

ORIGINAL RESEARCH

Case control study of supervised and unsupervised medical abortions in first trimester of pregnancy at a tertiary care center

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Abstract

Background: Abortion service as medical healthcare facility is an essential service a women needs. The objective of this study was to observe maternal outcome of supervised and unsupervised medical abortion in first trimester of pregnancy.

Methods: A case control study was done with two groups of patients in their first trimester in a tertiary care hospital (SMGS) during a period of 1 year from July 2022 to July 2023. Case group includes 30 patients presenting to emergency department with history of unsupervised abortion pill intake. Control group consists of 30 patients presenting to OPD want abortion pill under supervision. The main outcome variables were comparison of success rate, complications like heavy bleeding, fever, shock, requirement of blood transfusion and interventions required in terms of medical management, surgical evacuations and Laparotomy.

Results: In our study, the success rate achieved in terms of complete abortion was 76.7% in supervised group and 13.3% in unsupervised group. The complication rate was 23.3% in supervised group in contrast to 93.3% in the unsupervised group. 43.3% patients in unsupervised group required blood transfusion which was 10% in supervised group. 83.3% in the supervised group did not require intervention. In the unsupervised group 20% required medical management, 70% required surgical evacuations and 10% had to undergo Laparotomy for ectopic pregnancy.

Conclusion: In this study, we conclude that first trimester medical abortion under supervision is more effective and safe as compared to unsupervised medical abortion. Thus we recommend to curb the practice of over the counter sale of medical abortion pills.

Keywords: First trimester, medical abortion, supervised, unsupervised abortions.

Introduction

The MTP act legalized termination of pregnancy in India since 1971. World Health Organization recommends Medical method of abortion (MMA) as a safe method of termination of pregnancy over traditional dilatation and curettage. The combination of drugs Mifepristone and Misoprostol for medical method of abortion is a safe, efficient, affordable, acceptable and approved method of MTP upto 9 weeks (63 days) of gestation.[1][2]

As per WHO guidelines, it is necessary for a woman requesting for medical abortion to consult a gynaecologist for confirmation of pregnancy, estimation of correct gestational age, exact location of pregnancy and to rule out any contraindications. Thorough clinical evaluation of the patient and basic laboratory investigations should be done.[3] In spite of all the guidelines, medical abortion pills (MAP) are widely being sold without medical prescription by chemist over the counter. Lack of awareness about the MTP Act, concerns about privacy and affordability lead women to procure these abortion pills over the counter. Self medication of these drugs in India is on the rise especially in the rural areas where access to medical services is poor. Such unsupervised terminations can lead to hazardous effect on health of women, resulting in life threatening complications.[6]

Each year an estimated 42 million pregnancies end in induced abortion, out of which 20 million are performed under unsafe condition. Unsafe abortion is responsible for 13% of maternal death worldwide.

Hence, the aim of our study is to assess the effects of self-administered use of over the counter pill and compare it with the supervised use of mifepristone-misoprostol for medical termination of pregnancy in a tertiary care hospital, and to study its impact on women's health with respect to the complications, consequences and management of the patient.

Methodology

A Case-Control study was conducted in the department of obstetrics & gynaecology, GMC Jammu from July 2022 to July 2023.

Two groups of patients are taken in their first trimester of 30 people each. Case group includes 30 patients presenting to emergency department with history of self administration of abortion pills. Control group consists of 30 patients presented to OPD want abortion pill under supervision.

