

Title: 'I guess we have to treat them, but...': Health care provider perspectives on management of women presenting with unsafe abortion in Botswana

Authors:

Karabo Ngwako^{1,2*} and Aduragbemi Banke-Thomas^{2,3}

¹Department of Obstetrics and Gynaecology, Kanye Seventh-Day Adventist Hospital, Kanye, Botswana

²Department of Health Sciences, University of Roehampton Online, London, United Kingdom

³Department of Health Policy, London School of Economics and Political Science, London, United Kingdom

Name and postal address of corresponding author:

Karabo Ngwako

Department of Obstetrics and Gynaecology, Kanye Seventh-Day Adventist Hospital, Mokue Ward, Kanye, Southern District, Botswana

Email: krbngwako@gmail.com

ORCID

Karabo Ngwako - <https://orcid.org/0000-0003-0717-5906>

Aduragbemi Banke-Thomas - <https://orcid.org/0000-0002-4449-0131>

Word count:

Manuscript: 6,720 words (Excluding references); Abstract: 200 words

Abstract

Maternal mortality due to unsafe abortion and its complications stands among the three leading causes of maternal death in Botswana. Health care providers (HCPs) including doctors and nurses are at the frontline of providing care to women who have had an unsafe abortion. This qualitative study explored the knowledge, attitudes and perceptions of HCPs towards unsafe abortion in Botswana. We purposively sampled 18 HCPs and used a semi-structured topic guide to engage them in in-depth interviews, which were audio-recorded. These interviews were transcribed and analysed to identify emerging themes. We found that HCPs were knowledgeable about unsafe abortion, local inducers, and its management. However, their religious and moral biases as well as concern for the safety of women biased their view on the subject-matter and of the women themselves. These biases also affected their willingness to provide care, including provision of analgesics. Notwithstanding these biases and the reported lack of clarity on their legal role in managing unsafe abortion, many HCPs recognised their duty-of-care to patients. The continued strengthening of post-abortion services should be implemented in conjunction with engagements with providers to clarify their values and the roles they would be willing to play in abortion and post-abortion care services.

Key words:

Maternal health; abortion; health care provider; Botswana; low- and middle-income countries

Introduction

Globally, there has been an increase in the absolute number of abortions that occur annually, from 50.4 million in 1990 to 56.3 million in 2014 (Sedgh et al., 2016). When the numbers are disaggregated, it becomes apparent that while abortion rates have dropped from 46% to 27% in high-income countries, there has been no significant reduction in low- and middle-income countries (LMICs), with the most recent rate estimated at 37% (Sedgh et al., 2016). Approximately 17 million abortions that take place in LMICs are deemed unsafe (Alkema et al., 2016). Many of these unsafe abortions are either performed by unqualified and untrained individuals or are self-induced by the women themselves (Zafar, Ameer, Fiaz, Aleem, & Abid, 2018), with the highest incidence reported in sub-Saharan Africa where unsafe abortion occurs at rates of 18-39 per 1,000 women (Rasch, 2011).

For women who undergo unsafe abortions, the literature points to their poor access to safe and legal abortion services and unintended pregnancy as the two fundamental motivating factors (Haddad & Nour, 2009; Singh, 2010). Post-abortion, these women typically delay in seeking care, further increasing the risk of complications including bleeding, infection and uterine rupture. Evidence in the literature shows that these complications constitute a major burden of disease and contribute to prolonged hospitalisation as well as an increase in the cost of care (Zafar et al., 2018). Evidence also suggests that the direct costs of treating complications of abortion is a huge burden for LMICs and its indirect costs are catastrophic for families and communities (Grimes et al., 2006).

In Botswana, maternal mortality due to unsafe abortion and its complications is one of the three leading causes of maternal death (Ray et al., 2013). However, the true burden of abortion may be underestimated as its incidence is not known. Some have attributed this underestimation to the country's restrictive abortion law which has in turn led to a fear of prosecution and ultimately under-reporting of cases. Only about 4% of patients who presented in health facilities requiring post-abortion care in Botswana admitted that they induced the abortion by themselves. This is in contrast

to 14% reported in Ethiopia after abortion was legalised. One point that may suggest that a significant number of abortions are unsafe in Botswana is the fact that 32% of abortions occur in the second trimester which is not in keeping with spontaneous abortion (Melese et al., 2017). As in many LMICs, even if women in Botswana make it to a health facility, the legality or otherwise of abortion is a pre-determinant in whether or not the woman can receive safe post-abortion care (Guillaume & Rossier, 2018; Smith, 2013a). With only about 11% of African countries allowing abortion at a woman's request, many women are pushed to explore unqualified sources which lead them to poorer health outcomes even if they present at health facilities afterwards (Guillaume & Rossier, 2018). In Botswana, abortion is legal only under three general reasons: firstly, if the pregnancy is the result of rape, defilement or incest. Secondly where there is evidence that continuing the pregnancy would harm the life of the pregnant woman and thirdly if there is evidence that shows a substantial risk to the baby if it were to be born (Government of Botswana, 1986). In addition to legal barriers, socio-cultural beliefs are an important barrier to accessing care in the country (Smith, 2013a).

Health care providers (HCPs), including nurses and doctors, are at the frontline of implementing the legal framework and providing care to women who have had an unsafe abortion. Nurses are instrumental in the medical, surgical and psychosocial aspects of abortion management while doctors are mainly concerned with the medical and surgical management of abortion. However, evidence suggests that healthcare providers' attitudes and perceptions influence how healthcare providers relate and interact with patients (Rehnström Loi, Gemzell-Danielsson, Faxelid, & Klingberg-Allvin, 2015). While studies on the attitudes and perceptions of HCPs towards abortion have been done in other Southern African countries with high abortion rates including South Africa, Zimbabwe and Zambia, no such study has been undertaken in Botswana (Rehnström Loi et al., 2015). As such, the objective of this study was to explore the knowledge, attitudes and perceptions of HCPs towards unsafe abortion in Botswana.

