ORIGINAL RESEARCH ARTICLE

Perceptions of women of reproductive age towards maternal death in Qaukeni sub-District, Eastern Cape Province, South Africa: A qualitative study

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Abstract

Maternal mortality is a global problem, particularly in developing countries. This study explored perceptions, knowledge and attitudes of women of reproductive age concerning maternal deaths in Qaukeni Sub-District, Eastern Cape Province, South Africa. This was a community-based qualitative study using using in-depth interviews among women of reproductive age. Data was analyzed using thematic analysis. The study found some of the mothers knew the causes, signs and symptoms of pregnancy as well as danger signs during pregnancy such as haemorrhage, sepsis, high blood pressure and complications of unsupervised home deliveries, while others had little knowledge about these signs and symptoms. The participants indicated that using herbal medications during pregnancy could result to serious complications and even maternal death. Women do not attend antenatal care because of the long distances, absence of clinics, shortage of nurses and doctors; thus, predisposing women to deliver at homes with the assistance of traditional birth attendants, who had limited knowledge related to health issues and the Prevention of Mother-to-Child-Transmission programme. The findings indicated that some women are knowledgeable about the causes of maternal deaths during pregnancy as well as the signs and symptoms of pregnancy. Health education during pregnancy and provision of better resources would help improve the maternal health of women in this rural setting. *(Afr J Reprod Health 2020; 24[4]: 147-163).*

Keywords: Mothers, Maternal deaths, Perceptions, Knowledge and attitudes, South Africa

Résumé

La mortalité maternelle est un problème mondial, en particulier dans les pays en développement. Cette étude a exploré les perceptions, les connaissances et les attitudes des femmes en âge de procréer concernant les décès maternels dans le sous-district de Qaukeni, province du Cap oriental, Afrique du Sud. Il s'agissait d'une étude qualitative communautaire utilisant des entretiens approfondis auprès de femmes en âge de procréer. Les données ont été analysées à l'aide d'une analyse thématique. L'étude a révélé que certaines mères connaissaient les causes, les signes et les symptômes de la grossesse ainsi que les signes de danger pendant la grossesse tels que l'hémorragie, la septicémie, l'hypertension artérielle et les complications des accouchements à domicile non supervisés, tandis que d'autres avaient peu de connaissances sur ces signes et symptômes. Les participantes ont indiqué que l'utilisation de médicaments à base de plantes pendant la grossesse pouvait entraîner de graves complications et même la mort maternelle. Les femmes ne se rendent pas aux soins prénatals en raison des longues distances, de l'absence de dispensaires, du manque d'infirmières et de médecins; ainsi, prédisposant les femmes à accoucher à domicile avec l'aide des accoucheuses traditionnelles, qui avaient des connaissances limitées sur les problèmes de santé et le programme de prévention de la transmission mère-enfant. Les résultats indiquent que certaines femmes connaissent les causes des décès maternels pendant la grossesse ainsi que les signes et symptômes de la grossesse. L'éducation sanitaire pendant la grossesse et la fourniture de meilleures ressources contribueraient à améliorer la santé maternelle des femmes dans ce milieu rural. *(Afr J Reprod Health 2020; 24[4]:147-163).*

Mots-clés: Mères, décès maternels, perceptions, connaissances et attitudes, Afrique du Sud

Introduction

Maternal deaths are a global challenge. In 2013, 289,000 women died from pregnancy-related causes, and maternal death was identified as the second 'biggest killer' of women of reproductive age[1]. An estimated 289,000 women died during, or after pregnancy and childbirth in 2013[1]; and majority of those deaths were in developing countries, especially in sub-Saharan Africa, and could have been prevented by improving access to quality care[2,3]. The challenge of maternal deaths

triggered the World Health Organisation to set goals in relation to pregnancy as part of the Millennium Development Goals; and now Sustainable Development Goals encapsulated in *Health targets for SDG 3*; and these targets aims to reduce maternal deaths and to improve the general health of women[1]. Hospitals' perinatal reviews showed that omissions and sometimes negligence by clinicians in the delivery room have led to maternal deaths[4]. Under-reporting of maternal deaths is a problem, especially in underdeveloped, under-resourced sub-Saharan countries. Maternal mortality is high in Asia and in sub-Saharan Africa and is exaggerated by high fertility rates compared to the fertility rates in Europe[5]. European countries have been able to examine levels and trends by which maternal deaths occur over a period of time because of their comprehensive registration systems, unlike in sub-Saharan Africa, which has limited resources and poor data[6]. In the United States of America, the monitoring of progress in the area of maternal deaths was prioritised and policies were renewed to achieve goals through Obama's Global Health Initiative[7].

South Africa has established the National Committee for Confidential Enquiries into Maternal Deaths (NCCEMD) to engage in an audit of maternal deaths in health facilities, and the death audits have formed a basis for decision-making in South Africa[8]. Seemingly, South Africa is the only developing country in sub-Saharan Africa with a coordinated system of monitoring maternal deaths. The National Committee for Confidential Enquiries into Maternal Deaths released a triennial report showing a decrease in maternal deaths, the rate of decrease has slowed from 1999 to the latest reporting period of 2014-2016[9]. A study conducted in East London indicated that some maternal deaths may be attributed to a shortage of nurses assisting in deliveries in the maternity wards, poor quality care, and late detection of complications during labour, and progression of labour taking place without the assistance of a midwife[10]. OR Tambo Health District is the worst-performing district in the Eastern Cape in terms of maternal and child deaths, with 450 deaths per 100 000 live births[11]. An article in the Daily Dispatch, published on the 22 October 2013, reported an alarming high number (52) of maternal deaths in OR Tambo from April to October 2013. The report indicated that OR Tambo Health District had 91 maternal deaths per 100 000 live births in 2011; and 74 per 100 000 live births in 2012[12]. Consequently, a political decision was taken to establish a project called the Rapid Response Team, comprising senior managers from different directorates who formed a delegation mandated to solve the problems related to maternal deaths in OR Tambo[12]. The poor health outcomes observed in OR Tambo Health District could be attributed to its deep rurality, poor infrastructure, poverty and high employment.

