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A STUDY ON OUTCOME OF SELF ADMINISTRATION OF ABORTION PILL AMONGST THE PATIENTS ATTENDING A TERTIARY CARE CENTRE

Obstetrics & Gynaecology

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ABSTRACT

Objectives: To know the outcome amongst the patients following self medication with abortion pill in a tertiary care centre, To find out number of woman presenting to Gynaecology OPD and Emergency labour room after self medication of abortion pill **Materials and Methods:** This is a hospital based cross sectional observational study conducted at the Department of Obstetrics and Gynecology, Jorhat medical college and hospital from July 2021 to June 2022. 386 patients of abortion were admitted, 206 patient (53.36%) had history of intake of abortion pill at home without consultation of a RMP. 59 patient were studied to evaluate the outcome. **Results and Observation:** Majority of the patients were from 20 to 30 age group. Mostly from rural area (71%), >90% from lower socioeconomic strata. 43% took abortion pills within 7 weeks of gestation. 98% presented with some degree of anemia, out of which 78% needed atleast one unit of blood transfusion. Mean duration of hospital stay was 5.79 days. 62.71% had Incomplete abortion, 17% had complete abortion, 8.4% were ectopic pregnancy, 5% had septic abortion, 3.3% were scar pregnancy. 66% needed surgical evacuation, 12% needed laparotomy. 19% presented with shock and 29% needed HDU admission. **Conclusion:** Considering the lack of knowledge regarding abortion related complications, it is still not safe to allow self administration of abortion pills in our country without prior physician consultation.

KEYWORDS

Self administration, Abortion pill, Medical abortion, Outcome

INTRODUCTION

- Around 73 millions induced abortion take place annually worldwide. Three out of ten of all pregnancies end up in induced abortions.[1]
- An estimated 45% of all abortion are carried out either by unskilled provider or in unhygienic condition or both(unsafe abortion)[2]. Around 7 million women required hospitalisation for unsafe abortion related complication in developing countries[3], costing estimated $553 million per year in developing country and household loss of income US$ 922 millions for long term disability related to unsafe abortion.[4]
- Estimated 4.7-13.2 % of all maternal death is attributed to unsafe abortion.[5]
- In India, 2007-2011, 67% abortions were classified unsafe.[6]
- In India, unsafe abortions remains the third leading cause of maternal mortality and around 8 women die from causes related to unsafe abortion each day.[7]
- Termination of pregnancy with combination of Mifepristone and Misoprostol upto 63 days of gestation, is considered safe, with success rate of 92%-97% when taken under medical supervision.[8]
- In December 2008, a combipack was introduced by DHS for MTP upto 63 days of gestation in India.[9] These kits are schedule H drug and to be sold only on prescription of RMP.
- Because of easy access of these medicines over the counter, women take these tablets for self abortion unaware of its potential danger.
- Self-administration of these pills in unsupervised manner is becoming another method of unsafe (less safe) abortion.
- It is contributing to maternal morbidity and mortality.
- Outcome and complications related to self administration of abortion pills is poorly documented.

In this observational study, we are trying to document the outcome and complications among patients admitted in Jorhat Medical college and Hospital(JMCH), with self administration of abortion pills without prior RMP consultation.

AIM

To know the outcome following self medication of abortion pill in unsupervised manner without physician consultation.

MATERIAL AND METHODS

This is a hospital based cross sectional observational study conducted at Department of Obstetrics and Gynecology, Jorhat medical college and hospital from July 2021 to June 2022. During this period, a total 386 patients of abortion were admitted in Obstetric and Gynaecology Department of Jorhat Medical College And Hospital. Among them 206 patients (53.36%) had history of intake of abortion pill (either mifepristone or misoprostol or both) at home without consultation of a RMP. Among the study population, a sample of 59 patients were studied to evaluate the outcome regarding study variant.

Sample Size

Based on previous hospital records, population size taken as 200, with confidence level of 95%, estimated P value is taken from observational study done by Nivedita K et. with P=0.31 and with absolute precision level at 10%.
Sample size for proportion calculated in OpenEpi.com website and came out 59.