Materials and methods

Study design and setting

This qualitative study used in-depth interviews (IDI) to engage HCPs who provide post-abortion care for women in the maternity units of Princess Marina Hospital (PMH) and Kanye Seventh-day Adventist Hospital (KAH).

PMH is one of the two tertiary hospitals and with its 567-bed capacity, it is the largest referral facility in the country. It is located in the capital city, Gaborone. It provides preventive, curative and rehabilitative services free to citizens and services a population of about 300,000. There are more than 600 nurses and 147 doctors. The maternity section sees up to 4,500 births per year.

On the other hand, KAH, a 167-bed district hospital in the village of Kanye, was selected for its high patient turnover, with referrals from the southern part of Botswana. The maternity unit is one of the largest referral centres in the country, providing post-abortion care and receives up to 2,500 births per year with abortions contributing about 9.1% of all admissions. The facility has 150 nurses, 33 of whom are midwives.

All services at both facilities are provided free at the point of use to women.

Recruitment of study participants and data collection

Purposive sampling was used to select the participants, including midwives, general nurses, nurse anaesthetist and doctors, all of whom are involved in different aspects of abortion care. In line with the World Health Organization's guidelines on roles of health workers in providing safe abortion (World Health Organization, 2015), all the doctors and nurses who work in the emergency room (the point of entry into the facility for patients who present with complications of unsafe abortion), were

included in our sampling frame. Half of the doctors, almost all the midwives and nurse anaesthetists work in the operating theatre where uterine evacuations for retained products of conception are done. At the same time, the doctors and midwives also work in the ward where patients are observed following uterine evacuation.

To recruit potential participants, flyers were sent to the obstetrics and gynaecology as well as anaesthesia departments with potential participants by the first author (KN) with follow-up face-to-face interactions scheduled if there were questions regarding the study. Use of gatekeepers or direct solicitation were not employed to avoid any form of coercion (Namageyo-Funa et al., 2014). Only participants who voluntarily decided to be part of the study were recruited. Recruitment was done while ensuring heterogeneity around cadre, years of work experience, gender and religion, as much as was possible.

In-depth interviews were employed for data collection in this study as they are better for preserving the confidentiality of respondents (Kaiser, 2009). Interviews were conducted by KN, with care taken to manage the researcher's positionality using techniques such as bracketing, as the researcher is a medical doctor working in the research setting (Allmark et al., 2009; Fischer, 2009). This involved pre-identifying and setting aside assumptions of the interviewer and hermeneutic revisiting of the data and one's evolving knowledge of it in light of a revised understanding of any aspect of the issue being explored (Fischer, 2009). All interviews took place in private rooms within the study hospitals between May and June 2019. In total, we had 383 minutes of interviews, each lasting about 20 minutes. The interviews were audio-recorded alongside reflective field notes.

A topic guide was formulated and piloted with non-recruited respondents to check for its suitability for the interviews. This topic guide consisted of open-ended questions that allowed study participants to express themselves freely (McGrath, Palmgren, & Liljedahl, 2019). The topic guide

had five sections. The first section was for consent, where participants had to verbally consent to take part in the interview before the rest of the questions were asked. The second section was on the characteristics of the participants. These included the age range, the profession including any postgraduate qualifications, work experience in general medicine/nursing and specifically maternal health, and religion. The last three sections were guiding questions on knowledge of abortion, attitudes and perceptions about abortion and lastly the effects of attitudes and perceptions on practice.

Throughout data collection, an emphasis was placed on the trustworthiness of the research (Marshall & Rossman, 1999). Specifically, by establishing rapport, participants were made to feel comfortable and encouraged to speak freely as a way of ensuring credibility. In conducting the interviews, comments made by the interviewees were repeated to them. This repetition allowed for verification of the intended meaning of what was said by the interviewee. To ensure dependability, data collection was carried out until no more patterns or themes were emerging from the data, at which point thematic saturation was reached.

Ethical approval

Ethical approval was obtained from the University of Roehampton Online Research Ethics Committee, the Health Research and Development Division of the Ministry of Health, Botswana (HPDME 13/18/1) and the Kanye Adventist Hospital Administrative Committee (KAH/16/05/2019/BT/bm).

Verbal informed consent was given before commencement of the interview, as had been approved by the ethics committees. No financial or 'in-kind' incentive was given to the participants of the study. To ensure confidentiality, all audio recordings and transcripts were kept under lock and key at the study site and password-protected on the computer of the researchers. Any documents

transmitted electronically were completely stripped of content that could be associated with the study participants.

Data analysis

Audio interviews were transcribed using F4transkript software (audiotranskription, Marburg, Hesse, Germany). After transcription, data was analysed using the six steps of thematic analysis (Braun & Clarke, 2006). The first phase of data familiarisation took place during the transcription of the audio interviews. Subsequently, more familiarisation was done by repeatedly reading the transcripts, during which patterns emerging from the data were explored. MAXQDA (VERBI GmbH, Berlin, Brandenburg, Germany) was used to aid analysis. Although coding started with some predetermined codes, open coding was still conducted to ensure that no new codes were missed. The collated codes were grouped into broader themes that were partly guided by the research objectives. Based on guidelines from established qualitative literature (Bradley, Curry, & Devers, 2007; Ryan & Bernard, 2003), themes were then reviewed. Those that had redundant data were merged with others, and those not having enough data to support them were dropped. Subsequently, theme titles were refined, and themes described. An inductive approach was used in this study, as themes were derived from the data.

Results

A total of eighteen participants were recruited and interviewed for this study, including seven midwives, four general nurses, three nurse anaesthetist and four doctors. All the doctors had been trained in post-abortion care, while only two general nurses had been trained in post-abortion care. Most of the participants were female (75%). Work experience of participants ranged from three years to 21 years. However, this was presented as year categories in this paper (< 5 years, 5 – 10, 10 – 15 and > 15) to further protect the identity of the recruited health workers. Age ranged from 25 years to 52 years ([Table 1](#)).

