To Estimate the Level of Awareness of Contraception amongst the Teenage Girls

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Authors’ contributions
This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

“What is contraception?”
Contraception is the method for birth control which helps to prevent unwanted pregnancies. There are so many methods of contraception including long acting reversible methods, barrier methods, hormonal methods, lactational amenorrhea method, fertility awareness based methods, emergency contraceptives, etc.

In present decade, the knowledge of contraception in teenage girls is mandatory as the involvement of teenagers in sexual activities is increasing day by day. The reasons can be many such as social media, electronic gadgets, peer pressure, etc. There are so many studies that have shown that knowledge of contraceptive, especially among the teenage girls in universities remains limited and the rate of sexual activity before marriage, and unwanted pregnancies, illegal abortions remains higher among college going students. It leads to various health conditions in girls as well as mental and social disturbances in both girls and boys. There is a need to make them aware about the consequences they have to face after engaging in sexual activities and ending up with teenage pregnancies, unwanted pregnancies and unsafe abortions.
Current study aimed to assess the awareness of contraceptives, sexual behavior, and factors associated with contraceptives use among female undergraduate students as well as girls who are illiterate in Wardha region, Maharashtra.

**Aim:** ‘The study was conducted to estimate the level of awareness of contraception amongst the teenage girls’.

**Objectives:**
- To provide proper sex education to the teenagers.
- To aware teenagers about complications of teenage pregnancies.
- To acknowledge them about sexual activities and their consequences.
- To acknowledge them about contraceptives and their proper uses.

**Materials and Methods:** Sawangi, Wardha. Total study participants were 140 girls. One group of 70 girls, age between 13 years to 16 years, half of them from school located in Wardha and half of them from rural area around the Wardha. Another group of 70 girls belongs to 17 years to 19 years, half of them from school and half from rural area. The participants were on voluntary basis. The girls belong rural area that had never been to the school. None of them were given questionnaire to fill. Answers were recorded on the questionnaire by the social worker who was assigned the job. Adequate time was given to each adolescent to answer the questions asked. The data thus collected was analyzed. Prior permission and consent were taken from the school Principal and the parents.

**Conclusion:** The present study concludes that there should be sensitization of teenage girls about contraception and various contraceptive methods. It will help them to prevent the unwanted pregnancies and it adverse outcomes of abortions which is beneficial to maintain their further reproductive life.

**Keywords:** Adolescence; peer pressure; teenage pregnancy; contraceptives; preeclampsia; anemia; LARC; hormonal contraception.

1. **INTRODUCTION**

Adolescents constitute the healthiest group in the population, having the lowest mortality and morbidity when compared with other population age groups. But the period of adolescence, beginning with the onset of puberty, is a crucial transition into adulthood[1].

Adolescence is a period of development and gross change in physical, mental conditions and acquainting new capabilities. It is the time of susceptibility to risky conduct, which can have life-long outcomes, especially related to health, education and career. That’s why proper education is important. As the school is the place where teenagers get a chance to share many personal thoughts, perceptions with friends, have conversations with them as well as teachers; which is impossible if they do not get educated properly from the start. There should be some approach in bringing consciousness in such girls [2]. Earlier a study in schools nearby the institute had disclosed low knowledge of menstruation, pregnancy and prevention of pregnancy. So school-based sex education was begun. However, it was realized that those who had never been to school or went but dropped out might not know related things. So it was decided to find out knowledge of reproductive health among school dropout young rural girls [3].

Due to the youth composition contributing to India’s population; the generative point of view and conduct of youths are probable to have an important influence on overall generative health, demographic and social outcomes. Teenage sexual activities and vulnerability have the possibility of pregnancy has captivated considerable research attention to understand its magnitude and address it as a problem [1].

Teenage girls with insufficient understanding of personal hygiene and birth control practices enter the reproductive phase of life, hence perpetuating the problems of malnutrition and low socio-economic status to the upcoming generation [3].

Globally, death of mother and her infant remains prime concern. The era of the United Nations Millennium Development Goals witnessed great progress in reducing maternal and child mortality rates between 2000 and 2015. It is well proved that, pregnancy in teenagers is directly correlated with a variety of unfavorable outcomes, such as inclined death of new born ,higher incidence of
low birth weight, prematurity, and developmental abnormalities and greater risks for obstetric related complications and deaths. To avoid pregnancies in teens, one must be aware of use of contraceptives. There is no doubt that teenagers are on the peak of adolescence and they have hormones rushing all over their body. At this time, they tend to engage in sexual activity without understanding the consequences under peer pressure or out of curiosity [4].

Not only teenage girls but also boys should be aware of the consequences they will have to face not only physically but mentally and socially as well.

In rural areas, girls are illiterate; they never had to school so they lack all the sex education that somehow provided in some schools. And many ones do not even speak to their parents about it so engaging in sexual activity is a very exciting thing for them and they have to face very drastic health problems if they get pregnant or if unsafe abortion is done [5].

