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Case Series

Unsafe abortions: the plight of the womb

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ABSTRACT

Abortion is a common health care intervention in women of reproductive age group. It is reported that 6 out of 10 unintended pregnancies and 3 out of 10 of all pregnancies end up in induced abortion. Developing countries bear the burden of 97% of unsafe abortion and they account for 5-13% of maternal mortality. We have attempted to present a case series on unsafe abortions dealt with in our facility. It was a prospective observational study conducted over patients admitted in the department of OBG, GGSMCH, Faridkot over a period of 14 months. The patients presenting with post abortal complications constituted the study population. Out of the total 100 patients, 40 patients gave history of unsafe abortion; of whom 18 patients with grade 4 sepsis were included in study. Laparotomy was done in 12 patients, out of which there were 3 uterine repair, 1 intestinal repair and only peritoneal washings in the rest. Despite best efforts 5 patients succumbed to the sequelae of sepsis. Unsafe abortions and maternal mortality has a downward trend over the years, but still is a substantial burden on the economy. Regulations that force women to travel to attain legal care and face waiting periods lead to loss of income and other financial costs, and can make abortion inaccessible to women of low socio economic status. Therefore, availability of trained personnel and subsidized comprehensive abortion care services at the community health care centre level is the need of the hour.

Keywords: Sepsis, Abortion, Laparotomy, Mortality

INTRODUCTION

Abortion is a common health care intervention in women of reproductive age group. A woman and a country aren't really free if they don't have access to safe and legal abortion services as a human right. It is reported that 6 out of 10 unintended pregnancies (61%) and 3 out of 10 of all pregnancies (29%) end up in induced abortion.[1] Developing countries bear the burden of 97% of unsafe abortion and they account for 5-13 % of maternal mortality.[2] Also, it is one of the five major causes of maternal mortality.[2]

Unsafe abortion and maternal mortality has a downward trend over the years, but still is a substantial burden on the economy. Regulations that force women to travel to attain legal care, or require mandatory counselling or waiting periods, lead to loss of income and other financial costs, and can make abortion inaccessible to women of low socio economic status.[3] This is a case series on patients presenting with severe sepsis following unsafe abortion. The study was conducted with the motive of realizing the burden of unsafe abortions in North India so that policy decisions can be guided for future.

Grading of post abortal sepsis-Grade I: infection localized to the uterus, grade II: infection spreading to pelvis and abdomen without signs of generalized sepsis, grade III: Septicemia with clinical evidence of infection like fever, hypothermia, tachycardia, tachypnea or inadequate organ perfusion and grade IV-Patients with septic shock.

CASE SERIES

This prospective observational study was conducted over 20 patients who presented with grade 4 sepsis following unsafe abortion to the department of obstetrics and gynecology, Faridkot, Punjab, India during the period October 2021 to November 2022. All those patients with history of unsafe abortion (period of gestation less than 28 weeks) presenting with bleeding per vaginum, fever, pain abdomen, foul smelling vaginal discharge, abdominal or uterine tenderness, pelvic abscess, peritonitis, mechanical or foreign body injury and any systemic organ failure and shock were included. A total of 240 patients presented with miscarriage and its complications. Out of those, 48 patients gave history of unsafe abortions, of whom n=20 patients with features of grade 4 sepsis were included in the study.

Young women aged less than 20 years constituted 10% of these patients and pre-ponderence of women was seen in the age group of 20-30 years. Majority of the women were multipara and belonging to rural household. All of the cases were unbooked. One of the patients was unmarried. The time of presentation to a health facility was between 6-9 days for most of the women.

Out of the 20 patients with grade 4 sepsis, 17 (85%) patients had a history of induced abortion. Majority of these were second trimester abortions. A total of 17 (94.55%) patients underwent instrumentation at an unauthorized centre. Of these many patients initially concealed the history. All the patients presented with fever, abdominal or pelvic pain, shock and multiple organ dysfunction syndrome (MODS). Abdominal distension was present in n=14 (70%) patients. However, only 50 % patients presented with vaginal bleeding.

