Timing of Sexual Initiation and Contraceptive use: a study on the female adolescent of India

Mahadev Bhise

Research Scholar of International Institute for Population Sciences, Mumbai, India.

Abstract::Using data from National Family Health Survey III, the present study examines timing and the factors associated with sexual initiation and contraceptive use among female adolescents in India. The result shows that the mean age of sexual initiation among female adolescents in India is 17 years. There are 42.6 percent female adolescents in India who are sexually experienced. Multivariate logistic regression analyses revealed that education, economic status, mass media are negatively associated with the age at first sexual initiation and positively associated with contraceptive use. Female adolescents belonging to socio-economically deprived section needs to be taken care as they are more likely to expose into the sexual activity at an early age. Awareness programs should address these issues.

Keywords: Sexual Initiation, Contraceptive, Adolescent and Reproductive Health.

I. INTRODUCTION

The Sex is very sensitive subject and discussing sexual matters openly is considered as taboo in India. Sex in India has been considered a closed door activity. It is only recently with the increase in the level of literacy and changes in socio-economic structure of the society, led to the attitudinal shifts in perception of the young generation, that is adolescents have started experimenting with sexual activity in the pre marriage period. India being regarded as conservative country for its old traditional ideas, and the law legalizes sexual union only through marriage, outside marriage as well as sex before marriage is a social taboo. With changes in sociocultural perception, the society is changing more than ever, with the rising level of income and accessibility to health services in urban areas, spread of Mass media, and liberated the young women from stringent familial control, which were imposed on them before. The risk of unplanned pregnancy and sexually transmitted infection (STI) including HIV/AIDS may be affected by the sexual unveiling. Sexual activity at younger ages may be associated with a greater likelihood of unprotected intercourse and multiple partners, potentially leaving the adolescent at greater risk of contracting STI/HIV/AIDS (Bledsoe and Cohen, 1993). The majority of sexual initiation in India is within the marriage, and sexual commencement among women is very early. In India, sexual behavior of girl adolescent is under reported due to social fear and social taboo. The term adolescent is popularized in early 20th century by the researchers such as psychologist Stanley Hall. The term adolescent meaning is to emerge and to achieve identity is a relatively new concept, especially in development thinking. The origins of the term from Latin word 'adolescere' meaning "to growth mature" indicate the defining feature of adolescence. However, a universally accepted definition of the concept has not been established (UNFPA, 2000), but World Health Organization (WHO) define adolescent is both in terms age (spanning age between 10-19 year) and physical change in the body like 1) Rapid physical growth and development 2) physical, social and psychological maturity but all at the same time 3) sexual maturity and onset of sexual activity 4) experimentation 5) development of adult mental process and adult identity 6) transition from total socioeconomic dependence to relative independence. There is no single definition of adolescent, but researcher use the term adolescent as teen and youth interchangeably. In many study adolescents are considering age 15-24 like Kenyan study adolescent considered 15-24 (Lawrence Ikamari and Towett, 2007) and also In Adolescent Reproductive Health of India (Gupta, 2003). In youth include children age 10 through young adult age 25 (UN Right fact sheet, 2000) and due to unavailability of adequate data of adolescent age 0-15 here we consider the age group 15-24 as adolescent. This study focus on the age group 15-24 female adolescent's sexual behavior and contraceptive use.

II. REVIEW OF LITERATURE:

Women are generally under served in India and among them the most neglected an adolescent girl especially if they are unmarried. The adolescents are highly vulnerable group in terms of biologically and socially because they face two most serious health risks related to sexual Activity and childbearing (Jain et al, 2004). In context of marriage nearly half of an adolescent girl are married, the median age at marriage was 16 years in rural India and among them up to 40 percent girl belong to age 15-19 years was already married and

pregnant within their first child (IIPS and macro, 1998). The early child bearing is relatively high risk of morbidity and mortality both for mother and infant. Despite their vulnerability adolescent needs have been largely ignored. The knowledge of sex and reproductive health are also limited among both educated and uneducated adolescent, very few rural adolescent female could describe how body change related to sexual intercourse and reproduction (Vlassof, 1987).One fifth population of India is adolescents and they are engaged in high risky sexual behavior like unsafe sex, unwanted pregnancies and sexually transmitted disease. The study (Lawrence Ikamari and Rose Towett) found female adolescent are engaged in high risk sexual behavior and another study (Bloch and berry) found the spread infection of disease like STI's / HIV/ADIS through risky sexual activity is a major health problem in India. There are very few studies from India which shed light on sexual behavior of adolescents and the prevalence of STI's and STD's among adolescents which could be the main reason for the lack of services for adolescents. The adolescents are being more likely to HIV than older married women (Gadkari el al, 1997). The study conducted in Ajmer district of Rajasthan found that nearly one fourth of adolescents reported RTI/STI (Audinarayana, 2006).

