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Original Research Article

The effect of Literacy and Socio-economic status on issues related to adolescent girls

Nilesh Gothi[1], Gorav Yadav[1]*, Aditi Gothi[2]

[1]Department of Pediatrics, [2]Department of Preventative and Social Medicine, Dungarpur Medical College, Dungarpur, Rajasthan, India

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***Correspondence:**
Dr. Gorav Yadav,
E-mail: drgothinilesh@gmail.com

ABSTRACT

Background: HIV/AIDS therefore is the most devastating disease and is getting worst instead of better. Girls and young women are highly vulnerable to HIV/AIDS and lack of education makes them more so. The aim of this study to assess the effect of Literacy and Socio-economic status on issues related to adolescent girl's Reproductive and Sexual Health like menstrual hygiene, knowledge regarding reproduction, STD, AIDS in urban slums.
Methods: This is a observational community based cross –sectional study carried -out on all the Adolescent girls married and unmarried from the age group above 13 to 19 years residing in the defined area. House to house survey of the eligible subjects was done by the researcher herself using a pre-designed and pretested schedule.
Results: Out of total 376 respondents, majority 310 (82.44%) of adolescent girls knew about HIV/AIDS. most of the girls (69.67%) considered 'Sharing contaminated needles' as common mode of HIV/AIDS transmission out of which 86.57% were from above primary and 13.42% were from up to primary educational group. Most of the girls (69.67%) knew 'Sharing contaminated needles as common mode of HIV/AIDS transmission. Our study shows that, most of the respondents (72.69%) wanted to know more about methods of prevention, out of which 63.45%, 29.44% and 7.10% girls were from lower, middle and higher SEC respectively.
Conclusions: Adolescent girls undergo physical, emotional and psychological changes. Many doubts and questions arise in their minds especially regarding reproductive and sexual health leading to worries and anxieties. The various levels where interventions can be applied to improve adolescent girl's reproductive and sexual health.

Keywords: Adolescent girls, AIDS/HIV, Literacy, Socioeconomic status

INTRODUCTION

The Health problems of adolescent girls has been neglected, as they are considered generally less vulnerable to Disease than younger children. Biologically, adolescence proceeds through three distinct periods - early, middle and late. Each period marked by a characteristic set of salient biological, psychological and social features. Though, individuals vary both in terms of timing of somatic changes and quality of adolescence experiences. Many factors, internal or external, influence the health and development of adolescents which are likely to lead to high risk behavior and subsequently to health and development problems.

Gender based discrimination, urbanization and migration, poverty, unemployment, social values and norm, war and emergencies are some factors that impact adolescent health and development. Inadequate education and skill, poor access to health information and services, unsafe and unsupportive environment and exploitation and abuse are some other immediate causes facilitating high risk

behavior. This period is traditionally viewed as a time of optimal health with low levels of morbidity and chronic diseases.[1] HIV/AIDS therefore is the most devastating disease and is getting worst instead of better. Girls and young women are highly vulnerable to HIV/AIDS and lack of education makes them more so.

In India, around 2.3 million people are living with HIV. Of these, an estimated 39% are female and 3.5% are children.[2] However subsequent study report that 2.4 million Indians are HIV positive.[3]

According to UNFPA, 2004, those in age group 10-20 years have not formed their risk behavior patterns as compared to those above 20 years, therefore it is possible to educate and prevent the youth in this group of 15-20 to form their behavior on the basis of information and knowledge related to HIV/AIDS transmission.

Despite the high level of sexual activity among adolescents, research on reproductive and sexual awareness and attitude in India as well as globally was lacking but now the adolescent problems are one of the agendas of health planners and professionals as a part of reproductive and child health program supported by WHO, UNFPA, IPA AND UNICEF. In India adolescents find themselves sandwiched between glamorous western influence and stern conservation at home which strictly forbids discussion on their curiosities and instincts about sexuality, thus aggravating their confusion.

Also, they feel guilty if indulged in sexual act out of social norms and its association with lack of knowledge leads to anxiety and sometimes frustration. Changes in population growth and distribution, the rise of telecommunication, the increase in travel, and a decline in the institution of family as well as early start of menarche and later age of marriage may contribute to unprotected sexual relations before marriage thereby leading to reproductive health problems.[4]

The aim of this study to assess the effect of Literacy and Socio-economic status on issues related to adolescent girl's Reproductive and Sexual Health like menstrual hygiene, knowledge regarding reproduction, STD, AIDS in urban slums.