[Table 1 near here]

Four main themes and nine subthemes emerged from the analysis ([Table 2](#)). The main themes were knowledge on abortion, views on unsafe abortion, attitudes and perceptions towards patients and the effects of attitudes and perceptions on practice.

[Table 2 near here]

Knowledge of abortion

Morbidity and mortality associated with abortion

The health workers fully recognised abortion, especially when carried out by untrained persons, as a major health issue with attendant complications. A total of twelve complications were correctly elicited during the interviews including sepsis, death, severe anaemia, infertility, uterine perforation, septic shock and hypovolemia, bleeding, psychological issues, pelvic inflammatory disease, procedure-related complications, cervical incompetence and electrolyte imbalance.

‘Abortion is a serious problem in our country. We know the complications and see women present with these almost every other day’ (General Nurse, more than 15-years’ working experience)

The legal framework of abortion

All participants were able to list the circumstances under which abortion was permissible within the law in Botswana. The most frequent indication for abortion under the law listed by providers was if a pregnancy posed a risk to the mother, foetal complications incompatible with life, followed by rape and incest. A few participants incorrectly listed mental illness as an indication for abortion.

'Yes, in situations of sexual assault, especially of a minor even an elderly person and then also when the particular pregnancy is of risk for the mother' (General Nurse, more than 15-years' working experience)

'In cases of rape and mentally ill patients and on medical grounds to save the life of the mother where the foetus is already severely damaged by some other things' (General nurse, more than 15 years working experience)

Methods used for inducing abortion locally

Providers mentioned some of the methods commonly used for inducing an abortion by patients. The most commonly reported method was Cytotec (Misoprostol). This was either taken orally or inserted vaginally. They reported that this drug was available in the 'black market' and easily accessible 'for those who are looking for it'. Insertion of objects into the vagina was the second most common method listed. These objects included feathers of birds, pen ink cartridge, drinking straws and clothes hangers. Traditional medicines were also reported and included roots and herbs which could either be placed vaginally or taken orally. Water from boiled old coins and laxatives were also mentioned, but these were not on the top of the list of the providers. Providers stated that these methods were usually reported by the patients themselves or their relatives, the community, or gathered by themselves during physical examination. They also pointed out that these methods were either self-administered or administered by another person. For providers, it appeared that the choice on which method the women used in the long run was linked to what option(s) was/were available and who was doing the abortion.

'Some use traditional medicine where they put roots in the vagina, some they use Cytotec, I have seen clients who come with Cytotec in the vagina' (General nurse, between 10- and 15-years' working experience)

Views on abortion

Safety of abortion

Most providers reported that they did not like abortion because it was unsafe and harmful to women. They reported that many patients presented late to the hospital with severe complications. They also felt that it was a significant contributor to maternal mortality in the country.

'All-in-all I don't like it I hate it, ... It's not good, and it's not safe because some of the patients they come here in a critical state.' (General Nurse, more than 15-years' working experience)

One doctor, with five years' working experience, highlighted that the lateness of their presentation limits the effectiveness of any interventions to be done in health facilities if and when women present to the facilities. The doctor said, 'some patients present with complications of abortion really late after they would have gone around trying to access care after secretly commencing the abortion process either by themselves or by other individuals.'

Morality of abortion

Most providers who were against abortion stated moral reasons for their positions. They were convinced that abortion was morally wrong as it was contrary to the counsels from the word of God, which they used as a standard for morality.

'... I am a Christian, and I believe that self-induced abortion is wrong. I understand though that in some cases where people have been raped or situations like that where they would want to terminate the pregnancy but all in all I still think that abortion is wrong because its life and I believe that all life is important, all life matters..' (Doctor, less than 5-years' working experience)

'I cannot advise my patients to do abortion because it's a sin, it's against God's law.' (Midwife, between 10- and 15-years' working experience)

Legalisation of abortion

Providers were divided on the idea of legalisation of abortion. Barely over half of them were against the idea of legalising abortion. Their reasons for being against this idea were varied. Most cited their religious convictions for this. They said that the Bible was against abortion. Some felt that the mandate of their profession was to save lives and not take them.

'From the Christian point of view, I feel if it is legalised it won't feel right, at the same time it's a dilemma for me because my profession says I save a life and here I am, to me, it's like I'm killing. It's really a dilemma. If it were legalised it would be hard to really go through it.'
(General Nurse, 15-years working experience)

One doctor who had more than ten years' working experience in maternal health and who had expressed being against the idea, however, said that *'if there was data to show reduction of abortion-related morbidity and mortality in places where abortion is legalised, then it was wise for the country to act on such data'*. The premise of those who were in sympathy with legalising abortion was that the rate of unsafe abortion was already very high, therefore legalising it will make it safer. One of the providers submitted that she believed that abortion should be considered in cases of extreme poverty. On the contrary, some other providers, including nurses and doctors, thought that legalisation would increase the numbers of unsafe sex and will subsequently increase rates of abortion and incidence of Human Immuno-deficiency Virus. Others opined that legalisation was *'totally unnecessary'* since *'contraception was widely and easily accessible'* and that the emphasis needed to be placed more on encouraging use of contraception as opposed to legalising abortion, because from their perspective, *'most unsafe abortions were a result of unintended pregnancy'*.

Most providers, however, admitted that legalisation of abortion would significantly increase their workload and put a strain on the already scarce resources.

'It will mean more workload and more cases of sexually transmitted infections together with HIV...' (General nurse, between 5- and 10-years' working experience)

Legal liability on cases related to abortion

Most providers thought that their duty was to address the patient's health needs and prevent further complications. Some reported that it was not their place to report patients to the law enforcement officers. They added that this would only make matters worse as it would increase abortion-related deaths as patients will either stay at home or present late for fear of being reported to the police should it be discovered that the abortion was self-induced.