The most common diagnosis was generalized peritonitis followed by retained products of conception. Laparotomy was performed for evidence of peritoneal collection in n=16 (80%) patients. However, surgical exploration could not be performed for n=2 patients because of complications such as DIC. Among the 16 patients who underwent laparotomy, all patients had pyoperitoneum, 2 patients had pelvic abscess, 3 patients had uterine perforation and one patient had coexisting bowel injury also. One of the patients who had undergone MTP followed by instrumentation was eventually diagnosed with ruptured ectopic during laparotomy. After the visceral repair and thorough peritoneal lavage, an intraperitoneal drain was placed in all patients.

All patients required inotropic support and blood or component transfusion during some point of time during their stay in hospital. Stitchline sepsis developed in n=14 (87%) of the operated patients. Recovery was seen in 15 patients who suffered intense morbidity and prolonged hospital stay due to lung collapse in 15% patients, prolonged intubation in 30% patients and prolonged fever in 60% patients.

The total number of maternal deaths in our facility during the study period was 61. Among the study participants n=5 (25%) patients succumbed to their sickness. Therefore, the mortality attributable to unsafe abortion is 8.1%. The cause of Death was sepsis with acute kidney injury in one patient, sepsis with DIC, acute respiratory distress syndrome. The most common indirect cause of maternal mortality was anemia.

Data extracted from maternal death review showed that out of these 5 patients, one patient was unmarried and other 4 were parous. Out of these 5 patients, 2 had undergone laparotomy for pyoperitoneum. Other 3 had features of septic shock apart from retained products of conception and no free fluid. One of the common delays in all 5 patients was delay in seeking help. Average day of presentation was 7 days after instrumentation. It has also been observed that 3 out of 5 patients concealed their history of instrumentation at an unauthorized centre.

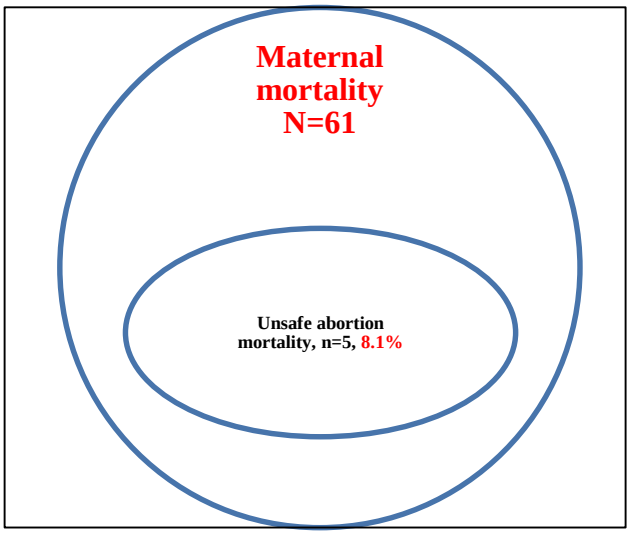

Figure 1: Relation with maternal mortality.

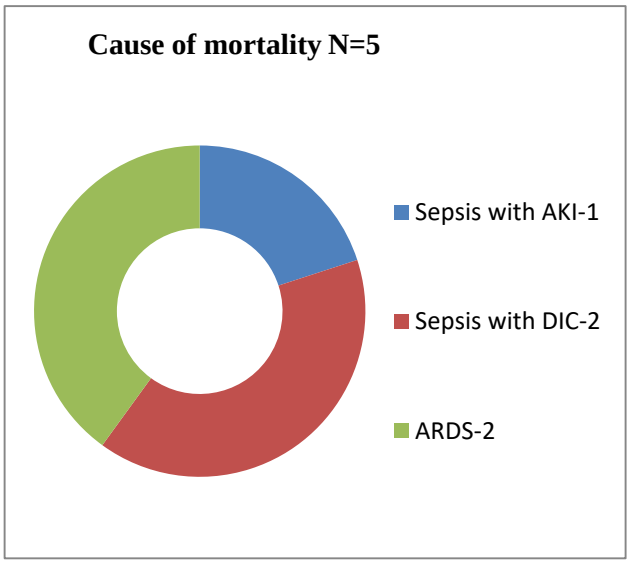

Figure 2: Causes of maternal mortality.

