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FREQUENCY OF COMMON COMPLICATIONS AMONG PATIENTS PRESENTING WITH SEPTIC INDUCED ABORTION.

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ABSTRACT… Objectives: To find frequency of common complications among patients presenting with induced septic abortion attending OPD of Hayatabad Medical Complex Peshawar. **Study Design:** Descriptive cross-sectional study. **Setting:** Department of Obstetrics & Gynecology Hayatabad Medical complex Peshawar. **Period:** 6 October, 2016 to 6 April, 2017. **Material & Methods:** Through a cross sectional validation study design, 123 pregnant female patients with induced septic abortion having a gestation period of 20 to 22 weeks were included in the research study. After their consent, detailed clinical examination and history of patients were taken. SPSS version 10.0 was used for analysis of the collected data. Descriptive statistical data like mean + Standard deviation was measured for age, gravidity & parity. Likewise, frequency & percentage was calculated for hemorrhage, diffuse peritonitis and severe anemia. **Results:** As per Common Complications, frequencies and percentages for hemorrhage was recorded in 31 (25.20%) patients, diffuse peritonitis was recorded in 49 (39.83%) patients while severe anemia was recorded in 26 (21.13%) patients. However, 17 patients (13.82%) had no complications other than septic abortion. **Conclusion:** Our study concluded that the mishap of septic-induced abortion is totally preventable. The definitive commitment to women's health can be achieved through effective contraception and by strengthening the family welfare services. Positive results can be achieved by discouraging repeated terminations of pregnancy.

Key words: Induced Abortion, Maternal Mortality, Morbidity, Unsafe Abortion.

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INTRODUCTION

Abortion (miscarriage) can be defined as the extraction or expulsion of a fetus (embryo) weighing less than 500-g or equivalent to approximately 20-22 weeks gestation.[1]

According to World Health Organization (WHO), unsafe abortion is defined as termination of pregnancy by unskilled persons or in an environment that does not support the minimal medical standards, or both.[2]

Septic abortion still remains a challenging problem in developing countries and reflects a major cause of maternal morbidity and mortality.[3]

Illegal induced abortion preceded by infection of uterus and adjacent organs is called septic abortion, which is characterized by excessive vaginal discharge, lower abdominal pain and rise in temperature of 38°c.[4]

History of recent pregnancy, abnormal vaginal discharge or bleeding with pain, fever and chills are the major symptoms of septic abortion.[5]

Reportedly in 2010, 10 women died from complications of legal induced abortion in the united states.[6] However, no death associated with known illegal induced abortion was reported which may be due to reporting issues.

In the United States about 4% of pregnancy are attributed to induced abortion and spontaneous miscarriages.[7]

After legalization of abortion in the United States, mortality declined rapidly from septic abortion.

Now mortality rate in United States is less than 1 per 100,000 abortions. This rate remains the same for most of the European countries.

WHO estimates that amongst the five major causes of maternal death, Induced abortion accounts for one fourth of these deaths. The number of women becoming pregnant is about 210 million each year worldwide. Unplanned births and abortions account for more than 25% of these pregnancies. Annually 20 out of 42 million women with unintended pregnancy (the most common cause of abortion i.e. 82%) choose termination of pregnancy, which is unsafe globally.[8]

Low resource settings, such as use of sharp or inappropriate objects and lack of sterile equipment results into complications like hemorrhage and peritoneum rupture, fever, septic shock, abnormal vaginal discharge etc are associated with unsafe abortions.[9]

MATERIAL & METHODS

After seeking the consent and approval of the hospital research and ethical committee, the study was carried out. All patients who met the inclusion criteria were admitted through OPD/ ER department for further evaluation. Written informed consent from the patients was obtained after discussing the purpose and benefits of the study. It was a Descriptive cross-sectional study conducted at Department of Gynaecology and Obstetrics, Hayatabad Medical Complex, Peshawar from 06 Oct 2016 to 06 April, 2017. A total of 123 pregnant patients were included using 95% confidence level with a 5% margin of error under WHO software for sample size determination.

Consecutive (Non probability) technique was used. Patients considered were of reproductive age ranging from15 to 45 years having history of induced septic abortion. Patients with history of abnormal uterine bleeding, missed and incomplete abortion were excluded.

