,64,66,69). Discrimination on payment for treatment, resulted in delay of treatment or verbal discrimination when money was not available (56,66,74). Due to verbal intimidation or even ignoring women's requests, women often felt neglected. They could deliver their child without the skilled birth attendant being around, or could have a complication without being noticed (56,64,66,69,74,86). Even harmful procedures seem to happen; suturing without analgesia, consciously administration of inadequate dosages of medication and an observed procedure where the provider tried to rupture membranes vaginally with a broken glass ampule (56,57,64). Informed consent and sharing of findings after examinations are important in enhancing autonomy of the woman. However, lack of informed consent was common before procedures (56,57,64).

At the antenatal clinic disrespectful care was seen as well, since communication about risk factors and danger signs, delivery planning and skilled birth was inadequate (38,47–50,56). This could be due to high workload but also due to knowledge of the healthcare workers. A clear example of inadequate communication at ANC was described in the study in Ngorongoro district: instead of counselling all women towards skilled birth attendance, only women with risk factors were counselled. Also delivery planning was not conversed, and postnatal care was not clearly communicated (48). Besides, women feared unnecessary examinations and procedures and compulsory delivery positions, which was not openly discussed at the ANC. Health workers reacted that they were too busy to counsel the women extensively, and women's fear was said to be due to lack of knowledge and low educational level (48).

Many of the above-mentioned findings related to provision of care can be linked to bad attitude and motivation, but disrespect could also be reactive due to weak infrastructure, shortage of staffing, drugs and supplies. However, physical and psychological abuse and discrimination of patients is clearly a harmful attitude of the healthcare workers. The recent review of Bradley on sub-Saharan Africa discusses midwife's perspectives on disrespectful care, but no studies in Tanzania were found to understand why some healthcare workers have disrespectful attitudes, and others behave respectfully (55).

6.3 Patient's reactions on disrespectful and low-quality maternal care

Several studies have described possible reactions from women who experience disrespectful care; quiet acceptance of abuse, bypassing the health facility or deliberate delivering at home with or without a TBA (20,21,48,57,66,69,74,90).

Accepting disrespectful care can be the result of stigma and fear, pitying working staff because of high workload or normalization of abuse. Women might fear that raising complaints could have influence on future treatment, or on the risk of closure of the health facility, worsening access to healthcare (57,66). Cultural normalization of power-imbalance and violence against women, also due to low knowledge of standards of care and human rights, can be a reason for

acceptance of abuse or disrespectful care as well. However normalization at both client and provider level can result in risky deliveries due to a reduction or delay of uptake of SBA (Annex 4) (1,57,66,75). Interestingly, women still seemed to be satisfied with the facility delivery despite the experience of disrespectful care (66). This might also be due to normalization of disrespectful behaviour.

Bypassing to avoid the healthcare facility where the woman has experienced unsatisfactory treatment as discussed in chapter 5 and 6, is another possible coping mechanism. Bypassing is defined as women who first present for delivery at a facility other than the nearest health centre or dispensary (21). Studies have shown that disappointment in received care at the closest health facility stimulates bypassing of health facilities with figures between 44-75% of the women (20,21,57,62,66,69,78,90). More than 80% of the women who bypassed, were not referred to another clinic but decided themselves (20). Significant associated factors towards bypassing seemed age above 35 years and low amount of children (0-1) which were discussed in chapter 4, a previous stay in a maternal waiting home or previous complications, as well as perceived quality of care in the nearest facility and trust as described in chapter 5 and 6 (20,21). Despite the costs of bypassing (travel, care, opportunity costs), no association was found with wealth (20,21). The availability of the emergency obstetric and neonatal care (EmONC) signal functions was significantly associated with bypassing (21). Every extra signal function available in the nearest health facility, reduced the likelihood to bypass with almost 50% (21).

Women who decide to deliver at home instead of seeking skilled birth attendance, can be driven by the expectation of low-quality or disrespectful and abusive maternal care. The Lancet Global Health Commission stated that more than 50% of the patients decide not to seek healthcare due to inadequate quality (90). This means that these women choose to deliver with TBA or a family member, accepting the risks of not being close to skilled birth attendance.

No studies were found including women who did not bypass, like women who decided to deliver in the nearest health facility or women who delivered at home. The reasons why they decided differently will be very interesting to understand. It might be due to influence of husband or family as discussed in chapter 4 or due to lack of transport or money as discussed in chapter 5, but this still needs to be investigated.

7 Best practices on respectful maternal care from Tanzania and other countries, to apply to Tanzania

This chapter aims to highlight best practices to improve respectful maternal care, since respectful maternal care has shown to be an important part of quality of care. When respect improves, an increase of skilled birth attendance is expected.

Interventional studies on the reduction of disrespect and abuse in maternal care are heterogenous. Due to this heterogeneity, the available reviews (Downe (2018), Rubashkin (2018) and Bohren (Cochrane 2019)) only describe results of studies (100,103,104). Downe solely included studies from African countries, Rubashkin and Cochrane reviewed at global level and included mainly high- and middle-income countries. Most studies combined several interventions to improve respectful care, which challenged the selection of separate interventions and outcomes.

Three applicable studies in comparable settings were selected to analyse best practices. One study was a randomized controlled trial (RCT) in Tanzania, the other two studies in Kenya and Tanzania were pre-post intervention studies without comparison-groups (105–107). All studies implemented multiple interventions and ensured accountability by special quality-improvement teams through hospital staff and/or multi-stakeholder involvement. The interventions focused on birth preparedness of pregnant women, training of healthcare workers and improvement of infrastructure within the healthcare facility. The Cochrane review from 2019 was selected because of interventions on birth companionship described in section 7.4 (100). Since the studies introduced multiple interventions, combined outcomes are described in section 7.5.

