

# Adolescent Boys Reproductive & Sexual Health : A Geographic Rural- Urban Perspective

## Abstract

Adolescence is a crucial period in the life of an individual. Between 10 and 19 years of age many key biological, social, economic, demographic and cultural events occur that set the stage for adult life. What happens during adolescence determines how boys and girls will live as men and women not only in the sphere of reproduction, but in the social and economic realm as well. This makes it imperative to understand adolescents' needs, which, surprisingly, have so far been given little importance in policy and programmes in several countries. Several factors contribute to the adolescents' growth. These factors range from the social, economic, cultural, geographical and political conditions of wider society to those characterising the conditions of adolescents including family, education, income, rural-urban etc.

**Keywords:** Adolescence, Reproductive, Condom, Safe Sex, Stress, Anxiety, Household Activities, Rural, Urban

## Introduction

Awareness and knowledge are considered to some of the most critical determinants of health. It is particularly important for the health issues which are closely related to the behaviors of people. The knowledge and awareness provides inputs for changing health behaviors of the people, by removing misconceptions, providing new information, motivating for adopting new behaviors and stopping the harmful practices. The role of knowledge and awareness in decision-making is well established. Reproductive health and sexual behaviors and safe practices for preventing HIV/AIDS require adequate and timely information and knowledge to influence the behaviors. Government and other non-government organization throughout the country are making serious efforts to create awareness and knowledge for this purpose.

## Review of Literature

In a study (Kim *et al.*, 2004), to compare geographical difference in the prevalence of isolated systolic hypertension (ISH) in between urban (Ansan) and rural (Ansung) Korean adults aged 40–69 years, 4351 men and 4604 women enrolled in the Korean Health and Genome Study were analysed. A recent study revealed that (Papiya, *et al.* 2009) the women from inaccessible villages in the Sunderbans were observed having multi-faceted difficulties in access to health services. Another study on —Rural-Urban Differences in Access to Iowa Child Health Services (1998) found large differences in urban and rural areas. A few studies on youth sexuality in India that are available have been reviewed in detail in Nag (1994) and Jejeebhoy (2000). Many studies indicate that young people are poorly informed about such basic sexual and reproductive health topics as reproductive psychology, contraception, human immunodeficiency virus/acquired immune deficiency syndrome (HIV/AIDS) (for example – NFHS, 1992-93; RCH-RHS,1997; Gupta, 1998, etc.).

## Study Area

The study was carried out in Ajmer district of Rajasthan. Rajasthan has been chosen since it is one of most critical state regarding various demographic, socio-cultural, economic and infrastructural parameters. Ajmer district is located in the center of Rajasthan state between 25° 38' and 26°58' north latitudes and 73° 54' and 75° 22' east longitudes. It is bounded on the north by Nagaur district, on the south by

**Balwan Singh**  
Assistant Professor,  
Deptt.of Geography  
Govt. College,  
Karnal, Haryana

# Periodic Research

Bhilwara district, on the east by Jaipur and Tonk districts and on the west by Pali district. Ajmer district has a triangular shape.

### Study Design and Methodology

The study is quantitative in nature, and is based on a sample survey of adolescent boys from urban and rural areas of Ajmer district. The urban sample was drawn from different localities of Ajmer town, while the rural sample was drawn from the selected villages within Ajmer district. The methodology involved cross sectional sample survey of adolescents boys in the age-group of 13-19 years. It was decided to select this age-group since it is important from the point of view of studying sexual behavior.

The sample size for the study has been determined at 300 adolescent boys, taking an equal proportion from urban and rural areas. The sample size has been determined based on the variable of knowledge about safe sex practices' and taking 95 per cent level of confidence. The data was collected from 3 different localities in Ajmer town and 3 villages of Ajmer block. The urban localities (urban wards) and villages was selected through the PPS technique, taking sample in proportion to the population. The data was collected in structured schedules, which was pretested before data collection. The analysis of data was done using SPSS software of data analysis. Appropriate statistics was used while analyzing and interpreting the study findings.

### Objectives of the Study

1. To study the knowledge and awareness of adolescent boys regarding reproductive and sexual health issues.
2. To study the differentials in knowledge, awareness and practices of adolescent boys living in rural and urban areas.

The misconceptions and wrong information rotates from one to another person in their peer groups. The reasons why such misconceptions are higher in rural areas is mainly the lack of accessibility to the information and services. Rural boys specifically do not have means to verify the information even if they perceive it wrong.

