Original Article

Service provider perceptions of the trend in severity of symptoms and complications in women admitted following an incomplete abortion

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Abstract

Background: Sri Lankan abortion law which dates back to the year 1883, and still unchanged, only allows a legal termination when the mother's life is in danger. Many studies undertaken in the country estimates that even in the light of such a backdrop, and with a high contraceptive prevalence rate, many women attempt an abortion when faced with an unwanted pregnancy. This study aims to describe the changes in abortion-related complications in the country over a period of time and explore the reasons for any changes in severity of symptoms among women hospitalized following an abortion based on the perceptions of healthcare service providers. **Method:** Using an interviewer guide, in-depth interviews were carried out among 30 service providers of post abortion care with more than 5 years of experience in obstetrics and gynecology in Sri Lanka. **Results:** Service providers perceived that the number of women presenting to hospitals after an induced abortion caused by a mechanical method is minimal or not at all at present. Over time, a significant reduction is seen in the number of women presenting with any abortion-related complications and the severity of complications has also reduced significantly. The common method of termination at present identified by the providers was the use of "drugs" or "the drug – Misoprostol." **Conclusion:** Over the years, women appear to have switched from surgical and mechanical methods to medical means (drugs) to induce an abortion and this change has contributed to reduce the severity of complications.

Keywords: Incomplete abortion, induced abortion, service provider perceptions, severity of symptoms, Sri Lanka

Introduction

World Health Organization (WHO) considers an abortion to be safe when done with a method recommended by WHO (medical abortion, vacuum aspiration, or dilatation and evacuation) that is appropriate to the pregnancy duration by a person trained on providing an abortion.[1] Abortions when performed in line with WHO guidelines are safe and have an extremely low risk of serious complications including death.

The highly restrictive law governing abortion in Sri Lanka stems from the penal code section 303A from the period under British rule and only allows for a legal termination when the mother's life is in danger.[2] In 2015, 870.4 women per 100,000 females in the reproductive age group were admitted to hospitals following spontaneous or induced abortions.[3] This when factored with 5,514,000 females in reproductive age group, it is

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estimated that around 48,000 (47,993) women were admitted to hospitals following spontaneous or induced abortions. However, the restrictive legal situation is likely to limit women from revealing efforts at attempting an induced abortion. Healthcare providers' perception and attitude toward induced abortions affects provision of safe abortion care. Studies have shown that healthcare personnel in South East Asia have a conservative attitude toward abortion due to religious, moral, and social reasons.[4] Even in countries where abortion is permitted legally for many indications, healthcare personnel have reservations due to religion and personal values.[4,5]

As a result of the above reasons, complications arising from unsafe abortions have been one of the leading causes of maternal death. In 2014, 14 of the 112 (12.5%) maternal deaths were attributed to unsafe abortion.[6] In recent years, medicines such as misoprostol and mifepristone are available. When used with adequate information and in appropriate doses and regimens, they have proven to safely induce abortions with minimal complications and side effects.[7,8] The latest statistics show that the number of maternal deaths due to abortion has reduced to 6 of 112 (5.4%) maternal deaths in 2016.[9]

Since 2014, misoprostol has been registered as a category 3 drug by the Cosmetics Devices and Drugs Authority to be used only in hospitals for the management of incomplete abortions and postpartum hemorrhage. However, anecdotal evidence suggests that in spite of all this, misoprostol use for medical abortions is increasing over the years.[10] A hospital-based study conducted in nine hospitals in eight districts in Sri Lanka found that around 4.1% of women admitted to hospital with incomplete abortions are using drugs to terminate a pregnancy.[11] These figures are likely to underestimate the prevalence of using a "drug" as many women may have experienced a complete evacuation and not needed hospitalization.

Although a community-based study would be required to determine the frequency of use of misoprostol, it has been suggested that a decline in the use of mechanical means of abortion and an increase in the use of drugs such as misoprostol might result in a reduction in the severity of symptoms of women who present at hospitals after attempting an abortion.

Therefore, from 2013 to 2014, Sri Lanka participated in a study supported by the UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (RHR), WHO, which examined the relationship between the use of misoprostol and the type and severity of abortion symptoms in three phases. This article presents the qualitative findings of the first phase of the above study which describes healthcare providers' perception about the presentation and characteristics of women seeking postabortion care (PAC) in tertiary level health facilities and the patterns of abortion symptoms, complications, and the methods used for inducing an abort.