However, in India, information on the sexual activity is less amount of available because of social and cultural taboos associated with sexual issues in Indian society; also data are under Reported (Jejeebhoy, 1996). The strong parental controls on adolescent behaviors and activities have limited opportunities for sexual activity particularly in adolescent females and also among young males; typically we can say young females have limited decision-making power in their sexual relationships (Bhende, 1994; Jejeebhoy, 1996). In Indian society condom use is erratic, and sexually activities within young people are increasingly associated with an unwanted pregnancy, sexually transmitted infection and unwanted sex. Thee early sexual initiation prolong the period of exposure of pregnancy during the reproductive span. It often leads to early marriage and childbearing. (UN Dept. of international and economic and social affairs).In the process of urbanization and modernization changes, the value and norms of urban areas affect the sexual activity of young age people. In the urban area free lifestyle and friendship among young male and female also increases sexual activity (Jejeebhoy, 2000). The contraception is an intervention to reduce the risk of unwanted pregnancy and sexually transmitted diseases (Ram, 2009). However the different study shows that increasing of sexual behavior among unmarried adolescent rises in the urban area than rural areas (Abraham and Kumar, 1999). In the Indian context very few studies focus on effect of factors on sexual initiation and contraceptive use and they are not much studied. Therefore, this study tries to find of some factors which have been indicated in the literature to be closely associated with sexual initiation and contraceptive behavior among adolescent.

III. NEED FOR THE STUDY

In the country like India discussion about sexuality with young children is absent and they are engaged in unprotected sexual activity. Adolescent is a period of physical, psychological and social change from childhood to adulthood. It generally begins at the age 13-14 and continues up to 19 years and more. In some developing country like India adolescent of motherhood closely associated with early marriage leading to early sexual initiation. The prevalence of STI/ RTI is more common among adolescents. The information on knowledge and prevalence of reproductive health problem for adolescents is very scarce in India. Among adolescents, early sexual activity leads to early pregnancy at the time when she is not biologically fit and not matured. It is necessary to know the prevalence of marriage among adolescents and to see the effect of sexual behavior on health of adolescent in India. With the changing society, adolescents are more exposed to consumption of alcohol and drug abuse, which may lead to risky sexual behavior as results adolescents are more likely to suffer from STD/RTI. In Indian context study of adolescent sexual behavior and their relative importance not much studied or limited. So an attempt has been made in this study to understand the sexual behavior and contraceptive use among female adolescent.

IV. OBJECTIVES

The broad objective of the study is to have a clear understanding of sexual initiation and contraceptive use female adolescents in India. However, the specified objectives are as follows:

- 1. To examine the level and pattern of sexual initiation among female adolescent in India.
- 2. To understand the timing of sexual initiation and contraceptive use among female adolescents in India.
- 3. To find out the factors that effect on sexual initiation among female adolescents.
- 4. To find out probability of adolescent woman using a contraceptive method at first sex.

V. DATA SOURCE AND METHODOLOGY:

Data source

The data for this study is taken from the National Family Health Survey NFHS III carried out during 2005-06. The NFHS was conducted to collect data on fertility, marriage, sexual activity, family planning, maternal and child health, information about HIV/AIDS and also information about other sexually transmitted diseases, information on domestic violence. The survey covered a national representative sample of 1, 24,385 women aged 15-49 years selected from the 29 sample state throughout the country. This paper focuses on 46762 adolescent women aged 15-24 years who include both single and ever-married women and the unit of analysis are individual adolescent women.

Method of Data Analysis

The present study used both bivariate and multivariate techniques to find out the effect of independent variables on the dependent variable. In bivariate analysis cross tabulation was done for dependent variable with background characteristics of the study population. The main dependent variable is the age at first sexual debut measured in term of completed year. During the survey, all women were asked a series of questions regarding their sexual activity. All women were sexually experienced women were asked the question how old they were when they first had sexual intercourse. The response of this question considered the women's age at first sexual debut. All the women who indicate that they had never sexual intercourse were not asked the question about the age at first sexual debut. In this paper, another dependent variable is the current use of any contraceptive during first intercourse by sexually experienced adolescent. This study use logistic regression analysis to find out probability of first sexual debut and use of contraception among sexually experienced female adolescent according to background variables.