7.1 Birth preparedness of pregnant women

Interventions on improvement of birth preparedness as discussed in the reviews were open days and workshops for community, education about women's rights, introduction of birth plans, improving access to information, groupwise pre-natal care, improving informed consent and support in decision making (103,104). The RCT in Tanzania implemented a Client Service Charter (CSC) (105). This was an existing, but nowhere implemented, national charter on patient and providers rights and responsibilities (108). Annex 5 shows the charter's key messages. Multiple stakeholders further developed the CSC and implementation was facilitated through meetings and workshops among the community and providers (105). The two pre-post intervention studies in Kenya and Tanzania implemented open birth days for pregnant women and community workshops to improve access to information and communication with healthcare providers (106,107).

7.2 Training of healthcare workers

Interventions on attitude-improvement of healthcare workers as discussed in the reviews were attitudinal training, monitoring and mentorship (103,104). The client-service chart which was used as birth preparedness tool in the RCT, was also used by healthcare providers to increase knowledge on respectful maternal care and to improve communication with the clients (105). The pre-post studies in Kenya and Tanzania introduced respectful maternal care training including mentorship and communication between providers on respectful care, as well as periodic observations of healthcare workers (106,107).

7.3 Improvement of infrastructure within the facility

The RCT in Tanzania focused on privacy in admission/discharge and delivery rooms and on the weekly distribution of a list on shortages in the pharmacy (105). Also, small adjustments were made, like tea for providers on duty. The respectful maternal care training in Tanzania resulted in action plans including improvement of privacy, changes of staffing structure and improved payment of additional working hours (107).

7.4 Birth companionship

The Cochrane review on birth companionship included mainly studies performed in HIC. The success of implementation of birth companionship seemed to be depending on the recognition of healthcare workers and women on the benefits, as well as on the privacy in the health facility. The review gave low evidence on the presence of male partners as birth companions (100).

7.5 Outcomes

As we have seen, the three studies in Tanzania and Kenya focused on birth preparedness, training and infrastructure improvement (105–107). Since the studies introduced multiple interventions together, it is difficult to exactly know the outcome of each intervention. In all studies outcomes were measured by interviewing women after childbirth; the pre-post studies added direct observations.

Most important, a reduction of disrespect and abuse was shown in all studies. The RCT showed a 66% reduction of the likelihood to experience disrespect and abuse (CI 0.21 – 0.58)) and the two pre-post intervention studies showed strong reductions as well. Both respectful care (AOR 3.44, CI 2.45 - 4.84), and overall quality of care (AOR 6.19, CI 4.29 – 8.94) were graded as excellent in the RCT (105), and during observations and interviews improvement was noticed on privacy, physical abuse, detention, verbal abuse and confidentiality (106). Patients and providers were very satisfied with the open birth days, and staff was positive about the RMC workshop with development of action plans to address barriers (107). Knowledge on rights seemed to be improved in both the women and the healthcare workers (107).

The review on birth companionship showed with high to moderate confidence, that a companion helped pregnant women to understand information, gave practical and emotional support and supported the women in making voice. As a result, satisfaction of the women with their childbirth improved (100).

The described reviews and studies can be linked to the results of this thesis as explored in the chapters 4 to 6. RMC workshops, trainings and infrastructure improvement are useful to improve the provision of quality and respectful care. Open birth days, birth plans, access to information, informed consent and birth companionship can increase women's empowerment, need perception and accessibility. The improvements will influence the expectations about provision of quality and respectful care. The fact that these interventions were supervised by a quality-improvement team composed by healthcare workers increases accountability and trust.

Not found in literature were interventional studies on personal attitude measurement of future healthcare workers. Attitude measurements could serve as a mandatory test before being accepted at pre-service training and could be combined with attitude measurement of current healthcare workers. The results of these tests on attitude might be more accurate than drawing

conclusions on qualitative studies using interviews. Also, no interventional studies were found on the implementation of male healthcare providers and the influence on respectful maternal care. This is controversial, since women do not always accept male healthcare workers to support them in childbirth due to religious and cultural beliefs (4,61). Lastly, no interventional studies on the influence of mHealth on women empowerment (like messaging on human rights specified on maternal care) were available.

In conclusion, multi-component interventions are expected to have the best outcome on respectful maternal care. Multi-stakeholder participation from national government to community level with smooth collaboration is mandatory to create ownership and sustainability. Good management at facility level and support of a facility-based quality-improvement team need to ensure that interventions are implemented, results are monitored, and feedback is provided. To create accountability mechanisms at all levels, all parties need to be involved in the development of the program and the implementation.

8 Discussion

This chapter discusses key findings of the thesis, including missing elements during literature search. Questionable aspects of the Sudhinaraset framework and the limitations of the thesis are described as well.

8.1 Key findings

Looking at the results of this thesis which are described in chapter 4-7, we see that factors influencing the uptake of skilled birth attendance are often interrelated.

Gender and power-imbalance (decision-making power, domestic violence), but also stigma and discrimination due to age, ethnicity, poverty or local beliefs in rural settings were important factors influencing uptake of SBA. Disrespectful care can be seen as a power-imbalance between patient and healthcare provider and is found in both rural and urban areas. Cultural acceptance of inequality and power-imbalance might increase disrespectful and abusive behaviour against women during delivery. Physical and psychological abuse and discrimination of patients are unacceptable attitudes of healthcare workers. No Tanzanian studies were found which investigated the reasons behind these disrespectful attitudes, but good evaluation could improve the decision about which interventions are needed to improve respectful care.

Inadequate communication between healthcare provider and woman was a sign of disrespect and low quality of care at both ANC and labour ward. Antenatal care seemed to be a missed opportunity, since ANC played an inadequate role in women's and husband's knowledge on danger signs and birth preparedness. This insufficient role of ANC is an important gap, since preparation of birth seemed to improve access to care by saving money for transport and planning where to deliver in advance, with positive influence on the uptake of SBA. Although above 95% of the women visited ANC once or more, only around 50% paid a visit to the ANC four or more times. A reduction which seems to be reflected in the low skilled birth attendance rate. Why ANC attendance strongly declined has not been explained. Quality might be a cause, since Tanzania is suffering high shortage of workforce at all levels which results in lower quality at all services. Since ANC was not the main focus of this thesis, further research is necessary to explore why ANC attendance drops quick after the first visit, and how this can be improved.