Sampling Technique – Convenient sampling

Selection Of Cases

Inclusion Criteria

1. All pregnant women upto gestational age of 20 weeks with h/o intake of abortion pill without medical consultation.

Exclusion Criteria

1. Pregnant women with spontaneous abortion.
2. Pregnant woman who has taken abortion pill under medical supervision
3. Patients who don't want to be part of the study

Methods Of Data Collection

H/O self administration of abortion pill without physician consultation taken .
Detailed history taken on demographic profile.
Clinical examination done to determine the uterine size and general condition of the patient.
Sample for haemoglobin level estimation on admission.
Ultrasonography done after patient stabilisation.

Patient followed up for management and outcome

Data Collected On Following Study Variable-

- Age
- Marital status
- Residence
- Educational status
- Socio economic status
  - By modified Kupuswamy Index
  - Lower
  - Upper lower
  - Middle
  - Upper middle
  - Upper
- Previous birth event
- Reason of MTP Pill intake
- Source of tablet procurement
- Gestational age at the time of pill intake
- Period from intake of pill to presentation
- Regimen of drugs taken
- Haemoglobin level on admission(ICMR Classification)
  - Very severe (<4gm/dl)
  - Severe (4 to 6.9 gm/dl)
  - Moderate (7 to 9.9 gm/dl)
  - Mild (10 to 10.9 gm/dl)
  - No anemia > 11gm/dl
- Duration of hospital stay
- Blood transfusion required
- Diagnosis
- Management

Statistical Analysis

To describe the data descriptive statistics of frequency analysis and percentage analysis used. Data were also depicted by using appropriate bar diagram, pie chart and frequency table.

RESULTS AND OBSERVATION

During the observation period from July 2021 to June 2022, total 386 patients admitted to Obstetric and Gynaecology department with diagnosis of abortion, of which 206(53%) patients had H/O self administration of abortion pills without prior consultation from RMP. 65% of patients were from 20-30 years age group and 28% were 30-39 years age group. 85% studied upto class 10 and 14% were illiterate. 94.92% were from lower or upper lower category of socio-economic status and most patients(71%) were from rural area.

75% took abortion tablets within 9weeks of gestational age, 25% took after 9 weeks of gestational age, 3 patients took in 2nd trimester also. Most common causes of intake are 1) as measure of birth spacing, 2) family completed, 3) Unplanned pregnancy. 25% took recommended regimen of 200mg mifepristone followed by 800mcg misoprostol after 36-48hours, while others took other regime than recommended dose. In 75% of cases abortion pills were brought by husband/partner. 48% presented to hospital within 1 week of pill intake. 8% were primigravida , 63% had previous spontaneous delivery and 29% had previous caesarean section.

Table-1

Distribution of place of residence		
residence	no	%
Rural	42	71%
Urban	6	10%
Semi urban	11	19%
Literacy rate		
class	no	%
Illiterate	8	14%
Primary	9	15%
Secondary	4	7%
High school	29	49%
Higher secondary	7	12%
degree	2	3%
Age distribution		
Age group	no	%
10-19	3	5%
20-29	38	65%
30-39	16	28%
40-49	1	2%
Socio-economic status		
class	no	%
lower	36	61%
Upper-lower	20	34%
middle	3	5%
upper	0	0

Table-2

Duration of pregnancy		
Gestational age	no	%
up to 7 week	25	43%
7 to 9 week	19	32%
9 to 12 week	12	20%
more than 12 week	3	5%
Causes of intake of abortion pill		
pregnancy during lactational amenorrhea	0	0
contraceptive failure	1	2%
birth spacing	19	32%
unplanned pregnancy	16	27%
unmarried	1	2%
family completed	22	37%
Regimen of drugs taken		
regimen	no	%
200mg mifepristone followed by 800mcg misoprostol	15	25%
200mg mifepristone followed by 200/400mcg misoprostol	24	41%
Only mifepristone 200mg	6	10%
Only misoprostol 800mcg	10	17%
Only misoprostol 200/400mcg	4	7%
Pill procured by husband		
Self	15	25%
Husband/ partner	44	75%
other	0	0
Time taken from pill intake to hospital admission		
Less than 1 week	28	48%
1-2 week	16	27%
>2 week	15	25%
Previous delivery events		
Primigravida	5	8%
Previous spontaneous delivery	37	63%
Previous once post C-section	11	19%
Previous twice post C-section	6	10%

Severity of anemia at the time of admission and need of blood transfusion 54% had haemoglobin <7gm/dl at the time of admission and 98% had some degree of anemia. Mean Hb at time of admission is 6.72gm/dl. 9 patients had <4gm% of haemoglobin at the time of admission.