'I guess we have to treat them and then counsel on the pros and cons of abortion...but reporting, I don't think it's the right thing because as health professionals we are here to help the patients so that one of whether it's criminal or not it's not our responsibility...' (Midwife, between 10- and 15-years' working experience)

Others yet feared that patients will take legal action against them for breaching the provider-patient confidentiality and that reporting might sour relationships between providers and the community. However, some providers insisted that patients suspected of having an unsafe abortion should be reported to the police as this would reduce the incidence of unsafe abortions although some of them admitted that this might result in fewer patients presenting to the hospital.

'I think they should report it to authorities really. I think the authorities should be on the alert for these cases to see because at least if the authorities know that there are several people

that are coming in with this self-induced abortion, they are able to like to trace the location and the source especially for things like Cytotec.’ (Doctor, less than 5-years’ working experience)

While another health worker, a midwife with over 15 years’ experience, admitted that reporting would have been ideal, she however said that *‘the process was too tedious and not worth the effort’* as the police asked so many questions that left the care providers feeling like they are the ones who committed the offence.

Attitudes and perceptions towards patients

Provider perception of patients presenting with abortion

Providers’ perceptions of patients who committed unsafe abortion were varied. Some were of the view that these are just regular people who because of the pressing circumstances they were in, chose to do abortion. They did not put any labels on them.

‘I feel that generally, they could be good children...but then the influence or the circumstances that they found themselves in could have led them to do such things.’ (Midwife, more than 15-years’ working experience)

Some providers, however, were of the view that people who usually induce abortion do so habitually. Most of the providers interviewed thought that such people are after money as they sometimes engage in transactional sex. They also opined that they are people who are selfish, often drink alcohol, do not care much about the future, lack self-respect, are irresponsible and promiscuous.

'Honestly, I feel like they are a little bit selfish... because when you were doing that (having sex), you knew that pregnancy was one of the possible outcomes. So, I would think that's very selfish of them.' (Doctor, less than 5-years' working experience)

'So, I just take them that they are cheap, they don't respect themselves. I don't know! That's how I feel.' (General Nurse, more than 15-years' working experience)

Perception regarding abortion patient's need for analgesia

Almost all the interviewees thought that patients with suspected unsafe abortion deserve to be given analgesia as part of medical and surgical management of abortion. They thought that these girls and women were also human, and they should not be allowed to 'suffer in pain' when analgesia is indicated. Some also thought that it was unethical to withhold analgesia.

'They should be given painkillers; they are human beings. It is not for you to judge them. You just have to provide service to them. Professionalism comes in.' (General Nurse, between 5- and 10-years' working experience)

However, the thoughts of two providers, including a doctor and a nurse, were contrary to that shared above. One believed that giving these patients analgesia so that they feel no pain at all, was not acceptable. She felt that patients were encouraged in committing abortions if they were made to feel no pain and believed that allowing women to feel some level of pain would deter them from aborting a subsequent pregnancy. The other provider submitted that if it were not for work ethics, she would not give analgesia at all.

'Honestly, I think sometimes I would like them to feel a bit of the pain so that they don't repeat it ...I thought it is encouraging them to just to abort because they know that they are

not going to feel anything, there is not going to be any effect of it. (Doctor, less than 5-years' working experience)

'...if it were allowed, I wouldn't give them, the reason being; so that they feel this pain so that they won't do it again.' (General Nurse, more than 15-years' working experience)

Practice and effects of attitudes and perceptions on practice

Provision of post-abortion care

Providers' reports on the incidence of abortion varied with some reporting that they generally have to manage two cases of abortion per week and others estimating as high as four to five cases daily. Most providers felt that the rate of abortion in the hospital was very high.

'I don't know in terms of numbers how many patients do we see per day or so. I've seen a lot... it's more common...almost more than 30 patients in a month' (General Nurse, between 10- and 15-years' working experience)

Most providers reported that women of ages 20-35 commonly presented with unsafe abortion. They reported that women from across all social classes and educational backgrounds were affected by unsafe abortion. For women whom they manage, providers reported that they provide relevant medical, surgical and psychological care to them.

'It (Abortion) is very common in Botswana. I have seen all sorts of women come in after aborting. Young, older women; rich, poor; graduate, uneducated' (Doctor, between 10- and 15-years' working experience)

'We try to establish the exact cause of the abortion, rule out any medical indication, perform evacuation or dilatation and curettage along with necessary analgesics and then counsel and

offer contraception including offering an explanation of possible side effects and how to address them' (Doctor, more than 15-years' working experience)

Most providers who had experience in post-abortion counselling reported that it was not offered differently for patients with unsafe abortion. Some had concerns that it was not done adequately for all patients due to staff shortages and knowledge deficiencies among healthcare providers.

'I personally think it's not done properly... it is very shallow, and sometimes it is omitted completely' (General nurse, less than 5 years' working experience)

Providers reported that from the history given and the physical exam, it was possible to suspect or to know of certainty that an unsafe abortion had been carried out. They reported that they had a high index of suspicion if women: gave a history that was inconsistent with physical findings, denied the pregnancy even if the pregnancy test was positive, or presented late to the hospital with vaginal bleeding. Most HCPs reported that if they found foreign bodies, tablets and herbs in the vagina and unexplainable trauma in the genitalia during the exam, then this pointed to an unsafe abortion.

'Sometimes just even from the questioning, you can tell that this person did not want to be pregnant... I mean if they tried to use something to insert into the cervix you can see trauma to the cervix, the vagina...' (Doctor, less than 5-years' working experience)

Effects of attitudes and perceptions on practice

Even if the providers had to be the one to discover that an abortion has been induced, most providers reported that they treated all patients the same whether they had an unsafe abortion or not. Some said that it was sometimes difficult to tell on presenting to the hospital who induced the abortion and who had a spontaneous abortion.