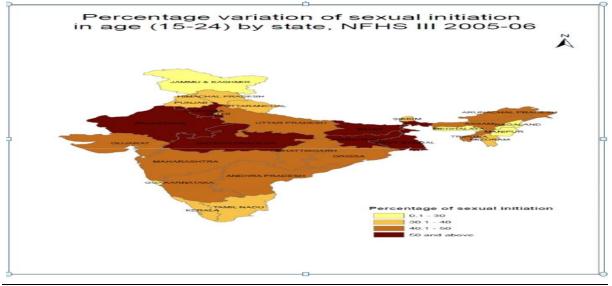
Description of Explanatory Variable

This study considers background characteristics like religion, region of residence, age of adolescent, type of place of residence, caste of adolescent, exposure to mass media, and economic status of adolescents. The education variable refers to the highest level of education attained by adolescents at the time of survey this is measured in terms of no education, primary, secondary and higher. Region of residence refers to the region in which the adolescent usually resides. There are six regions in India. These six regions are different from each other due to socio-economics, geographical and cultural factor. The type of place of residence refers to rural and urban residence of adolescent. In this study, we consider Listening a Radio/watching TV/Reading Newspaper as representative of exposure of Mass media and new ideas. This is measured in term of adolescent listens a Radio/watching TV/Reading Newspaper every day or at least once in the week, more frequently and not at all. The Caste refers to Schedule caste, scheduled tribe, other backward class, and Other Caste. The Household wealth index is used to measure the household economics status. In NFHS III has given wealth index. This index measured in terms of poorest, poorer, middle, richer and richest. Marital status also measured in terms of single and married adolescents. The religion variable is measured in terms Hindu, Muslim or other. Finally, this study also examines the effect of above stated all explanatory variable on the adolescent women's age at first sex and use of contraception.

VI. RESULTS FOR BIVARIATE ANALYSIS:

Level and Pattern of Sexual Initiation across India

The analysis using descriptive statistics revealed that 42.6 percentage of female adolescents aged 15-24 had gone for sexual initiation in India (shown in Map).



Descriptive statistics by state shows In Bihar 63.9 percent female adolescent had gone for sexual intercourse in age 15-24 because of early child marriage and economically backwardness. Also in other bigger state like Jharkhand 63.8, west Bengal 59.8, Rajasthan 56.9, Andhra Pradesh 56.6, Haryana 49.9, Uttar Pradesh 49.9, Chhattisgarh 49.9,Karnataka 48.6, Tripura 48.1, Gujarat 48, and Maharashtra 46.9 percent female adolescent had been gone for sexual intercourse. In This state early child marriage, economical factor and cultural factor highly effect on sexual intercourse. In Goa, only 20 percent female adolescent had gone for sexual initiation at the time of the survey may be because of age at marriage is high and literacy rate is also high in Goa.

The Timing of Sexual Initiation

Figure 1 shows that the cumulative percentage of female adolescents who were already sexually experienced at specified age. Analysis based on descriptive statistics shows that 42.6 percent of the female adolescents aged 15-24 year were already sexually experienced at the time of the survey, and also shows that percentage of ruralurban differential, in a rural area 49.4, and urban area 34.1 percent adolescents were sexually experienced.

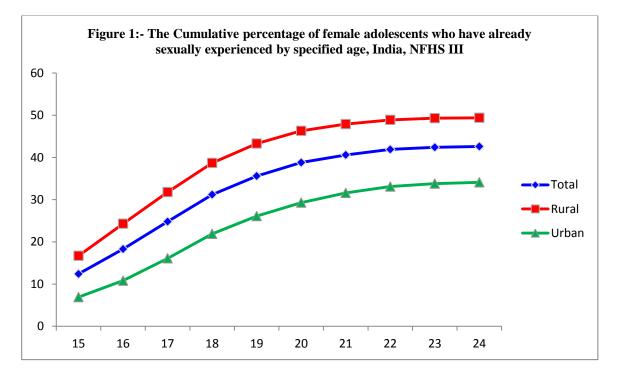
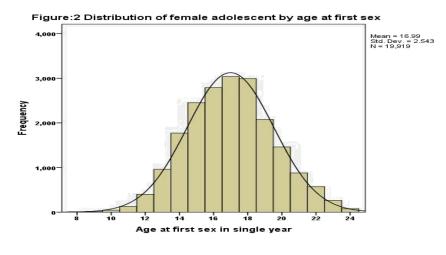