### Night Emission

It is an involuntary ejaculation of semen after erection at night during a dream. As the erection and ejaculation may have resulted from sexual excitement during a dream it is also called a 'wet dream'. They are embarrassed by finding their undergarments wet and sticky in the morning after emission. Some fear that it is a 'rog', a disease. Some of them even think it to be a venereal disease and something to be ashamed about. The myth is further propagated by sex quacks who freely advertise it as 'swapna dosh' – a defect during dreams – and numerous medications all mysterious add an aura to the mystery of this simple fact of science. The fact is that erections of the penis at night are a regular phenomenon – a sort of nervous conditioned reflex. Sometimes, it can be seen even in a male baby. When semen starts forming in adolescence as the testes and other glands start functioning the erection is followed by ejaculation

of semen. This is quite normal and no physical or mental harm can come from them. If a person is ignorant of the normal sexual process, he will be bewildered at what is happening to him and may turn to bogus literature on sex or go to quacks for an answer.

In this study, the reporting of night emission was higher among urban adolescents as compared to the rural ones. Nearly 45 per cent of urban and 35 per cent of the rural boys reported experiencing night emission as depicted in Table 1.

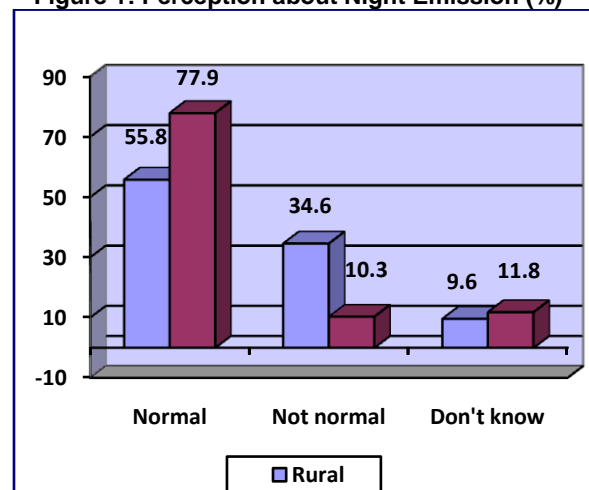
**Table 1**  
**Perception about Night Emissions**

	Number	Percent
<b>Rural</b>		
Percent reported night emissions	52	34.7
<b>Perception about night emission</b>	<b>n=52</b>	
Normal	29	55.8
Not normal	18	34.6
Don't know	5	9.6
<b>Urban</b>		
Percent reported night emissions	68	45.3
<b>Perception about night emission</b>	<b>n=68</b>	
Normal	53	77.9
Not normal	7	10.3
Don't know	8	11.8

Source: Data collected under this Study.

Most of the boys experienced first night emission around 15-16 years of age; this was commonly reported in both the geographical areas, urban and rural.

**Figure 1: Perception about Night Emission (%)**



Though night emission is a natural physiological process, due to lack of proper knowledge several adolescent boys get quite embarrassed or frightened with this. Table 1 also indicates that only 56 per cent of the rural adolescents are aware that this is a normal physiological process, while the corresponding figure for urban adolescents was 78 per cent. Nearly one-third of the rural boys

and 10 per cent of the urban perceive it as an abnormal happening, and the remaining did not know whether it is a normal process or something abnormal.

Hence, the misconceptions are prevalent in both the geographical areas, however comparatively it was higher in rural areas as compared to the urban areas.

### Awareness and Use of Condom

Under the backdrop of increasing prevalence of STDs and HIV/AIDS among youth, it is imperative that knowledge of the safe sex practices be imparted to them. One of the safer sex practices is the use of condoms. Hence, use of condom has been considered as a useful means to prevent HIV/AIDS as well as RTIs and STIs. However, studies to assess the knowledge and attitude of youth indicated that only a small number uses condom. However, the level of knowledge is found to be significantly higher in urban areas as compared to rural areas (Gupta 2000). It has been established that adolescents are less likely than people over age 20 to use contraceptive methods. Reasons for this include lack of information, misinformation, poor access, hitch, lack of ability to negotiate, etc.

In this study, an effort was made to assess the level of awareness as well as use of condom among urban and rural respondents, who reported having engaged in sexual activities. It revealed that the level of awareness about condom was high among urban boys as 76 per cent of them were aware of this method (Table 2). However, only 63 per cent of the rural boys, who had sexual activities, had heard about condom.