'...I don't judge them... I treat to give back life even if someone could have done it deliberately; what I want is the recovery of the person not whether they have induced it...' (General Nurse, more than 15-years' working experience)

'but most cases especially because here people use Cytotec most of the time, it is difficult to tell that it was self-induced so it just goes, even when you suspect that this patient might have taken Cytotec to try and get rid of the child it's very difficult to prove it' (Doctor, less than 5-years' working experience)

Some reported that though it was difficult not to be judgemental, but that they tried to be neutral by attending to patients with abortion just like they would 'any other patient'.

'I just treat them like any other patient, after all, I'm a healthcare provider I don't have to be judgmental, I try not to be.' (General Nurse, between 5- and 10-years' working experience)

Some providers, however, said they showed their displeasure when patients with abortion came to the health facility to seek help. They reported reprimanding the patients, especially those who present in relatively good health and those that they expect to make better choices, such as teenagers.

'As a human being I won't say I don't scold them, I do sometimes especially if they are still ok, but most of them come in the state when they now need so much of your help, attitude is left outside, and you start to give medical care, but over time, I have learned to listen to their stories and hear them... so I have learned not to judge, to help them out just as much as I can.' (General Nurse, more than 15-years' working experience)

'Most of my time, maybe, I don't know specifically, but I will say 80%, especially the teenagers I treat them with anger.' (General Nurse, between 5- and 10-years' working experience)

Most providers who had patients approaching them and asking them to assist them in carrying out an abortion reported that although they refused to assist the patients to do such, they, however, talked to the patients to find out why they wanted to do an abortion. They also counselled the patient with the intention to discourage the patient from doing an abortion or referred them to a social worker in the hope that the social worker will also try to dissuade the patient. Most providers reported they were not in a position to refer the patients to get an abortion at a place where they knew it was legal. Only a few providers said they had referred patients to such places.

'From experience most clients they do ask, "where can I get help?", especially in an emergency. Most of them we will tell them that in Botswana it is illegal but in South Africa it is allowed. So, most of them we just tell them they have to go to Mafikeng where it is legal; if they can afford it.' (General Nurse, more than 15-years' working experience)

Discussion

Our study showed that providers were adequately informed about abortion and its complication in general as well as the local methods used to abort pregnancies. However, though providers were knowledgeable, they generally had negative views of unsafe abortion and its legalisation. Their negative views were principally underpinned by religion and morality. Such beliefs have been widely reported in the literature (Chiweshe & Macleod, 2017; Rehnström Loi et al., 2015). Evidence shows that religious beliefs can influence views on abortion. In other studies, religious views have even been reported to influence HCP willingness to be trained in post-abortion care for fear of being labelled as pro-choice (Lamina & Lamina, 2013). However, in South Africa, even though some providers also took their stand against abortion based on their religion, for others, their religious beliefs did not prevent them from being strong supporters of a woman's reproductive right to

choose (Harries, Stinson, & Orner, 2009). In our study, we found that some providers may be willing to move their belief base if there was irrefutable evidence that showed that legalisation was effective in reducing abortion. The most recent analysis conducted in 2016 did not show any association between abortion rates and legislation (Sedgh et al., 2016). In addition, it appeared that HCPs were also concerned about the health risks to women from unsafe abortion, especially when carried out by untrained persons. As we found in our study, most cases of unsafe abortion in Botswana tend to present late to the hospital with life-threatening complications. It is because of these complications that some HCPs were in favour of legalising abortion with the hope that these complications will be reduced, and lives will be saved. Indeed, a 2019 ecological study concluded that 'abortion law reform in countries with restricted abortion laws may reduce maternal mortality' (Latt, Milner, & Kavanagh, 2019).

Regarding the legal framework of abortion in Botswana, our study showed that many HCPs were aware of it and could detail permissible abortions in the country. In other sub-Saharan African countries, most HCPs were uncertain about the legal framework of abortion in their countries (Rehnström Loi et al., 2015). Evidence suggests that providers who are knowledgeable of the legal frameworks of abortion where they practice are more likely to have a better attitude towards patients and provide them with better information (Abdi & Gebremariam, 2011; Provenzano-Castro, Oizerovich, & Stray-Pedersen, 2016). However, these studies were done within the context of safe abortion. From our study, it is difficult to reach the same conclusion in the context of unsafe abortion. Some HCPs appear less empathetic to patients who have or are suspected to have engaged in unsafe abortion.

One point of consensus of HCPs was on their lack of willingness to take on any legal liability as it relates to the care of women who have had an abortion. They do not want to report cases to the police because they do not see it as their role, do not believe it would help, perceive it as tedious,

and fear that they may be liable to breach of patient confidentiality. Indeed, the 1986 penal code of Botswana, which is the most recent update of the law, does not specify the role of HCPs as it relates to a suspected unsafe abortion case (Government of Botswana, 1986). In Kenya, threats of police involvement with patients suspected to have had an unsafe abortion have only led to them fleeing the health facilities or going elsewhere (Izugbara, Egesa, & Okelo, 2015). It is for this reason that in other sub-Saharan African countries, both patients and HCPs report all abortions as spontaneous abortion as police involvement tends to complicate and delay the provision of post-abortion care and violate patient's confidentiality (Izugbara et al., 2015; Suh, 2018). In our study, HCPs were unclear about how they should relate to the law when dealing with patients with abortion as there appears to be a lack of a clear policy from the Ministry of Health. Lack of clarity confuses providers even in settings in which abortion has been legalised (Harrison, Montgomery, Lurie, & Wilkinson, 2000).

Our study also revealed that patients were negatively labelled as selfish, lacking self-respect, irresponsible and promiscuous by providers. Nearby in Zimbabwe, unfavourable labels have also been used for patients with abortion, including referring to them as being 'evil' and an 'instrument of Satan' (Chiweshe & Macleod, 2017). However, some HCPs empathised with these patients and many alluded to their difficulty in being able to distinguish spontaneous abortions from those that were unsafe. As such, many providers do not want to judge the women. In the wider Botswanan population, abortion is looked upon with disgust. Most people do not believe that abortions can be spontaneous (Smith, 2013b). It is possible that some providers hold similar views as the communities from which they come from and this is in fact affecting their views of patients.