There several studies exploring the attitudes, knowledge and perceptions of women concerning maternal death in other countries[3,13-23], but there is relatively scant information in the South African context. Analysis of deaths in Qaukeni Sub-District in OR Tambo Municipality from January 2011 – December 2014 showed a significant number of maternal deaths. The national target for maternal deaths was 38 per 100 000 live births; and in Qaukeni Qaukeni Sub-District it was 154 per 100 000 live births[24]. Qaukeni Sub-District is very rural, with some parts unreachable due to poor roads. There is wide geographical distribution of health clinics, as well as few and functional ward-based outreach teams in the region. The use of unskilled providers for antenatal and delivery care is one of the major predisposing factors to high rates of maternal morbidity in many sub-Saharan African countries[25]. Generally, factors influence maternal deaths include cultural norms, gender discrimination, inadequate knowledge of signs and symptoms of illness and services available, cost of services, unavailability of transport and poor quality of care[26]. It is not known whether maternal deaths in Qaukeni Sub-District could be attributed to a lack of knowledge, awareness and attitudes of women towards maternal health or institutional/facility maternity-related issues concerning poor quality of maternal healthcare services provision in the setting. The present study explores the perceptions, knowledge and attitudes of child-bearing age women towards maternal deaths in Qaukeni Sub-District, since information in this regard is lacking. It is envisaged that findings from this study might help in informing the

Department of Health to craft strategies and interventions to reduce maternal mortality and improve maternal health in the region.

Methods

Research design

A community-based in-depth interview of multiparous pregnant women was conducted to explore their perceptions, knowledge and attitudes towards maternal deaths at Qaukeni Sub-District. A qualitative descriptive approach was deemed relevant because it enables understanding of what determined behaviour in the context of maternal deaths[27.]

Study setting

This study was conducted at two gateway clinics in Qaukeni Sub-District: Holy Cross Clinic and St Elizabeth's Clinic. These constitute two of 20 clinics in the sub-district and are connected with Holy Cross Hospital and St Elizabeth's Hospital, respectively.

Population and sample

The population of the study consisted of women of child-bearing age from 18 to 45 years. The target population was multiparous pregnant women and excluded those who were nulliparous. A group of women of child-bearing age from 18 to 45 years of age were invited to attend to three focus group discussions. Participants were purposively selected because of their presumed knowledge of the phenomenon under study because of their experience of pregnancy, childbirth and postnatal.

Data collection

In-depth interviews were conducted, with each interview lasting between 45-60 minutes. Recorded information was listened to and transcribed verbatim. Interviews continue until data saturation. The following broad questions were asked to get the desired information:
A semi-structured set of interview questions was used as a guide to facilitate the interview process.

a. What do you know about pregnancy?
b. What problems do you encounter related to pregnancy?
c. What do you perceive as the causes of maternal deaths?
d. What are your perceptions about maternal deaths?
e. What are your attitudes about maternal deaths?

Permission was sought from the participants to use a tape recorder to record the interviews. Open-ended questions with prompts were used to give respondents an opportunity to give full explanations according to how they perceived the phenomenon[28].

Trustworthiness

Trustworthiness was maintained by applying the concepts of credibility, transferability, dependability and conformability. Data collected and the conclusions drawn from the information collected during interviews were verified with the participants to ensure that the interpretations made were correct[29]. The participants were given in-depth explanations regarding the study in question to enable them to answer appropriately[30].

Data analysis

The recordings and the notes taken were used to generate transcripts that were in turn, where necessary, translated into IsiXhosa, the local language. Content analysis was then applied to analyse the transcripts. Data analysis was done manually. The transcripts were read several times in order to gain an overview of the material by the authors, and a consensus was reached regarding the data coding. Themes and sub-themes were formed based on the information provided by the participants. The data gathered was summarised, interpreted and meanings were attached to it. All the points that were captured as notes constituted the basis of the final interpretation[28].

Results

The findings were grouped together under four themes, each with categories and sub-categories (Table 1).

Theme 1: Knowledge about pregnancy

Findings indicated that participants had different perceptions about pregnancy and causes of maternal deaths, with some showing ignorance of what pregnancy is.

Physical signs and symptoms of pregnancy

This category was divided into five sub-categories. During the interview, participants highlighted the physical signs and symptoms of pregnancy such as missed menstruation, vomiting and not liking certain foods, dizziness, swelling of the feet, eyes becoming white, changes in colour and size of the breasts and pimples on the face.

Missed menstruation

Participants stated that a woman is pregnant when she has missed the menstrual period.

"*When I am pregnant I only know it when I have missed my month of menstruation, a month, then it happens that I wait for the upcoming month and there is no menstruation. Then I go for check-up and it is then that I know*".

