

A COMPARATIVE STUDY OF THE  
SOCIO-CLINICAL PROFILE OF UNMARRIED  
AND MARRIED SUBJECTS SEEKING  
MEDICAL TERMINATION OF PREGNANCY  
--TEN YEARS ANALYSIS

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SUMMARY

Pregnancy out-of-wedlock is a social stigma which mostly ends in illegal abortion. A comparative analysis of the characteristics of unmarried and married subjects who underwent medical termination of pregnancy during last 10 years was done. Unmarried subjects are younger, poorly educated and they present at advanced period of gestation. Since liberalization of medical termination of pregnancy has not brought any discernible change in the number of maternal deaths related to illegal abortions, it is desirable to decrease the incidence of these unwanted pregnancies by proper emphasis on sex education and contraceptive use.

**INTRODUCTION**

Pregnancy out-of-wedlock is not accepted in any society though premarital sexual relationship is not uncommon. Contraceptive use is very infrequent among unmarried teenagers and young adults where sexual act is a matter of chance, occasion and sometimes force. This occasionally results in a pregnancy, out-of-wedlock, which carries tremendous medico-social and moral implications. Mostly, the girl is not aware of the possibility and comes to know about it relatively late. In ma-

jority, abortion is sought from untrained personnel with disastrous results. Out of abortion related maternal deaths, 78% were found due to illegally induced abortions (Jindal et al, 1989). No statistics are available for related long term morbidity in these cases. Hence, it is important to study the characteristics of these unmarried pregnant women before contemplating remedial measures.

**MATERIAL AND METHODS**

A retrospective analysis of the unmarried subjects who underwent medical termination of pregnancy in the Department of Obstetrics and Gynaecology, Postgraduate

Institute of Medical Education and Research, Chandigarh, was done. During a period of 10 years from January 1980 to December 1989, 10218 subjects underwent pregnancy termination with period of gestation varying from 35 days to 20-22 weeks. Out of these, first trimester abortions, carried out mainly by suction evacuation, constituted 9607 (94%). Remaining 611 (5.98%) underwent pregnancy termination by other methods including prostaglandins in different forms, siap and laminaria tents, extraovular ethacridine lactate or isotonic saline instillation followed by oxytocin infusion and hysterotomy. For the present analysis all the unmarried subjects who underwent termination of pregnancy form the study group. For controls, for each unmarried subject, two married abortion seekers were taken. These included one subject entered last in the records on the previous day and the second, entered first on the following day.

Different variables for comparison were age, education, uterus wise and the method employed for termination of pregnancy. Income of the family could not be used as a parameter because of gross under-reporting in the hospital records. Similarly, it is usually difficult to obtain the correct information on number of previous induced abortions and hence, this parameter was also dropped. Out of total 10218 abortions, 190 were carried in unmarried subjects (1.86%). Hence for 190 unmarried study subjects, 380 controls have been taken.

## RESULTS

Tables 1 to 4 show the result of this study. Unmarried subjects were of significantly younger age group. Nearly one third were less than 18 years as compared to none belonging to this age in the control group.

96.1% of controls were over 21 years in contrast to only 17.4% study subjects who were above 21 years.

TABLE I

Age	Percentage of subjects		
	Married (n=380)	Unmarried (n=190)	
<15	0	4.74	
15-17	0	27.89	
18-21	3.95	50.00	
22-24	16.84	12.63	
> 24	79.21	96.05	
		4.74	17.37*

TABLE II

Education	Percentage of subjects	
	Married (n=380)	Unmarried (n=190)
Illiterate	19.21	32.11*
Primary or below	10.00	18.95
Below matric	11.05	17.89
Matric and Inter	29.74	22.63
Graduate	25.26	7.37
Postgraduate	5.79	1.05

\*Difference is statistically highly significant.

Table II shows the distribution by level of literacy in the two groups. It was observed that 32.1% of unmarried subjects were illiterate as compared to 19.2% in the controls. 31.1% subjects from married group were graduate as compared to only 8.4% from unmarried group. 92.6% married subjects presented in the first trimester and only about 1% had uterus size of 20 weeks or bigger. On the contrary, in the group of unmarried subjects,

TABLE III

Period of gestation (weeks)	Percentage of subjects	
	Married (n=380)	Unmarried (n=190)
<6	37.63	2.11
6-10	42.89	92.63*
10-12	12.11	13.16
>12-20	6.58	41.58
>20	0.79	20.00

38.4% were in the first trimester and 20% presented at a gestation of 20 weeks or above (Table III). The choice of the method of termination, of course, depended on the period of gestation. There was no mortality in this series. Hysterectomy was done in one unmarried subject for uncontrollable bleeding during hysterotomy. there was no other instance of significant morbidity (Table IV).