**Table 2**  
**Awareness and Use of Condom**

Adolescent Groups	Number	Percent
<b>Percent know about condom*</b>		
Rural	17	63.0
Urban	25	75.8
<b>Percent used condom*</b>		
Rural	2	7.4
Urban	6	18.2

**Source:** Field Work.

*Note :\** Of those who had sex( Rural=27 and Urban=33)

Of those who were involved in sexual activities, only a small proportion of boys reported use of condom during sex. Only 7 per cent of the rural respondents reported use of condom, while the corresponding figure for the urban respondents was 18 per cent, which also seems to be quite low.

The discussions during the study revealed that the cultural sensitivity regarding condom is still high since its use is directly related to the sexual act. Open display of condoms in pharmacies, stores and clinics and open discussions about it are still avoided as far as possible. Boys using it have to take extra precautions to see that no one come across while obtaining it from the sources. Buying a condom from a pharmacy or a store or getting it from a clinic is still a matter of great embarrassment for most of them.

However, this problem is less in case of urban areas due to availability more number of shops at different places.

Another major reason for non-use of condom was reported to be the unplanned and unintended involvement into sexual activity. In most of the cases, sex among adolescent is subject to the availability of appropriate opportunity, and hence, is mostly unplanned. Another important reason for non use of condom was came out to be the 'loss of sexual pleasure', especially when the quality of condom is not appropriate. The discussions revealed that attitudes and beliefs are changing towards more liberal sexual morals, and that this includes beliefs regarding condom use. Given the fact that there is a strong belief in their efficacy, the skills to implement these beliefs are critically needed.

Education and exposure to the mass media also seems to play important role with regards to the likelihood of contraceptive use during sexual initiation among adolescents. During the discussion, lack of knowledge appeared to be a particularly strong barrier to use of condom. Some of the respondents did not use condom during intercourse simply since they did not know about it or about the source to obtain it. Some of them did not know how to use it.

The above analysis indicates that there are differences in the knowledge and use of condom between two types of geographical locations.

### Perception about Safe Sex

Safe sex is a sexual relationship in which there is minimal chance of contracting STD/HIV. In other words, this is a term used to describe certain things which people do or are advised to do to reduce the risk of acquiring sexually transmitted diseases and HIV infection. Penetrative sex tends to have a higher risk of acquiring STDs/HIV. This can also be reduced by using condom. Such practices are called — safe sex practices.

Table 3 depicts that very few of the adolescents, both in rural and urban areas were aware about what is meant by safe sex. In rural areas, 44 per cent of the respondents perceive that having sex with single partner is called safe sex. Around 13 per cent believe that not having sex with prostitutes is safe sex.

**Table 3**  
**Perception about Safe Sex**

Perceptions : Safe sex means:	Number	Percent
	<b>Rural</b> N=150	
Never having intercourse	2	1.3
Using condom during intercourse	8	5.3
Having sex with single partner	66	44.0
Not having sex with prostitutes	20	13.3
Not having anal sex	8	5.3
<b>Urban</b> N=150		
Never having intercourse	3	2.0
Using condom during intercourse	44	29.3
Having sex with single partner	61	40.7
Not having sex with prostitutes	14	9.3
Not having anal sex	10	6.7

**Source:** Field Work.

Some of them also believe that never having intercourse or not having anal sex is safe sex. Only 5 per cent of the rural adolescents were aware that using condom during intercourse is safe sex. Hence the knowledge about the real meaning of safe sex was known to only a small proportion of the rural respondents.

The knowledge about the meaning of safe sex was although low in urban areas also, but was higher as compared to their rural counterparts. In urban areas more than 29 per cent were aware that using condom during the intercourse is called safe sex. However, as many as 40 per cent of the respondents said that having sex with single partner is safe sex. Similarly around 9 per cent said that not having sex with prostitutes is safe sex, with around 7 per cent said that not having anal sex is safe sex. It indicates that the level of awareness about the actual meaning of safe sex is low in urban areas also.

### Test Statistics

Perceptions : Safe sex means:	Percent reporting perception		Z* Values
	Rural N=150	Urban N=150	
Never having intercourse	1.3	2.0	-0.330
Using condom during intercourse	5.3	29.3	-5.616
Having sex with single partner	44.0	40.7	0.614
Not having sex with prostitutes	13.3	9.3	1.233
Not having anal sex	5.3	6.7	0.558

Source: Field Work.

