ORIGINAL ARTICLE

Safe Motherhood: Morbidity and Mortality Associated with Unsafe Termination of Pregnancy

KHOLA YOUSAF, KIREN KHURSHID MALIK, MARIAM MALIK

ABSTRACT

Objective: To determine the morbidity and mortality associated with unsafe termination of pregnancy.

Material and Methods: A cross sectional descriptive study was conducted in the Department of Obstetrics and Gynaecology at Sir Ganga Ram Hospital, Lahore from January 2008 to March 2014. A total of 139 patients who presented with history of termination of pregnancy with instruments were included in the study. Data regarding their socio demographic features, reason for termination of pregnancy, nature of provider/facility, complications and treatment were collected and analysed.

Results: A total of 139 women who underwent instrumental termination of pregnancy were included in this study. Majority of them were married (98%). Multigravida constituted 54% of the patients while 46% were primigravida. The most common complaint was fever (26%) while 21% presented with abdominal distension and acute abdomen. Mortality among the subjects was 17%. The most frequent complication was uterine perforation (65%) followed by pelvic abscess (32%) and septicaemia (26%). All termination of pregnancies was performed by untrained providers. An unwanted pregnancy was the main reason (58%) while 42% underwent instrumentation due to irregular vaginal bleeding.

Conclusion: The high maternal morbidity and mortality associated with unsafe termination of pregnancy in our study highlights the importance of providing safe post abortion care to our women and the need to improve contraceptive practices in our set up.

INTRODUCTION

Pakistan is the 6th most populous country in the world with a total fertility rate (TFR) of 3.8¹. Over all in Pakistan only 35% of married women of reproductive age (MWRA) are currently using a contraceptive method. There is 1 in 4 MWRA with an unmet need of family planning which in majority of cases is for limiting the family. Most of the women with unwanted pregnancy then seek termination of pregnancy as a method of limiting their family. An estimated 890,000 induced termination of pregnancies are performed annually in Pakistan and the unwanted pregnancy rate is as high as 37% of all pregnancies. Since in Pakistan the law allows termination of pregnancy only in a situation where it is needed to protect a woman's life or her physical or mental health, most of the women with unwanted pregnancy undergo such procedure in unsafe environment where the procedure is conducted either by a person lacking the necessary skills or in an environment lacking the minimal medical standards or both. Lack of access to post abortion care also makes many women with spontaneous miscarriage, a victim of this disastrous practice.

WHO has estimated that 21.6 million unsafe abortions and 47000 abortion related deaths occurred globally in 2008, ³ while in Pakistan 6% of MMR ⁴ is attributed to complications of unsafe

termination of pregnancy. For every maternal death 10-15 women suffer morbidity, making unsafe termination of pregnancy a major health concern for many developing countries where an estimated five million women are admitted in hospital for treatment of complications from termination of pregnancy each year.⁵ Maternal ill health and death have an immense effect on females, families and communities and has far reaching effects across all socioeconomic sectors. The current investment in maternal health is insufficient to meet the 5th millennium development goal for Pakistan. The social stigma associated with termination of pregnancy means that the data on the magnitude of this problem are scarce; however, various studies have highlighted its importance as one of the leading cause of maternal mortality. Thus we carried out a study to explore the significance of this problem in our set

MATERIAL AND METHODS

A cross sectional descriptive study was conducted in the Department of Obstetrics and Gynaecology at Sir Ganga Ram Hospital Lahore, from January 2008 to March 2014. A total of 139 patients who presented with complication of Termination of pregnancy with instruments, were included in the study. Data regarding their socio demographic

Khola Yousaf, Kiren Khurshid Malik, Mariam Malik

characteristics, reason for termination of pregnancy, nature of provider/ facility, complications and treatment were collected. Data was analysed and percentages were derived.

RESULTS

A total of 139 women who underwent termination of pregnancy with instruments were included in this study. Their ages ranged from 14-45 years while the mean age was 30 years. Most of these women (98%) were married while only 2% were unmarried. Among the study population 54% were multigravida while 46% were primigravida. 94% of them had never used a contraceptive method. The main reason to seek termination of pregnancy was unwanted pregnancy (48%). Irregular vaginal bleeding (42%) and early pregnancy loss (10%) were the other two indications.

Regarding the decision to choose a particular facility, 88% were taken by their family members while only 12% made the decision themselves. In majority of the cases (42%) the facility was chosen because the family members used to go there. In other cases the reason to opt the facility was because it was recommended by relatives (27%) or neighbours (9%). 15% chose the facility because it was near to the family's house. Word of mouth was the main source of information about the chosen facility in 7%.

