KNOWLEDGE AND ATTITUDES OF ADOLESCENT GIRLS TOWARDS REPRODUCTIVE HEALTH TECHNOLOGIES

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ABSTRACT

Adolescence is a transitional stage that includes multidimensional changes, including physical, psychological, emotional, and social changes. Adolescence is the crucial period reflected by the initiation of active reproductive period. It is a stage of life in which an individual attains sexual maturity, and in spite of this, it has been observed that adolescents lack basic information about their body, sexuality, and contraception. Adolescents' knowledge and access to reproductive health services is important for their physical and psychosocial wellbeing. Modern advances in the reproductive field have evolved with the introduction of certain reproductive technologies. The research was conducted on adolescent girls from the degree colleges of Chittoor district in Andhra Pradesh. The present study was focused on collecting information on their knowledge levels of the recent reproductive technologies such as pregnancy avoidance, storage of semen and sterilization techniques. The results indicated 71.6 percent of them were of pregnancy avoidance techniques, 47.6 percent known that semen could be stored and 65.4 percent were aware of sterilization techniques. The findings on the attitudinal scores indicated that the adolescent girls need to be educated to motivate them positively towards adopting healthy reproductive practices.

Keywords*:* Adolescence, Knowledge, Reproductive Technology, Sexual Maturity, Psychological.

1. INTRODUCTION

Adolescents find themselves facing new opportunities and are eager to assume new responsibilities. It is also a formative stage in terms of sexual and reproductive maturity. During this phase of transition from childhood, adolescents are often confused about the physical and emotional changes in their bodies, but feel hesitant and embarrassed to discuss them with anyone. Therefore, adolescence is a critical period, which influences one's reproductive health and well-being throughout life. Adolescent girls are especially vulnerable to the effects of the biological and social changes taking place during this time owing to the existing inequity between the sexes (Deepanjali, *et.al.*, 2020)

Reproductive health is not merely the absence of any infirmity. Reproductive health implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so. Implicit in this are the right of men and women to be informed and to have access to safe, effective, affordable and acceptable methods of family

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planning of their choice and the right to appropriate health care services that enable women to safely go through pregnancy and childbirth (Morris, *et.al.,* 2015).

Reproductive health needs, especially adolescent reproductive health needs, are poorly understood and underserved in India. Studies addressing issues of sexual behavior in general and adolescent sexual behavior in particular are few and exploratory. Fewer studies discuss female sexual behavior than male. Adolescent marriage and adolescent fertility are disturbingly high. Double standards exist whereby unmarried adolescent boys are more likely than adolescent girls to be sexually active (Kar, *et.al.,* 2015).

High fertility rates, high rates of teenage pregnancy, high risk of STI/HIV, and poor nutritional status are the main health problems among the adolescent population in India. High fertility is related to early marriage. The age-specific fertility rate (ASFR) among 15–19 year – old female adolescents is as high as 0.107. That means one of every 10 women would have a child. There are wide urban and rural differentials in the ASFR. The rural ASFR, 0.121, is twice that of urban areas (Indian Institute of Population Sciences, 2000). Teenage pregnancy almost all of which takes place within marriage, is the major cause of poor reproductive health and health outcomes among adolescents. About 15 percent of pregnancies are among teenage girls under age 18 who have a two to five times higher risk of maternal death (Wall, *et.al.,* 2016).

Adolescent pregnant mothers, who are often already poorly nourished before becoming pregnant, run a high obstetric risk for premature delivery, giving birth to a low-birth-weight baby, prolonged and obstructed labor, severe intrapartum and postpartum hemorrhage (Jejeebhoy, 2000, Verma, *et.al.,*1997).Induced abortions are yet another important reason for the poor reproductive health of women in general and adolescents specifically. An estimated six million induced abortion are performed in India and anecdotal evidence suggests that a fairly large proportion of them are performed for adolescent mothers and unmarried teenage girls. While no realistic or accurate data are available, the enormity of the problem may be judged by the fact that 8 – 10 percent of those who seek medical termination of pregnancy are teenage mothers and unmarried girls. The real percentage may be far larger (Bela, *et.al.,* 2002).