"*Pregnancy we can say when you see yourself having missed the menstruation period, you first look at the week as against your usual time of menstruation then if you miss a month you will begin to see signs of pregnancy like nausea and vomiting, then you are sure that something is happening in your body*".
Another participant further explained that pregnancy occurs when a woman has "*slept with a man without using a condom misses a period and then she becomes pregnant*".

One participant had this to say: "*It means when one is not using a condom then she becomes pregnant when she sees herself having missed menstruation then the woman is pregnant*".

Vomiting

Some participants thought that vomiting and disliking of certain foods is a sign and symptom of pregnancy.

"*A pregnant person vomits; she vomits when she has eaten something, or she may dislike some food stuffs*".

"*When one is pregnant there are things she dislikes, there are things, let me make an example about me, when I am pregnant there are foods and people I dislike*".

Dizziness

Dizziness was highlighted as another sign of pregnancy by participants.

Changes in colour and size of the breasts, pimples on the face and swelling of the feet

A participant explained that she might not know that she is pregnant but someone looking at her may observe signs and symptoms of pregnancy, such as pimples on the face or changes in the size of the breasts.
The participant had this to say:

"*This person will be seeing pimples on my face or my breasts being full and big in size whilst I may not be knowing that I am pregnant*".

Another participant stated,

"*When one is pregnant there will be changes in size and colour of the breasts and swelling of feet*".

Subjective understanding of pregnancy

The participants mentioned different views and descriptions of the condition of pregnancy.

"*Pregnancy you carry a baby in your stomach after fertilisation of an egg and sperm has happened*".
"*Pregnancy means to carry a baby in the womb when you have slept with a man without a condom, then you fall pregnant*".

Table 1: Emergent themes, categories and sub-categories concerning perceptions, knowledge and attitudes of women towards maternal deaths

Themes	Categories	Sub-Categories
Knowledge about pregnancy	Signs and symptoms of pregnancy	• Physical Change such as: Missed menstruation, vomiting when pregnant, dizziness, disliking certain foods and people, changes in the colour and size of the breasts,
	Subjective understanding of pregnancy	• Description of pregnancy
	Limited knowledge about pregnancy	• Having sexual intercourse. • Protection of the baby.
Knowledge about causes of maternal deaths	Not attending antenatal clinic	• Fear of disclosure re- pregnancy.
	Home delivery	• Heavy bleeding at home • High blood pressure • Lack of skill in traditional birth attendants • Infection
	Lack of resources	• Staff shortage • Clinics are too far in rural areas. • Ambulance does not arrive when needed. • Lack of food • Electricity outage
	Delays in assisting pregnant woman in labour	• Lack of responsibility in nurses and doctors. • Delayed diagnosis.
	Medico-legal hazards	• Telling stories about a pair of scissors forgotten in the womb.
	Superstitions	• Hiding pregnancy in early stage to prevent your boyfriend's fiancée from knowing that you are pregnant. • Bewitched when you share a boyfriend with others.
Views about challenges of pregnancy	Negative implications of unplanned pregnancy	• Rejection • Forced abortion • Lack of support for the baby • Sickness in the pregnant woman • Limited knowledge of labour and fetal movements.
	Perceptions regarding Teenage pregnancy	• Unexpected pregnancy. • Exposure to severe labour pains. • TV exposure.
	Use of herbal medication	
Views about services to be rendered for pregnant women	Positive responses related to services	• Role played by nurses in pregnant women. • Health education pertaining to treatment, antenatal care and dangers of home delivery. • More nurses to be employed by the Department of Health. • Building of a clinic • Clinics in rural areas to have ARVs in stock
	Negative responses related to services rendered	• Long waiting times • Replacement of aged and stubborn nurses by younger • Nurses.
	Nursing ethics	• Male nurse proposing love to a patient in labour. • Artificial nails. • Swearing to patients • Doctors misidentifying a patient.
Perception of women concerning maternal deaths	Subjective feeling due to loss	• Pain • Siblings' difficulty with adjustment to the father figure. • Loss of a loved one and community leader.

"*Pregnancy means to be pregnant, to carry the baby in the womb and you are required to attend the clinic*".

"*Pregnancy means you will have a baby after nine months*"

Limited knowledge about pregnancy

This category was divided into two sub-categories.

Having sexual intercourse

Some of the participants had no clear understanding of how exactly pregnancy occurs:

"*I am sleeping with a man, now I am pregnant or do not see that I am pregnant until someone tells me that I am pregnant, she will say, why do you look as if you are pregnant*'?'

Another respondent said,

'*'some women like to sleep, maybe she doesn't know that she is pregnant and may link drowsiness to pregnanc*y''.

Protection of the baby

A participant further defined pregnancy as "*a means to protect the baby*".

Theme 2: Knowledge about causes of maternal deaths

Not attending antenatal care clinic

The findings indicated that clients do not attend the antenatal care clinic when pregnant because of various reasons such as fear of their pregnancy being detected by parents and school teachers, or myths such as the possibility of being bewitched by girls with whom they share a boyfriend. Another reason cited was that clinics are very far, and they do not have money for transport.

Home delivery

Home delivery was mentioned as one of the contributory factors for maternal deaths, due to the limited knowledge and skill of the people who assist with deliveries at home.

One participant said, '*'There is no one to assess a person who is in labour like a doctor*''.

Another participant cited that even if there were helpers, they were not the same as health professionals in the hospital, because they do not know what to do when the baby has an abnormal presentation.

One said, "*When you deliver at home there is nobody to take care of you, unlike in the hospital where the patient is cleaned and given vitamins, you are cleaned and remain clean. For example, when you have delivered at home the baby is just put there without being checked*".