Infrastructure and resources were important factors of quality of care. Shortage was often a higher-level problem, whereby the supply-system from MSD is slow and inefficient. No interventional studies were found on improvement of the supply-system, which is remarkable since this is a very important factor of the provision of quality care. The inadequate coverage of skilled healthcare workers was troublesome. However, one study showed that, instead of lack of staffing, absenteeism and leave for training were the underlying factors of low workforce. Reasons why health care workers were absent were not investigated in this study, however negative working attitude due to low salaries, lack of training and social circumstances in remote areas in combination with managemental problems might have been underlying factors. Health facilities differed in availability and quality of BEmONC services, whereby health-centres seemed to be better prepared than dispensaries and hospitals. The availability of BEmONC services was a pull factor and stimulated bypassing of primary healthcare to higher-level facilities.

Healthcare workers suffered from lacking training opportunities and career-building, shortage of guidelines and drugs and skilled colleagues. These problems reduced motivation with implications for the quality of care. Disrespectful care was described as a reaction to inadequate infrastructure, shortage of staffing, drugs and supplies. However, this should never be an

excuse to abuse and maltreat women. Whether healthcare workers are tempted to improve their knowledge by self-study of guidelines when available, needs to be studied.

Outcomes of interviews and results of observational studies performed by health workers might have been influenced by normalization of disrespectful care. Probing during the interviews of most qualitative studies can have reduced this bias. More difficult to overcome is the bias during observations performed by healthcare workers. These workers have been educated and trained in the environment of culturally accepted norms on respectful behaviour, which might influence objectivity during observations. Also, elements like privacy and social support depend on local context and the support of the overarching healthcare system, so norms might be different in LMIC than in high-income countries.

Most common responses of the women towards low quality and disrespect seem to be quiet acceptance of abuse, bypassing the nearest facility or delivering at home. This results in inefficient use of the existing health system with 77% primary health facilities as gatekeepers. Bypassing can result in financial hardship for the pregnant woman and her family. So, there is a high need to upgrade primary healthcare centres with good staff and supplies, to ensure that women can deliver at first level of the formal health system without fear of low quality, disrespect or abusive care. No studies were found including women who did deliver in the nearest health facility or at home, but their opinions will be very interesting to understand reasons not to bypass. This might be due to influence of husband or family as discussed in chapter 4 or due to lack of transport or money as discussed in chapter 5.

The upcoming use of ICT during maternal care might increase motivation of healthcare providers, since it will increase their skills. ICT could be used for health education purposes or awareness raising, and for reminders of ANC appointments using mHealth. Also, it could improve quality of care due to improvement of the health management and information system (HMIS), as well as consultation with or referral to other health facilities. However, communication infrastructure in Tanzania still needs to be improved and financially covered, to make sure that the whole population can benefit.

Expectations based on quality of maternal care in facilities and on differences in supportive care between TBAs and healthcare workers, were important for uptake of skilled birth attendance. Good quality seemed to attract women to skilled birth attendance, supportive care and continuous support from TBAs were pull-factors for home-delivery. Possibly, traditional birth attendants can play a role in connecting patients with the health facility, but most studies are from other LMIC (109). TBAs could be of use in referring women with risks during pregnancy, and they could serve as birth companion during labour in the health facility. However, this needs acceptance from all levels with clear targets, and needs to be implemented into the primary healthcare system with training of TBAs and improvement of communication between TBAs and the formal healthcare system.

Despite strategic plans focussing on quality improvement in healthcare facilities, the quality is still inadequate in a country like Tanzania. Even, respectful care is not addressed in the strategic plans which is a gap in healthcare upgrading. Government budget on health is only 9% of the total national budget, which might be another reason why improvements have a slow pace. These gaps should be seen as an opportunity. Accountability and management on both provision of care and respectful care at all levels are necessary and an increase of the government budget to 15% as declared by the Abuja target is mandatory.

Best practices on respectful maternal care indicate that multi-component interventions, multi-stakeholder participation and good management are the best way forward to increase respectful care. The interventions mentioned in chapter 7 should be combined to increase the uptake of

respectful care. The participation of multiple stakeholders will increase accountability when integration and communication between all parties is good and future goals are recognized. Standards on privacy and social support to increase respectful care might need adjustment towards local context because of possible normalization. Accountability mechanisms and monitoring results are necessary to analyse progress and give feedback to all participating stakeholders. Good quality research on the outcome of the interventions is necessary, including control groups for comparison.

Since availability and accessibility of facilities was less in rural areas which pushed rural women towards home-delivery, more attention on provision of care improvement should be given to rural areas. However, disrespectful attitude has been shown in both rural and urban areas. This implies that interventions on improvement of respect should be implemented in both rural and urban health care facilities at all levels within the healthcare system.

8.2 Person-centered care framework for reproductive health equity from Sudhinaraset

This thesis has explored factors influencing uptake of skilled birth attendance in Tanzania, under guidance of the person-centered care framework for reproductive health equity from Sudhinaraset. This framework was used because of completeness of factors, however some elements of the Sudhinaraset framework have been raising questions during the progress of this thesis.

First, within this framework the health system is reflected in the upper level of societal and community determinants. However, the WHO defines a health system as "all organizations, people and actions whose *primary intent* is to promote, restore or maintain health" (3). This implies that the health system is also of direct influence on the facility quality by policies, financial resources and pre- and in-service trainings, which is a missing link in the Sudhinaraset framework. Policies and strategies also determine accessibility, perceived need by educating community, and indirectly the experiences of women who use the health care system.

Second, management and accountability are not described within the Sudhinaraset framework. However, articles have shown that management is highly important to motivate health workers, to have good division of tasks and supervision at the labour ward, and to implement interventions to improve RMC. In this thesis, management and accountability were added to chapter 6 on provision of care and were part of best practices in chapter 7.

To overcome these limitations of the framework the health system could be described in a separate box on the left side of the framework with separate connections to all three levels, and management could be added to the block "provision of care".