#### DISCUSSION

It is evident from this analysis that compared to the married women seeking abortion, unmarried ones are under privileged as they suffer the ordeal at younger age when they possibly do not understand the implications of sexual intimacy. Dutta et al (1979) reported similar findings showing that nearly 60% unmarried subjects were between 16-20 years of age. Although pregnancy out-of-wedlock is not uncommon amongst educated subjects, more often it is the illiterate or school drop out who becomes its victim. The percentage of illiterate unmarried abortion seekers was 23% (Purandare et al, 1979) and 32% (Roy Chowdhury et al, 1979) in previous studies and, compares well with 32.1% in the pres-

ent data analysis. Another one fifth of the subjects had education only upto primary level. For different reasons, apart from ignorance and illiteracy, there is significant delay in reporting by the unmarried subjects and it was observed that 61.6% subjects reported after 12 weeks of pregnancy and 20% at 20 weeks or more. This is in contrast to a very low incidence (7.3%) of mid-trimester abortion in the control group. Shrotri et al (1980) reported that 80% of unmarried girls sought abortion in second trimester. In some other studies, duration of pregnancy was observed to be more than 16 weeks in 50% (Purandare et al, 1979) and 71.2% (Roy Chowdhury et al, 1979) and in 20-30%, the pregnancy had already advanced to 20 weeks or more. Liberalisation of the medical termination of pregnancy since the introduction of MTP Act in 1972 should have decreased the tragic sequelae of criminally induced abortions. However, no such change has been observed (Malhotra, 1979; Prema, 1986). Hence, it seems important that apart from providing good medical care at different levels, our efforts should aim at decreasing the number of these unwanted and unexpected pregnancies. This is feasible only by

adequate and proper emphasis on sex education and usage of contraceptives.

India, 29: 598, 1979.

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Abstract serum AFP was estimated in 11 cases of normal pregnancy and 25 cases in various types of abortion and ectopic state. In normal pregnancy AFP started rising from 20th week of pregnancy, reached highest level between 28-32 weeks and then declined gradually till term. In threatened abortion there was no rise of AFP in first trimester but it was significantly raised in 2nd trimester while the levels were almost double of the normal pregnant level in cases of inevitable abortion. In cases of inevitable abortion while elevated AFP level in the trimester is more indicative of inevitable abortion while elevated AFP level may be indicative of both threatened as well as inevitable abortion. In case of complete abortion AFP was significantly raised. In cases of habitual abortion it was raised when the case was fatal in origin and not inconspicuous revealed or in case of missed abortion and was raised when AFP level was that of non-pregnant level because AFP is of fetal origin. About 90% of women showing abnormally high or low AFP levels eventually aborted.

In cases of threatened or low level AFP level to rise in gestation was in 10 cases. In cases of inevitable abortion AFP level was raised in 10 cases. In cases of complete abortion AFP level was raised in 10 cases. In cases of habitual abortion AFP level was raised in 10 cases. In cases of missed abortion AFP level was raised in 10 cases. In cases of ectopic state AFP level was raised in 10 cases.

INTRODUCTION

Alpha foetoprotein (AFP) is an embryo-fetal protein synthesized primarily in the fetal liver. It is the first major fetal protein to appear in fetal serum. The level has been estimated in normal pregnancy, threatened abortion, inevitable abortion, complete abortion, habitual abortion, missed abortion, ectopic state, and in various types of abortion. The concentration of AFP in fetal serum is about 100 mg/dl. In cases of normal pregnancy AFP level rises from 20th week of pregnancy, reaches its peak between 28-32 weeks and then declines gradually till term. In cases of threatened abortion there is no rise of AFP in first trimester but it is significantly raised in 2nd trimester while the levels are almost double of the normal pregnant level in cases of inevitable abortion. In cases of inevitable abortion while elevated AFP level in the trimester is more indicative of inevitable abortion while elevated AFP level may be indicative of both threatened as well as inevitable abortion. In case of complete abortion AFP is significantly raised. In cases of habitual abortion it is raised when the case is fatal in origin and not inconspicuously revealed or in case of missed abortion and is raised when AFP level is that of non-pregnant level because AFP is of fetal origin. About 90% of women showing abnormally high or low AFP levels eventually aborted.

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