Heavy bleeding

Heavy bleeding was cited as another cause of maternal death at home, putting the lives of women in danger when health professionals are absent**.** When asked how bleeding could cause death, a participant said,

"*The reason might be heavy bleeding at home and not being in hospital where there are no nurses who could assist the woman, death could be caused by bleeding*".

The participants thought that delivering without Nevirapine may contribute to bleeding. When asked what causes the death of a pregnant woman when there was no Nevirapine, a participant had this to say:

"*The reason might be heavy bleeding at home and not being in hospital where there are nurses who could assist the woman; death could be caused by bleeding*".

High blood pressure

Participants cited that there is a tendency among pregnant women to default on taking treatment. When asked what happens when a person does not take her treatment, one participant said, "*The woman may have elevated blood pressure, eyes not seeing well and swollen*".

Lack of skill in traditional birth attendants

One of the challenges of home deliveries mentioned was the limited skills of traditional birth attendants,

especially when women had complicated deliveries. This lack of skill on the part of the birth attendant could lead to the death of the woman in labour.

A participant in focus group one stated the following:

"*The helpers can just be there but when the baby comes in a complicated way, maybe showing feet first or any other abnormal way, or showing an arm, they don't know what to do. So, because the person with home delivery has a problem, that may lead to death. When they rush her to the hospital it will be late already*".

Helpers at home were unable to cut the umbilical cord. In addition, a participant indicated that home deliveries occur because of teenagers wanting to hide their pregnancies. She said,

"*Those who are schooling hide themselves from parents, will deliver alone, strangle the baby where she delivered and will come home without the baby and no one will know that she fell pregnant*".

The participant further stated that some home deliveries took place amongst those who were not schooling because they were too lazy to travel.

Infection

Infection was cited as another cause of maternal death in home deliveries. A participant in focus group 2 said,

"*Infection inside the womb could be the cause, because in the hospital the woman is cleaned before discharge. I don't see anyone who can think or who can do the cleaning of the private parts at home, and infection will form inside*".

Lack of resources

Staff shortages

Resources are enablers for rendering effective quality services in hospitals and clinics. Staff shortages were strongly cited by all as a contributor to maternal deaths. Participants said that they were attended by health professionals whom they perceived to be student doctors because of a general shortage of doctors in the hospitals. They said that student doctors made mistakes when they were left to conduct Caesarean sections without the supervision of experienced personnel. A participant said:

"*Another thing, sister, sorry ~ there are those doctors whom I don't know whether they are still on training. When a pregnant woman is in labour and must be taken to theatre for Caesarean section, then the operation will be done by a student doctor. There is someone in the location who was wrongly cut and wrongly sutured and was buried two weeks ago*".

The participant further stated,

"*When the doctor examined her body, he enquired from her father about the person who did the suturing, and the answer was that the father was referred to a student doctor*".

The shortage of nurses was highlighted by participants as another contributory factor to maternal deaths. Here is what a participant had to say:

"*What I have observed is the shortage of nurses, they are few, and yes there is a shortage of nurses. Now when there is one nurse she is expected to go to the dispensary or to go and attend babies that side, meanwhile there are also pregnant women this side. The nurse must attend to the number of patients outside. I see the shortage of nurses*".

Clinics too far

Participants indicated that clinics are too far apart in rural areas and it is difficult to reach the clinic during the night. Also, there are no means of communication to assist the woman in labour. A participant said:

"*Another cause of maternal death is that clinics are too far, and you will find that it is the rural areas and it is during the night. So, if you deliver at home assisted by old-aged people, then you die or the baby dies".*

Ambulance does not arrive

In some areas there are no phones, you call the ambulance and it does not arrive during the night. Even when she has arrived in the hospital, the women do not get quick attention and stays for a long time until the baby comes, maybe coming in a wrong way ~then the woman dies".

Limited food in the hospitals

When participants were asked about the care for pregnant women in the clinics and hospitals, they were strongly critical.
One participant stated that there was no care in the clinic or hospital, and she would not advise families and friends to use clinics and hospitals because relatives are always asked to bring food for the sick family members.
She said this had happened to her recently. When asked about how often it was necessary to bring food for the sick relative, she said,

"*I am not sure because I rarely come this side, I think she was admitted for four days. If there is food, it is very little and maybe of this amount [pointing at the tip of her finger]. Food is not enough and when you take treatment you need a full plate of food; you can't take pills when the stomach is not full. I cannot say they must go to the clinics or hospital. I would encourage relatives and other people to stay at home*".

Electricity

Electricity outage was also mentioned as another factor that could predispose women to maternal deaths. When the Researcher enquired how electricity outages predispose women to maternal death, this is what the participant said:

Respondent: *It does happen sister when doing suturing and the electricity goes off, now the doctor does suture quickly without noticing that some items used were not all taken out. I think some do not get care from theatre and they are forgotten like the pair of scissors or they become slow in doing operations and the person dies*.

Delays in assisting pregnant women

Lack of responsibility

Participants were asked whether they were ill-treated by health professionals and how that ill treatment, if any, might contribute to maternal deaths.
A participant had this to say:

"*Another cause of death when you give birth is the lack of care in hospitals. Nurses are sitting there and do not care for you, or they will say 'Get on the bed', then they will instruct you to push. It was my first time to give birth to a baby, I don't know how to push a baby and how do I go about it. There goes a nurse to another room leaving me behind pushing the baby and she stayed there. The birth process is continuing or perhaps I am tired that can cause me to die or I had a very long labour without care, I am supposed to deliver but they don't care for me and I am tired*".