Figure2 Present distributions of the 19919 sexually experienced female adolescents according to how old they were when they had sex. The mean age at first sex is 16.9 with a median of age 17 and with mode 17 year age at first sex. The inception of sexual activity fairly done in very early age; 8 out of 19919 female adolescents had their first sexual debut when they were just 8 years of age.



By age 16, 43 percent adolescent were sexually experienced and by age 18, 73.2 percent were sexually experienced, and by the age 20, 91 percent adolescent were already sexually experienced. In this study also find out nearly 85 percent female adolescent had their first sex with an older partner; 69 percent of them had a partner who was older by less than ten years and 16.3 percent had a partner who was at least 10 or more years older. About 2 Percent of the adolescent had their first sex with same age partner and a very small percentage 0.8 had a younger partner than adolescent. This result shows that women are more likely to sex with the partner who is older than themselves.

demographic characteristics: India, NFHS III		
Background characteristics	Ν	Percentage
Age	14100	10.0
<18	14190	10.8
8-20	15145	41.6
1-24	17477	69.4
Aarital status	27028	0.0
ingle	27038	0.9
ver Married	19258	99.8
Level of education	0005	70 4
No education	9025	73.4
Primary	6209	54.9
Secondary	27045	33.2
ligher	4479	20.5
Place of residence	20010	<u></u>
Urban	20810	34.1
Rural	25952	49.4
Caste		
SC	8125	48
ST	6612	41.8
OBC	15061	46.9
Other	16964	36.5
Religion		
Hindu	32981	44.9
Muslim	7194	42.5
Other	6533	30.9
Aass Media		
Not at all	22956	48.3
Less frequently	7529	43.2
More frequently	16266	34.3
Vealth index		
Poorest	5230	63.3
Poorer	6859	56.3
Middle	9485	46.8
Richer	11737	39.8
Richest	13451	27.2
Region residence		
North	8721	38.2
Central	8931	47.5
East	7102	52.4
Northeast	8410	35.5
West	5765	38.2
South	7833	43.9
Fotal	46762	42.6

VII. RESULTS FOR MULTIVARIATE ANALYSIS

The result obtained through logistic regression model using all sexually experienced adolescent aged 15-24 are presented in **Table 2**. The Model I present the result of only one explanatory variable age. Model II present the result with education, current age and place of residence of adolescent. And Model III includes all explanatory variables. In Model, I and Model II current age has highly significant impact on probability of first sexual debut. In the Model III age group, <18 and age group (18-20) adolescents are low probability or less risk of sexual debut as compared to reference age group (21-24) years of adolescent. Because in Indian context legal age of marriage is after 18 year old and so many adolescent sexual intercourse done in the age group (18-20) and (21-24) year of adolescent period. In the Both Model II and Model III education has a significant impact on age of first sex. Those adolescent who have at least secondary or higher secondary education are low probability of sexual debut than category no education. In Indian context, rural adolescent are more likely than urban adolescent to initiate sexual activity, and this result is a significant impact on probability of age at first sexual debut.

15-24 year by Covariate: India NFHS III 2005-06CovariateModel IModel III				
IVIC		would III		
1.0	1.00	1.00		
0.0		0.024***		
0.0		0.196***		
0.5	0.0215	0.190		
	1.00	1.00		
	0.485***	0.586***		
	0.162***	0.276***		
	0.032***	0.068***		
	0.032	0.000		
	1.00	1.00		
	1.552***	1.322***		
	1.002			
		1.00		
		0.803***		
		0.998		
		0.856***		
		1.00		
		0.808***		
		0.640***		
		1.00		
		0.618***		
		0.389***		
		1.00		
		1.029		
		0.850***		
		0.825***		
		0.741***		
		1.00		
		1.441***		
		1.602***		
		0.95		
		1.296***		
		1.496***		
<0.001, **p<0.01, and *p<0.02	pendent Variable: The First Sexua	1 De		