METHODS

This is a observational community based cross-sectional study carried -out on all the Adolescent girls married and unmarried from the age group above 13 to 19 years residing in the defined area.

Inclusion criteria

- All adolescent girls of study population between age group 13-19 years.

Exclusion criteria

- Those who were non-respondents and refused to give consent and below 13 years of age.

House to house survey of the eligible subjects was done by the researcher herself using a pre-designed and pretested schedule. In the survey detailed in-depth interview of the subjects was conducted regarding their knowledge about reproductive and sexual health and attitude and practices related to it.

Data collection and statistical analysis. The data generated was analyzed using computer software and appropriate tests were applied.

RESULTS

Out of total 376 respondents, majority310 (82.44%) of adolescent girls knew about HIV/AIDS. most of the girls (69.67%) considered 'Sharing contaminated needles' as common mode of HIV/AIDS transmission out of which 86.57%were from above primary and13.42% were from up to primary educational group. Only (18.38%) girls considered 'From mother to her breast-feeding child' as modes of HIV/AIDS transmission (Table 1).

Table 1: Distribution of Adolescent Girls according to their Knowledge about Modes of Transmission of HIV/AIDS and their literacy.

Modes of transmission	Up to primary	Above primary	No. (%) (N=310)
Physical relation with HIV/AIDS patients	20 (9.80)	184 (90.19)	204 (65.80)
Using infected blood for transfusion	28 (14.50)	165 (85.49)	193 (62.25)
Sharing contaminated needles	29 (13.42)	187 (86.57)	216 (69.67)
From infected mother to unborn child	16 (10.32)	139 (89.67)	155 (50)
From mother to her breast-feeding child	8 (14.03)	49 (85.96)	57 (18.38)
Responses obtained per respondent	2.66		

Most of the girls (69.67%) knew 'Sharing contaminated needles as common mode of HIV/AIDS transmission, out of which 61.11, 32.40% and 6.48% girls were from lower, middle and higher SEC respectively (Table 2).

Table 2: Distribution of Adolescent Girls according to their Knowledge about Modes of Transmission of HIV/AIDS and their SES. *

Modes of transmission	Lower	Middle	Higher	No. (%) (N=310)
Physical relation with HIV/AIDS patients	121 (59.31)	71 (34.80)	12 (5.88)	204 (65.80)
Using infected blood for transfusion	108 (55.95)	72 (37.30)	13 (6.73)	193 (62.25)
Sharing contaminated needles	132 (61.11)	70 (32.40)	14 (6.48)	216 (69.67)
From infected mother to unborn child	94 (60.64)	49 (31.61)	12 (7.74)	155 (50)
From mother to her breast-feeding child	30 (52.63)	22 (38.59)	5 (8.77)	57 (18.38)
Responses obtained per respondent	2.66			

Out of total 376 respondents, majority (82.44%) of adolescent girls knew about HIV/AIDS. Majority (20%) of the girls considered the myth of 'touching the infected blood and hugging the infected patient' as the mode of disease transmission out of which 83.87% were from above primary and 16.12% were from up to primary educative group (Table 3) and most (60%) of the girls had the knowledge of 'Not sharing needle/syringe' as the preventive method, of whom 87.09% and 9.67% were from above primary and up to primary educational group respectively (Table 4).

Table 3: Distribution of adolescent Girls according to Myths about modes of transmission of HIV/AIDS and their literay. *

Myths about modes of transmission	Up to primary	Above primary	No. (%) (N=310)
Sharing toilet with HIV/AIDS patient	1 (12.5)	7 (87.5)	8 (2.58)
By insect bite	2 (9.52)	19 (90.47)	21 (6.77)
Kissing the HIV/AIDS patient	5 (17.85)	23 (82.14)	28 (9.03)
Shaking hands with HIV/AIDS patient	1 (4.76)	20 (95)	21 (6.77)
Sharing utensils with HIV/AIDS patient	1 (6.25)	15 (93)	16 (5.16)
By using public toilets	1 (12.5)	7 (87.5)	8 (2.58)
Living with HIV/AIDS patient	3 (20)-	12 (80)	15 (4.83)
Touching the blood of HIV/AIDS patient	4 (12.90)	27 (87.09)	31 (10)
Hugging the HIV/AIDS patient	6 (19.35)	25 (80.64)	31 (10)
Responses obtained per respondent	0.57		