8.3 Limitations of the thesis

Studies showed high levels of heterogeneity on objectives, geographical location, size and variables of the study population and study methods. This means that conclusions need to be drawn cautiously.

This thesis focused on women during childbirth. However, antenatal care (ANC) is also described because of its influence on skilled birth attendance. Due to the focus on childbearing women in this thesis, ANC has not been explored broadly. The importance of good quality care at the antenatal clinic, is a reason for further research.

This thesis investigated skilled birth attendance as an extension of the decision to seek care in the second level of the framework. This difference between Sudhinaraset framework and thesis topic was accepted by the author of this thesis, since this framework was qualified best for the topic of research.

The title of the framework mentioned reproductive health equity, while this thesis explored the uptake of skilled birth attendance. Reproductive health equity means that all women are empowered to make their own decision whether and when to become pregnant and have equal access to maternal care, which is a reproductive right. The factors described in the chapter 4-7 are all related to equitable distribution of maternal care, which ensured coverage of the framework.

Bias due to normalization of disrespectful care within the country context might have reduced the prevalence disrespectful care. Especially during direct observations of disrespect by healthcare workers who have been educated in this context, this bias is difficult to overcome.

9 Conclusions and recommendations

This chapter draws conclusions from findings and discussion and gives recommendations to the Minister of Health & Social Welfare and the engaged local stakeholders how to increase skilled birth attendance.

9.1 Conclusions

This thesis has explored the factors influencing uptake of skilled birth attendance in Tanzania. Skilled birth attendance in Tanzania is too low, possibly due to insufficient quality of care and high prevalence of disrespectful care. Shortage of resources results in reduced quality and accessibility of maternal care and increases disrespectful attitudes towards pregnant women. However, an intrinsic disrespectful attitude of healthcare workers might be due to gender- and power-differences within society. This societal acceptance of power-imbalance can result in normalization of disrespectful behaviour towards pregnant women and especially vulnerable groups.

Quality and respect seem to be major factors in the uptake of SBA. The Tanzanian government aims at improvement of equity and quality, but respectful care is not mentioned in the strategic plans. This gap needs to be addressed. Only by implementing interventions from different angles, all aspects of quality and respect can improve resulting in an increase of skilled birth attendance. Good management at facility level is needed to ensure implementation of interventions and adherence to changes. Since primary healthcare facilities comprise 77% of all healthcare facilities, these need to be upgraded to ensure that the gatekeeper function is fully used. By doing so, the higher-level facilities will be able to focus on referrals requesting more complicated care.

Multi-stakeholder participation - federal and local government, facility workers, TBAs, community - is necessary to ensure financial resources, accountability and sustainability. Multi-component interventions will address the problem of low quality and disrespect from different angles to ensure better uptake of improvements. However, changes will only be possible when the government health expenditure will be increased towards 15% of the national budget which is in line with the Abuja Target.

Lastly, without personal willingness of healthcare workers to change their attitude, improvements on respect towards pregnant women will not be made.

9.2 Recommendations

Recommendations as described below are made at policy, implementation and research level. As described above, these recommendations needs multi-stakeholder participation and an increase of government health expenditure. Also, different interventions need to be combined to ensure improvement.

9.2.1 Recommendations on governmental policies and strategies

- The promotion of respectful care needs to be included in all national plans and programs to ensure accountability. To support respect for women by law, a Domestic Violence Act needs to be established and national policies need to be lined up with the declaration of human rights.

9.2.2 Recommendations on interventions

- Communication and two-directional understanding between community and facility needs to be improved by implementing "open birth days". Community awareness on respectful care and human rights can be increased by workshops and involvement of voluntary health workers.

- The availability of good quality in-service trainings (FANC, BEmONC/CEmONC, RMC, birth companionship, attitudinal behaviour and human rights) needs to be increased by expanding the amount of training sites and adding trainers. Additionally, the curriculum of pre-service education at medical, midwifery and nursing school needs to be adjusted by putting strong emphasis on attitudinal behaviour and respectful maternal care.

- Job-descriptions on responsibilities for quality, respectful behaviour and birth companionship need to be guaranteed, and adherence needs to be ensured by mentorship, supervision and feedback-mechanisms. This requires improvement of the infrastructure of antenatal clinic and labour ward: the availability of guidelines, drugs, equipment and privacy.

- The antenatal clinic needs to be used as opportunity to inform women and their companions about birth preparation, danger signs, SBA and birth companionship. This requires sufficient staffing.

- A national "Champion of Improvement " label can be developed for healthcare facilities, focussing on attendance of in-service trainings, improvement of working circumstances and the increase of uptake of skilled birth attendance. This should be combined with a quality-control system, with yearly visits of all healthcare facilities resulting in mandatory improvement plans for the coming year.

9.2.3 Recommendations on research

- Interventional research on personal attitude measurement of future healthcare workers as a mandatory test before pre-service training. Early selection might increase the percentage of healthcare workers with positive attitude concerning respectful behaviour.

- Interventional research on personal attitude measurement of current healthcare workers. When bad attitude would result in sanctions or dismissal, behavioural change among other healthcare workers might be expected.

- Implement interventional research on the role of TBAs as a bridge between pregnant women and the formal health care system (counselling, birth preparation, referral, birth companionship, postnatal care). This needs consensus between different stakeholders and training of TBAs.