In model III caste like ST and Other is a significant impact on age at first sex. In ST and Other Caste has less chance or low probability of early sexual initiation and Religion is strongly associated with the first sexual activity. As compared to adolescent in Hindu religion, adolescent in other religion are low probability to initiate sexual activity in early age because in other religion life style is different and Adolescent in other religion are less likely to initiate sexual activity is late as compared to adolescents of Hindu religion. The Muslim religion are less likely to initiate sexual activity is late as compared to adolescents of Hindu religion. The adolescent who have listened Radio/Watching TV/ Reading Newspaper are less likely/ Risk to initiate sexual activity than those adolescent who have not listen Radio/Watching TV/ Reading Newspaper. Household economics status has been the impact on probability of first sexual initiation. The adolescent from abundant family are less like to initiate sexual activity may be because of in India poorest people are engaged in risky sexual behavior and so many bad habits. The Model III also shows that regional variation in first sexual debut. As compared to the reference category adolescent in the north region, adolescent in all other regions like central, east, north east, and west is more likely, or high risk or probability to initiate sexual activity early. For example, adolescent in central (1.4) times, West (1.2) and east (1.6) times are more likely to initiate sexual activity early than reference category north region.

VIII. THE RESULTS OF PERCENTAGE USE OF CONDOM DURING FIRST SEX:

Table 3 depicts result of the percentage of use of condom during first intercourse among sexually experienced adolescent according to background characteristic likes age <18 only 3.5 percent adolescent using a condom during first sexual intercourse and age group 21-24 years adolescents near about 3.3 percent use of condom during first sexual intercourse.

Table 3: Percentage of the study population using c	Table 3: Percentage of the study population using condom during first intercourse according to		
the Background characteris	the Background characteristics: India, NFHS III		
Background characteristics	Ν	Percentage	
Age			
<18	1541	3.5	
18-20	6300	3.1	
21-24	12094	3.3	
Marital status			
Single	257	18.7	
Ever Married	19678	3.0	
Level of education			
No education	6626	1.4	
Primary	3412	2.1	
Secondary	8969	4.3	
higher	918	9.9	
Place of residence			
Urban	7101	4.5	
Rural	12834	2.6	
Caste			
SC	3901	3.2	
ST	2769	2.3	
OBC	7063	2.7	
Other	6202	4.3	
Religion			
Hindu	14828	3.3	
Muslim	3059	2.7	
Other	2048	3.7	
Mass Media			
Not at all	11737	2.1	
Less frequently	4342	4.2	
More frequently	3816	5.8	
Wealth index			
Poorest	3315	1.5	

Timing of Sexual Initiation and...

Poorer	3868	1.5
Middle	4441	2.5
Richer	4641	3.7
Richest	3670	6.9
Region residence		
North	3333	3.9
Central	4251	2.8
East	3723	3.4
Northeast	2984	3.7
West	2207	4.5
South	3437	1.7
Total	19919	3.2
Source: Computed from NFHS III 2005-06 data file		

In **Table 4**, the ever use of contraception among the sexually experienced adolescent (15-24) is fairly high.40.8 percent of them has ever used contraceptive with 32.3 percent adolescent use Modern Method of contraceptive. However, Indian context only 3.2 percent adolescent use condom during their first sexual intercourse. This result indicates that most of the adolescents had engaged in unsafe sexual activity. The current use of contraceptive among the female adolescents (15-24) are fairly low; only 28.3 percent adolescents have reported current use of contraceptive with 4.7 percent of them use pill, 1.8 percent IUD, 0.2 percent injection, 6.2 percent condom , 3.2 percent practicing period absentees and 11.2 percent use another method of family planning. The result indicates low use of contraception among the female adolescents yet contraception offers protection against unwanted pregnancy as well as sexually transmitted infection, including HIV/AIDS. In this paper also see the impact of contraceptive use on the prevalence of HIV/AIDS. Only 22.9 percent adolescents know the way to avoid AIDS using a condom during sex. This results show that low use of condom in sexually experienced adolescents have a high risk of contracting HIV/AIDS.