Note : \* Alpha = 0.05, two tailed. Z (critical) =  $\pm 1.96$ .

The test statistics indicates that the differences in perceptions among rural and urban boys regarding safe sex were not statistically significant, except for use of condom.

With impending danger of AIDS pandemic in India, mainly through unprotected sex, an intervention programme for much wider use of condom than present, particularly adolescents who have sex, is a matter of urgent priority. The government has already taken steps to enhance the production of better quality condoms which resist rupture and diminishes the loss of pleasure in sexual intercourse. More, however, can be done to promote the romantic and pleasure aspect of condoms by taking clues from packaging and advertising strategies successfully adopted for the promotion of commercially manufactured condom brands.

The discussions with the adolescents revealed that providing better education and counseling to people regarding proper usage of condom and making it more easily available impinge on a cultural domain but cultural change through appropriate programmatic actions are not unfeasible. Cultural sensitivity of condom can be mitigated by creatively using traditional and modern media to propagate educational messages with empathy, humor and respect for human dignity.

### Time Spent on Different Activities

The growth and development of younger generation is influenced by various activities that they perform in their daily routine. Over burden of physical and mental activities may lead to stress, while an inadequate physical and mental exercise may curb their growth and development. Appropriate time spent on studies helps in their career development, whereas games, sports and physical exercise contribute to their physical growth. Adolescents that are over burdened with household activities may not get opportunities to spend time on their career development and physical and mental growth. In this study an analysis was done to assess how the adolescent boys and girls are engaged in different activities and what proportion of the time they spend on these activities in their daily routine. For this purpose, mean hours spend on different activities has been calculated. To assess the difference in the means of boys and girls, Z values were also computed, with Alpha set at 0.05 level, as depicted in table 4.

The analysis indicates that in agriculture related activities, urban boys spend on an average one and half hours, whereas rural respondents spend almost five hours on activities related to agriculture or farming (Table 4). Similarly, rural boys spend more time as compared to urban boys on taking care of cattle, which is also a kind of household activity.

Table 4

Mean Hours Spent by Boys on Different Activities

Activities	Mean hours spent and SD		Z* Values
	Rural	Urban	
Agriculture related work	4.88 $\pm$ 2.52	1.57 $\pm$ 1.27	14.318
Taking care of cattle	2.18 $\pm$ 2.11	1.37 $\pm$ 2.63	2.932
Care for self (taking bath, meals, etc.)	2.67 $\pm$ 2.29	3.51 $\pm$ 2.52	-3.011
Studies at school	4.15 $\pm$ 3.69	5.63 $\pm$ 3.07	-3.764
Studies at home	1.65 $\pm$ 2.53	3.20 $\pm$ 3.86	-4.099
Entertainment (watching TV, listening songs, playing etc.)	1.16 $\pm$ 2.19	2.19 $\pm$ 3.17	-3.263
Sleeping	5.06 $\pm$ 4.35	5.09 $\pm$ 4.35	0.059
Household	1.11 $\pm$ 3.66	1.01 $\pm$ 4.52	0.209
Other	1.25 $\pm$ 1.83	1.11 $\pm$ 0.69	0.874

Source: Field Work.

Note : \* Alpha = 0.05, two tailed. Z (critical) =  $\pm 1.96$ .

The test statistics indicates that the mean hour spent on these activities was significantly higher among rural respondents as compared to urban respondents.

It may be observed that the urban boys are able to spend more time on studies as compared to rural ones. A large difference can be noted in the time spent on studies at home, which is almost double in case of urban as compared to rural (1.65 for rural and 3.20 for urban).

The difference in the time spent on studies at school as well as at home is statistically significant. This may be because the rural respondents spend more time on agricultural and animal husbandry related activities and get less time for studies. Similarly, urban boys are able to spend significantly more time on entertainment, like watching TV, listening songs, going for movies etc. No significant difference was found between the average time spent by rural and urban boys in sleeping, household activities and other activities.

### Stress and Anxieties

Although exposure to some negative events is considered a normal part of development, stressful life experiences can threaten the well-being and healthy development of children and adolescents. Adolescents, in particular, are exposed to high rates of stressful life experiences (e.g., romantic break-ups, community violence, date rape), and there is some evidence that increases in stressors account, at least in part, for the increased rates of psychological problems adolescents experience (e.g., depression, conduct disorder, substance abuse) (Kathryn, *et al.*, 2005).

