

A Study of Knowledge of Contraceptive Use among Adolescent Girls in Reproductive Age Group in Rural Community

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Original Research Article

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Article History

Received: 23.06.2018

Accepted: 06.07.2018

Published: 30.07.2018

DOI:

10.36347/sajb.2018.v06i07.002



Abstract: Today every fifth person in India is an adolescent. One in every ten child birth belongs to adolescent mother and one in every ten legal abortions happens to adolescent pregnancy. 31% of the girls aged between 15 to 19 years are married in India. Early childbearing is associated with serious health problems to their mother and offspring. Knowledge about contraceptive use plays crucial role in addressing this health issues. To study the knowledge of contraceptive methods among adolescent girls in reproductive age group. To assess some socio-demographic determinants of contraceptive knowledge in adolescent girls in reproductive age group in rural community. A Cross-sectional survey was conducted in PHC of Pune district, Maharashtra during Jan 2012 to Dec 2012. 116 adolescent girls in reproductive age group were surveyed from a village in PHC. Simple random sampling method was used to select a village among 35 villages in PHC. Informed consent was taken and pre-designed questionnaire was used. Out of 116 study subjects, 75% were aware about any contraceptive method. Female sterilization was most commonly known method. Most common source of information was media 53% followed by family members 48%. Age of study subjects ($p < 0.001$), Marital status ($p < 0.001$), literacy status ($p < 0.001$), type of family ($p < 0.001$), Socio-economic status ($p = 0.33$) have shown the influence on knowledge of contraceptive methods. The present study found out that the knowledge of contraceptive use is 75% in the study area among study subjects and the knowledge of contraceptive methods depends on various socio-demographic variables.

Keywords: Knowledge of Contraceptive use, Adolescent girls in reproductive age group, Socio-Demographic variables.

INTRODUCTION

India is the second most populous country in the world, contributing about 20% of births worldwide & having 1.21 billion people. With only 2.4% of world's land area, India is supporting 17.56% of world's population[1].

India adds about 10 lakh persons to its population every fortnight and adds about one Australia every eight month. By 2045 or earlier, India would overtake China as the world's most populous Nation[2].

India was the first country in the world to formulate the National Family Planning Programme in the year 1952 with the objective of 'reducing the birth rate to the extent necessary to stabilize the population at a level consistent with requirement of national economy[3].

The extent of acceptance of contraceptive methods still varies within societies and also among different castes and religious groups. The factors responsible for such varied picture operate at the individual, family and community level with their root in the socioeconomic and cultural milieu of Indian society[1]. In spite of availability of a wide range of contraceptives and mass media campaigns and information, education and communication programmes, the population control remains a distant dream to achieve. It is pertinent to identify the factors responsible for poor acceptance of family planning programme in different socio-cultural and socioeconomic groups[2].

The World Health organization (WHO) defines adolescents as persons between 10 and 19 years of age. The WHO also defines reproductive age group in woman in the age group of 15-49 years of age.

Today every fifth person in India is an adolescent. One in every ten child birth belongs to adolescent mother and one in every ten legal abortions happens to adolescent pregnancy. 31% of the girls aged between 15 to 19 years are married in India. Early childbearing is associated with serious health problems to their mother and offspring. Knowledge about contraceptive use plays crucial role in addressing this health issues[4].

Women need the ability to decide when to start and finish childbearing, how long to wait after the birth of one child before becoming pregnant with the next and how many children to have[3].

In recent years, the need of such kind of studies was very important, because more specific knowledge can be acquired about factor determining fertility and acceptance. From wide experience, it is observed that the beneficiary is not aware of new technology and improvement in the existing program. Despite various studies and extensive work in this field, above phenomenon is observed, considering this study was planned with the objective to study the knowledge of contraceptive methods among adolescent girls and to assess the socio-demographic determinants of contraceptive knowledge in adolescent girls in reproductive age group in rural community.

MATERIALS & METHODS

This Cross-sectional study was carried out in one of the village from one of the Primary Health Centre (PHC) in Tal. Mawal, Dist. Pune, Maharashtra from January 2012 to December 2012, after taking approval from Institutional Ethical Committee; The one PHC was selected by Random sampling method. The selected PHC is having 7 sub centers and 35 villages.

According to the census 2011, total population of selected PHC was 36760.