Detailed history, clinical examination and routine investigations were done. Patients were carefully evaluated for common complications of induced septic abortion like hemorrhage, diffuse peritonitis and severe anemia. All the observations were done under guidance of an experienced pathologist possessing requisite standards. Pre-designed Proforma was used for recording of already obtained information. To control confounders and bias in the study results, a strict exclusion criterion was followed.

Data was processed and analyzed by using SPSS version 10.0. Descriptive statistics like mean + Standard deviation was calculated for age, gravidity & parity. Frequency & percentage was calculated for qualitative data like common complications (hemorrhage, diffuse peritonitis and severe anemia). All results were presented in the form of tables.

RESULTS

As per age distribution, 61 (49.60%) patients were recorded in 15-30 Years Age Group. In 31-45 Years Age Group, 62 (50.40%) patients were recorded (Table-I). As per Descriptive Statistics, Mean and SD for Age was recorded as 31 Years + 6.61. Mean and SD for Gravidity was recorded as 2 Gravidity + 1.15 and Parity was recorded as 2 Parity + 1.04. (Table-II).

As per distribution of gravidity and parity, 84 (68.29%) patients were having parity equal to or less than two whereas 39 (31.70%) patients were having parity more than two times. 74 (60.16%) patients were having gravidity less than or equal to two times whereas 49 (39.83%) were having gravidity greater than two times. (Table-III). However, 17 (13.82%) had no complications. (Table-IV).

As per common complications, frequencies and percentages for hemorrhage was recorded in 31 (25.20%) patients, diffuse peritonitis was recorded in 49 (39.83%) patients while severe anemia was recorded in 26 (21.13%) patients. (Table-V)

	Age	Frequency	Mean&SD
Age	15-30 Years	61 (49.60%)	31 Years + 6.61
	31-45 Years	62 (50.40%)	
Gravidity	< 2	74 (60.16%)	2 Gravidity+ 1.15
	> 2	49 (39.83%)	
Parity	< 2	84 (68.29%)	2 Parity + 1.04
	> 2	39 (31.70%)	

Table-I. Distributions of age, gravidity and parity

Common Complications	Frequency
Hemorrhage	31 (25.20%)
Diffuse peritonitis	49 (39.83%)
Severe Anemia	26 (21.13%)
Sub Total	**106 (86.17%)**
No Complications	17 (13.82%)
Grand Total	**123 (100%)**

Table-II. Frequencies and percentages for common complications (n=123)

Age	Hemorrage	Frequences	P -Value
18-30 years	Yes	17 (13.82%)	0.499
	No	44 (35.77%)	
Total		**61 (49.60%)**	
31-45 years	Yes	14 (11.38%)	
	No	48 (39.02%)	
Total		**62 (50.40%)**	
Gravidy			
<2	Yes	19 (15.44%)	0.822
	No	55 (44.71%)	
Total		**74 (60.16%)**	
> 2	Yes	12 (9.75%)	
	No	37 (30.08%)	
Total		**49 (39.83%)**	
Parity			
<2	Yes	20 (16.26%)	0.601
	No	64 (52.03%)	
Total		**84 (68.29%)**	
> 2	Yes	11 (8.94%)	
	No	28 (22.76%)	
Total		**39 (31.70%)**	

Table-III. Stratification of complication (Hemorrhage) with age, gravidy & parity (n=123)

Age	Diffuse Peritonitis	Frequencies	P-Value
18-30 years	Yes	21 (17.03%)	0.224
	No	40 (32.52%)	
Total		**61 (49.59%)**	
31-45 years	Yes	28 (22.76%)	
	No	34 (27.64%)	
Total		**62 (50.40%)**	
Gravidy			
<2	Yes	26 (21.13%)	0.190
	No	48 (39.02%)	
Total		**74 (60.16%)**	
> 2	Yes	23 (18.61%)	
	No	26 (21.13%)	
Total		**49 (39.83%)**	
Parity			
<2	Yes	29 (23.57%)	0.077
	No	55 (44.71%)	
Total		**84 (68.29%)**	
> 2	Yes	20 (16.26%)	
	No	19 (15.44%)	
Total		**39 (31.70%)**	

Table-IV. Stratification of complication (Diffuse Peritonitis) with age, gravidy& parity (N=123)