Out of social stigma, people in rural area do not always abort the child but they make their daughters marry some man so that society would not shame them. This is also one of the major problems in India. Girls have to forcefully marry some man eventually ruining their mental health or sometimes unsafe abortion is done which can alter her health in a severe manner. Hence, in rural areas sex education must be practiced and more important is to teach the girls and make them literate so that they can decide what is good and bad for them and their health, not only physically but mentally too [6].

Approximately half of the pregnancies in teenagers (15 to 19 years) are unplanned. One of the outcomes is unsafe abortion in 3.8 million in teenagers per year. Various studies propound that even as well as the overall termination rate has fall of , a fraction of precarious or unsafe termination has been. From 1995 to 2003, overall number of unsafe abortions are decreased, but the unsafe abortion rate was unshakeable being 15 to 17 per 1000 women, respectively.

In western nations, only 3% of terminations are precarious whereas in developing nations 55% are precarious. The highest occurrences of terminations that are precarious happens in Latin America. Africa and South Asia.

For the prevention of pregnancies, the teens have to understand sexual activities and their consequences if done in young age or probably at wrong age. They must be aware of contraceptives so that harmful health effects can be avoided. Contraceptives are anticonception or fertility control methods helps to avoid pregnancy. It is safe and effective way to avoid pregnancy [7,8].

Contraception methods are of many types. Some of them are:

Long acting reversible (LARC):

There are two types of LARC methods. The first one is Intrauterine device i.e. IUD and the other one is Birth control implant. These are usually used by adults and not teenagers. The efficaciousness of LARC methods is 99%. Its the most effective way of preventing pregnancy for a very long time. Ex: Copper T.

Hormonal contraception:

Hormonal contraceptives contains hormones like estrogen and progesterone or sometimes only progesterone which avoids pregnancy to occur by interrupting in production of oocytes in ovary and in thickening of cervical mucus so that entry of sperm can be interrupted. It is one of the most dependable contraceptive methods having side effects like headache, nausea, mood swings, acne, breast tenderness and irregular menses. Depo povera injection also comes under hormonal contraceptions.

Barrier methods: It is the method of contraception which interrupts the entry of semen into vagina indirectly interrupting the entry of sperm. If sperm do not enter the vaginal cavity, there is 0% chances of getting pregnant. These contraceptives acts as a barrier between sperm and egg. There are two types of barrier contraceptives namely Condoms and internal condoms which is also known as female condoms. Condoms are worn by males and internal condoms are worn by females inside the vagina.

The efficaciousness of using condoms during sex is 90%.It is the most used methods of contraception among teenagers. Boys should always use condoms during intercourse as it not only prevents pregnancies but it also protects
you from getting several sexually transmitted diseases or infections.

Emergency contraception:

Emergency contraception methods contain contraceptives which should be taken as soon as possible after having unprotected sexual intercourse. It can be taken under 5 days of unprotected intercourse. They are 95% effective in preventing pregnancy. These pills are given to the rape victims under 18 years of age or more to prevent them from getting pregnant.

The adequate amount of knowledge about contraceptives are very very important for not only girls but boys as well. They should also beware of consequences of not using contraceptives or having intercourse which ends up in pregnancy of a girl [9].

Eighty one percent of the teenagers think that their knowledge of contraception is enough for them to be responsible of their own sexual lives, whilst some nine percent mentioned that they lack such knowledge, eighty five percent of the teenagers are interested in contraception.

In schools, girls get opportunities to share their personal thoughts, doubts with friends and teachers. If they do not go to school, it is not possible. Lack of awareness, information about reproductive health, sex education and contraception may cause health related problems during teenage [9,10].

Girls in their teenage years are at a very high risk of certain pregnancy complications such as preeclampsia, anemia and hypertensive disorders.

Preeclampsia is a pregnancy drawback which is denoted by high blood pressure. It can affect baby’s health as well. The complications for babies include premature birth and low birth weight. Mother’s organ system are at a higher risk of getting affected mostly liver and kidneys. It can be fatal to both mother and child [11].

Anemia is a condition in which there is a depletion of red blood cells (RBCs). Pregnant teens are at a verge of getting anemia and it will affect the baby's development. The mother will always feel weak and tired and hence putting up negative effects on the baby.

For preventing such fatal health conditions, mental health as well as socio-economic outcomes of teenage pregnancy it is must to make them aware about use of contraceptives and about sex education in a proper way [12].

1.1 Aim

‘The study was conducted to estimate the level of awareness of contraception amongst the teenage girls’.

1.2 Objectives

- To provide proper sex education to the teenagers.
- To aware teenagers about complications of teenage pregnancies.
- To acknowledge them about sexual activities and their consequences.
- To acknowledge them about contraceptives and their proper uses.

2. MATERIALS AND METHODS

Ethical clearance was obtained from Institutional Ethical Committee of JNMC, Sawangi, Wardha. Total study participants were 140 girls. One group of 70 girls , age between 13 years to 16 years , half of them from school located in Wardha and half of them from rural area around the Wardha. Another group of 70 girls belongs to 17 years to 19 year, half of them from school and half from rural area. The participants were selected on voluntary basis. The girls belong to rural area that had never been to the school. None of them were given questionnaire to fill. Answers were recorded on the questionnaire by the social worker who was assigned the job. Adequate time was given to each adolescent to answer the questions asked. The data thus collected was analyzed. Prior permission and consent was taken from the school Principal and the parents.

