

**SAFE MOTHERHOOD
WHEN TO BEGIN**

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ABSTRACT

Two thousand five hundred college girls were assessed for their knowledge and attitudes regarding sex, pregnancy and child rearing with the help of a pretested questionnaire. The site of menstruation was known to only 35.3% of the girls. The knowledge about the time and site of conception was 25.3% and 58.2%, respectively. Only 16.3% of the respondents knew the normal route of delivery although the duration of normal pregnancy was known to majority (87.7%). The girls were aware of the ideal timing of abortion (67.5%) but the safe method and legality were poorly known facts. Only 5% of the girls believed in pre-marital sex.

More than half (54.9%) of the girls knew about some form of contraceptive, Copper-T being the best known. Nearly one fifth of the girls were either undecided or wished family members to decide about antenatal check-ups. The need for better diet and injections during pregnancy was well known although few (15.2%) were aware of the injections being tetanus toxoid. Only about 10% wanted a home delivery but one fourth felt that a Dai or a relative was suitable for conducting the delivery. An overwhelming majority of the students stated that knowledge about above facts was important

Conventional school and college education prepares the young women for renowned careers but not for ideal motherhood. The young woman, who is going to be responsible for the foundation of a family has little or no knowledge regarding the basic facts of reproduction. She acquires the knowledge about sex and pregnancy generally from friends, relatives and sometimes from books. The parental dialogue with their children on sex is limited due to inhibition and taboos. The young people are left to procure knowledge from unsuitable sources like films or books which often provide incomplete and wrong information, or they resort to trial and error method. This leads to propagation of many myths and a number of problems such as early pregnancy, ignorance about spacing and birth control measures, illegal induced abortions, etc. The result of all these is a high mortality rate for mother and child with other problems like low birth weight and malnutrition(1).

As far as we could gather, there are no reports from India about the knowledge of

and they would like to learn about them preferably during college education. It is recommended that 'Family life education' be provided during pre-adolescent and adolescent years to ensure a safe motherhood and a healthy child.

Key words: *Safe motherhood, Contraceptives, Adolescence.*

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women regarding different aspects of reproduction. The present study was an attempt to assess the level of knowledge and attitude of urban educated girls on the various aspects of sex, pregnancy and child rearing and evaluate the need for an institutional family life education.

Material and Methods

Two thousand five hundred college girls registered in the colleges of Ludhiana city were the subjects of this study. A pretested questionnaire was given to them in the presence of a supervisor. They were asked not to disclose their identity. No discussion was allowed. The initial part of the questionnaire consisted of personal and social information, viz., age, class, marital status, socio-economic group and media exposure in terms of newspapers, magazines and television.

The questions were categorized into various subjects like sex, pregnancy, child rearing and need for sex education. They were mainly of the multiple choice type, with a few to be answered in the affirmative or negative with reasons for their answer.

The data was computerized and analysed with Chi-square test using the statistical package of social sciences.

Results

The largest group of girls (41.4%) were in the age group of 17-18 years doing their graduate studies. Most of them (88.8%) belonged to the middle socio-economic class (modified Kuppaswamy's scale)(2). None of the girls was married. Television was most popular media with 96.4% viewership.

As shown in *Table I*, the majority of the girls were unaware of the site of menstruation (64.7%) and the time of conception

(75%) in relation to the menstrual cycle. A little more than half knew about the site of conception. The normal duration of pregnancy was known to 87.2% but the route of normal delivery was a very poorly known fact. Only 16.3% answered correctly while 35.1% reported urethral opening to be the route. All the above observations had a significant positive correlation with increasing age, education and socio-economic status.

The girls were questioned about the suitable timing, safe method and legality of abortion (*Table II*). The ideal time of abortion was known to 67.2% of them but

TABLE I - Knowledge Regarding Reproduction and Pregnancy

Parameter	Total	Correct	Percentage answered
Site of menstruation	2476	874	35.3
Time of conception	2479	629	25.4
Site of conception	2430	1416	58.3
Duration of pregnancy	2478	2172	87.2
Route of normal delivery	2479	403	16.3

TABLE II-Knowledge About Abortion

Knowledge	Total	Correct	Percentage answered
Safe timing (Upto 16 weeks)	2478	1667	67.2
Methoc (By doctor/nurse)	2479	939	37.8
Legally allowed	2482	973	39.8

knowledge regarding safe method and legality was poor. Attitude towards premarital sex was negative, with only 5.2% believing in it while 3.2% were indifferent.

Table III shows that 54.9% of girls knew of one or other contraceptive method while 44.2% were not aware of any. The most well known was Copper-T (12.9%).

Only 35.9% of the girls wished to delay the first pregnancy to 2 years while the rest either wanted to have the baby earlier or were undecided. An encouraging finding was that most (83%) of them wanted to have a birth interval of three years or more.

Regarding antenatal care, nearly one fifth of them wanted to leave the decision to the husband or the mother-in-law or did not wish to have a check-up. The need for increased diet during pregnancy was well known. Majority (77.5%) of the girls knew about the need of some injections during antenatal period but were unaware of them being tetanus toxoid.