Age	Severe Anemia	Frequencies	P-Value
18-30 years	Yes	13 (10.57%)	0.659
	No	48 (39.02%)	
Total		**61 (49.59%)**	
31-45 years	Yes	12 (9.76%)	
	No	50 (40.65%)	
Total		**62 (50.40%)**	
GRAVIDY%			
<2	Yes	18 (14.63%)	0.287
	No	56 (45.52%)	
Total		**74 (60.15%)**	
> 2	Yes	8 (6.50%)	
	No	41 (33.33%)	
Total		**49 (39.83%)**	
PARITY			
<2	Yes	20 (16.26%)	0.286
	No	64 (52.03%)	
Total		**84 (68.29%)**	
> 2	Yes	6 (4.87%)	
	No	33 (26.82%)	
Total		**39 (31.70%)**	

Table-V. Stratification of complication (Severe Anemia) with age, gravidy & parity (n=123)

DISCUSSION

As per age distribution, 61 (49.60%) patients were recorded in 15-30 Years Age Group. In 31-45 Years Age Group, 62 (50.40%) patients were recorded. As per Descriptive Statistics, Mean and SD for Age was recorded as 31 Years + 6.61. Mean and SD for Gravidy was recorded as 2 Gravidy + 1.15 and Parity was recorded as 2 Parity + 1.04. As per distribution of gravidy and parity, 84 (68.29%) patients were having parity equal to or less than two whereas 39 (31.70%) patients were having parity more than two times. 74 (60.16%) patients were having gravidy less than or equal to two times whereas 49 (39.83%) were having gravidy greater than two times. (Table-I)

As per Common Complications, frequencies and percentages for hemorrhage was recorded in 31 (25.20%) patients, diffuse peritonitis was recorded in 49 (39.83%) patients while severe patients. (Table-II) Anemia was recorded in 26 (21.13%)

This study has helped us in finding the common complications among patients with induced septic abortion locally and based upon results of this study various guidelines will now be recommended regarding further policy reconsideration about the induction of abortion at illegal setups and more research work is required to be conducted. The results of this study will now specially be published into the literature to make higher authorities aware about the gravity of the problem locally and make necessary and timely decision regarding prevention and control of induction of abortions locally. 10-12% of maternal deaths are due to complications of miscarriages/abortion in Pakistan which includes both spontaneous as well as induced abortions. The survey by Population Council also reflects that quite high number of women desires abortion for unintended pregnancies. The number of induced abortion on annual basis is approximately 890,000, which indicates that 1 out of 6 pregnancies end up by unsafe manner through induction.[10]

A study conducted at Pakistan found the complications of septic abortion as purulent vaginal discharge in (56.4%) and vaginal bleeding (34.5%), acute abdomen in 21.8% while 18.9% patients came in shock. Nine percent patients had haematometra while 6.4% develop Disseminated Intravascular Coagulation (DIC).[11]

Sreelakshmi U et all found in their study at India that Incidence of septic abortion was 6.78 %. Out of 72% of cases undertaken by medical qualified personnel, 14 patients developed complications like, renal failure, peritonitis, septic shock and pelvic abscess.[12]

Another study in Nigeria included 96 patients with complications of unsafe abortion. According to their results, the most common complication was sepsis, that amount to79.2% of patients while 12.5% of the women developed had urine perforation. The case fatality rate was 16.6%.[13]

In Brazil 9555 patients with abortion were evaluated. 237 women (2.5%) developed severe complications. Among them 81.9%, had life threatening conditions, 15.2% had near miss mortality and maternal mortality in 3%.[14]

CONCLUSION

Our study concluded that women aging from 31-45 years having two or more parity and gravidity showed slightly high percentage of complications like hemorrhage, anemia and peritonitis, in comparison to patients having low parity and gravidity. All these complications are preventable through effective contraception and discouraging repeated termination of pregnancy.

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AUTHORSHIP AND CONTRIBUTION DECLARATION

Sr. #	Author(s) Full Name	Contribution to the paper	Author(s) Signature
1	Kiran Ikram	Conceived & designed the analysis, collected data, analysis tools, Performed analysis + write paper.	
2	Surraya Israr	Data collection, Proformed analysis, Analysis tools, performed analysis.	
3	Ubaid Ullah Khan	Data correction, conceived and designed tool and analysis.	
4	Umer Farooq	Data collection, contribution analysis tools.	
5	Iqbal Begum	Conceived and designed analysis, Performed analysis.