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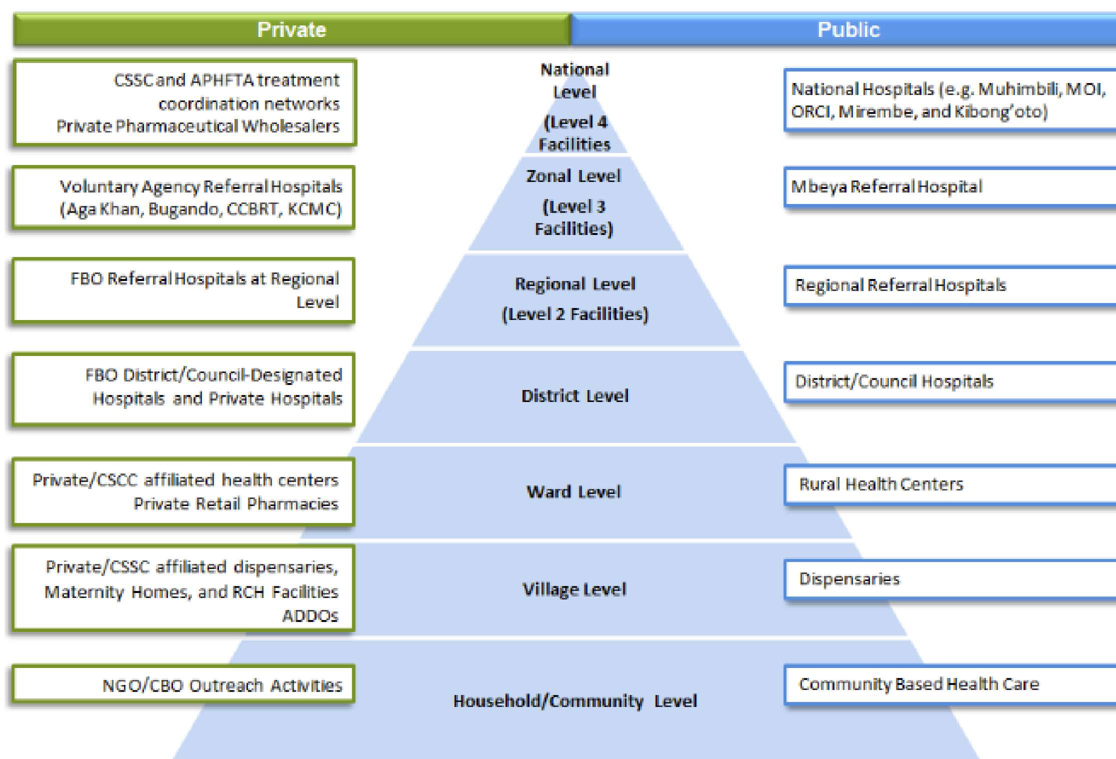
Annex 1

Health care pyramid of Tanzania; *source HSSP IV Report (2015), p1* (16).



Annex 2

Antenatal card Tanzania; *source: Ndala Hospital, Tabora Region, Tanzania (2019), p17*

REKODI YA MAHUDHURIO YA MAMA BAADA YA KUJIFUNGUA HADI WIKI 6

Baada ya kujifungua mama ahudhurie kliniki mara tatu au zaidi. Chunguza yafuatayo, weka (√) au Ndiyo au Hapana panapohusika. Pale unapogundua tatizo mpeleke kwa Mganga au Hospitali

A. REKODI YA MAHUDHURIO	Mahudhurio ndani ya masaa 48	Mahudhurio ndani ya siku 7	Mahudhurio ndani ya siku 28	Mahudhurio ndani ya siku 42
Tarehe				
Joto la Mwili (38°C na zaidi)				
Blood Presure 140 / 100 na zaidi (mmHg)				
Hb chini ya 60% (8.5gm/dl)				
PMTCT: Lishe ya mtoto: Maziwa ya mama pekee (EBF), Maziwa mbadala (RF) : uliza yafuatayo				
Matiti:				
• Mtoto ananyonya?				
• Maziwa yanatoka				
• Ameanza kunyonya ndani ya saa moja				
• Chuchu zina vidonda				
• Yamejaa sana				
• Yana jipu				
• Chunguza unyonyeshahi, toa ushauri				
Tumbo la Uzazi:				
• Linanywea? Involution) Ndiyo/Hapana				
• Maumivu makali				
Sehemu za Uke:				
Msamba / Kidonda cha upasuaji				
• Msamba: - Hakuchanika: Ndiyo / Hapana				
- Alichanika (Tear)				
- Aliongezwa njia (Episiotomy)				
• Kidonda Kimepona? Ndiyo / Hapana				
- Kina usaha; Ndiyo/Hapana				
- Kimeachia, ndiyo/Hapana				
• Lokia: - Inanuka? Ndiyo/Hapana				
- Nyingi / Wastani / Kidogo				
- Rangi ngapi?				
Hali ya Akili:				
- Mgonjwa / Siyo Mgonjwa				
- Matatizo mengine				
Uzazi wa Mpango:				
• Ushauri umetolewa? Ndiyo/Hapana				
Dawa za Kinga:				
• Ferrous Sulphate				
• Folic Acid				
• Pepopunda: Chanjo amepata ya ngapi? TT1, TT2, TT3, TT4, TT5				
PMTCT/CTX: Kama mama anaishi na VVU				
Dawa anazotumia baada ya kujifungua (ART)				
Vitamini A (Amepata / Hajapata)				
Tiba Nyingine				
Tarehe ya Kurudi				
Jina la Mhudumu				
Cheo cha Mhudumu				
SAINI YA MHUDUMU				

*Iwapo mama ana matatizo aonwe kliniki kulingana na mahitaji

RCH4

Jamhuri ya Muungano wa Tanzania
Wizara ya Afya, Maendeleo ya Jamii, Jinsia, Wazee na Watoto

KADI YA KLINIKI YA WAJAWAZITO

Jaza au weka (√) panapohusika

JINA LA KLINIKI — NAMBA YA UANDIKISHAJI — NAMBA YA HATI PUNGUZO YA CHANDARUA

JINA LA MAMA — UMRI: — KIMO (CM): JUU YA 150 ☐ CHINI YA 150 ☐ — ELIMU: — KAZI:

JINA LA MUME / MWENZI — UMRI: — ELIMU: — KAZI:

KIJIJI / MTAA / KITONGOJI: — JINA LA MWENYEKITI

HABARI KUHUSU UZAZI ULIOTANGULIA

MIMBA YA NGAPI .... AMEZAA MARA NGAPI .... WATOTO WALIO HAI ....