Few constructs in mental health have been as important, yet as difficult to define, as the concept of stress. The common theme across all prevailing definitions of stress is a focus on environmental events or conditions that threaten, challenge, exceed, or harm the psychological or biological capacities of an individual (Cohen, Kessler, & Gordon, 1995). In recent decades, the most widely accepted definition of stress has been the transactional definition offered by Lazarus and Folkman (1984): —Psychological stress involves a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well being.

Children and adolescents who come from low socioeconomic status (SES) backgrounds are at higher risk for a variety of health problems. Beyond the health problems that can be attributed to limited health care, environmental pollutants, and poorer nutritional status, the health of low SES adolescents may be compromised by the psychological impact of growing up poor. Stress, for example, is one psychological factor that has been related to both lower SES and poorer health. Stressful and unpredictable negative life events occur more frequently in low versus high SES adolescents. The stressful environments in which low SES adolescents are raised may lead them to think about the world as a threatening place requiring heightened vigilance (Chen and Margaret 2005). This vigilance may lead adolescents to interpret social situations as threatening, particularly when the situation is ambiguous.

Due to psychological, biological and other changes, adolescence can be the most volatile and difficult stretch of life. Rebellious and provocative behavior, isolation, withdrawal, strange obsessions etc. are not uncommon during this period. Development of sexual drives, peer pressure, love-

hate relationship with parents, uncertainty of career, stress of studies, etc. are some of the factors that cause immense stress, distress and anxieties among adolescents (Chen and Margaret 2005). These anxieties affect their quality of life to a great extent. In this study an attempt was made to assess the level of anxieties among adolescent boys and girls.

It is surprising that around 19 per cent of urban and 35 per cent of the rural boys in the study area reported feeling some kind of anxiety (Table 5). The prevalence of anxieties is much higher among the respondents living in urban areas as compared to those living in rural areas. The test statistics show a significant difference in proportion of urban and rural respondents, which suggests that the level of anxiety is influenced by the geographical differences in terms of rural or urban residence.

Table 5 depicts that out of those who had anxiety 64 per cent of rural and 28 per cent of urban boys have anxieties related to education. It may be observed that although there is not much difference in the anxieties caused by education among rural and urban respondents, but there is large difference between these two groups in the anxieties related to carriers. It was 39 per cent in rural areas and as high as 66 per cent in urban areas.

**Table 5**  
**Anxieties among Adolescents**

	Number	Percent
<b>Rural</b>		
Percentage of adolescents feeling anxiety	28	18.7
<b>Reported causes of anxiety (percent)*</b>		
<b>(n=28)</b>		
Education related	18	64.3
Career related	11	39.3
Love affair related	5	17.9
Family related	9	32.1
Health related	4	14.3
Others	5	17.9
<b>Urban</b>		
Percentage of adolescents feeling anxiety	53	35.3
<b>Reported causes of anxiety (percent)*</b>		
<b>(n=53)</b>		
Education related	15	28.3
Career related	35	66.0
Love affair related	12	22.6
Family related	15	28.3
Health related	5	9.4
Others	6	11.3

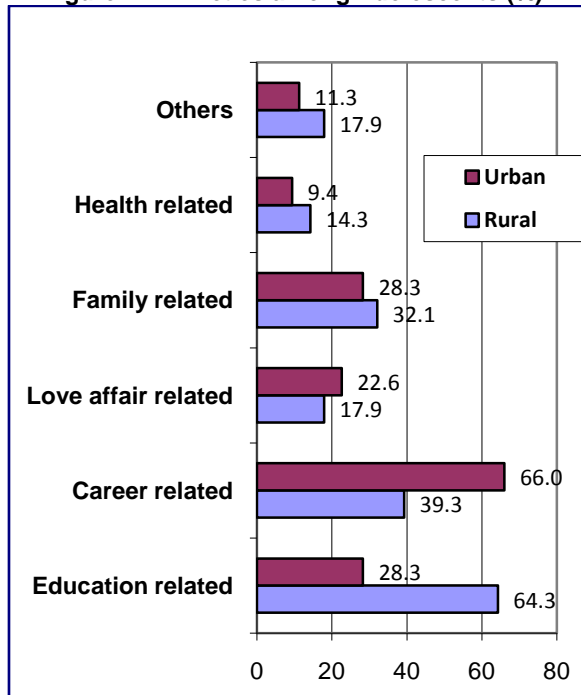
**Source:** Field Work.