One patient needed more than 5 units of blood transfusion, 12 patients (20%) needed more than 4-5 units of blood transfusion, and 77% needed at-least one unit of blood transfusion. Average units of blood needed per patient is 2.14.

Table-3

degree of anemia	percentage	No. of unit of blood transfused	percentage
very severe anemia	15%	>5 units	2%
severe anemia	39%	4-5 units	20%
moderate anemia	37%	1-3units	56%
mild anemia	7%	No transfusion	22%
no anemia	2%		

19% presented with shock at the time of admission. 29% needed HDU admission either due to severe anemia with or without shock, or due to ruptured ectopic pregnancy or septic abortion.

Duration Of Hospital Stay

Mean duration of hospital stay is 5.79 days with SD 2.04 days. Minimum duration of hospital stay is 2days and maximum 12 days. 14% were discharged within 3 days, 69% within 3-7 days and 17% after one week.

Diagnosis
62.71% had incomplete abortion, 8.4% had ectopic pregnancy, 3.3% had scar pregnancy, 5% had abortion complicated with infection.

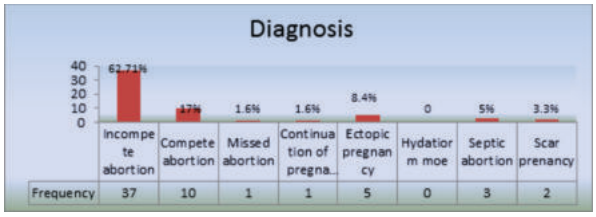

Fig-1

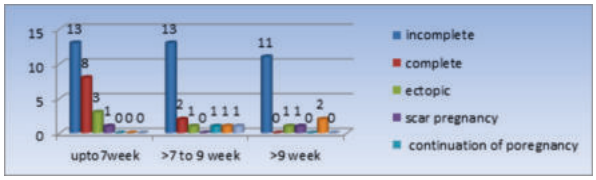

Fig-2: Diagnosis Among Different Gestational Age Group

Occurrence of incomplete abortion, ectopic pregnancy or other complication is more or less similar in all the groups, with more complete abortions in less than 7 weeks of gestational age group.

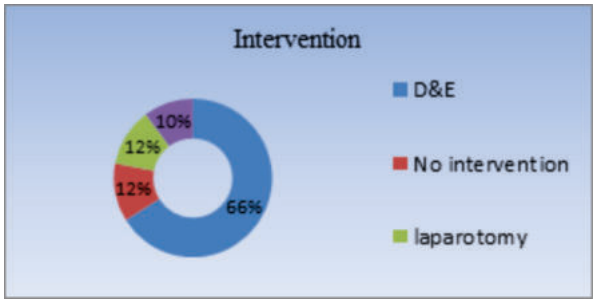

Fig-3: Management

66% needed surgical evacuation and 10% needed medical management. 12% needed laparotomy for ectopic or scar pregnancy. Two patients needed laparotomy followed by hysterectomy for scar pregnancy.

DISCUSSION

Unsafe abortion is a significant cause of maternal mortality and morbidity in India which is preventable. MTP act was passed in 1971 to reduce maternal mortality and morbidity related to abortion and bring abortion under the purview of law. This law has been amended from time to time making abortion more liberal and accessible. Despite these measures, most people are not availing safe abortion care. Despite being schedule H drugs, abortion pills (MTP KIT) are easily available over the counter. As its use doesn't require hospital admission and other invasive procedure, people rampantly take abortion pills without proper knowledge. In our study, total 386 patients were admitted out of which 206(53%) patients had H/O self medication of abortion pills.

Age/Residence/ Educational Status/ Socio Economic Status
We have seen that self intake of abortion pills are prevalent among less educated, lower socio -economic status category , residing mostly in rural areas. 65% were of 20 - 30 years age and 5% were of < 20 years. Similar findings were demonstrated by Pandey D et.al and Dogra A et. al. Nivedita K et.al and Desai R et al.