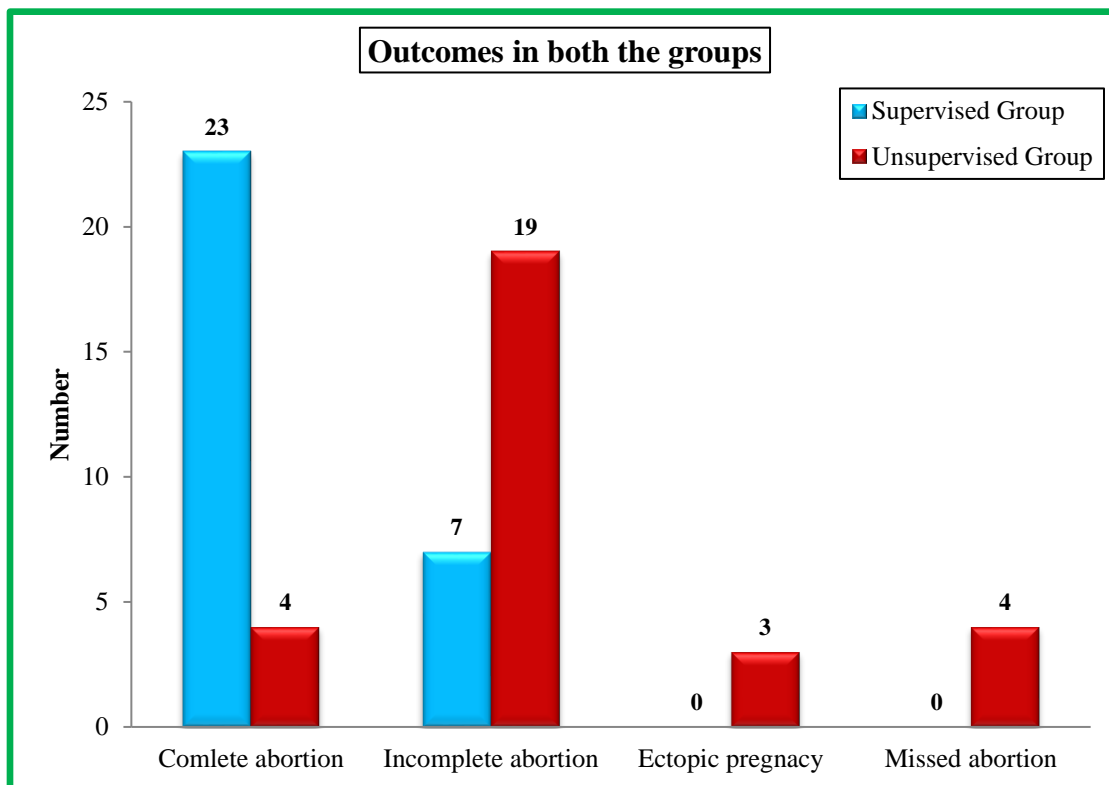
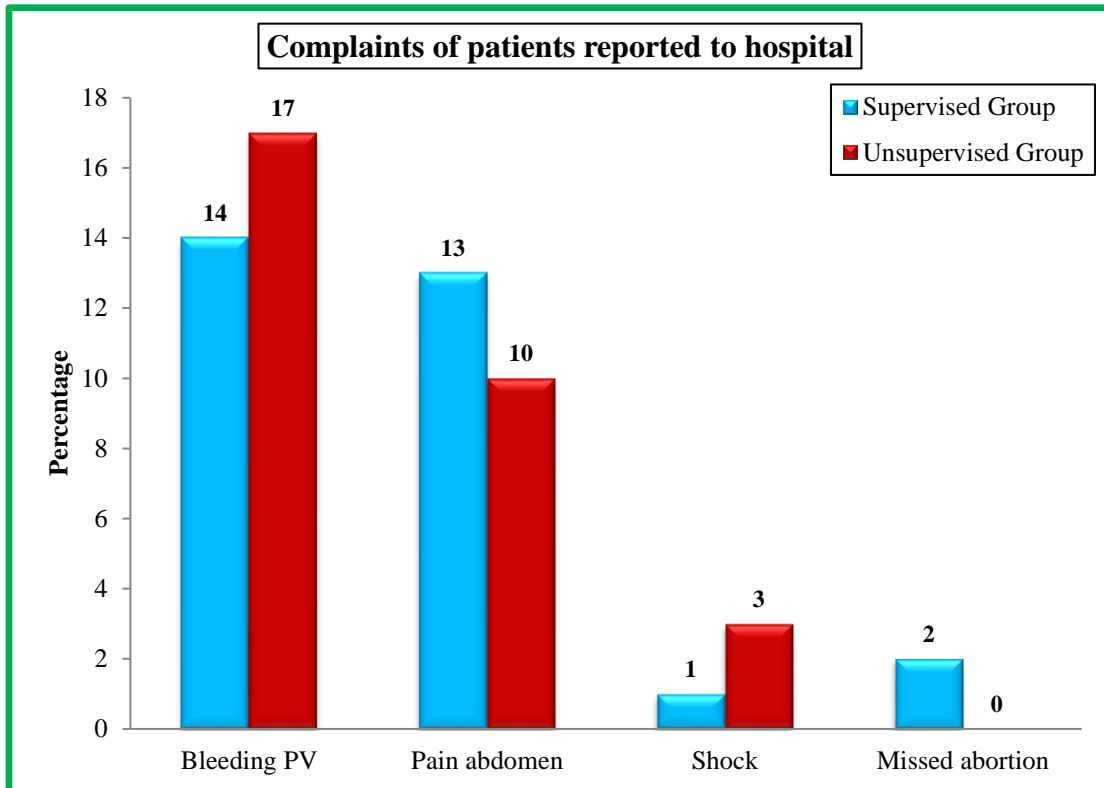
- ▶ Data were collected from all patients regarding their age, marital status, education, investigations and USG at time of presentation, treatment given, management of complications, need of blood product transfusion.
- ▶ A detailed history was taken from each patient regarding their present complaints, last menstrual period(LMP), obstetric history and medical history.
- ▶ The main outcome variables were comparison of success rate, complications like heavy bleeding, fever, shock, requirement of blood transfusion and interventions required were compared in both the groups in terms of medical management, surgical evacuations and laparotomy.