**Note :** (Multiple Response)

\*Out of those who reported anxiety

It clearly suggests that the adolescents living in urban areas have much higher level of anxieties related to their careers. Anxieties related to love affairs was 18 per cent and 23 per cent respectively in rural and urban areas, having a statistically significant difference. A small proportion of respondents in both the groups also had anxieties related to their health, although the difference was insignificant.

**Figure 2 : Anxieties among Adolescents (%)**



It may be noted that except for the education related anxieties, all other kinds of anxieties are more prevalent among urban residents as compared to their rural counterparts.

**Test Statistics**

	Z value
Percentage of adolescents feeling anxiety	-3.228
<b>Reported causes of anxiety (percent)</b>	
Education related	4.333
Career related	-4.631
Love affair related	-1.013
Family related	0.717
Health related	1.313
Others	1.619

**Source:** Field Work.

**Note :** (Multiple Response)

Many of the stressful life events and daily hassles of adolescence are similar for youths despite differences in cultural background or place of residence. In neighbourhoods and schools across the region, adolescents face pressures to be accepted by peers, battles with parents over rules, fallouts with friends, difficult family transitions due to parental divorce, and frustrations with schoolwork and teachers. However, in addition to these common experiences, adolescents from diverse cultural groups often encounter unique challenges that arise from the particular cultural-ecological niches they inhabit by virtue of their ethnic group membership and other context-defining factors, such as their families' socioeconomic status, history of immigration, integration with mainstream and ethnic communities, and the location of their neighbourhoods and schools. For some adolescents, these factors combine to offer increased opportunities for development of competencies that enable them to become productive

young adults, uniquely prepared for the demands of an increasingly multicultural, global society. Too often, however, these factors expose youth to chronic adversities and cumulative stressors that overwhelm their coping abilities and contribute to the troubling health, educational, and occupational disparities that exist for minority populations (Nacy et al., 2005).

**Conclusion**

Lack of access to sexual and reproductive health information and services can lead to unwanted pregnancies and unsafe abortions. The fact that young people, even in urban areas, do not have adequate information and services in sexual and reproductive health is a great cause of concern in the area of the HIV/AIDS pandemic. The study also outlines that the role of geographical accessibility should always be studied together with health-need of the population, failing of which might attach undue importance to it. The best policy directives could reflect on initiatives that facilitate overcoming of geographical hurdles faced by the people, who are anyway observed accessing services having the utmost felt-needs for it.

**References**

1. Abraham, Leena (2001), "Understanding Youth Sexuality: A Study of College Students in Mumbai City", *The Indian Journal of Social Work*, Vol. 62, Issue 2, pp. 233-248.
2. Arokiasamy, P. (2004), "Regional Patterns of Sex Bias and Excess Female Child Mortality in India", *Population*, Vol. 59, pp. 831-863.
3. Baker, Perry and Will, Gesler (2000), "Physical Access to Primary Health in Andean Bolivia", *Social Science and Medicine*, Vol. 50, No. 9, pp.1177-1188
4. Bansal, R.K. (1992), "Sexual Behaviour and Substance Use Patterns among Adolescent Truck Cleaners and Risk of HIV/AIDS", *Indian Journal of Maternal and Child Health*, Vol. 3, No.4.
5. Cromley, R.G and Ellen K. Cromley (2009), "Chloropleth Map Legend Design for Visualizing Community Health Disparities". *International Journal of Health Geographics*. Vol. 8, No52.
6. Jejeebhoy, S. J. (2000), "Adolescent Sexual and Reproductive Behaviour : A Review of the Evidence from India", in Ramasubban and Jejeebhoy (eds.), *Women's Reproductive Health in India*, Rawat Publications, Jaipur.
7. Kim et al., 2004
8. Nag Moni (1994), "Sexual Behaviour and AIDS in India: State-of-the-Art", *The Indian Journal of Social Work*, Vol. LV, No. 4.
9. Papiya G. Mazumdar, Barun Kanjilal, Debjani Barman, and Arnab Mandal (2009), *Revisiting the Role of Geographical Accessibility in Women's Access to Healthcare*, IHMR, Jaipur.
10. Rosero-Bixby, Luis (2004), "Spatial Access to Healthcare in Costa Rica and Its Equity: A GIS-based Study", *Social Science and Medicine*, Vol.58, No.7, pp.1271-1284.