Original Research Paper

Obstetrics & Gynaecology

COMPARISON OF AGE AND SOCIAL PARAMETERS IN EARLY ABORTIONS

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ABSTRACT

INTRODUCTION - Abortion is one of the most common complication of human pregnancies. Approximately 80% spontaneous pregnancy losses occur in first trimester of pregnancy. The etiology of miscarriage is often complex and multifactorial. Advanced age and various social factors may affect fetal growth adversely and can lead to abortion. **MATERIAL AND METHODS-** The study was conducted in the department of Obstetric and Gynaecology, Sir Sunderlal Hospital, Institute of Medical Science, Banaras Hindu University Varanasi. Total 50 females in age group 18-30 year with history of one or more than one early pregnancy loss or those undergoing elective abortion at 7-12 week of gestation as per the inclusion and exclusion criteria, were selected for the study. **RESULTS-** Majority of cases and control were in between 21-23 years . social factors were statistically important . Majority of cases and control were in lower middle class group. **DISCUSSION-** In developing country like India still incidence of abortion is high. In this study, we focused the effect of age and social factors in early pregnancy loss. As India is one of those developing countries where access to health facility still a important health issue. **CONCLUSION-** The current study, conducted in Sir Sunderlal Hospital , Banaras Hindu University, concluded that patients residing in rural area and belonging to lower socioeconomic status were having high incidence of abortion. Unawareness , Illiteracy and poor knowledge regarding complication of pregnancy were some major issues.

KEYWORDS : age , socioeconomic factors , education

INTRODUCTION –

In the first trimester of pregnancy vaginal bleeding is relatively a common event , reported to occur in 15- 25% of all pregnancies (1).about 50% of those who bleed will lead to miscarriage (2). The miscarriage rates, reported in India are lower than it might be encountered , because poor acknowledgment of pregnancy and visit to health care system.

Role of socioeconomic factor - For people in low SES are more likely to show risky behavioral patterns and limited access to health services. Low income levels were associated with poor housing, nutrition and health care access, as well as increasing the risk of spontaneous abortion.

MATERIAL AND METHODS- this prospective case control study was performed in Sir Sunderlal Hospital, in the department of Obstetrics and Gynaecology, Institute of Medical Science, Banaras Hindu University, Varanasi, over 24 month period in the year 2018-2020.

AIMS AND OBJECTIVE :
1. To compare age and social factors among cases and control 25 cases and 25 control were selected according to inclusion and exclusion criteria

INCLUSION CRITERIA
- **CASES**-individual of age group 18-30 year with history of one or more than one early pregnancy loss
- **CONTROL**-individuals of age group 18-30 year who had no previous history of abortion, ectopic pregnancy, stillbirth or preterm delivery and undergoing elective abortion at 7-12 week of gestation under family planning program.

EXCLUSION CRITERIA: genetic, endocrine or anatomic abnormalities, history of auto immune disease, endometriosis, inflammatory disease or vaccination within 2 months prior to this study.

Written informed consent was taken from the enrolled patient

and purpose of study explained. When patient reported either in OPD or labour room detailed history elicited in each case. Baseline socio-demographic data as age, marital status, religion, residence, educational level, employment, income recorded for the study purpose. For socioeconomic classification Kuppuswamy scale was used.

Patient was examined thoroughly. Relevant investigation was done.

RESULTS-
AGE- In the study, majority of cases, i.e. 48% fall in the age group 21-23 years age. Mean age among cases was 23.20 years, with a SD of 3.40. Majority of controls, I.e. 40% fall in the same age group between 21-23 years .Mean age among control was 23.48 years, with a SD 3.40. P-value was 0.939, which was considered as statistically non significant.

Table 1: Comparison of age group between cases and controls

Age (years)	Group			
	Cases		Control	
	No.	%	No.	%
18-20	5	20.0	5	20.0
21-23	12	48.0	10	40.0
24-27	4	16.0	5	20.0
28-30	4	16.0	5	20.0
Total	25	100	25	100
Mean Age	23.20±3.40		23.48±3.40	

$\chi^2=0.404$; p=0.939

SOCIOECONOMIC STATUS -In cases 32% were in lower middle class, 28% were in upper lower, 24% were in lower class and 16 % were in upper middle class according to kuppuswamy scale .In control group 64% women were in lower middle class, 16% in upper middle class .P-value was 0.007, which was statistically significant.

Table 2: Comparison of Kuppuswamy score between cases and controls

| Kuppuswamy | Group | | | |
| | Case | | Control | |
	No.	%	No.	%
Lower	6	24.0	3	12.0
Upper lower	7	28.0	0	0
Lower middle	8	32.0	16	64.0
Upper middle	4	16.0	4	16.0
Upper	0	0	2	8.0
Total	25	100	25	100

$\chi 2=12.667$; $p=0.007$

RESIDENCE - Majority of cases, i.e. 68% belong to rural area, 24% of cases were resident of semi urban area. Among control group, 52% of them were resident of semi urban area where as 40% of them were resident of urban area. P-value was 0.001, which was significant statistically.

Table 3: Comparison of residence of patients between cases and controls

| Residence | Group | | | |
| | Case | | Control | |
	No.	%	No.	%
Rural	17	68.0	2	8.0
Semi urban	6	24.0	13	52.0
Urban	2	8.0	10	40.0
Total	25	100	25	100

$\chi 2=19.75$; $p<0.001$

DISCUSSION- Several studies have been conducted to identify etiology of abortion. In the present study, majority of cases and control fall in the age group 21-23 years age.

Study conducted by the Guttmacher institute in March 2018 concluded in much of the world, 20–24-year-old women tend to have the highest abortion rate of any age-group .(3)

A study conducted at public health facilities in Madhya Pradesh, India, focusing on the socio-economic profiles of women seeking abortion services, revealed that "57% of women of who received abortion care at public health facilities were poor, followed by 21% moderate and 22% rich.

CONCLUSION - The current study reports that patients residing in rural area and belonging to lower socioeconomic status were having higher incidence of abortion. The reason for this can be unawareness regarding pregnancy as many females came to know about pregnancy long after missed periods . Other reason could be poor access to health system , because of poor knowledge about complications of pregnancy.

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