The participant explained about the conduct of nurses working on night duty. She stated:

"*Sister, if you have arrived during the night, nurses have a tendency of locking themselves up in the rooms exactly when you feel that the labour pain is strong and you need help because the situation needs a nurse. Then you will raise your voice and some nurses do come, some don't*".
In addition to that, one participant indicated that she was sent to and from the labour ward by nurses, and as a result she nearly delivered her baby in the waiting room. She might have been delivering a breech baby, and nurses were all far away.

Delayed diagnosis

Another respondent raised the issue of lack of timeous and early diagnosis of women in labour. She said.

"*Even if you are going to deliver through an operation, nurses do not quickly observe that, until you are in labour for days in succession, and*

eventually you are going to deliver through an operation. The nurse does not see that and continues to do vaginal examination; she does not see that you are supposed to be having an operation".

Lack of responsibility of patients

It was highlighted by participants that sometimes the cause of death is the negligence of women themselves. It was pointed out that some women do not take care of themselves.

"Women do not care for themselves. For example, she is taking ARVs in her pregnancy and does not take treatment, saying the treatment is delaying her. Then the unborn child is infected. When giving birth she dies, leaving the child alive".

Another participant confirmed that women were sometimes contributors to their own deaths. One said,

"*I can say death is caused by not following clinic instructions, because when you go to the clinic for the first time you are given instructions as to how to take your treatment. Even if you have high blood pressure, you are given information on how to take your treatment, and you need to take it exactly the way you were told. Some people default treatment for some days without taking their treatment and forget*".

Medico-legal hazards

The respondents also cited mistakes made by nurses and doctors such as leaving a pair of scissors in the womb during an operation. This is what one said:

"*Pertaining to the pair of scissors, it happens that a pair of scissors may be left in the womb and after a long time you feel that something happened in your womb when you were giving birth, and it is only then that you are taken for another operation, after you have already delivered*".

One said, "*It happens frequently because they [doctors and nurses] do the operations in a hurry – just the way the nurses are behaving when they are conducting deliveries, and that is how the pair of scissors is left. The outcome is seen on the legs that stop functioning, which ends up making the patient using a wheelchair or crutches*".

Superstitions

Some of the causes of maternal deaths are invisible factors – namely, women's superstitions. These beliefs cannot be proved or disproved, since they have to do with the realm of belief. One respondent had this to say:

"*It happens to us, who get pregnant and attend traditional healers, when you share a boyfriend with other girls, or you are bewitched, and when you are in labour you eventually die*".

Theme 3: Participants' views on challenges encountered in pregnancy

Negative implications of unplanned pregnancy

This category was supported by five sub-categories:

Rejection

Some pregnant women shared their experiences of rejection by their spouses when they were pregnant. One participant stated,

"*In my first pregnancy the problem I saw was the rejection by my husband whom I loved so much. I would be excited just by seeing him, even if he has said nothing to me, but if I have seen him with another girlfriend, I will cry at home the whole night. That is one reason that made me to see that pregnancy has problems because I just wanted to see him, even if he has not said a word. I wanted to commit abortion when I saw that he does not really love me, and I preferred to do abortion for his child because he does not love me and I love him*".

When participants were asked about the impact of not being loved by a fiancé, the response was,

"*It affects the baby because of stress and you don't know that … you want to get rid of the baby, because you continue to think of someone who does not care for you*".

Forced abortion

Another respondent shared how she was ill-treated by the father of the child, from the time she told him that she was pregnant until the pregnancy was far advanced.

"*I told him, and he said, 'You say you missed the menstrual period? Chase it and you will eventually catch it.' I realised that this was ill-treatment, and he ended up giving me money to do abortion because he did not want the baby*".

Lack of support for the child

The scenario portrayed the extent of abuse women and children are subjected to. A participant had this to say:

"*Yes, I agree he has not yet phoned me and has not spoken to me up to now, and the child is four years now; he has never done anything for him. When the child wants to go to the father's place he goes and comes back with nothing*".

Sicknesses in pregnancy

Challenges experienced by participants involved various aspects, as described. These included abdominal pains with no fetal movements, vomiting, and dizziness, loss of appetite, painful bones, high blood pressure, swelling, headache and bleeding during pregnancy. A participant said:

"*I noticed that a pregnant person falls sick most of the time. You have things which you did not have when you were not pregnant*".

Limited knowledge about labour and fetal movements

A participant said she came to the hospital with labour pains:
"*When I arrived in hospital, I don't know whether labour pains stopped or what happened. I stayed more than a week and when I went to check up I heard that the mouth of the womb was still closed and I thought that I might die there, and I requested a Caesarean section*".

This was shared by another participant in relation to fetal movements:

"*I can say some will say they are pregnant; their abdomen is painful and there are no fetal movements*".

A participant stated:

"*One is able to feel the fetal movements, when they are there and when they are not there, now only minimal movements are felt, now when there are no fetal movements the whole fetus makes a sound*".

When the participants were asked about other causes of fetal death, the response from one participant was:

"*I can say that compressing a pregnant abdomen and use of Xhosa medication can lead to the death of a fetus*".

Perceptions regarding teenage pregnancy

This category was supported by three sub-categories:

Unexpected pregnancy

Teenage pregnancy was viewed as a challenge experienced in the community. Teenagers fell pregnant, and because their condition was unexpected in the family and might incur parental disapproval, they kept it hidden, thus losing out on essential antenatal care.