Study Area is one village which is selected by simple random sampling method from 35 villages of this PHC and study subjects were enrolled.

Sampling unit was the adolescent girl in reproductive age group (15-19 years). Sample Size calculation was done based on the census data from world population prospects-The 2012 revision, UN 2013[5]. According to this, 19.6% of adolescent population is present in India. The selected village was having population of 1559. With the reference to census data, the calculated sample size of adolescent population in the selected village was 263. Assuming 50% of female population among adolescent age group, the Sample Size calculated for the survey was 132.

Sampling Techniques these 132 sampling units were planned to study by visiting all households in the selected villages. More than one visit was planned to collect the data from the study subjects, if it is present in that house.

Study Tool

The study was conducted by using a Questionnaire only after written informed consent was obtained from study subjects. The questionnaire was based on NFHS-3 Questionnaire. Semi structured, Pre-tested Questionnaire was used.

Data analysis

Epi Info 3.5.3, Primer software

RESULTS

Total 116 adolescent girls were surveyed from the study village paying frequent house to house visits.

Table-1: Knowledge of any contraceptive methods (n = 116)

| Knowledge of any contraceptive method | Frequency (%) |
|---------------------------------------|---------------|
| Aware | 87 (75%) |
| Not aware | 29 (25%) |
| Total | 116 (100%) |

The table no. 1 shows that 75% adolescent girls in reproductive age group were aware about some or the other form of contraceptive methods. The most common known method was female sterilization (70%),

followed by O.C pills (52%) and Cu T (34%). 33% and 24% adolescent girls were aware about Condom and Male sterilization respectively as shown in fig. 1.

Types of Contraceptive methods

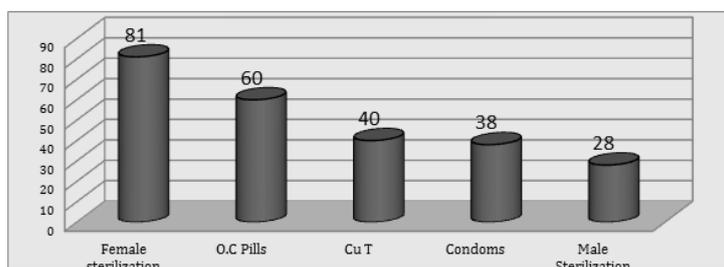


Fig-1: Types of contraceptive methods known to study population (n=116)

Socio-demographic Variables of study subjects

Out of 116 adolescent girls in reproductive age group, 110 (94.83%) adolescent females were Hindu, whereas 6 (5.17%) were Muslim. 28 (24.14%) adolescent females are married. Majority of the study

population studied up to Secondary (41.38%) and Primary (34.48%). Majority of the study population belongs to the S.E Class of III & IV (55.17%) followed by Class V (22.41%). The mean age at menarche was 13.4 years in the study population.

Source of Information

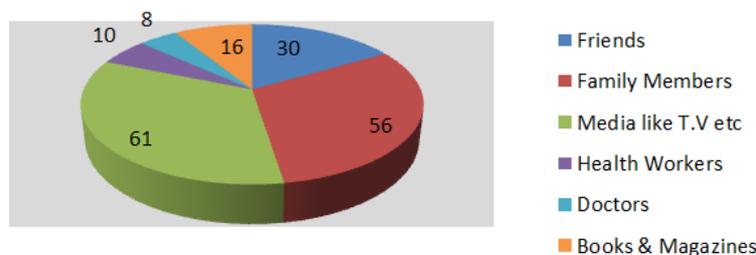


Fig-2: Source of Information to study population

The figure no. 2 clearly states that the most common source of information for contraceptive

awareness was Media 53% followed by family members 48%.

Table-2: Association of Awareness of any contraceptive methods and some Socio-demographic Determinants