While induced abortion was legalized in India under the Medical Termination of Pregnancy (MTP) Act, a major proportion (approximately 80 percent) of all induced abortions are still performed illegally by private and untrained persons in unhygienic conditions (Chhabra. *et.al.,* 1997).Induced abortions account for more than 11 percent of maternal deaths and significantly influence women's reproductive health (Jejeebhoy, 2000).

2. MATERIALS AND METHODS

2.1. Study design and sampling

Samples refer to the part of population selected for analysis. According to Kothari (2003), the respondents selected should be as representative of the total population as possible, in order to produce a miniature cross-section.

A sample of 500 students in the age group of 17-19 years were randomly selected from the 5 different colleges i.e., 100 students from each college (50 Science and 50 Arts)

2.2. Tools for Data Collection

The questionnaire was found to be the most appropriate data collecting device since it is an

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inexpensive and flexible way to gather data from a potentially large number of respondents. The Knowledge on reproductive technology questionnaire consists of four close-ended questions concerned with the avoidance of pregnancy, storage of semen, and usage of sterilization of techniques. The attitude towards reproductive technology segment consists of five-point scale, namely Strongly Agree, Agree, Undecided, Disagree and Strongly disagree about eight statements.

2.3. Data Analysis

The coded data was classified, tabulated and statistically analysed using SPSS version 12. The statistical techniques that were applied to analyze the 't' test .

3. RESULTS & DISCUSSION

3.1. Knowledge on Reproductive Technology

Proper knowledge on reproductive technology is an essential factor as it creates the awareness and helps to prevent various reproductive tract infections among the youth. Also, it prevents adolescents from various disease such as AIDS, assessment on the knowledge of reproductive technology would help in better understanding on reproductive health issues (Jitendra, *et.al.*, 2015).The data on the knowledge of the adolescent girls on the available reproductive technology are presented below.

Table:1 Knowledge on reproductive technologies

Variables	Frequency	Percentage
Avoidance of pregnancy		
Can be avoided	358	71.6
Cannot be avoided	142	28.4
Storage of semen		
Semen can be stored	238	47.6
Semen cannot be stored	262	52.4
Common usage of sterilization techniques		
Commonly used	349	65.4
Not Commonly used	151	30.2

It isevident from the table 1 shows that most of the adolescents (71.6%) were aware of the fact that pregnancy can be avoided with the help of available reproductive technologies. However, 28.4 per cent of them did not know that pregnancy could be avoided. When asked about the storage of semen, more than of half of them (52.4%) did not know that semen can be stored in places like semen banks for using during the processes like artificial insemination.

Most of the adolescent girls (65.4%) have stated that the available sterilization techniques are put into use common. But the remaining 30.2 per cent of them have responded that common people do not use sterilization techniques commonly.

Attitude towards Reproductive Technology

A Favourable attitude towards reproductive technology would create a health society. Youth gain more knowledge on the various reproductive technologies, if sex education becomes a part of the main stream of education. It is necessary to study the attitudes towards reproductive technology in order to improved reproductive health adolescents.

Table 2 Attitude of the adolescents towards reproductive technology

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Attitude	Strongly agree		Agree		No opinion		Disagree		Strongly disagree	
	N	%	N	%	N	%	N	%	N	%
Advancement in reproductive technologies is good for a healthy society	220	44	215	43	42	8.4	18	3.6	5	1
It has helped in birth control measure	145	28.6	260	52	55	11	31	6.2	9	1.8
This has resulted in population reduction	125	25	233	46.6	98	19.6	24	4.8	20	4
Reproductive techniques are ethical	77	15.4	129	25.8	218	43.6	33	6.6	43	8.6
On a larger scale it has helped in economic growth	106	21.2	207	41.4	124	24.8	44	8.8	19	3.8
RT should be part of main stream education	96	19.2	205	41	118	23.6	52	10.4	29	5.8
Parents and teachers should encourage students to discuss these topics freely	95	19	173	34.6	120	24	48	9.6	64	12.8
Improvement in the knowledge about various reproductive technologies helps to prevent reproductive tract infections	108	21.6	203	40.6	104	20.8	42	8.4	43	8.6