Severe labour pains

When a participant was asked to say more about teenage pregnancies, she highlighted that the labour pains can be unbearable – and that teenagers rush into things that are meant for adults.

TV exposure

Television was cited as the one of the causes of teenage pregnancies.

"*We watch TV and see how things are done, we practise that, and something happens*," said a participant.

Use of herbal medication

The use of herbal medication was mentioned as a possible cause of danger to pregnant women. A medication called *gwarugwaru* is ingested by

pregnant women as a purgative when the woman feels dizzy. The idea is to remove bitterness from the gall, according to the interpretation people give to the dizziness. *Mbelekisane* is also ingested for assisting with quick expulsion of the fetus during labour.
A participant said,

"*A pregnant woman would complain of dizziness and would suspect something, and say, 'I have bitterness from the gall when I am asleep. I wish I could take a purgative'',*

and she would drink *gwarugwaru*. *Mbelekisane* makes the baby to be quickly expelled. When you have already delivered the baby, *Mbelekisane* as a traditional medicine has caused the baby to have a green colour on the buttocks which you may think is caused by veggies, yet it is the traditional medicine".
When participants were asked how *Mbelekisane* could be a danger, a participant said:

"*It is wrong these days, especially when you use Mbelekisane alone and you don't go to the clinic, while you don't know the position of the baby in the womb*".

Theme 4: Views about services rendered to pregnant women

Positive responses related to services

This category was divided into five sub-categories:

Role played by nurses

Younger nurses were perceived to be more caring than older nurses, and male nurses were viewed as more caring than female nurses.

"*Young nurses are caring, together with student nurses. I don't know whether it is because the students are not full-time workers, but they care*".

Heath education

Health education generally was felt to be needed:

"*I wish that the Department can teach us as women about when to start at the clinic early so as to protect yourself and the baby. If we can have knowledge, maybe things can be better, because some people do not have knowledge*".

Another participant stated that her wish was

"*to see the Department going to communities to do health education, because people do not go to hospitals. Health education should be about the importance of attending antenatal clinic by pregnant women*".

Another said,

"*My wish is to see pregnant women being encouraged to take iron tablets to protect the unborn child*".

More nurses needed

More nurses need to be employed by the Department of Health:

"*My wish is that the Department of Health employs more nurses because they are scarce. One nurse may attend a patient while the other patient is in labour and is left unattended, since there is only one nurse*".

Building of clinics

Participants mentioned the challenges of the scarcity of clinics in their areas:

"*It happens sometimes that we do not have money for transport to go and fetch treatment, but if there was a clinic in the area we could be assisted*".
Another respondent said that often hospital was the last resort:

"*We do come to the hospital after we have tried enema. Yes, it will be the last resort, because the client will complain of hunger and there is no money for travelling long distances*".

Clinics in rural areas to have ARVs in stock

Another participant highlighted that it would be good if mobile clinics in the rural areas had ARV treatments in stock when going to mobile clinic points.

Negative responses related to services rendered

Long waiting times

Participants highlighted the long times they were expected to wait when seeking assistance at clinics and hospitals:

"*You see, Sister, I arrived at five, I have been sitting here ever since. The nurses continue to tell us to move and follow the queue [laughing]. There is nothing that they are doing. I have been here long before, Sister; if there was something they were doing, I would be having my pills in my hand*".

Stubborn, aged nurses

Participants felt that nurses who are old are stubborn and unhelpful and had negative attitudes to patients. One participant stated:

"*There are too many old-aged nurses and they must be reduced through retirement, to bring in young nurses. Older nurses are stubborn. Old nurses have a negative impact in the hospitals*".

Another said,

"*The older nurse will ask you, 'You say you have come to deliver the baby?' Then she will ask you about the number of your pregnancies, then you start counting and say I have two and this is the third one, then the nurse says, 'You are an old woman of my age, see – you will go home straight after delivery.' Hey, you ask yourself why it will be like that because with the previous pregnancies I slept in hospital after delivery. Why now when I have come to deliver the third baby I am told that I am an old woman, when I saw myself that I am not of the same age with this mother who says this*".

Ethics of health professionals

Four sub-categories emerged:

Male nurse proposing love to a woman in labour

The conduct of both nurses and doctors was cited as unethical. Participants had this to say:

"*A male nurse inserted fingers in my vagina only to find out that he is fallen for me. He wanted me to have love affair with him after delivery, which is not good*".

Some nurses swore at patients, and one was reported to have said,

''*open your thighs! You enjoyed it when you opened up for the coming of the baby*".

Participants narrated how many nurses behave uncaringly in labour wards. One said:

"*Then you will raise your voice and some nurses do come and some don't. You would say, 'Nurse, I need to give birth', then the nurse would insult you saying, you are nagging us by your noise, what do you know about giving birth what I say happened to me*. The day nurses said this patient should have delivered yesterday".

A doctor was reported as having called a patient a 'chocolate':

"*Nursing care might not be there, like when we lost my aunt who was taken to hospital. The doctor said, 'Huh! You have brought me this chocolate, what I am going to do with this chocolate?' You see the doctor labels you as a chocolate when you are sick and wheeled by a wheel*".

Artificial nails

Experiences were shared pertaining to the pain and torment endured by patients when nurses wore artificial nails in the labour wards:

"*Nurses must stop putting artificial nails on, because they are required to clean the patients and wear gloves, but these gloves are torn because of the long nails*".