| Socio-Demographic Variables | | Knowledge about any Contraceptive methods | No Knowledge about any Contraceptive Methods | Chi-Square Value (d.f) | P Value |
|-----------------------------|------------------|---|--|------------------------|-------------|
| Age | 15 yrs | 4 (50%) | 4 (50%) | 12.646 (4) | 0.013 S |
| | 16 yrs | 13 (65%) | 7 (35%) | | |
| | 17 yrs | 16 (62%) | 10 (38%) | | |
| | 18 yrs | 24 (80%) | 6 (20%) | | |
| | 19 yrs | 30 (94%) | 2 (6%) | | |
| Marital Status | Unmarried | 61 (69%) | 27 (31%) | 5.52 (1) | 0.01 S |
| | Married | 26 (93%) | 2 (7%) | | |
| Types of Family | Nuclear | 47 (67%) | 23 (33%) | 5.47 (1) | 0.01 S |
| | Joint | 40 (87%) | 6 (13%) | | |
| Literacy Status | Illiterate | 1 (50%) | 1 (50%) | 9.354 (3) | 0.03 S |
| | Primary | 32 (80%) | 8 (20%) | | |
| | Secondary | 30 (63%) | 18 (37%) | | |
| | Higher Secondary | 24 (92%) | 2 (8%) | | |
| S.E Status | Class I | 2 (100%) | 0 (0%) | 15.206 (3) | 0.002 HS |
| | Class II | 22 (92%) | 2 (8%) | | |
| | Class III | 26 (87%) | 4 (13%) | | |
| | Class IV | 18 (53%) | 16 (47%) | | |
| | Class V | 19 (73%) | 7 (27%) | | |

The table no. 2 shows association of some socio-demographic determinants with knowledge of any contraceptive methods among adolescent girls in reproductive age group. There is statistically significant association between age of study subject, marital status, types of family, literacy status and socio-economic status with knowledge of any contraceptive methods.

As the age of study population increases the knowledge about any contraceptive method also increases. Similarly, as the literacy increases among adolescent girls the knowledge of contraceptive methods also increases. If purchasing capacity of family increases which is determined by Socio-economic status the knowledge of contraceptive methods also increases.

DISCUSSION

Adolescent plays a crucial role in controlling the growth of population in the country as they are in the preparatory stage for their future productive & reproductive roles in society & family [4]. In the literature search many studies conducted are in the urban area or on the school going adolescent age group. The literature on rural adolescent age group is limited.

The attempt has been done to find out the knowledge about contraceptive methods in adolescent girls in rural area to find out the lacunae in achieving the National Family Planning Program goal. In the present study, the practice of early marriage was still prevalent 28/116 (24%) and the prevalence of adolescent pregnancy was 35.71% (10/28). This shows the needs of intervention to be taken in rural areas and focus of Health education on rural adolescent girls in reproductive age group.

NFHS-3, shows the awareness of contraceptive methods in adolescent females in 15-19yrs of age is 94% [4]. The study conducted by Ratna Majumdar & S. K Ganguli [6] in Pune shows the knowledge of contraception was 19.43%. The study conducted in Fatehpur District Uttar Pradesh [7] on college going adolescent girl's shows the knowledge was 86%. These study findings were not comparable with the present study since the present study is conducted in rural setting.

The study conducted by Netravati H. S [8] in villages of Dharwad also showed the similar findings of awareness of contraception. The contraception awareness was 72%. Whereas, study conducted by Dr. Chinmay Shah *et al.* [9] in rural & urban part of Gujarat showed the awareness of contraception was less accounting 40.76%. These study findings are comparable with the present study since these studies are also conducted in rural setting. Despite of many years after these studies, the scenario of knowledge of contraceptive method is same suggesting the need of specific interventions in rural area.

In the present study the most common source of information was media (53%) followed by family members (48%) while in study conducted by Kundan Mittal and Manish Kumar Goel [10] in Rohtak city the most common source of information was Friends/peer (24%) followed by mass media (20%).

A study by Benjamin AI *et al.* [11] in school going girls Ludhiana had revealed most common contraceptive method known was O.C Pills (87%) followed by Condoms (47%). This study finding is not comparable with the present study.

CONCLUSION

This study showed the Knowledge of contraceptive measures in study population is 75%. Knowledge of contraceptive methods depends on Age, Marital status, literacy status & type of family and Socio-economic status.

RECOMMENDATION

The awareness programme should be included in formal education system especially in the school curricula so that adolescent girls can acquire correct knowledge from reliable and social accepted sources rather than from so called magazine, pornography etc.

Creating awareness regarding proper use of contraceptive methods and various services available by the government to promote use of contraceptive methods at their doorsteps is the need of an hour to increase the contraceptive prevalence.

Early marriage and early childbearing below 18 years of age is still prevalent. This shows that emphasis should be made on sensitizing general population with regards to legal age at marriage for the girls.

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