Table 1: Socio demographic variables.

Variables	N	Percentage (%)
Age (in years)		
<20	2	10
20-30	10	50
>30	8	40
Place		
Urban	2	10
Rural	18	90
Booking status		
Booked	0	0
Unbooked	20	100
Marital status		
Unmarried	1	5
Married	19	95
Parity		
Primipara	2	10
Multipara	18	90

Table 2: Antecedent event.

Antecedent event	N	Percentage (%)
Abortion		
Spontaneous	3	15
Induced	17	85
Trimester		
First trimester	3	15
Second trimester	17	85
Type		
MTP	3	15
Spontaneous abortion followed by instrumentation	3	15
MTP+ instrumentation	14	70

Table 3: Clinical profile.

Clinical profile	N	Percentage (%)
Puerperal day of presentation (Days)		
1-3	3	15
3-6	4	20
6-9	8	40
>9	5	25
Presenting complain		
Fever	20	100
Vaginal bleeding	10	50
Pelvic pain	20	100
Abnormal discharge	10	50
Abdominal distension	14	70
Shock	20	100
Uterine tenderness	4	20
Sequelae of unsafe abortion		
Uterine perforation	3	15
Bowel injury	1	5
Pelvic abscess	2	10
Renal failure or MODS	20	100
Generalized peritonitis	17	85
Lung collapse	3	15
Respiratory distress	5	25
Clinical course		
Inotropic support	20	100
Prolonged fever >48 hours	12	60
Prolonged intubation >48 hours	6	30
Stitchline sepsis	14	
Average duration of hospital stay	16 days	

Table 4: Comparison among studies.

Author	Country	Year	Study population	Incidence	Induced abortion	Complications	Mortality
Sreelakshmi et al[4]	India	2014	Septic abortion	6.78%	59.52%	India	Nil
Nahar et al[9]	Bangladesh	2017	Septic abortion		45.45%	Bangladesh	12%
Adenuga et al[7]	Nigeria	2020	Septic abortion	Case series	100%	Nigeria	28.6%
Chopra et al[5]	India	2022	Septic abortion	4.4%	84.6%	84.6%	15.4%
Present study	India	2023	Unsafe abortion	20%	85%	41.6%	25%

DISCUSSION

Incidence of unsafe abortion in study was 20% which is higher than that of Sreelakshmi et al and Chopra et al.[4,5] It could be due to COVID pandemic when illegal abortion rate increased due to phobia in public for accessing government facilities.[6] As per study patient spent an average of 7 days before presenting to facility with complications similar to findings of study conducted in Nigeria.[7] It could be due to no awareness on danger signs, financial concerns, stigma associated with abortion, lack of access to gynecologist and ignorance by family.[3,8]

In our study, majority (85%) of the patients had an induced abortion, similar to the findings of Chopra et al (84%).[5] However, a study from Bangladesh reported a 45% incidence of induced abortion.[9] Majority of the patients in our study got abortion induced in second trimester as against other studies.[4,6,9]

As per our study, 2/3 patients diagnosed with uterine perforation had it on the posterior wall of uterus. This was congruent with findings of other studies.[7] All but 2/16 patients developed surgical site infection after laparotomy. Other studies have shown similar results with rates as high as 73%-93%.[5,7] Surgical site infection

rates are high in the backdrop of sepsis, anemia, immunocompromised state and leads to prolonged hospital stays and in itself is a substantial burden on economy.[10] The percentage mortality among study participants was 25% less than that of Adenuga et al who described a case series on post abortal patients managed jointly by surgery and gynecology team where mortality was 28%.[7]

CONCLUSION

It is said that skill lies in the hands of the trained. MTP is simple and safe as long as done by trained personnel and with strict adherence to aseptic precautions. Interventions are required at multiple levels right from changing the attitude of the general public to policy level decisions.