A participant also shared that she felt pains for a month after a vaginal examination conducted by a nurse wearing long, artificial nails:

"*The nurse asked, 'Do you want to be helped?' Then you say, yes, while crying due to pains and the nurse will insert fingers the way she feels like doing it, and you tolerate the pain with eyes closed, crying and tolerating the help from artificial nails*".

One participant highlighted that her episiotomy was not done well:

"*The people who do suturing are doing it badly. As a result, some people are encountering problems emanating from suturing, or if an episiotomy has been done, it is not done properly. The cut is enlarged, and suturing is done badly. I am referring to a 'home girl' who stays next to my home that was not sutured properly and could not walk for a period of a month. She felt pains when walking and had a yellow vaginal discharge and the suture line did not heal*".

Theme 5: Perception of women concerning maternal deaths

Subjective feelings due to loss

This category is supported by three subcategories:

Pain

A sense of psychological pain was expressed by participants due to the loss of a woman in the community who left young children behind.

"*It is painful when you see the children of the deceased, the woman leaving young kids, it is painful*".

Difficulties for siblings in adjusting to a father figure

Participants highlighted that maternal deaths expose children to frustration when they are left with a father who may make things difficult by being irresponsible and failing to support them financially.

Loss of a loved one and community member

Maternal deaths are sometimes perceived as a great loss, robbing the community of women who bring hope to other people. A participant stated:

"*It is not nice to lose a person that you are used to, or maybe someone who has been doing good things in the location, for example, a ward counsellor*".

Discussion

Maternal deaths are public health problem both locally and globally. A high number of maternal deaths have been recorded at Qaukeni, despite the strategies by the World Health Organization for countries to imbibe in order to reduce or prevent maternal deaths. As a preventative strategy to maternal deaths, women of child-bearing age and their families should be empowered with knowledge related to pregnancy, labour, delivery and the postpartum period to detect early pregnancies and labour-related problems. The findings of this study indicated that women perceived maternal deaths as a painful occurrence in the community, and one that could be avoided. Knowledge about the signs and symptoms of pregnancy needs to be more clearly disseminated to women because knowledge of one's condition forms the basis of timeous antenatal care. Most of the participants knew about some signs and symptoms of pregnancy; they mentioned missed menstruation, nausea and vomiting, dizziness, disliking certain foods, changes in the size and colour of the breasts. Hadayat et al.[31] study concurs with the findings of this current study concerning signs and symptoms of pregnancy namely, nausea, vomiting and dizziness. Knowledge about the discomforts of pregnancy is important to women of child-bearing age in order for them to manage the discomfort correctly and refrain from using home remedies that may have side effects detrimental to their own life or the life of their fetus.

Some women could further explain how conception takes place, stating that a woman carries a baby in her womb after fertilisation of an egg and sperm. However, others were ignorant about pregnancy, and associated pregnancy with sickness, protection of the baby or drowsiness. Most women in this study could not know that they are pregnant, apart from the odd sign or symptom which they often depend on others to detect. Most of the women are uneducated and live in rural setting, and the health facilities are far away from them. This explains why so many of the women do not attend antenatal care clinic or attends late. It has been reported that women who do not attend antenatal and who give birth at home are also more likely to be poor, uneducated, and to live far from health facilities[21,32-34]. Also, other factors that discouraged women from attending antenatal is the feeling of healthiness as well as the constraints of time, money, and transportation[21]. There is need to make

antenatal more accessible to women, through more frequent visits by mobile teams.

Knowledge of the causes of maternal mortality is important to prevent the deaths that are preventable, including those sustained during parturition. The findings in this study indicated that most women had a good knowledge of the causes of maternal deaths. They stated home deliveries, bleeding, high blood pressure, and lack of skill in traditional birth attendants, infection and non-adherence to anti -retroviral treatment as contributory factors to maternal deaths. The findings are similar to those revealed in a study carried out in Northern Ethiopia[35], where participants highlighted infection, high blood pressure and bleeding as causes of maternal deaths. Also, the WHO highlighted the global causes of maternal deaths include haemorrhage, hypertension and sepsis as being responsible for more than half of the global maternal deaths[36]. Non-pregnancy-related infections (HIV-related), obstetric haemorrhage, and complications of hypertension in pregnancy are the three conditions responsible for almost two-thirds of potentially available maternal deaths in South Africa[37].

Nevertheless, a few participants who had limited information about the causes of maternal deaths. They were confused about taking of Nevirapine before delivery. A participant cited that bleeding would occur without Nevirapine. Limited knowledge could be attributed to the fact that some women have little knowledge about HIV/AIDS and the prevention of mother-to-child transmission (PMTCT) programme. Empowering communities with health knowledge are paramount and a cost-effective way to reduce maternal mortality. Awareness about the importance of antenatal care may reduce home deliveries and their many complications. In addition, in under-sourced settings or communities, traditional birth attendants are needed to perform deliveries in the absence of health facilities or emergency and may lack necessary skills to deliver babies with complications. This is clearly an area where education could be stronger, alerting the traditional birth attendants on the basic biomedical practices considered very crucial during labour, and the need for them to screen for high risk pregnancies and early referrals to health facilities. Another important aspect of training could be on childcare services.