Table 4: The percentage of contraceptive use among the sexually experienced Adolescents		
Contraception method	Percentage	
Ever use of contraception	40.8	
Modern method	32.3	
Condom used during first sex	3.2	
Current use of contraception	28.3	
Type of contraception		
Pill	4.7	
IUD	1.8	
Injection	0.2	
Condom	6.2	
Period absentees	3.2	
Other method of family planning	11.2	
Way to avid AIDS using Condom during sex	22.9	
Ν	19919	

IX. THE PROBABILITY OF CONDOM USE DURING THE FIRST SEX:

The result of logistic regression analysis of condom use during first sexual intercourse by the sexually experienced adolescents in (Table 5), Logistics techniques are used to see the net influence of independent variable on the dependent variable. In Model I, is only use current age of adolescents. Model II education, age, marital status, and Model III education , age of adolescents, marital status, type of residence, region, caste, wealth index, listening Radio/Watching TV/Reading Newspaper (Mass media) and religion have been taken independent variable. In the age category age group, 18-20 and 21-24 year adolescents are less likely to use contraceptive than adolescents of age group <18 years. It may be because of

adolescents in the age group 18-24 are married and they have not social restriction and social taboo. Obviously the marital status of adolescents is also significant impact on the use of contraceptive. Married women are less likely to use contraceptive during first intercourse than single adolescents. In Model II shows that education significant impact on the use of Condom. The model shows that as level of education increases, the probability of use of Condom during first intercourse is increased. Adolescents who have got at least higher education are 3.3 times more likely to use contraceptive than no educated adolescents. In Model II The type of residence significant impact on the use of contraceptive; the adolescents belong to rural area are less likely to use of contraceptive may be because of in a rural area social stigma attached with the use of contraceptive or fair of community and not easy to assess. In the caste category, ST and OBC adolescents are less likely to use of contraceptive and also in Muslim and other religion adolescents are less likely to use of contraceptive. The adolescent who are using Mass Media are more use of contraceptive adolescent who are belong to abundant family are more likely to use of contraceptive. The regional variation and use of contraceptive is found to be a significant impact in some region like East, and South. Northeast region 1.1 times, east region 1.3 times and West region 1.06 times more likely to use of contraceptive as compared to north region as the reference category.

Covariate	Model I	Model II	Model III
Age			
<18®	1.00	1.00	1.00
18-20	0.889	0.825	0.793
21-24	0.93	0.742*	0.672*
Marital status			
Single®		1.00	1.00
Ever Married		0.168***	0.144***
Level of education			
No education®		1.00	1.00
Primary		1.412**	1.233
Secondary		2.820***	1.861***
higher		6.536***	3.354***
Place of residence		0.000	0.00
Urban®		1.00	1.00
Rural		0.746***	1.024
Caste		0.710	1.021
SC®			1.00
ST			0.537***
OBC			0.808
Other			0.907
Religion			0.907
Hindu®			1.00
Muslim			0.914
Other			0.869
Mass Media			0.009
Not at all®			1.00
Less frequently			1.246**
More frequently			1.345**
Wealth index			1.575
Poorest®			1.00
Poorer			0.881
Middle			1.311
Richer			1.729***
Richest			2.607***
Region residence			2.007
North®			1.00
			0.95
Central East			0.95 1.335*
			1.335*
Northeast			1.069
West			1.069 0.464***
South			0.404****

X. DISCUSSION

The majority of 42.6 percent of Indian adolescents are sexually experienced. The mean age is 16.9 with mode 17 years with the median age at first sex is 17 years. The paper also shows state wise percentage Variation of female adolescents who are already sexually experienced. The bigger state like Jharkhand, west Bengal, Rajasthan, Andhra Pradesh, Haryana, Uttar Pradesh, Chhattisgarh, Karnataka, Tripura, Gujarat, and Maharashtra has high proportion of adolescent had already gone for sexual intercourse. The study also found that the majority of young adolescents are preferred sexual partner who are older than themselves to those who are younger than them. The results show that most of adolescents are engaged in risky sexual behavior, and low use of condom during first sex is about 3.2 percent which is very low and may high risk of STI/RTI and other sexual diseases. The result of multivariate analysis shows that the sexual experience and contraceptive use vary by selected background characteristics. This study found that level of education is negatively associated with early sexual initiation and positively associated with the contraceptive use. The educated adolescents have been delayed to sexual initiate and more likely to use contraceptive during first intercourse. The country like India where age at marriage is low and some stigma attached with age of marriage that why most of adolescent married in age group 15-24 years and it is the main reason of high probability to early sexually initiate and after the marriage sex is legalized through society that why they are less use of contraceptive during first intercourse. Being ever married is positively associated with early sexual activity but negatively associated with contraceptive use. The place of residence are significantly impact on early sexual initiation and contraceptive use, the rural counterpart adolescents are highly likely to early sexual initiate and less likely to use of contraceptive than their counterpart urban adolescent. The regional variation also seen in sexual initiation and contraceptive use, regions are positively associated with the sexual initiation and use of contraceptives. However the economic status of adolescent and Mass media exposure are positively associated with lower level probability of early sexual initiation and same time it is highly associated with high probability of contraceptive use. This result shows that there is a need to create awareness about reproductive right and health and to promote contraceptive use. It may be help to reduce probability sexual infection like STI/RTI and unwanted pregnancy.