There were varied presenting complaints with fever being the most common (26%) among them. Acute abdomen and abdominal distension affected 21% while 12% had acute abdomen and absolute constipation. 14% presented with RPOCs on pelvic ultrasound report. Irregular vaginal bleeding was the leading symptom in 19% of patients.

Maternal mortality was 17% and septicaemia was the most common (80%) cause of death in these patients. Other complications included uterine perforation 65%, pelvic abscess 32%, septicaemia 26%, gut injury 21% and bladder injury 13%. Anaemia affected 96%, while in 84% it was severe enough to require blood transfusion.

Laparotomy was performed in 95% of patients. Total abdominal hysterectomy due to gangrene uterus was done in 31% of cases. Gut resection and anastomosis was done in 16% and 5% needed a colostomy as well. Uterine repair was possible in 34% of women. Evacuation of RPOCs at the time of laparotomy was done in 36% of patients. Drainage of pelvic abscess in 32% and bladder repair was performed in 13% of the patients. Salpingectomy due to tubal ectopic

pregnancy was performed in 5%.Only 5% of all patients were treated

DISCUSSION

In Pakistan the annual abortion rate is 29 per 1000 women aged 15-49. ² The rate of abortion in Pakistan is higher in provinces where contraceptive use is lower. In our study 94% had never used contraception even though 98% were married and 54% were even multi gravida. Srinil S ⁶ in his study done in Thailand also found that 56% of women with unsafe pregnancy termination did not use any contraception.

The age range of patients in our study was 14-45years with a mean age of 30 years. This means that most of these women were mature enough to understand the implications of termination of pregnancy. Only 2% of the study population was unmarried which is in contrast to the popular belief that unmarried women are mostly the ones to seek termination of pregnancy. This finding is in contrast to a study in Ghana ⁷ where most of the patients in induced abortion group were younger and unmarried.

Although in Pakistan the unwanted pregnancy rate is estimated at 37% ² in our study it was 48%. None of these women had ever used a contraceptive method even though they did not want another child. A similar result was found in the study carried out at Civil Hospital Karachi, ⁸ that showed that completed family was the main reason for induced abortion (48.2%). This reflects the general mind set of our society where people use pregnancy termination as a method of limiting their family size.

Primigravida constituted 46% of the study population and most of them underwent the procedure for irregular vaginal bleeding (42%) and early pregnancy loss (10%). In women who had irregular bleeding in early pregnancy, no attempt was made to establish the type of miscarriage through other investigations, as pelvic ultrasound scan, before performing the uterine evacuation. This suggests that bleeding in early pregnancy is often considered a sign of early pregnancy failure or incomplete miscarriage even though it may be otherwise. Health awareness and early pregnancy clinics can help to mitigate this belief.

Lack of proper investigations in early pregnancy also leads to wrong diagnosis of tubal ectopic pregnancy as incomplete miscarriage or early pregnancy loss. In our study 5% women actually had tubal ectopic pregnancy.

Safe Motherhood: Morbidity and Mortality Associated with Unsafe Termination of Pregnancy

Unfortunately, not only did they not get the necessary treatment for this potentially fatal condition, they ended up have more complications for a simple reason that their health care providers were not trained enough to establish a definitive diagnosis prior to performing the procedure.

Women in our society are often not involved in decision making process which is amply evident in our study, as only 12% of the women themselves chose the facility at which they had the procedure. In most cases (88%) family members made the decision and this adversely affected even the ones who did not have an unwanted pregnancy. Empowering women through education can give them the confidence to make the right choice and also the ability to voice it.

Maternal mortality in our study was 17% but in Civil Hospital Karachi ⁸ it was as high as 34.9%. Septaecemia was the most common (80%) cause of death. Pelvic abscess (32%) and septicaemia (26%), which was severe enough to kill 17% patients, indicate the poor infection control practices in the set ups where such procedures are conducted.

Those who reached the hospital to seek treatment for complications often gave a vague history regarding the nature of the facility and the health care provider. However, their condition clearly suggested that the health care provider, even if a doctor, was not trained well especially in dilatation and curettage. The provider also lacked the ability to figure out as to who needs expulsion of foetus before and who needs D&C straight away.