Notwithstanding the mostly negative perceptions of providers towards patients with abortion and the scolding and treatment with anger especially of younger patients, our study revealed that providers still opined that they still had a duty of care to the patients. The providers reported that in

terms of their practice, post-abortion counselling was generally poor for all patients regardless of the nature of the abortion. This was attributed to staff shortage and inadequate training of the staff on this subject. There are several components required for post-abortion care (Huber, Curtis, Irani, Pappa, & Arrington, 2016), and many were reported to have been performed by the providers. However, one component of care that providers in our study could not agree on relevance was pain management with analgesia. Many providers thought that every patient should get analgesia and that it was rather unethical to subject these patients to such harsh treatment for what they had done. However, a few believed that offering analgesia to unsafe abortion patients was encouraging them to persist in this practice while adding that pain could act as a deterrent to this undesirable behaviour. We found no evidence in the literature to support such an assertion.

To the best of our knowledge, this is the first qualitative study carried out in Botswana, which explores knowledge, attitudes and perceptions of healthcare providers towards abortion. However, there are some limitations that need to be borne in mind when interpreting our findings. Firstly, our sample size was small, and we have conducted the study in only two facilities. Thus, the conclusions we draw cannot be generalised. However, it is worth noting that the two facilities selected for this study are the largest maternity units in the country, and we purposefully sampled participants with the aim of guaranteeing heterogeneity. Secondly, it was challenging to assess the effects of attitudes and perception on practice, as these were only reported by the providers themselves, who might have been conflicted. To reduce any potential for conflict of interest, HCPs were made comfortable in voicing out their opinions without fear of discrimination. Being that the first author (KN) was a staff at one of the included hospitals, it was easy to establish rapport and trust. However, this also posed a potential limitation and source of bias to the study. To address this, both authors (KN and ABT) discussed and identified KN's assumptions on the sensitive subject matter. These were set aside before the interview and revisited through routine discussions with the senior author (ABT)

throughout data collection. This approach was designed in line with guidance from the literature on bracketing (Fischer, 2009).

In terms of implications for policy and practice, while some have thrown weight behind the legalisation of abortion in Botswana (Smith, 2013a), our findings suggest that even within the present legal framework of what is permissible, much work is needed with the care providers. As seen in South Africa, even when legalised, the Choice on Termination of Pregnancy Act (no 92 of 1996) did not stop the stigmatisation that women experienced. It also did not change that health workers still did not want to work in these services or indeed be associated with them (Freeman & Coast, 2019; Harries, Cooper, Strebel, & Colvin, 2014; Mokgethi, Ehlers, & Van der Merwe, 2006). There is certainly a need to train more providers in the provision of post-abortion care, especially as complications are high in Botswana (Melese et al., 2017). Additionally, there might be a case for refreshers or cues that provide recall on the most up-to-date legal framework guiding the management of abortion in Botswana. This will help prevent incorrectly including or excluding cases that are not currently permissible by law. In addition, values clarification workshops to address the judgemental attitudes of HCPs towards patients need to be implemented, as such trainings have led to significant improvements in knowledge, attitudes, and behavioural intentions of providers (Turner, Pearson, George, & Andersen, 2018).

In addition, it will be helpful work collaboratively with providers to know what part of the services they would want to play a part, as was done in Ghana (Morhe, Morhe, & Danso, 2007). This forum should also be used to clarify their legal roles if women present to their facilities with suspected unsafe abortions. Clearly, as our findings show, irrespective of the legal status of abortion in the country, even women with legally permissible reasons for abortion may not receive adequate care or will be labelled and stigmatised if they present in a health facility at a time when a health worker who does not hold pro-abortion views is on duty. At such times, clarity on what the provider is

willing to do or not do is essential. Such, position clarification and role assignments can be done a priori, ensuring that providers are given the onus of making their choice without contravening their beliefs and that women can be referred to providers who can help them within the legal remits of the country. HCPs must see the post-abortion care that women seek from them as a life-saving measure rather than an opportunity to police illegal abortion. Doing such would only further institutionalise abortion stigma and mask the unsafe abortion within and beyond the hospital (Izugbara et al., 2015; Suh, 2018). If women are able to find a safe place to receive the abortion care that they need within legal remits and critical post-abortion care, as they have been reported to desire (Gallo et al., 2004), it can contribute to overall reduction in abortion-related maternal mortality.

Conclusion

It is well established that health care providers are critical for management of abortion and its complications (Ganatra, 2015). In Botswana, these professionals are knowledgeable about abortion and the legal framework guiding its management. However, as in many countries in sub-Saharan Africa, they can be prejudiced by their beliefs. While the issue of unsafe abortion remains a sensitive issue with legal ramifications in the country, it is critical that providers who are most technically and emotionally prepared to support women who have had an abortion are placed at the forefront of abortion services. For women who have already aborted, emphasis on 'duty-of-care' needs to be made to providers, as such women now require 'post'-abortion care, which can be ultimately be lifesaving for them.

Acknowledgements

This research was conducted as part of the Master's in Public Health training of the first author. We would like to thank the Ministry of Health and Wellness, Botswana for granting us permission to

conduct this study. We are also indebted to all the health care providers who took out time from their busy schedule to partake in this research.

Declaration of interest statement

No potential conflict of interest was reported by the authors.

Funding details

No funding was received for this study.