Methodology

In-depth interviews with 30 healthcare professionals involved in providing PAC in the gynecology wards of three tertiary care hospitals in Colombo (De Soysa Maternity Hospital, National Hospital of Sri Lanka, and the Castle Street Hospital for Women) were undertaken as a part of the study. Sites were chosen on the basis of providing specialized PAC services and round the clock emergency services for women. Healthcare professionals with over 5 years of experience in gynecology (who had served in urban/rural hospital settings before being posted to the above three tertiary care hospitals) were selected for interviews to understand changes over a period of time.

Interviews using a moderator guide were conducted by members trained in qualitative research methods. The interviews included questions exploring changes in the type and severity of abortion symptoms, composition of the caseload by type and severity of complications, and the method used for inducing an abortion over the years.

All interviews were conducted in either Sinhala or English based on the preference of the interviewee in the respective wards where staff worked without breaks and recorded to reduce possible omissions. Recorded interviews were transcribed and translated into English and coded based on themes by a member of the research team with expertise in qualitative data analysis. Thematic analysis was done along four themes related to study objectives using NVivo qualitative data analysis Software (QSR International Pvt Ltd., Version 11). Ethical clearance was obtained from the Research Ethics Review Committee of the WHO and the Ethics Review Committee of the Faculty of Medicine, University of Colombo, Sri Lanka. In addition, ethical clearance from the respective hospital ethics review committees and administrative clearances was obtained from relevant administrative authorities.

Results

In all, 21 medical officers and 9 nursing staff were interviewed of which two-thirds were males. Individuals with a wide range of experience from consultants to senior house officers among

Table 1: Profile of healthcare providers (*n*=30)

Variable	Levels	Number of respondents (%)
Sex	Male	20 (66.6)
	Female	10 (33.4)
Profession	Consultant	4 (13.3)
	Senior registrar/registrar	6 (20.0)
	SHOs	11 (36.7)
	Ward sisters/nursing officers	9 (30.0)
Years of experience	5-9	16 (53.3)
	10-14	8 (26.7)
	>15	6 (20.0)

SHOs: Senior house officers

the medical officers and ward sisters and nursing officers among nursing staff [Table 1] were interviewed. Although participants were currently assigned to tertiary care hospitals where the study was conducted, they had worked in different settings in the country including urban, rural, and estate sector with a mean experience of 13.4 years for doctors and 15.2 years for nursing staff (range: 5–29 years).

Analyses of the interviews were done on four themes. Profile of women seeking abortion care, caseload, use of contraception, and the common methods used were the themes, and the following findings were revealed.

Healthcare providers' perception on the profile of women seeking abortion care

Providers were of the view that women seeking an induced abortion were mostly married and had completed their families. Some providers indicated that unmarried women were less likely to seek care at government facilities due to social and cultural reasons but instead would seek care in private healthcare facilities. Many of the interviewees stated that married women who had completed their families were unwilling to use contraception and resort to abortions to terminate the pregnancy. Many of the interviewees stated that married women who had completed their families were unwilling to use contraception and resort to abortions to terminate the pregnancy [Box 1].

Health providers' perception on the number of women presenting to hospitals for abortion care

Health providers were of the opinion that the number presenting to the hospital with complications following an induced abortion has decreased over the past 10 years. However, providers with experience in the rural and estate sectors felt that healthcare institutions in the peripheral settings were more crowded with women seeking PAC, than the urban settings where the survey was conducted. However, providers with experience in the rural and estate sectors felt that healthcare institutions in the peripheral settings were more crowded with women seeking PAC, than the urban settings where the survey was conducted [Box 2].

Providers' perception on the use of contraceptive services

Providers' perception on the use of contraceptive services in relation to the caseload for abortion was mixed with some providers highlighting the wider availability of contraceptive services and its use by younger women as a possible reason for the decreasing trend. However, some of the providers also highlighted challenges with contraceptive use such as the prevalence of myths and misconceptions, concerns about side effects, lack of support from partners, and women's understanding of their own fertility. These were reasons for women, usually older and married to experience unintended pregnancies and seek abortions. These were reasons for women, usually older and married to experience unintended pregnancies and seek abortions [Box 3].