Mimba Zilizoharibika	Mwaka	Umri wa Mimba	Mimba Zilizoharibika	Mwaka	Umri wa Mimba
1			3		
2			4		

TAREHE YA KUANZA YA HEDHI YA MARA YA MWISHO (LNMP)

TAREHE ANAYOTAZAMIA KUJIFUNGUA (EDD) ....

CHUNGUZA VIDOKEZO VIFUATAVYO KWA MAMA AJAPO KWA MARA YA KWANZA

A **WEKA ALAMA (√) PANAPOHUSIKA, MPELEKE KITUO CHA AFYA AU HOSPITALI KWA UCHUNGUZI/USHAURI ZAIDI ENDAPO MAMA ANA:**

- UMRI CHINI YA MIAKA 20 ☐
- MIAKA 10 AU ZAIDI TOKEA MIMBA YA MWISHO ☐
- KUJIFUNGUA KWA KUPASULIWA ☐
- KUZAA MTOTO MFU/KIFO CHA MTOTO MCHANGA (Wk 1) ☐
- KUHARIBIKA KWA MIMBA 2 AU ZAIDI ☐
- UGONJWA WA MOYO ☐ KISUKARI ☐ KIFUA KIKUU ☐

B **WEKA ALAMA (√) PANAPOHUSIKA, MPELEKE KITUO CHA AFYA AU HOSPITALI KWA KUJIFUNGUA ENDAPO MAMA ANA:**

- MIMBA YA 5 AU ZAIDI ☐ — MIMBA YA KWANZA ZAIDI YA MIAKA 35 ☐
- KIMO CHINI YA CM 150 ☐ — KUZALISHWA KWA KUPASULIWA AU VACUM ☐
- KILEMA CHA NYONGA ☐ — KUTOKA DAMU NYINGI BAADA YA KUJIFUNGUA ☐
- KONDO LA NYUMA KUKWAMA ☐

VIPIMO MAALUM VYA MAABARA:
DAMU: GROUP .... Rh .... SYPHILIS STATUS ....
VIPIMO VINGINE: ....

Toleo 2015 *Iwapo mama ana matatizo aonwe kliniki kulingana na mahitaji

REKODI YA MAHUDHURIO

CHUNGUZA VYOTE KILA MAHUDHURIO MPELEKE KITUO CHA AFYA /HOSPITALI IWAPO KIWANGO KINAZIDI AU KINAPUNGUA ILIYO KWENYE MABANO

Mimba isiyo na matatizo mama anahitaji mahudhurio 4: chini ya wiki 16, kati ya wiki 20-24, 28-32, 36-40*

TAREHE YA MAHUDHURIO						
UZITO (Kilo)						
BLOOD PREASURE (140/90mmHg)						
ALBUMIN KWENYE MKOJO (+)						
DAMU / Hb (8.5 gm/dl)						
SUKARI KWENYE MKOJO (-)						
UMRI WA MIMBA KWA WIKI						
KIMO CHA MIMBA KWA WIKI						
MLALO WA MTOTO						
KITANGULIZI (KUANZIA WIKI YA 36)						
MTOTO ANACHEZA BAADA YA WIKI 20 (NDIYO / HAPANA)						
MAPIGO YA MOYO WA MTOTO BAADA YA WIKI 20, YAPO (Y), HAKUNA (H)						
KUVIMBA MIGUU (Oedema) (++)						
Ferrous Sulphate (2 kila siku)						
*Folic Acid (1 kila siku)						
MALARIA: Sulphadoxine / Pyrimethmine (SP) vidonge 3 baada ya wiki 14/ Rudia kila hudhurio mradi ipishane wiki 4.						
PEPOPUNDA: Angalia kadi kama amepata chanjo (jaza amepata ngapi) TT1, TT2, TT3, TT4, TT5						
MAMA AMESHAURIWA KUHUSU:						
* Dalili za Hatari						
* Uzazi wa Mpango						
* Maandalizi ya Kujifungua						
* Magonjwa yatokanayo na kujamiana na matumizi sahihi ya kondomu						
PMTCT						
* PMTCT / ART (0, -, 1,2)						
* Dawa (ART)						
* CTX - Bila kujali hatua ya ugonjwa						
* Uhusiano na huduma ya CTC (EO, E1, 1R, kama ameandikishwa andika namba ya kadi ya CTC na tarehe						
* Ushauri juu ya lishe ya mtoto: Maziwa ya mama pekee (EBF), Maziwa mbadala (RF)						
* Ufuasi (Adherence): (P= Poor) (G = Good)						
Tarehe ya Kurudi						
Jina la Mhudumu						
Cheo cha Mhudumu						

C **VIDOKEZO VYA MIMBA VYA KUANGALIA KATIKA KILA HUDHURIO. WEKA ALAMA (√) PANAPOHUSIKA NA MPELEKE HOSPITALI KAMA ANA DALILI ZA HATARI**

- BP 140/90 AU ZAIDI ☐ — UMRI WA MIMBA ZAIDI YA WIKI 40 ☐
- Hb Chini ya 60% (8.5gm/dl) ☐ — MTOTO KUFIA TUMBONI ☐
- ALBUMIN KWENYE MKOJO ☐ — MTOTO AMELALA VIBAYA BAADA YA WIKI 36 ☐
- SUKARI KATIKA MKOJO ☐ — KUVIMBA MIGUU USO / MIKONO ☐
- MAMA ANAZO DALILI ZA HATARI ☐ — MAMA ANA MAPACHA ☐
- KIMO CHA MIMBA KIKUBWA ZAIDI AU KIDOGO ZAIDI KULIKO UMRI WAKE ☐

MAMA AMESHAURIWA AZALIE WAPI: ....

***Baada ya wiki 40 mama ahudhurie kliniki kila wiki.**

REKODI YA UCHUNGU

JINA LA KITUO ....
KULAZWA Tarehe .... Saa ....
UCHUNGU UMEANZA: Tarehe .... Saa ....
CHUPA IMEPASUKA: NDIYO/ / HAPANA: Tarehe .... Saa ....
UMRI WA MIMBA: (Wiki) .... KIMO CHA MIMBA (Wiki) ....
MLALO WA MTOTO .... KITANGULIZI ....
UPIMAJI WA NYONGA: - Sacral Promontory inafikiwa? Ndiyo / Hapana
- Ischial Spines zimetokeza? Ndiyo / Hapana
- Outlet: Finyu? Ndiyo / Hapana
- Nyonga ni kubwa ya kutosha? Ndiyo / Hapana

MAONI YA MPIMAJI: ....
JINA LA MHUDUMU: .... CHEO: ....