It is intriguing that some women in this study, perceived maternal deaths as being caused by witchcraft. They clearly explained their belief that when two women share a boyfriend, it is likely that one or both will seek assistance from a traditional healer to use a '*muti'* (witchcraft opium) to bewitch the other one, and cause her to die while giving birth. Such beliefs contribute to delays by women in attending antenatal care; as they are afraid of being seen by their counterparts, whom they believe will bewitch them. Although some participants showed knowledge about the signs and symptoms of pregnancy and the causes of maternal deaths, their overall attitudes to clinics and hospitals were negative. This finding is in line with a study conducted in South India[13], and in Nigeria[14], where participants were aware of the causes of maternal deaths, but the attitude received towards formal care at the health facilities restricted and delayed them from seeking professional help.

The finding of this study also showed that one of the contributory factors to the negative attitudes of women in attending antenatal clinics is associated to the harsh behaviour of nurses, which kept them away from clinics. In a systematic review[26], evidence synthesised from public and private health facilities in 42 low-and middle-income countries (LMICs) across four regions (Africa, Asia, Latin America, Middle East) indicated frequent reporting of negative attitudes and behaviours, mostly commonly verbal abuse, rude behaviours and neglect. Okonofua et al.[14] study involving Nigerian women's satisfaction with maternal health care in referral hospitals indicated that women were dissatisfied with the quality of care received during antennal, intrapartum, and postnatal care. Poor staff attitude, long waiting time, poor attention to women in labour, high cost of services and inadequate facilities were the major reasons for their dissatisfaction[14]. It was perceived to be very alarming that a male professional nurse could propose love to a pregnant woman in labour. Clearly, professionalism, accountability and responsibility are grossly compromised in some hospitals, with the nurses' Code of Ethics being completely ignored. The Code states, "The nurse maintains a standard of personal conduct which

reflects well on the profession and enhances public confidence"[38]. The recommendations made in Okonofua et al.[14]study concerning the challenges women experienced in accessing maternal health care services could be replicated to address the challenges elucidated by women in this present study. These included the improvement and expansion of health facilities, better organisation of clinical services to reduce delays and mis-management, the training and re-orientation of health workers, education/consoling of women, and the re-training and re-orientation of staff to salvage the problem of poor staff attitude[14].

Infection control and prevention is one of the six priorities of the National Core Standards, designed to improve the quality of health. Health professionals have a dress code prescribed by the health professions body. This study reveals that women were exposed to pain and the risk of infection due to vaginal examinations conducted by nurses who wore artificial nails on duty. Infection is known to be a cause of maternal deaths, making it quite astonishing that nurses are predisposing patients to infection, disregarding the training they obtained. The conduct of nurses in this regard contradicts the International Code of Nurses[38], which states that "*the nurse in providing care must ensure that the use of technology and scientific advances are compatible with the safety, dignity and rights of people*." Transformation is of paramount importance in nursing practice, to increase access to health care. Older nurses were portrayed as a hindrance, preventing participants from accessing health care services through their poor attitudes. Participants highlighted their preference for younger nurses over older nurses, and implied that they would be more willing to attend clinics if they knew they would not have to endure the verbal abuse with which many older nurses treat them. Despite the inappropriateness of one male nurse's behaviour, male nurses were preferred by participants because they were perceived to be more caring than female nurses. More stringent measures against negative attitudes in health professionals ought to be enforced to motivate women in seeking maternal health in health facilities.

Participants perceived maternal deaths as a painful phenomenon that robbed siblings, the family and the community of their loved ones, sometimes leaving children with fathers who do not play their role of being a provider. The integration of the Health Department's services with the services of other departments would assist vulnerable children in such situations.

The findings of this study should be interpreted with caution bearing some limitations of the study. Although data collection was designed to capture a range of perspectives from the sampled Qaukeni Sub-District, as with all qualitative research, the findings are not representative of the entire Qaukeni Sub-District, and cannot be generalised. This is so because Holy Cross Hospital and St Elizabeth's Hospital, although located differently within the Qaukeni Sub-District, the two hospitals are not representative of the whole district health system. In addition, the translation from local language to English was reliant upon the capacities of the local research team members, so some likely limitations in this aspect of the work cannot be overrule. Nevertheless, the findings are relevant in the context of a low-resource constraint and rural setting highlighting the perceptions, knowledge and attitudes of women towards maternal deaths. This could serve as a model to plan for context specific strategies to improve maternal health services in this region to increase service utilisation.

Ethical Considerations

Ethical Clearance Certificate was obtained from the University of Fort Hare's Research Ethics Committee (Ref: GOO111SMAYO1). Permission to conduct the study was obtained from the Epidemiology Section of the Eastern Cape Department of Health EC (Ref:EC_2016RP35_46), further approval was provided by the Director District Health Services of the OR Tambo District and from the Chief Executive Officer of Qaukeni Sub-District. Participants provided written consent forms after all the processes had been followed and prior to the interview process. The right of participants to privacy and confidentiality was ensured.

Conclusion

The findings indicated that some participants knew about pregnancy and the cause of maternal deaths,

while others were ignorant about the signs of pregnancy. Non-attendance of antenatal care was attributed to the long distances, absence of clinics, shortage of nurses and doctors, predisposing women to delivery at homes by traditional birth attendants, who had limited knowledge related to health issues and the PMTCT programme. The women perceived pregnancy as a painful phenomenon when it occurred in the teenage years, as teenagers were ill-equipped to deal with it. Better provision of maternal resources is advocated for women in this poor-resourced setting.

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Conflict of Interests

The authors declare that there are no competing or potential conflicts of interest.

Contribution of Authors

NDM and DTG conceptualized the study. NDM collected the data. UBO drafted the manuscript. DTG, NV and NMR read and made input to the manuscript. All authors read and approved the final version of the manuscript for submission.

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