Table 4: Distribution of Adolescent Girls according to their knowledge about methods of prevention from HIV/AIDS and their literacy.*

Methods of prevention	Up to primary	Above primary	No. (%) (N=310)
Safe sex by using condoms	7 (6.19)	106 (93.80)	113 (36.45)
Sex with only one partner	13 (9.28)	127 (90.71)	140 (45.16)
Do not share needles/syringes	18 (9.67)	162 (87.09)	186 (60)
By using only safe and lab checked blood	15 (10.13)	133 (89.86)	148 (47.74)
HIV/AIDS women should avoid pregnancy	9 (10.34)	78 (89.65)	87 (28.06)
By giving ART to infected mother and child	5 (10)	45 (90)	50 (16.12)
Do not make physical relation with unknown person	1 (3.12)	31 (96.87)	32 (10.32)
Don't know	3 (5.88)	48 (94.11)	51 (16.45)
Responses obtained per respondent	2.60		

Our study shows that, most of the respondents (72.69%) wanted to know more about methods of prevention, out of which 63.45%, 29.44% and 7.10% girls were from lower, middle and higher SEC respectively (Table 5).

DISCUSSION

In this study the knowledge about HIV/AIDS was good among adolescent girls and majority (82.44%) of adolescent girls knew about HIV/AIDS. The knowledge regarding modes of transmission of HIV/AIDS was good among adolescent girls and majority (69.67%) knew that sharing contaminated needles is mode of transmission of HIV/AIDS, followed by physical relation with HIV/AIDS patient (65.80%), using infected blood for transfusion (62.25%), from infected mother to unborn child (50%) and from mother to her breast-feeding child (18.38%).

Similarly, the fact that sexual intercourse with an infected person and sharing needles for intravenous drug usage are the most common modes of transmission of STD/AIDS was known to 73.9% in Kundan mittal et al, study on knowledge regarding reproductive health among urban adolescent girls of Haryana, 2010.[5]

Table 5: Distribution of Adolescent Girls according to their knowledge about methods of prevention from HIV/AIDS and their literacy.*

Preferred issues	Lower	Middle	Higher	No. (%) (n=271)
Modes of spread	81 (60)	44 (32.59)	10 (7.40)	135 (49.81)
Methods of prevention	125 (63.45)	58 (29.44)	14 (7.10)	197 (72.69)
Initial signs and symptoms	41 (55.40)	27 (36.48)	6 (8.10)	74 (27.30)
About treatment	91 (59.47)	49 (32.02)	13 (8.49)	153 (56.45)
History of disease	31 (53.44)	24 (41.37)	3 (5.17)	58 (21.40)
Responses obtained per respondent	2.27			

Ramani SK et al found that most (93.42%) of the adolescent girls knew about HIV/AIDS and out of these majority (80.66%) knew that physical relation with HIV/AIDS patient is mode of transmission of HIV/AIDS followed by sharing of contaminated needles (79.69%), from infected mother to unborn child (77.43%), using infected blood for transfusion (70.31%) and from mother to her breast feeding child (49.51%).[6] In Agarwal S et al found that 90.2% were aware about HIV and modes of transmission.[7] In Alene et al cross sectional study in north western Ethiopia study, though the general awareness of HIV was high, correct knowledge of the virus and its modes of transmission were shown in only 41% of adolescent girls.[8] In Gupta et al ICMR study on reproductive health awareness among school going adolescents, 2004, it was found that 76% were aware of AIDS.[9]