CHUNGUZA VIDOKEZO HIVI WAKATI WA KUMLAZA - WEKA ALAMA (√) PANAPOHUSIKA. MPELEKE HOSPITALI AU MWARIFU DAKTARI HARAKA.

- KIDOKEZO A AU B KATIKA UJAUZITO ☐ — HOMA ZAIDI YA 38 Centigrade ☐
- CHUPA IMEPASUKA BILA UCHUNGU ☐ — KONDO LA NYUMA KUKWAMA ☐
- UCHUNGU KABLA YA WIKI 34 ☐ — KIFAFA CHA MIMBA AU BP ZAIDI YA 140/90 ☐
- NI ZAIDI YA SAA 12 TOKEA UCHUNGU ULIPOANZA ☐ — UPUNGUFU WA DAMU CHINI YA (8.5gm/dl) ☐
- MLALO/KITANGULIZI KIBAYA CHA MTOTO ☐ — NYONGA NYEMBAMBA AU MTOTO MKUBWA
- KUTOKA DAMU UKENI ☐ — MECONIUM ☐
- MAPIGO YA MOYO YA MTOTO YANABADILIKA BADILIKA (Chini ya 120 au zaidi ya 160 kwa dakika) ☐

BAADA YA KUZAA

- KUCHANIKA VIBAYA KWA MSAMBA ☐ — KUPOTEZA DAMU ZAIDI YA ML 500 ☐
- VITAMINI A IMETOLEWA: NDIYO/HAPANA

MAELEZO YA UZAZI

KUJIFUNGUA: Tarehe .... Saa ....
NJIA YA KUJIFUNGUA ....
KAMA AMEPASULIWA: SABABU ZA KUPASULIWA ....
KONDO LIMETOKA: Tarehe .... Saa ....
KONDO NA MEMBRENI ZIMETOKA KAMILI? NDIYO/HAPANA ....
DAMU ILIYOTOKA.............ML ERGOMETRINE/OXTOCIN................ I.I.M
MSAMBA: HAUKUCHANIKA ☐ UMECHANIKA ☐ ULICHANWA (EPISIOTOMY) ☐
JINA LA ALIYESHONA MSAMBA .... CHEO ....
BP BAADA YA KUJIFUNGUA .... (mmHg)
MUHTASARI: HATUA YA 1 Saa...... Dakika ...... HATUA YA 2 Saa...... Dakika .....
HATUA YA 3 Saa .... Dakika ....
JINA LA MZALISHAJI .... SAINI ....
MENGINEYO MUHIMU .... **ARVs** Baada ya kujifungua ☐ 1Z ☐ 1A ☐ Hakunywa
MTOTO: Jinsia .... Uzito .... Kgs
APGAR SCORE 1 dakika.................. 5 dakika ....
DAWA YA MACHO (EYE OITMENT) IMETOLEWA NDIYO ☐ HAPANA ☐
Kama mama ni PMTCT1, Je mtoto amepewa ARVs ☐ N ☐ z ☐ Hakunywa (ndani ya masaa 72)
AZT dispensed ☐ 1 wk ☐ 4 wk
Lishe ya mtoto: Maziwa ya mama pekee EBF ☐ Maziwa mbadala RF ☐ Huduma ya unasihi ya kusaidia ulishaji wa watoto wachanga.

VIDOKEZO VYA HATARI KWA MTOTO BAADA YA KUZALIWA
*** Weka alama(√) panapohusika. Mpeleke Hospitali**

Uzito chini ya kilo 2.5 ☐ Homa kali zaidi ya digrii 38c° ☐ Mtoto kushindwa kunyonya ☐
Mtoto kushindwa kupumua vizuri (APGAR SCORE chini ya 5 baada ya dakika 5) ☐
Chunguza maumbile ya mtoto tokea kichwani hadi miguuni

*** Kama mtoto amezaliwa na mama aliye na kaswende atapatiwa matibabu**

Grafu ya Uchungu

TAREHE ______________ SAA ___________

MAPIGO YA MOYO WA MTOTO
*Zaidi ya 160 au chini ya 120
Mwarifu Daktari / Rufaa
(scale: 180, 170, 160, 150, 140, 130, 120, 110, 100, 90, 80; columns headed 30)

Maji ya chupa (Liquor) (B,S,M)
B: Bado kupasuka chupa (Intact), S: Safi (clear), M: Meconium;
Kubonyea kichwa (Moulding) - Hakuna, + Wastani, ++ Sana.

Weka alama
x - Njia kufunguka (Cervix)
• - Kichwa kuteremka (Descent)
(scale: 10 to 0; Kichwa kuteremka; hours 0–24)
Latent Phase — Active Phase — Alert Line — Action Line

Maumivu ya uchungu kila dakika 10 (scale: 5 to 1)
- Zaidi ya nukta 40
- Nukta 20 - 40
- Chini ya nukta 20

Dawa zilizotolewa

Oxytocin Matone/dakika

Mapigo ya moyo wa mama kwa dakika (Pulse)