Box 1: Profile of women seeking abortion care

"You see all women who get admitted to our hospital are married women with husbands" (medical officer)

"If you look at the type of women who seek abortions, it is not the unmarried. It is the married mostly" (nursing officer)

"It is unfortunate that there are so many myths regarding modern family planning methods. Also many discontinue after starting saying there are so many side effects ….Then they get pregnant and seek an abortion" (medical officer)

"There are always issues with the unmarried seeking abortion services. So they will - for obvious reasons - not come to the government hospitals . So you will not see the entire spectrum in these government hospitals" (medical officer)

Box 2: Quotes on caseloads for abortion care in health facilities

"Well, if you take all bleeding PV after POA instances, the threatened abortions are still quite high. We have to keep ready several beds free on casualty day for admissions for threatened abortions as we have to provide care for bed rest. Most recover with bed rest and other management. But if you take incomplete abortions and the rate of ERPC done, I think it has decreased much over the last 10 years" (ward sister)

"You can see different numbers in the different settings. I feel the rural hospitals would be more crowded than here. But here there is a hospital every half a kilometer and the crowds get split" (medical officer)

"But if you take incomplete abortions and the rate of ERPC done, I think it has decreased much over the last 10 years. Earlier I remember preparing about four patients for ERPC every day for the postcasualty theatre list. But now sometimes we do not have a single case for the list" (nursing officer)

I would for sure say there is a reduction in the number of women coming with an incomplete abortion. As registrars we had a lot of such cases and we used to perform a lot of ERPCs in the theatre lists. I think we used to have at least 3-4 ERPCs in any list. But now I do not have to get my registrars to do that many ERPCs in a single list (consultant)

PV: Per vagina; POA: Period of amenorrhea; ERPC: Evacuation of retained products of conception

Box 3: Quotes on family planning use

"The number of unwanted pregnancies has gone down. The emergency contraception is available and anyone can get it. You just walk in to a pharmacy and ask for it and it is so easy to take. That has reduced all these girls as well as married women from becoming pregnant even if they are not using any contraception long term" (nursing officer)

"We must strengthen our family planning services. I know it is already very good. But there has to be a gap and that is why these women seek the ultimate solution . But we definitely need to strengthen the family planning services" (gynecology SHO)

"Some women are very helpless. In some communities, the men do not let the women practice any family planning method, thinking it will affect the wife or the sexual activities. So when they get pregnant, they do not want that also, mainly due to economic reasons" (nursing officer)

"But one good thing about identifying if it is induced is that we can advise her to get some family planning method in the future. At least some emergency contraception if there is an emergency" (gynecology registrar)

SHO: Senior house officer

Providers' perceptions on common methods used among women seeking abortion care

Many (26 of 30) of the providers stated that the complications following abortions were very few at present. Several providers

with over 10 years of experience in providing care for women following abortions recollected from the past that the cases with severe complications seen then had used mechanical methods and indicated that these are rare now. Several providers with over 10 years of experience in providing care for women following abortions recollected from the past that the cases with severe complications seen then had used mechanical methods and indicated that these are rare now [Box 4].

Many of the providers were aware of and identified the use of drugs such as a misoprostol by women as the commonest method for inducing an abortion. Many providers also indicated that awareness about the use of drugs for abortion was common both among women and healthcare providers. Given the experience of healthcare providers using misoprostol for other clinical indications, they highligthed the lower risk of using this drug when compared with mechanical methods.

Although misoprostol was not registered at the time of the survey, providers noted that the drug was available without prescription in pharmacies. The providers were of view that the "drugs" were sold at a rate from Rs 1000 to Rs. 10,000 (around 8 to18 US$).

Discussion

This study provides information regarding healthcare provider's perception on women presenting to hospitals seeking PAC. Healthcare providers perceived that women presenting with complications following induced abortions have reduced, based on their experience of fewer cases requiring emergency evacuation of retained products of conception during a night causality list.

Among those interviewed, providers with longer years of experience indicated seeing more patients seeking PAC, higher frequency of abortion-related complications such as sepsis or injuries at the beginning of their careers than during the latter years. Providers with over 5 years of experience had not seen any women presenting with induced abortions using mechanical methods considered to be least safe or methods other than "drugs' "Providers suggested that these changes may be related to increased awareness among women coupled with access to medicines such as misoprostol.

Providers also noted that a majority of the women seeking PAC were married, in line with findings from other studies.[12] As the study was conducted at public health facilities, it is possible that younger or unmarried women may be less likely to access care at these facilities, thus skewing results and contributing to the views of the providers.

With the availability of medical abortion, the use of surgical procedures for termination of a pregnancy or for the management of incomplete miscarriage has markedly reduced over a period of time.[7]

Given the wide range of clinical indications and use of misoprostol, the majority of providers were aware of its use in induced abortions and PAC. In line with the mechanism of action of misoprostol and the similarities in clinical presentation between a spontaneous and induced abortion, there was consensus among respondents that it was not possible to identify whether the woman has used a drug to induce an abortion or not unless women voluntarily disclosed the use of these drugs.