References

- Abdi, J., & Gebremariam, M. B. (2011). Health providers' perception towards safe abortion service at selected health facilities in Addis Ababa. *African Journal of Reproductive Health*, *15*(1), 31–36. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21987935>
- Alkema, L., Chou, D., Hogan, D., Zhang, S., Moller, A.-B., Gemmill, A., ... United Nations Maternal Mortality Estimation Inter-Agency Group collaborators and technical advisory group. (2016). Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: a systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. *Lancet*, *387*(10017), 462–474. [https://doi.org/10.1016/S0140-6736\(15\)00838-7](https://doi.org/10.1016/S0140-6736(15)00838-7)
- Allmark, P., Boote, J., Chambers, E., Clarke, A., McDonnell, A., Thompson, A., & Tod, A. M. (2009). Ethical Issues in the Use of In-Depth Interviews: Literature Review and Discussion. *Research Ethics*, *5*(2), 48–54. <https://doi.org/10.1177/174701610900500203>
- Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Services Research*, *42*(4), 1758–1772. <https://doi.org/10.1111/j.1475-6773.2006.00684.x>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Chiweshe, M., & Macleod, C. (2017). 'If You Choose to Abort, You Have Acted As an Instrument of Satan': Zimbabwean Health Service Providers' Negative Constructions of Women Presenting for Post Abortion Care. *International Journal of Behavioral Medicine*, *24*(6), 856–863. <https://doi.org/10.1007/s12529-017-9694-8>
- Fischer, C. T. (2009). Bracketing in qualitative research: Conceptual and practical matters. *Psychotherapy Research*, *19*(4–5), 583–590. <https://doi.org/10.1080/10503300902798375>
- Freeman, E., & Coast, E. (2019). Conscientious objection to abortion: Zambian healthcare practitioners' beliefs and practices. *Social Science & Medicine*, *221*, 106–114. <https://doi.org/10.1016/J.SOCSCIMED.2018.12.018>
- Gallo, M. F., Gebreselassie, H., Victorino, M. T. A., Dgedge, M., Jamisse, L., & Bique, C. (2004). An Assessment of Abortion Services in Public Health Facilities in Mozambique: Women's and Providers' Perspectives. *Reproductive Health Matters*, *12*(sup24), 218–226. [https://doi.org/10.1016/S0968-8080\(04\)24027-7](https://doi.org/10.1016/S0968-8080(04)24027-7)
- Ganatra, B. (2015). Health worker roles in safe abortion care and post-abortion contraception. *The Lancet Global Health*, *3*(9), e512–e513. [https://doi.org/10.1016/S2214-109X\(15\)00145-X](https://doi.org/10.1016/S2214-109X(15)00145-X)
- Government of Botswana. *Criminal and penal law*. , Pub. L. No. 160, 1 (1986).

- Grimes, D. A., Benson, J., Singh, S., Romero, M., Ganatra, B., Okonofua, F. E., & Shah, I. H. (2006). Unsafe abortion: the preventable pandemic. *Lancet (London, England)*, *368*(9550), 1908–1919. [https://doi.org/10.1016/S0140-6736\(06\)69481-6](https://doi.org/10.1016/S0140-6736(06)69481-6)
- Guillaume, A., & Rossier, C. (2018). Abortion Around the World. An Overview of Legislation, Measures, Trends, and Consequences. *Population (English Edition)*, *73*(2), 217–306. Retrieved from https://ideas.repec.org/a/cai/poeine/pope_1802_0217.html
- Haddad, L. B., & Nour, N. M. (2009). Unsafe abortion: unnecessary maternal mortality. *Reviews in Obstetrics & Gynecology*, *2*(2), 122–126. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19609407>
- Harries, J., Cooper, D., Strelbel, A., & Colvin, C. J. (2014). Conscientious objection and its impact on abortion service provision in South Africa: a qualitative study. *Reproductive Health*, *11*(1), 16. <https://doi.org/10.1186/1742-4755-11-16>
- Harries, J., Stinson, K., & Orner, P. (2009). Health care providers' attitudes towards termination of pregnancy: a qualitative study in South Africa. *BMC Public Health*, *9*, 296. <https://doi.org/10.1186/1471-2458-9-296>
- Harrison, A., Montgomery, E. T., Lurie, M., & Wilkinson, D. (2000). Barriers to implementing South Africa's Termination of Pregnancy Act in rural KwaZulu/Natal. *Health Policy and Planning*, *15*(4), 424–431. <https://doi.org/10.1093/heapol/15.4.424>
- Huber, D., Curtis, C., Irani, L., Pappa, S., & Arrington, L. (2016). Postabortion Care: 20 Years of Strong Evidence on Emergency Treatment, Family Planning, and Other Programming Components. *Global Health, Science and Practice*, *4*(3), 481–494. <https://doi.org/10.9745/GHSP-D-16-00052>
- Izugbara, C. O., Egesa, C., & Okelo, R. (2015). 'High profile health facilities can add to your trouble': Women, stigma and un/safe abortion in Kenya. *Social Science & Medicine*, *141*, 9–18. <https://doi.org/10.1016/j.socscimed.2015.07.019>
- Kaiser, K. (2009). Protecting respondent confidentiality in qualitative research. *Qualitative Health Research*, *19*(11), 1632–1641. <https://doi.org/10.1177/1049732309350879>
- Lamina, M. A., & Lamina, M. A. (2013). Health care providers' attitudes towards termination of pregnancy: A qualitative study in Western Nigeria. *Open Journal of Obstetrics and Gynecology*, *03*(04), 400–410. <https://doi.org/10.4236/ojog.2013.34074>
- Latt, S. M., Milner, A., & Kavanagh, A. (2019). Abortion laws reform may reduce maternal mortality: an ecological study in 162 countries. *BMC Women's Health*, *19*(1), 1. <https://doi.org/10.1186/s12905-018-0705-y>
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research* (Third). Thousand Oaks, California: SAGE Publications.
- McGrath, C., Palmgren, P. J., & Liljedahl, M. (2019). Twelve Tips for Conducting Qualitative Research Interviews. *Medical Teacher*, *41*(9), 1002–1006.
- Melese, T., Habte, D., Tsimba, B. M., Mogobe, K. D., Chabaesele, K., Rankgoane, G., ... Moreri-Ntshabele, B. (2017). High Levels of Post-Abortion Complication in a Setting Where Abortion Service Is Not Legalized. *PloS One*, *12*(1), e0166287. <https://doi.org/10.1371/journal.pone.0166287>
- Mokgethi, N., Ehlers, V., & Van der Merwe, M. (2006). Professional nurses' attitudes towards providing termination of pregnancy services in a tertiary hospital in the North West province of South Africa. *Curationis*, *29*(1), 32–39. <https://doi.org/10.4102/curationis.v29i1.1037>
- Morhe, E. S. K., Morhe, R. A. S., & Danso, K. A. (2007). Attitudes of doctors toward establishing safe abortion units in Ghana. *International Journal of Gynecology & Obstetrics*, *98*(1), 70–74. <https://doi.org/10.1016/j.ijgo.2007.02.023>
- Namageyo-Funa, A., Rimando, M., Brace, A., Christiana, R., Fowles, T., Davis, T., ... Sealy, D.-A. (2014). Recruitment in Qualitative Public Health Research: Lessons Learned During Dissertation Sample Recruitment. *The Qualitative Report*, *19*(4), 1–17. Retrieved from <https://nsuworks.nova.edu/tqr/vol19/iss4/3>
- Provenzano-Castro, B., Oizerovich, S., & Stray-Pedersen, B. (2016). Future healthcare professionals'