2.1 Observations

Table no. 1 Showing 35 Literate and 35 Illiterate girls of age group 13 to 16 and 17 to 19

Table no. 2 showing awareness of contraceptive in 13 years to 16 years age group. Out of 35 literate girls 7 girls were aware about contraception and 28 were unaware about it. Out of 35 Illiterate girls only 1 girl was aware about contraception and 34 were unaware about it. It is statistically significant.
Table 1. Age wise distribution of study subjects

| Age     | Education | Total |
|---------|-----------|-------|
|         | Illiterate| Literate|     |
| 13 - 16yrs | 35        | 35     | 70  |
| 17 - 19yrs | 35        | 70     | 70  |

Table 2. Awareness of contraception in age group 13-16 years

| Education | No. of subjects | Awareness of Contraception | Fisher’s Exact Test |
|-----------|-----------------|----------------------------|---------------------|
|           |                 | Yes | No              |                     |
| Literate  | 35              | 07  | 28              | 0.024, S           |
| Illiterate| 35              | 01  | 34              |                     |

Table 3. Awareness of Contraception in Age group 17-19 years

| Education | No. of subjects | Awareness of Contraception | Fisher’s Exact Test |
|-----------|-----------------|----------------------------|---------------------|
|           |                 | Yes | No              |                     |
| Literate  | 35              | 09  | 26              | 0.042, S           |
| Illiterate| 35              | 03  | 32              |                     |

Table no. 2 showing awareness of contraceptive in 17 years to 19 years age group. Out of 35 literate girls 9 girls were aware about contraception and 26 were unaware about it. Out of 35 illiterate girls only 3 girls were aware about contraception and 32 were unaware about it. It is statistically significant.

3. RESULTS

In 13 years to 16 years age group, out of 35 literate girls 7 girls were aware about contraception and 28 were unaware about it. Out of 35 illiterate girls only 1 girl was aware about contraception and 34 were unaware about it. In 17 years to 19 years age group, out of 35 literate girls 9 girls were aware about contraception and 26 were unaware about it. Out of 35 illiterate girls only 3 girls were aware about contraception and 32 were unaware about it.

4. DISCUSSION

As previously stated, nowadays, awareness of contraceptives in teenagers is one of the most sensitive and important topics. Teenagers are on their peak of adolescence having drastic hormonal changes and eagerness to know about sex and sexual activities without knowing their consequences. At this phase, a proper sex education including knowledge of contraceptives is very important to bring about.

From our study, it is observed that among literate teenage girls not even 50% of them have a proper knowledge about what contraceptives are and how they are used and among illiterate ones almost 80% lack this knowledge about sexual activities, teenage and adolescence pregnancies, contraceptives and their consequences on their health and teenage life. The lack of knowledge among teens has led to many health consequences and it affect not only on health but also their social life and studies as well. In illiterate girls, lack of knowledge has led to earlier and unwanted pregnancies and they have to face the mental as well physical trauma raised from it for their whole life.

This shows that it is a very crucial topic to talk about among teenagers to decrease their health consequences arising and the prenatal and neonatal mortality and the social outcomes arising from this.

Therefore, it is must for parents as well as schooling universities to create awareness among teenagers with proper sex education to decrease the rate of sexual activities, unwanted pregnancies, premature pregnancies and illegal abortions as well. For this, it is very essential to educate girls in rural areas and make them literate and to aware the literate ones properly.

According to one study conducted by Camellia Davtyan Et al, Dept. of Medicine, University of California, Los Angeles, CA 90095, West J. Med 2000; 172:166-17. It was discussed that misinformation about contraceptive uses and their own privacy concern stop them from visiting
the doctor. Teenagers are only comfortable to talk about their sexuality only if they will be assured of confidentiality. Because of increasing occurrence of sexually transmitted infections and sexually transmitted diseases among adolescents, avoidance of these health issues along with contraception should be talked through advises to go for the uses of condom as well as hormonal methods in order to decrease the chances of sexually transmitted infections along with preventing unwanted pregnancy. The major contribution of using condoms is along with protection from unwanted pregnancy, it also provides protection against infertility or cervical cancer. The use of condoms increased drastically among adolescents, due to fear of AIDS. Many teenagers still find it humiliating or demeaning to buy condoms from clinics and if brought they fail to use it during every act of coitus. On the other hand, the emergency contraception methods are 75% effectual and pregnancy rates seem to be lessened from 80% when used at a proper time. One of the most effective emergency contraceptive pills is Mifepristone which has 100% efficaciousness but is not always accessible [13].

5. CONCLUSION

The present study concludes that there should be sensitization of teenage girls about contraception and various contraceptive methods. It will help them to prevent unwanted pregnancies and it adverse outcomes of abortions which is beneficial to maintain their further reproductive life.

CONSENT

The data thus collected was analyzed. Prior permission and consent were taken from the school Principal and the parents.

ETHICAL APPROVAL

Ethical clearance was obtained from Institutional Ethical Committee of JNMC.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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