It is clear from the table 2 shows that considerable numbers of the adolescents (44 %) have strongly agreed that advancements in reproductive technologies are good for a healthy society. More than half of the selected respondents (52 %) have agreed that reproductive techniques have helped to a greater extent in controlling the number of births.

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The statement, Invention of various kinds of reproductive technologies has resulted in population reduction' was agreed by 46.6 per cent of the respondents and one quarter of the selected adolescent girls have strongly agreed to the same. Slightly more than one-fourth of the adolescent girls (25.8 %) have agreed that reproductive techniques are ethical and do not cause any harm to physical health (Wymelenberg, *et.al.*, 1990). About 15.4 per cent of the adolescents have strongly agreed to the same fact. About 41.4 per cent of the respondents have acquiesced that reproductive techniques have helped in the economic growth of the country by controlling the population explosion. The same was strongly agreed by 21.2 per cent of the adolescent girls. Noticeable number of the adolescent girls (41 %) have assented that information on the latest reproductive technologies should be a part of the main academic curriculum. Almost 20 per cent of the adolescents (19.2 %) have also strongly agreed with the given statement. Slightly less than 35 per cent of the adolescent girls (34.6 %) have agreed that parents and teachers should encourage students to discuss the topics relating to reproductive techniques freely without any embarrassment. The same was echoed by 19 per cent of the adolescents who strongly agreed that encouragement should be rendered by parents and teachers for the adolescents to learn about reproductive health and related techniques for them to lead a healthy life, Craig (2016) has stated that the knowledge on reproductive technologies is very important for adolescents as it contributes to attain knowledge and change the attitude of young towards the reproductive health. Nearly 41 per cent of the adolescents have assented that improvement in the knowledge about various reproductive technologies helps to prevent reproductive tract infections. About 21.6 per cent of them have also strongly agreed to the same. World health organization stated that the adolescent friendly health services acknowledge the health issues and makes it easy for adolescents to acquire the required health services WHO, 2020).

The results of 't' test carried out to find out the difference between adolescents studying in science and arts stream of education on their attitude towards reproductive technology is given in table 3

Table 3 Difference between Science and Arts faculty adolescents on attitude towards reproductive technology

Variable	Stream of education	N	Mean	S.D	Std Error	't' value
Attitude reproductive technology	Science	250	30.7240	4.88994	0.30927	5.672**
	Arts	250	28.0240	5.72104	0.36183	

****-Significant at 1% level**

Significant difference could be found between adolescents of science and arts stream of education on attitude towards reproductive technology at $p<0.01$ ($t = 5.672$) level. It could be inferred from the mean values that adolescent from science stream of education have better attitude towards reproductive technology (X=30.7240).

Therefore, the above table**,** which states that, there will be no significant difference in the attitude of reproductive technology between adolescent girls of science and arts stream of education is **not accepted.**

CONCLUSION

Adolescent's reproductive health technologies knowledge and attitudes determined by a complex

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array of individual and social factors. Knowledge, self-efficacy, parental supports or family relation, peer and media influence were often found as strong predictors of adolescent's reproductive health and also sexual behaviour. Of those, knowledge was found as a consistent predictor. Adolescent's risky behaviour, mainly caused by the lack of reproductive health information which has failed to be provided by parents or schools.Thus, the present study aimed to assess the adolescent's knowledge and attitude towards reproductive health technologies in Chittoor district of Andhra Pradesh, India.The knowledge regarding matters related to reproductive health technologies was inadequate in this study. Thus, there is a need for providing more information about the same to adolescents. Adequate reproductive health education is the need of time.