The respondents were asked about their choice for place of delivery and only about 10% wanted a home delivery although almost 25% felt that a Dai or a relative was a suitable birth attendant (Table IV).

Finally, the girls were asked whether they felt the need for education on various aspects of health and reproduction before marriage. The answer was an overwhelming yes (81.1%) with more than half of them (58.8%) wanting to learn college education.

Discussion

The present study evaluated the awareness of college girls, the future mothers, regarding various aspects of reproduction. A poor awareness about the site of menstruation and conception was noted. Lema has

TABLE III - Knowledge About Contraceptives

Type of contraceptive	Number	Percentage
Condom	122	4.9
Oral contraceptives	244	9.8
Copper T	323	12.9
All	683	27.3
None	1106	44.2
Unanswered	22	0.9
Total	2500	100.0

(54.9)

TABLE IV- Choice for Place of Delivery and Attendant

Answers	Number	Percentage
<i>Place of Delivery</i>		
Hospital	1180	47.2
Private nursing home	922	36.9
Home	249	10.0
<i>To be conducted by</i>		
Doctor	1130	45.2
Nurse	599	24.0
Dai	526	21.0
Relative	58	2.3
Don't know	178	7.1

also reported similar results in a study on Kenyan Secondary School girls(3). Surprisingly, 12.8% of the girls were ignorant of duration of a normal pregnancy. The route of normal delivery was known to few girls (16.3%) and one of the common misconception was the urethral opening being the normal route. A still lower figure of 13% has been quoted by Mathai regarding the

number of adolescent girls knowing any thing about child birth(4).

Septic abortions are a leading cause of maternal mortality and continue to occur despite legislation(5,6). One of the reasons for this is lack of awareness. In the present study, although 67.2% of the girls knew the ideal time of termination of pregnancy, only 38.8% were aware that it was permitted by law. The number of girls knowing about safe method of abortion was still lower (37.8%). Behara and Padte found that 35% of the unmarried pregnant teenagers sought abortions in the second trimester and 7.5% had gone to quacks for the same(7).

In developed countries, sexual activity starts at an early age. In contrast, we found only 5.2% of the girls in the present study thought pre-marital sex was alright. Similar reports (less than 6%) have come from countries like Republic of Korea and Thailand(8).

The knowledge regarding contraception was fair in the present group of girls. Behara and Padte have also noted similar figures although the teenagers in their study were indifferent to the use of various methods(7). The Copper-T and oral contraceptives were the better known methods in this study. Probably, the media exposure may be responsible for this. In contrast, El-Shafei and Rao found oral pills followed by condoms to be the most well known in their study(9). Nadelson *et al.* have also made similar observations(10).

Soon after marriage, there is a social pressure on the woman to prove her fertility. On questioning the girls in the present study, it was found that only 35.9% wished to delay the first pregnancy and majority were undecided. Similarly, Salber *et al.* observed that most of the mothers in their

study group had not planned the pregnancy (11).

Nearly one-fifth of the respondents of the study wanted the husband/mother-in-law to decide about antenatal care or did not wish to have a check-up. In a report from Punjab, 22.3% of mothers had check-ups in clinics while 46.4% of them did not feel the need(4). The girls showed a high awareness regarding the increased nutritional needs during pregnancy. Very few believed in the maternity myth of decreased intake during pregnancy.

An interesting observation in this study was that although 46.1% of the girls either wanted to start their family soon after marriage or did not plan anything, 88.8% wanted to delay the subsequent pregnancies. El Shafei and Rao have also documented that the majority of women, *i.e.*, 98% felt that the child and mother's health are better when the birth interval is 3 years, and the ideal pregnancy interval was thought to be 36 months or more by 74.8% of women(9).

A hospital or private nursing home was opted as the place of delivery by 84.1% of the girls in the present study. A Dai or a relative was desired as the attendant for delivery by 23.3% of the girls.

This was a poor reflection on their awareness regarding the need for skilled care during delivery. A higher percentage opting for hospital delivery could be because of the urban population with better education and awareness in this study. UNICEF, the State of the World's Children, 1990, reports the percentage of births attended by trained personnel to be 33% in India(12). Mathai assessing care during delivery and the type of the birth attendant in 1982 in Punjab has stated that 61.3% of the births were conducted by untrained dais.

30.4% by other trained persons and only 7.3% by doctors(4).

Majority of the girls (81.1%) in the present report wanted to know about the various aspects of sex, pregnancy and child rearing before marriage. More than half of them (58.9%) wanted health education to be included in the college.

It is recommended that family life education should be provided in the preadolescent or adolescent period and not be postponed to antenatal clinics. For a safe motherhood and a healthy child it is important for the women to know what care should be given and how. Considering the fact that the study group was exposed to mass media and yet the overall knowledge is so meagre the family life education needs to be doubly stressed and started side by side with college education which is the time when the girls are most receptive. Leaving the responsibility entirely to parents and mass media to propagate information is decimating this knowledge.

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