Makenzius *et al.*[13] reported administering misoprostol following diagnosis of incomplete abortion by midwives to be safe and effective as diagnosis and administration by the physicians. In another study done in Norway on medical abortion, home administration of misoprostol by women following the initial administration of mifepristone under supervision of a nurse was reported to be effective and safe.[14] These studies indicate that it is possible to manage incomplete miscarriages in a primary care setting with minimal complications. In both these studies, some women did require medical attention after misoprostol administration due to pain or increased bleeding. It is possible to manage most of such complaints by a primary care physician.

In countries like Sri Lanka where termination of pregnancy is illegal, women who have taken a drug most likely misoprostol to induce an abortion take it without a proper assessment of the duration of pregnancy or confirming the presence of an intrauterine pregnancy by performing an ultrasound scan. Many of these women would not present themselves even to general practitioners or to primary care physician but purchase the "drug" on their own.

Since termination is illegal in the country, many of these patients are unlikely to divulge the information of using a drug to terminate a pregnancy to the care provider. When misoprostol is administered without an initial ultrasound scan, there is possibility

Box 4: Quotes on common methods used for abortion

"Over the last 10 years the drugs became more and more popular. Earlier drugs were not known much and people resorted to ridiculous methods and came to the hospitals with all kinds of complications, sometimes life threatening" (medical officer)

"I know from what the patients say, people resort to drugs for abortions now. It is much safer then the mechanical methods, which were supposed to have been used a long time ago" (medical officer)

"I would say the drugs. They are available, everyone knows about it. You do not need to go to a doctor to get it but can go directly to a pharmacy and buy the drug" (nursing officer)

"I can definitely say that we do not see some of the horrific cases we use to see in the older days. When I was in Kotiyagala, I have seen at least twenty or even twenty five women getting admitted to the hospital with signs of induced abortions, with injuries to the vagina, heavy bleeding, with fever and signs of sepsis, etc. All these were induced alright. Now that type of case I see very rarely here" (medical officer)

"No matter how much family planning methods are promoted, no matter how much these people are educated; there will always be unwanted and unplanned pregnancies. So there will always be the need for abortions. At least we should admit that there is a safe method available now which does not kill women" (gynecology SHO)

SHO: Senior house officer

of missing an ectopic pregnancy.[15] It is more difficult to diagnose an ectopic pregnancy during and after medical methods of abortion, due to the similarity of symptoms.[8] It is known that following administration of misoprostol, small percentage of patients will continue to have retained products and present with prolonged bleeding.[13] Patients with undiagnosed ectopic pregnancies and retained products are likely to present to a primary care physician or to the hospital with abdominal pain or irregular bleeding and the caring physicians should be aware of such a possibility.[15]

When the patients decide to buy misoprostol over-the-counter like in Sri Lanka, it is likely that they will not be informed or be aware of any side effects or contraindications. The possibility of using inappropriate doses in a scarred uterus carries an additional risk to the woman.

Although there is wider availability of free contraceptive methods including emergency contraception through the family planning program contributing to a high contraceptive prevalence rate of 65%,[16] the results of the study also indicate the need to strengthen family planning services, mostly among older and married women. Specifically efforts should be taken to educate women regarding their fertility and risk of pregnancy, to improve counseling and management of side effects of modern contraceptives, and to identify interventions to engage partners to support the use of family planning methods. These are critical in addressing the issue of unintended pregnancies.

In addition, analysis of the quantitative data collected as part of the wider study is likely to also prove greater detail and further insight into the scenario on women seeking PAC and the use of medicines to induce abortion.

Although misoprostol was not registered at the time of this study, its increasing use among women in Sri Lanka and potential role in reducing serious complications among women seeking PAC should be recognized. The use of misoprostol can reduce the need for theater time, cost involved, and the duration of hospitalization in managing women seeking PAC. A community-based study to understand the extent of the use of misoprostol, its efficacy, and safety should be undertaken to support future policy change for training, health resource planning, and improving community awareness as efforts to improve women's health in Sri Lanka.

Conclusion

Findings of this study conclude that over the years women appear to have switched from surgical and mechanical methods to medical means (drugs) to induce an abortion which has contributed to reduce the severity of complications.

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Conflicts of interest

There are no conflicts of interest.

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