Statistical Analysis: The data was collected and tabulated. The observations were described in terms of percentages and proportions. Data was compiled and statistically analyzed using chi-square test, Students t-test where applicable. P < 0.05 was considered significant.

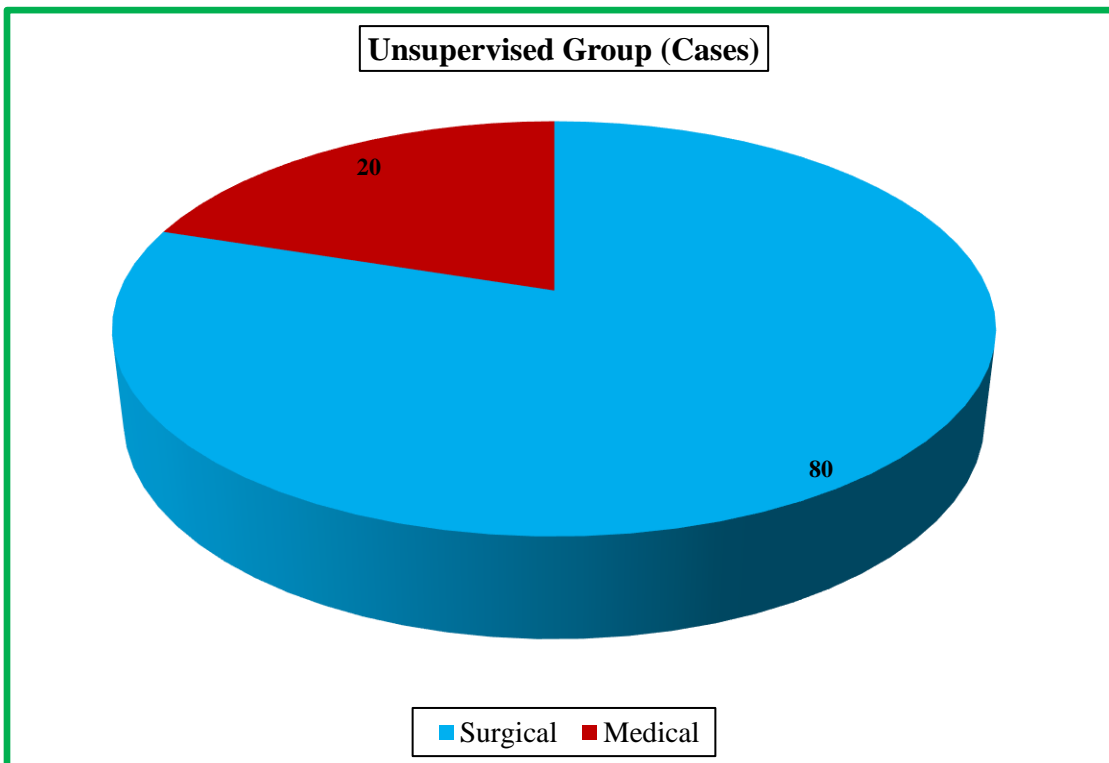
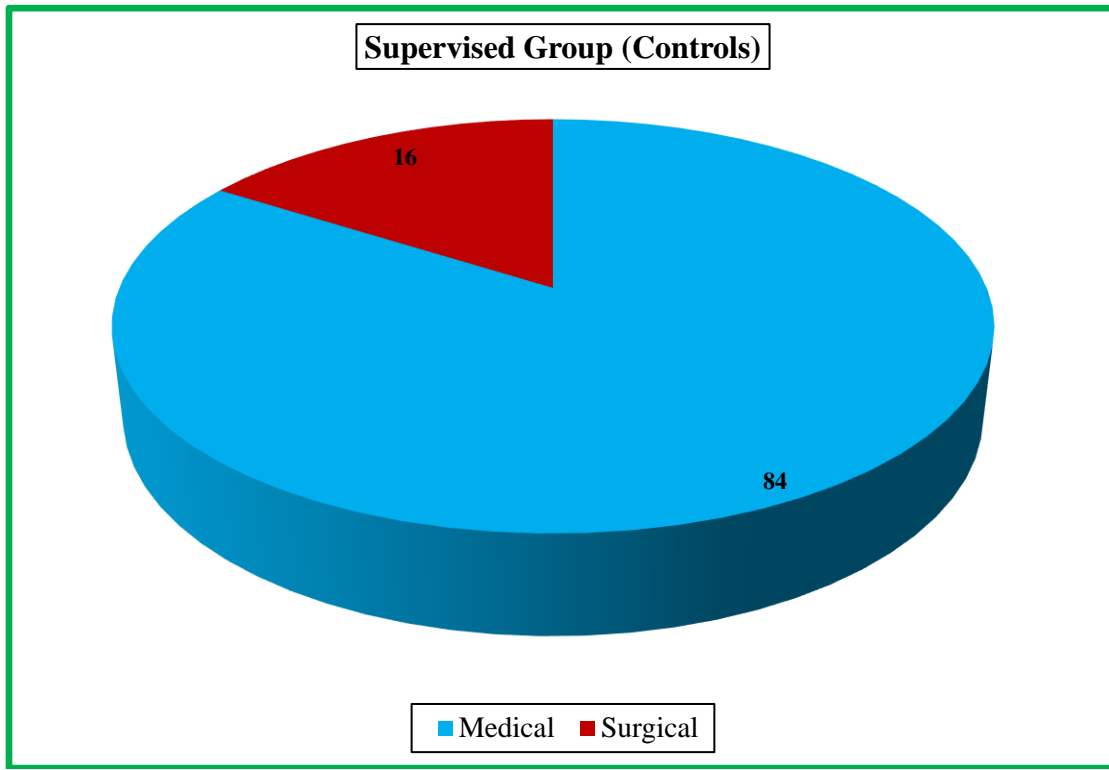
Observations and results: In our study, majority of women belong to age group of 25-35 yr with a minimum age of 19 years and maximum of 45 years. 51 out of 60 (85%) patients were multigravida and only 9 out of 60 (15%) were primigravida. Majority of patients in both the groups reported to hospital with the complaint of bleeding per vaginum i.e. 46.67% in supervised group and 56.67% in unsupervised group and many were having more than one chief complaint. Majority of patients took pills in between 6 and 8 weeks in both the groups i.e. 93.33% in supervised group and 80% in unsupervised group. In terms of outcome variables, 76.67% of controls (supervised group) achieved complete abortion whereas in cases i.e. (unsupervised group) only 13.33% had complete abortion with a p-value of <0.001. Majority of cases (unsupervised group) required surgical management i.e. 80% whereas only 16.67% of controls (supervised group) required surgical evacuations with a p-value of <0.05.