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REFERENCES

1. Adolescent Sexual Reproductive Health (WHO, 2020)
2. Bela Ganatra & Siddhi Hirve (2002) Induced Abortions Among Adolescent Women in Rural Maharashtra, India, Reproductive Health Matters, 10:19, 76-85,
3. Chhabra, Rami and Sheel C. Nuna (1997). Abortion in India. An Overview. New Delhi: Veerendra Printers.
4. Craig F. Garfield, Greg Duncan, Sarah Peters, Joshua Rutsohn, Thomas W. McDade, Emma K. Adam, Rebekah Levine Coley, and Patricia Lindsay Chase-Lansdale (2016). Adolescent Reproductive Knowledge, Attitudes, and Beliefs and Future Fatherhood. *Journal of Adolescent Health.* 58: 497-503
5. Deepanjali D. Deshmukh1 and Sukhjeet S. Chaniana (2020). Knowledge About Sexual and Reproductive Health in Adolescent School-Going Children of 8th, 9th, and 10th Standards. *Journal of Psychosexual Health.* 2(1) 56–62.
6. International Institute for Population Sciences (IIPS) and Macro International (2008).
7. Jejeebhoy, S.J. (2000). "Adolescent sexual and reproductive behaviour: A Review of the evidence from India. "In women's reproductive health in India, Ramasubban and Jejeebhoy, eds. New Delhi: Rawat Publications.
8. Kar SK, Choudhury A, Singh AP (2015). Understanding normal development of adolescent sexuality: A bumpy ride. *Journal of Human Reproductive Sciences*. 8(2):70-74.
9. Kotecha, PV, Patel, SV, Mazumdar, VS (2012). Reproductive health awareness among urban school going adolescents in Vadodara city. *Indian Journal of Psychiatry*. 54(4):344–348.
10. Marie Stopes International, *Perceptions and Realities: Yemeni Men and Women and Contraception. Key Findings from a Knowledge, Attitudes and Practices Survey and Peer Ethnographic Evaluation Research Study Yemen*, MSI, London, UK, 2008.
11. *Millennium Development Goals Report*, United Nations, New York, NY, USA, 2012.

SSN (Print): 2204-0595
ISSN (Online): 2203-1731

12. MOPHP and CSO, "The Yemen Family Health Survey (YFHS) 2003," Tech. Rep., MOPHP (Ministry of Public Health and Population) and CSO (Central Statistical Organization), Principal Report, Sana'a, Yemen, 2004.
13. Morris JL, Rushwan H (2015). Adolescent sexual and reproductive health: The global challenges. *International Journal of Gynaecology and Obstetrics*. 1:S40-2.
National Family Health Survey (NFHS-3), India, 2005-06: Tamil Nadu, Mumbai: IIPS.
14. *Programme of Action of the International Conference on Population and Development*, Chapter 4, United Nations, New York, NY, USA, 2012.
15. The World Bank, *World Development Indicators*, The World Bank, Washington, DC, USA, 2011.
16. Verma V. and K.B. Das. (1997). Teenage Primigravidae: A Comparative Study. Indian *Journal of Public Health* XXXI.
17. Wall-Wieler, E., Roos, L.L. & Nickel, N.C (2016). Teenage pregnancy: the impact of maternal adolescent childbearing and older sister's teenage pregnancy on a younger sister. *BMC Pregnancy Childbirth* **16,** 120.
18. Wymelenberg S; Institute of Medicine (US). Science and Babies: Private Decisions, Public Dilemmas. Washington (DC): National Academies Press (US); 1990. 7, New Technologies: The Ethical and Social Issues.

SSN (Print): 2204-0595
ISSN (Online): 2203-1731