An awareness march led by the health service providers and supported by the district administration should be conducted at various locations of the area with special focus on villages lacking skilled staff in Primary Health care centre. Also, ASHA and ANM have a vital role to play. They must reiterate to the women of their area about the safety of institutional comprehensive abortion services.

It is true that one who doesn't plan her fertility cannot plan her life. This emphasizes on fulfilling the unmet needs of family planning. As per the NFHS-5 survey, the total unmet needs of family planning is 9.4% for India, but still holds the nation back at the global front with rates higher in rural areas.[11] Proper and determinate counselling sessions must be conducted in hospitals as well as in the field that can motivate the women to adopt a suitable method of contraception so that they can walk on the fruitful path of life without dismay.

Over the counter availability of MTP kits must be banned and unauthorized centres providing abortion services must be identified and curbed by law.

With respect to our study area, the availability of trained personnel and subsidized comprehensive abortion care services at the community health care centre level is the need of the hour.

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REFERENCES

1. Bearak J, Popinchalk A, Ganatra B, Beth M, Özge T, Cynthia BBA, et al. Unintended pregnancy and abortion by income, region, and the legal status of abortion: estimates from a comprehensive model for 1990-2019. Lancet Glob Health. 2020;8(9):e1152-e1161.
2. Ganatra B, Gerdts C, Rossier C, Brooke RJ, Özge T, Anisa A, et al. Global, regional, and subregional classification of abortions by safety, 2010-14: estimates from a Bayesian hierarchical model. Lancet. 2017;390(10110):2372-81.
3. Coast E, Lattof SR, Meulen Rodgers YD, Moore B, Poss C. The microeconomics of abortion: A scoping review and analysis of the economic consequences for abortion care-seekers. PLoS One. 2021;16(6):e0252005.
4. Sreelakshmi U, Thejaswini J, Bharathi T. The outcome of septic abortion: a tertiary care hospital experience. J Obstet Gynaecol India. 2014;64(4):265-9.
5. Chopra K. A case series of septic abortion during covid-19 pandemic at A tertiary care centre in New Delhi, India. Women Health Care Issues. 2022;5(5):01-05.
6. Qaderi K, Khodavirdilou R, Kalhor M, Bahar MB, Maryam K, Maryam HB, et al. Abortion services during the COVID-19 pandemic: a systematic review. Reprod Health. 2023;20(1):61.
7. Adenuga AT, Akande OW. Peritonitis following unsafe abortion: a retrospective study in a tertiary health facility in North Central Nigeria. Pan Afr Med J. 2020;37:354.
8. Sageer R, Kongnyuy E, Adebimpe WO, Omosehin O, Ogunsola EA, Sanni B. Causes and contributory factors of maternal mortality: evidence from maternal and perinatal death surveillance and response in Ogun state, Southwest Nigeria. BMC Pregnancy Childbirth. 2019;19(1):63.
9. Nahar S, Akhter S, Ahamed F, Akhtar K, Noor F. Study on clinical presentation and outcome of septic abortion and its relationship with person inducing abortion. Mymensingh Med J. 2017;26(4):699-704.
10. Monahan M, Jowett S, Pinkney T. Surgical site infection and costs in low- and middle-income countries: A systematic review of the economic burden. PLoS One. 2020;15(6):e0232960.
11. Mumbai M. International Institute for Population Sciences (IIPS) and ICF. National Family Health Survey (NFHS-5), 2019-2021. 2021.

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