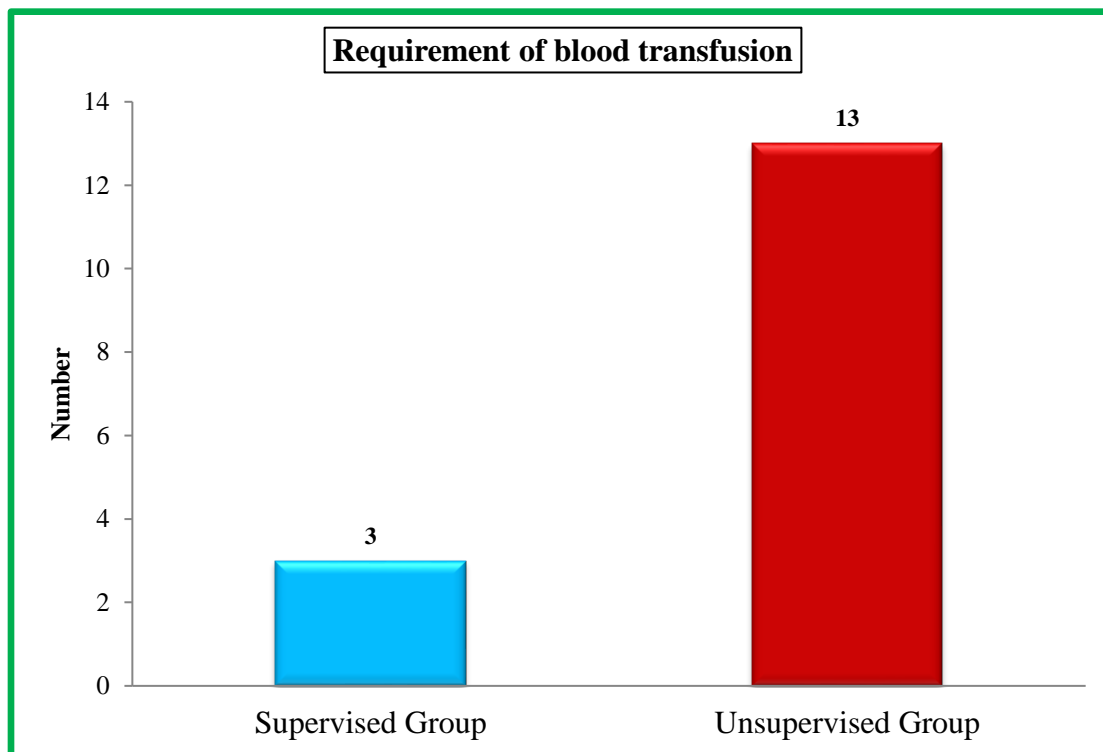
Table: Distribution of demographic variables of subjects studied.

Parameters		Supervised		Unsupervised		Statistical significance	
		n	%age	n	%age	test - statistic	p-value
Age	Mean & SD	25.97	5.10	26.37	6.13	t=-0.275	0.785
Education (n & %age)	Upto 8 th	3	10	1	3.33	$\chi^2=1.072$	0.585
	9 th – 10 th	15	50	16	53.33		
	11 th – 12 th	11	36.67	13	43.33		
	Graduation	1	3.33	0	0		
	Total	30	100	30	100		
Gestational Age	6 Wks	8	26.67	9	30	t=-1.163	0.249
	7 Wks	10	33.33	6	20		
	8 Wks	10	33.33	9	30		
	9 Wks	1	3.33	2	6.67		
	10 Wks	1	3.33	2	6.67		
	12 Wks	0	0	1	3.33		
	Mean & SD	7.23	1.01	7.63	1.59		
Gravida (n & %age)	Total	30	100	30	100	$\chi^2=2.297$	0.513
	Primi	5	16.67	4	13.33		
	2	15	50	12	40		
	3	9	30	10	33.33		
	4	1	3.33	3	10		
	5	0	0	1	3.33		
	Total	30	100.00	30	100.00		



Comparison in terms of treatment in both the groups





10% of supervised group required blood transfusion whereas in unsupervised group, about 43.33% required blood transfusion

Conclusion

In present study, we conclude that first trimester medical abortion under supervision is more effective, safe and convenient as compared to unsupervised medical abortion.[7]

► Abortion pills should be banned as over-the-counter drug and strict surveillance is required for the same.[2][5] Society needs to be educated for the risk of self-intake of abortion pills and their dangerous consequences.[4]

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Conflict of interest: None

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