In Basir Gb et al study on KAB on HIV/AIDS among female senior secondary students in Srinagar district of Kashmir, 2003, only 24 % of the adolescents had never heard of HIV/AIDS. Among those who were aware, only 48.44% attributed the cause to a germ or a virus, 43.04% had no idea about the possible mode of transmission.[10] Also in study on sexuality and sexual behavior among school going adolescents in Mumbai by Patil SS et al, 95.84 % were knowing about HIV/AIDS. Out of which 74.5% knew that physical relation with HIV/AIDS patient is mode of transmission, by contaminated needles and blood (43%).[11] Though adolescents are aware about STD'S especially HIV/AIDS, many seem to have only superficial knowledge and gross misconceptions have been recorded by studies. For instance, study in Benin city, Nigeria, study on perceptions of sexual behavior and knowledge about STD among adolescents,1999 revealed that adolescents had some knowledge about STD's, especially HIV/AIDS, many believed infections were inevitable.[12]

In the present study the myths regarding spread of HIV/AIDS were common among adolescent girls and 10% said that it can be transmitted by touching the blood or hugging the HIV/AIDS patient each, by kissing the HIV/AIDS patient (9.03%), by insect bite and shaking hands with HIV/AIDS patient each (6.77%). Only few knew that it can be transmitted by sharing utensils with HIV/AIDS patient (5.16%), living with HIV/AIDS patient (4.83%), by using public toilets and sharing toilet/bathroom with HIV/AIDS patient each (2.58%). While most common (50.48%) myth regarding transmission was, by kissing the HIV/AIDS patient, followed by touching the blood (27.10%) and hugging (25.32%) the HIV/AIDS patient and least common myths were by using public toilets (3.07%) and sharing utensils with HIV/AIDS patient in S.K.Ramani et al study of sexual and reproductive health behavior among school going adolescents of Jaipur district,2007.[6] Most (82%) of the adolescents believed (myths) that HIV/AIDS could spread through handshake, followed by eating with the victim or sharing utensils (64%) or use of fumets (52%) in Gaash Basir et al study on KAB on HIV/AIDS among female senior secondary students in Srinagar district of Kashmir,2003.[10]

HIV/AIDS women should avoid pregnancy (28.06%), by giving ART. In Ramani SK et al study of sexual and reproductive health behavior among school going adolescents of Jaipur district, 2007, out of the respondents who knew about HIV/AIDS, 76.70% knew that needles/syringes should not be shared, followed by using

only safe and lab checked blood (64.48%), safe sex/by using condom (63.11%), sex with only one partner (59.87%) and only (28.32%) knew that it can be prevented by giving ART to infected mother and child.[6]

While in Mittal K et al, study on knowledge regarding reproductive health among urban adolescent girls of Haryana, 2010, only 11.3% girls knew correctly about safe sexual intercourse, that was defined as "protected sex (using effective barrier methods during sexual act, e.g., condoms, etc.) with any partner having any HIV status" or "even unprotected sex (without using effective barrier methods during sexual act, e.g., condoms, etc.) with any partner with proven HIV negative status."[5]

Knowledge of HIV and condoms was lower among students whose parents were farmers, significant so among girls in Ethiopia study.[5] According to adolescents, the best method of prevention was total premarital abstinence (25%), followed by sterilization of needles before injection (21.8%) in Basir G et al study on KAB on HIV/AIDS among female senior secondary students in Srinagar district of Kashmir.[10] This study highlighted the need for more efforts on knowledge enhancement regarding methods of prevention.

In this study the knowledge about modes of prevention from HIV/AIDS was good among adolescent girls and most girls (60%) knew that not sharing needles/syringes is method of prevention from HIV/AIDS, followed by using only safe and lab checked blood for transfusion (47.74%), sex with only one partner (45.16%), safe sex by using condom (36.45%).

Low response rate (92%) was common due to various factors like shame, unable to understand etc, so bias due to no or low response is possible. Ambiguous replies and hiding knowledge is another problem, which may lead to problems during analysis of data. In this study the non-respondent rate was 8%. The participants who refused to participate in study and those who did not share information during the interview were considered non respondents and were not included during data analysis. The subjects in the age group of 10 up to 13 years (20 %) were not included as they are ignorant and unable to understand the nature of the questionnaire.

CONCLUSION

Adolescent girls undergo physical, emotional and psychological changes. Many doubts and questions arise in their minds especially regarding reproductive and sexual health leading to worries and anxieties. Adolescent girls till now are specially underserved and most vulnerable group whose problems are entirely different and thus need to be served by different interventions. The various levels where interventions can be applied to improve adolescent girl's reproductive and sexual health.

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