CONCLUSION XI.

These results pointed toward the need to educate adolescents about reproductive health and health attitude toward sexuality, there is need to delay onset of sexual activity and marriage and also decreases risky sexual practices. They have different needs and problem, need to create awareness through sexual education in younger age, and also gives information about the impact of early sexual initiation, sexually transmitted diseases and HIV/AIDS. Similarly, encourage sexually experienced adolescent to have access of contraceptive to use including condom to prevent them from STI/RTI/AIDS and unwanted pregnancy. It is necessary to take effort to organize awareness program related reproductive health and sexual behavior and it should be intensified through use of Mass media, print media for create awareness. We all well knows adolescent are future of the country and it is necessary to pay attention towards them.

REFERENCES

- [1]. Abraham, L., & K., A., Kumar. (1999). Sexual experiences and their correlates among college student in Mumbai city, India. International family planning perspectives, 25(3): 139-46.
- [2]. Adolescent profile of India by UNFPA. (2000). Retrieved from www.unfpa.org/focus/india/facetoface/docs/adolescentsprofile.pdf.
- [3]. Adolescent Sexual Health and Behavior in the United State. (2000). Retrieved from www.adocateforyouth.org.[4]. Audinarayana, N. (2006). Sexually transmitted infections among young men hosiery workers of Tamil Nadu. In C.P. Prakasham and Raju Siva S. (eds), Adolescents reproductive health perspectives. New Delhi: B.K. Publishing Corporation.
- [5]. Bhende, A., A. (1994). A study of sexuality of adolescent girls and boys in underprivileged groups in Bombay. The Indian Journal of Social Work, LV (4): 557-571.
- [6]. Bledose, C., H., & Cohen, B. (1993). Social dynamics of adolescent fertility in sub-Saharan Africa. Population dynamics of Africa, Washington D.C National academy press, Pp45-56.
- [7]. Bloch, D., & Derryberry, M. (1971). Effect of political controversy on sex education research: A case study. Family Coordinator, 259-264
- [8]. Gangakhedkar, R. R., Bentley, M. E., Divekar, A. D., Gadkari, D., Mehendale, S. M., Shepherd, M. E,& Quinn, T. C. (1997). Spread of HIV infection in married monogamous women in India. Jama, 278(23), 2090-2092.
- [9]. International Institute of Population Sciences. National family health survey 1998- 99. Mumbai: IIPS, 2000.
- [10]. Jejeebhoy, S. J. (1998). Adolescent sexual and reproductive behavior: a review of the evidence from India. Social Science & Medicine, 46(10), 1275-1290.
- [11]. Lawrence, D., E., Ikamari, & Rose, Towett. (2007. The sexual initiation and contraceptive use among female adolescents in Kenya. African Journal of Health Science, Volume 14.Pp 113.
- [12]. Government of India National population policy (2000). Ministry of Health and family welfare India.
- [13]. Jain, P., Nutan., Gupta, S., D., & Singh, L., P. (2004). Meeting reproductive and sexual health needs of adolescents": A strategic approach for Rajasthan, India. IIHMR, Working Paper No. 4. Jaipur: Indian Institute of Health Management Research.
- [14]. Gupta, S.D. (2003) Adolescent reproductive health in India: status, policies, programs and issues, Policy Project, January (2003), Pp. 1-31.
- [15]. Ram, Usha. (2000): Contraceptive Use among Young Married Women in India. Paper presented in international conference on family planning: Research and Best Practicesat Munyonyo, Uganda. Pp1-27.
- [16]. Vlassof, C (1987). Awareness and assess to reproductive care among adolescents. Retrieved from http://iussp2009.princeton.edu/papers/91518.