The use of instruments, especially at a gestational age where expulsion was needed prior to D&C, led to multiple complications that added to the morbidity. In our study these included uterine perforation (65%), gut injury (21%) and bladder trauma (13%), while the study in Jamshoro Sindh⁹ showed bowel perforation with uterine perforation in 54% cases. A study in Tanzania ¹⁰ revealed that bowel perforation was more common in second trimester abortions (79.4%).

There were 36% who had RPOCs after the first evacuation and needed another D&C. Repeated evacuation has a strong association with Asherman's syndrome. It is one of the causes of secondary sub fertility and amenorrhea so these women are also at risk of this long term morbidity.

Most of the patients underwent laparotomy (95%) and 31% had total abdominal hysterectomy due to gangrene of uterus. They not only had to

undergo a major operating procedure, they also suffered long term effects of losing fertility. The 34% cases that had uterine repair face high risk of uterine rupture in their subsequent pregnancy. This highlights the importance of providing family planning services and access to safe post abortion care to our women. This will prevent such potentially fatal incidents in which even when patient survives, she either loses her ability to reproduce or faces potential death due to rupture uterus if she ever gets pregnant again.

There should be widespread campaign to raise awareness regarding Family planning services. These services should be available round the clock at the door steps of the clients. The message should be administered on television and radio at prime time. In this regard doctors, nurses, students, members of civil society and teachers, all can contribute in spreading the word.

The health care providers should use the opportunity at antenatal, postnatal and well women clinics to talk to women and their families about family planning. The inclusion of Lady Health Workers in spreading awareness about the availability of family planning services and counselling of women regarding mortality and morbidity associated with unsafe termination of pregnancy can influence the maternal mortality ratio in Pakistan. This can eventually help us to achieve the 5th millennium development goal.

Empowering women in decision making regarding their own health and training of health care providers in infection control and lower risk techniques like Misoprostol and MVA to provide post abortion care will also lessen the associated morbidity.

CONCLUSION

Unsafe termination of pregnancy leads to high maternal mortality and morbidity. Easy access to and widespread use of family planning services can help in reducing the number of unwanted pregnancies, thus reducing termination of pregnancies. Provision of post abortion care to all women and training of the health care providers can help reduce the burden of complications in patients with an early pregnancy loss.

REFERENCES

 National Institute of Population Studies (NIPS) [Pakistan], and MEASURE DHS, ICF International.2013.Pakistan Demographic and Health Survey 2012-2013.Preliminary Report.

Khola Yousaf, Kiren Khurshid Malik, Mariam Malik

- Islamabad, Pakistan: National Institute of Population Studies and ICF International.
- 2. Sathar ZA, Singh S, Fikree FF. Estimating the incidence of abortion in Pakistan. Stud Fam Plann. 2007 Mar; 38(1):11-22.
- World Health Organization (WHO), Unsafe Abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2008, sixth ed, Geneva: WHO, 2011.
- National Institute of Population Studies (NIPS) [Pakistan], and Macro International Inc. 2008. Pakistan Demographic and Health Survey 2006-07. Islamabad, Pakistan: National Institute of Population Studies and Macro International Inc.
- Singh S. Hospital admissions resulting from unsafe abortion: estimates from 13 developing countries. Lancet. 2006 Nov 25; 368 (9550):1887-92.
- Srinil S. Factors associated with severe complications in unsafe abortions. J Med Assoc Thai. 2011 Apr; 94 (4):408-14.

- 7. Schwandt HM, Creanga AA, Danso KA et al. A comparison of women with induced abortion, spontaneous abortion and ectopic pregnancy in Ghana. Contraception. 2011 Jul; 84(1):87-93. doi: 10.1016/j. contraception.2010.10.011. Epub 2010 Dec 3.
- Shah N, Hossain N, Noonari M et al. Maternal mortality and morbidity of unsafe abortion in a university teaching hospital of Karachi, Pakistan. J Pak Med Assoc. 2011 Jun; 61(6):582-6.
- Shaikh Z, Abbassi RM, Rizwan N et al. Morbidity and mortality due to unsafe abortion in Pakistan. Int J Gynaecol Obstet. 2010 Jul; 110(1): 47-49. doi: 10.1016/j.ijgo.2010.01.02. Epub 2010 Apr 14.
- Mabula JB, Chalya PL, McHembe MD, Kihunrwa A, Massinde A, Chandika AB et al. Bowel perforation secondary to illegal abortion: a tertiary hospital experience in Tanzania. World J Emerg Surg. 2012 Sep 1; 7(1): 29. doi: 10.1186/1749-7922-7-29.