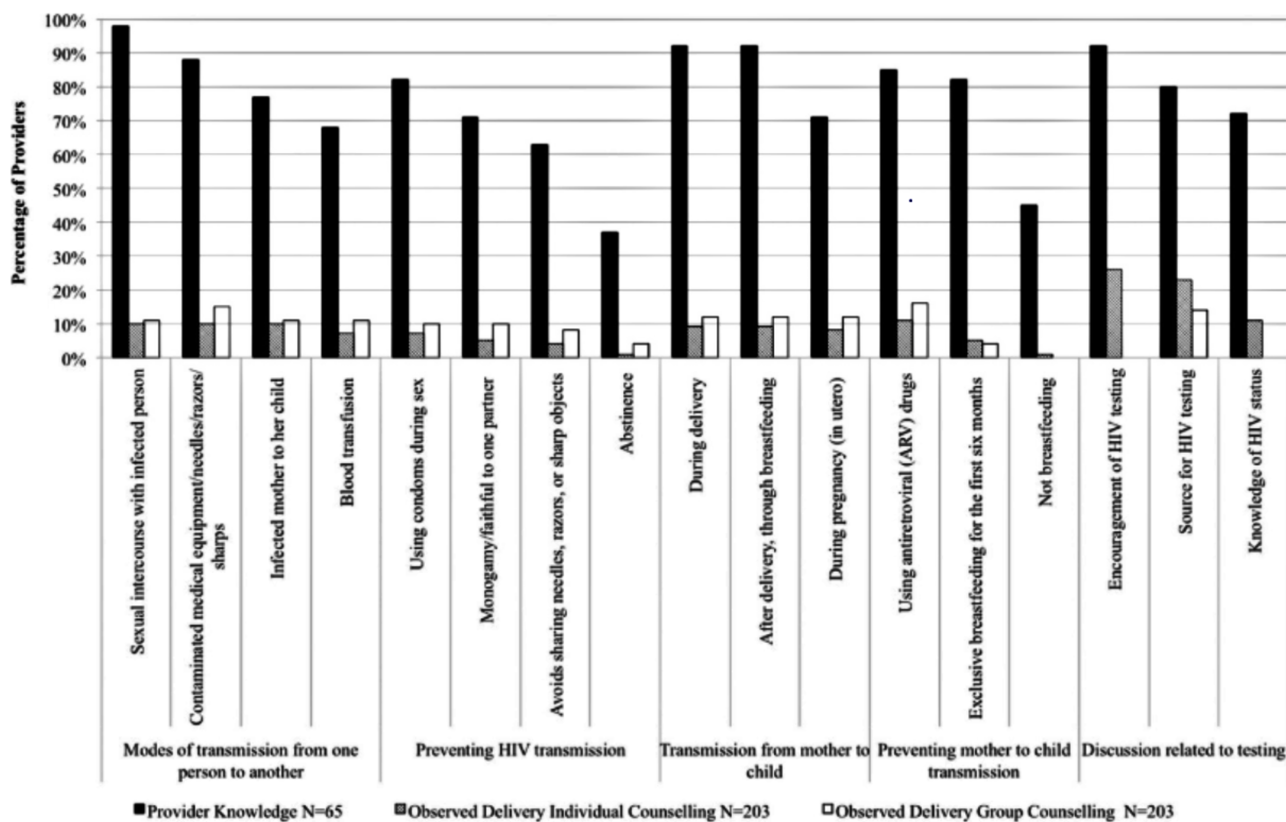
Shinikizo la damu (Blood Pressure) mmHg

Mkojo (+ Ipo, - Hakuna): Albumini +/-; Sukari +/-; Acetone +/-

Joto la mwili (°C)

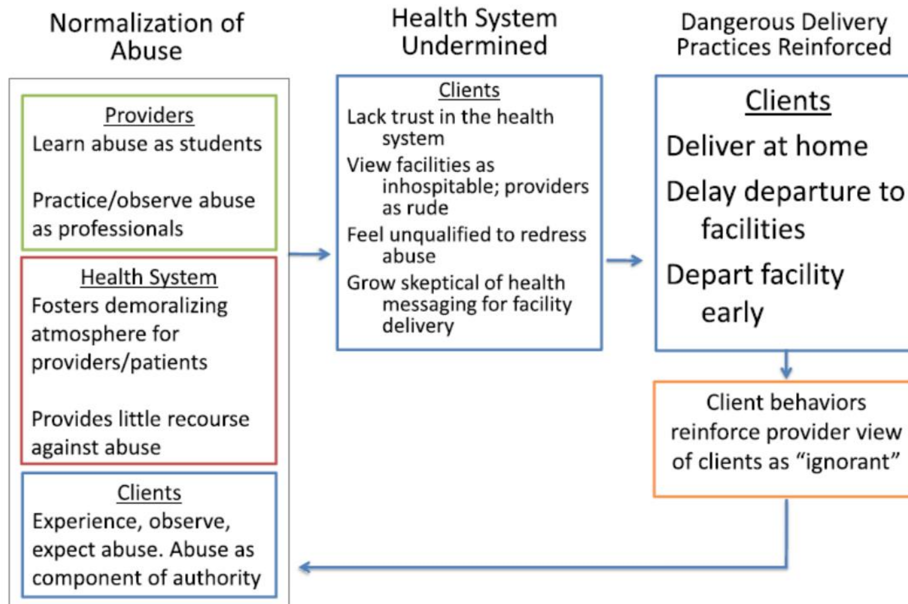
Annex 3

ANC provider knowledge and percent of observed counselling sessions with delivery and of HIV- and ANC-related messages; *source An (2016), p18* (85).



Annex 4

Pathway from disrespectful care to dangerous delivery; *source McMahon (2014), p20* (66).



Annex 5

Key messages of the Client Service Charter; *source Kujawski (2017), p21* (105).

Key charter messages

- Mutuality of respect
- Patient rights & responsibilities
- Provider rights & responsibilities
- Standards of service, including relationships
- Standards of ethical conduct
- Accountability, feedback and complaint mechanisms
- Equality and respect for all
- Ongoing maintenance of charter

List of tables and figures within thesis

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Figure 1, p3 Skilled assistance at delivery by region: Percentage of live births in the 5 years before the survey assisted by a skilled provider; source DHS Tanzania (2015) (15).

Figure 2, p9 Person-centered care framework for reproductive health equity from Sudhinaraset (2017) (13).

Figure 3, p13 Recall of danger signs during pregnancy (n=335); Mwilike (2018) (38).

Figure 4, p15 Percentage distribution of seven signal functions for BEmONC services (n=905); Bintabara (2019) (84).