Less educated people from lower socio-economic status are mostly unaware of safe abortion care services, the possible complications and risks associated with intake of abortion pills and so present late to hospital.

Though 75% took the abortion pills within 9 weeks of gestational age, dosing regimen were not adequate either in amount or in duration. Only 25% took adequate dose. Inadequate dosing is an important cause of incomplete abortion. Similar outcome and complications were seen among gestational age group of <7 week, 7-9 week and >9weeks patients, but complete abortion were more in <7weeks group. Main causes of intake of abortion pills are as a measure of birth spacing, completion of family and unplanned pregnancy. Health education of masses regarding usage of different family planning methods definitely has a role in reducing these unsafe abortion practices of using MTP as means of getting rid of unwanted pregnancy.

Outcome/Management
54% of patients had severe anemia at the time of admission and 20% needed 3 to 5 units of blood. Similar finding was demonstrated by Giri et. al.

19% of patients presented with shock in our study, whereas 24% and 10% presented with shock respectively in study done by Bhalla S et. al and Pandey D et. al.

Mean duration of hospital stay is 5.79days. 69% patients were discharged in 3-7 days, 17% were discharged after 1 week. Compared to study done by Desai et. al. where 54% patients were discharged on 2nd day, in our study 69% were discharged within 3-7days. This longer duration of hospital stay can be attributed to more severe degree of anaemia at the time of admission.

Significant percentage of patients required blood transfusion and HDU admission. In a study by Deshpande et al. found that requirement of blood or blood products is only 0.01% if medical termination pill is taken under medical supervision. 69% of patient occupied hospital bed for atleast 3 days. All these resources could have been utilized for other needy patients as these cases could be prevented with proper pre-medication counseling. But instead, they created a unnecessary strain on limited resources available.

Table-4

study	anaemia	shock	Septic abortion	Ectopic /scar pregnancy	Molar pregnancy	Incomplete abortion	Surgical evacuation	laparo-tomy
Our study	98%	19%	5%	11.86%	0%	62.71%	66%	12%
Sarojini et. al. [19]	75%	2.9%	4.8%	3.8%	0%	72.2%	90.4%	1.9%
Giri A et. al.	80%	10.4%	6.2%	6.2%	0%	60%	71%	6.5%

After ultrasound examination, 62.71% patients were diagnosed as Incomplete abortion, 17% were complete abortion, 8.4% were ectopic pregnancy, 5% were septic abortion and 3.3% were scar pregnancy. Before taking medical termination pills, it is important to rule out ectopic pregnancy by a physician, as serious complication of ruptured ectopic pregnancy may occur after taking abortion pills. The patients with incomplete abortion needed further surgical evacuation, and those with septic abortion were treated with broad spectrum antibiotics, followed by surgical evacuation. 12% patients needed laparotomy or hysterectomy for ruptured ectopic pregnancy and scar pregnancy. Similar results were also seen in study done by Sarojini et. al. and Giri et. al. (Table-9)

From the outcome and complications among the patients, it is evident that serious life threatening complications like ruptured ectopic pregnancy, severe degree of anemia and haemorrhagic shock, infection and septecaemia can occur after self medication of abortion pills. But these complications can be largely prevented by proper counselling among the women about the correct dose and timing of the pills, possible complications which may arise and when to seek help of health care woker.

CONCLUSION

Though a combination of mifepristone and misoprostol tablets induced abortion proved to be effective and safe within the recommended gestational age and schedule, using it in an unsupervised manner without awareness about its complication and adverse effect may lead to extremely dangerous and life threatening situation. In the developed countries, safety and efficacy of self managed abortion with combination pills were demonstrated in some studies. But considering lack of knowledge regarding abortion related complications, it is still not safe to allow self administration of abortion pills in our country without a physician consultation.

Creating awareness among masses regarding complication of use of

abortion pills, utilization of safe abortion care services and prevention of unwanted pregnancy by using contraceptive methods may help to control this problem of unsafe abortion.

Limitations Of The Study

This is an observational study done in a tertiary care centre with small sample size. A community based study with larger sample size will reflect real prevalence and outcome of self medication of abortion pills.

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