- knowledge about the Argentinean abortion law. *International Journal of Medical Education*, 7, 95–101. <https://doi.org/10.5116/ijme.56e0.74be>
- Rasch, V. (2011). Unsafe abortion and postabortion care - an overview. *Acta Obstetrica et Gynecologica Scandinavica*, 90(7), 692–700. <https://doi.org/10.1111/j.1600-0412.2011.01165.x>
- Ray, S., Madzimbamuto, F. D., Ramagola-Masire, D., Phillips, R., Mogobe, K. D., Haverkamp, M., ... Motana, M. (2013). Review of causes of maternal deaths in Botswana in 2010. *South African Medical Journal*, 103(8), 537. <https://doi.org/10.7196/SAMJ.6723>
- Rehnström Loi, U., Gemzell-Danielsson, K., Faxelid, E., & Klingberg-Allvin, M. (2015). Health care providers' perceptions of and attitudes towards induced abortions in sub-Saharan Africa and Southeast Asia: a systematic literature review of qualitative and quantitative data. *BMC Public Health*, 15, 139. <https://doi.org/10.1186/s12889-015-1502-2>
- Ryan, G. W., & Bernard, H. R. (2003). Techniques to Identify Themes. *Field Methods*, 15(1), 85–109. <https://doi.org/10.1177/1525822X02239569>
- Sedgh, G., Bearak, J., Singh, S., Bankole, A., Popinchalk, A., Ganatra, B., ... Alkema, L. (2016). Abortion incidence between 1990 and 2014: global, regional, and subregional levels and trends. *Lancet*, 388(10041), 258–267. [https://doi.org/10.1016/S0140-6736\(16\)30380-4](https://doi.org/10.1016/S0140-6736(16)30380-4)
- Singh, S. (2010). Global Consequences of Unsafe Abortion. *Women's Health*, 6(6), 849–860. <https://doi.org/10.2217/WHE.10.70>
- Smith, S. S. (2013a). Reproductive health and the question of abortion in Botswana: a review. *African Journal of Reproductive Health*, 17(4), 26–34. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/24558779>
- Smith, S. S. (2013b). The challenges procuring of safe abortion care in Botswana. *African Journal of Reproductive Health*, 17(4), 43–55. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/24558781>
- Suh, S. (2018). Accounting for abortion: Accomplishing transnational reproductive governance through post-abortion care in Senegal. *Global Public Health*, 13(6), 662–679. <https://doi.org/10.1080/17441692.2017.1301513>
- Turner, K. L., Pearson, E., George, A., & Andersen, K. L. (2018). Values clarification workshops to improve abortion knowledge, attitudes and intentions: a pre-post assessment in 12 countries. *Reproductive Health*, 15(1), 40. <https://doi.org/10.1186/s12978-018-0480-0>
- World Health Organization. (2015). *Health worker roles in providing safe abortion care and post-abortion contraception*. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK316326/pdf/Bookshelf_NBK316326.pdf
- Zafar, H., Ameer, H., Fiaz, R., Aleem, S., & Abid, S. (2018). Low Socioeconomic Status Leading to Unsafe Abortion-related Complications: A Third-world Country Dilemma. *Cureus*, 10(10), e3458. <https://doi.org/10.7759/CUREUS.3458>

Tables

Table 1: Summary of characteristics of providers interviewed.

Provider characteristics		Doctors	Nurses
Age	<30 years	1	0
	30-40 years	1	9
	>40 years	2	5
Gender	Male	4	2
	Female	1	11
Work experience	General medicine/nursing		
	<10 years	1	4
	10-20 years	2	7
	>20 years	2	2
	Maternal health		
	<10 years	1	1
10-20 years	2	4	
>20 years	2	0	
Religion	Christianity	3	13
	Others	2	0

Table 2: Themes and subthemes

Themes	Subthemes
Knowledge of abortion	Morbidity and mortality associated with abortion is well recognised
	Legal framework of abortion in Botswana is well known
	Different methods used for abortion locally are known
Views on abortion	Abortion is viewed as unsafe
	Abortion is morally wrong
	Disagreement on legalisation of abortion
	Healthcare providers do not want legal liability on cases related to abortion
Attitudes and perceptions towards patients	Provider perception of patients presenting with abortion varied
	Perception on abortion patient's need for analgesia varied
Practice and effects of attitudes and perceptions on practice	Provision of post-abortion care
	Attitudes and perceptions can affect practice