

# The Role of Sexual Reproductive Health Education in Adolescents: Sexual Behaviours in Secondary Schools in Morogoro Municipality, Tanzania

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**Abstract:** HIV/AIDS, STD, unwanted pregnancies and abortion are indicators for the existence of adolescents' sexual behaviours. Young people accounted for 40 per cent of new HIV infections in 2006 and about 6 millions of girls aged 15 to 19 years gave birth each year worldwide. The sexual and reproductive health education in secondary schools was a key strategy for promoting safe sexual behaviours among teenagers. This study examined the role of sexual and reproductive health education on adolescents' sexual behaviours. A cross sectional design was employed by using open and closed ended questionnaires, interview guides and focus group discussions (FGD). Data analysis was done using Statistical Package for Social Science (SPSS) software. Some adolescents, (28.8 %) in secondary schools in Morogoro Municipal were sexually active; they were involved in risky sexual behaviour such as having multiple partners, practising sex at early age as early as from 10-15 years, Lack use of condoms, engaging with sexual partners who were much older. Also adolescent students' awareness of sexual and reproductive health matters was average. Moreover it was revealed that, students' awareness on sexual and reproductive health had positive influence on students' risky sexual behaviours i.e. students with high level of awareness were less likely to engage in risky sexual behaviour.

**Key words:** Sexual behaviour, reproductive health, awareness and adolescents

## INTRODUCTION

Investment in sexual and reproductive health education in primary and secondary schools where most adolescents are found is crucial component of both economic and social development. It is one of the strategies initiated to respond to the consequences of adolescents' risky sexual behaviours (UNICEF, 1996), which are sexual transmitted diseases, unwanted pregnancies and abortion and even HIV/AIDS infections.

Adolescents (aged less than 25 years) - who are the majority almost three billions people of the world population (UNFPA, 2006) are reported to be sexually active although not always by choice (THIS, 2005). This leads

to health problems mentioned above which has got impact directly and indirectly to the development. Many adolescents tend to drop out of schools and hence fail to accomplish their goals of studying and attaining good life.

Sexual and reproductive health education has been reported to show remarkable effects on adolescent's sexual behaviours. A study in life skills education at Kwazulu Natal reports a substantial increase in exposure to life skills over the two-year period among the youth. Magnan (2002) also reported that, most respondents had been exposed to at least some information and support for skills development to help them reduce their risk. However the effect of sexual reproductive health education on adolescent's risky sexual behaviours is determined by a number of factors such as contents of the subject matters, the level of awareness and the extent/level to which these risky behaviours are performed. This paper explored various sexual and reproductive health education and sexual behaviours among adolescents in Morogoro Municipality.

## **BACKGROUND**

### **Sexual Behaviours among Adolescents**

Sexual behaviour refers to involvement in sexuality issues such as ever had sex, age at first sexual intercourse experience, age difference with first sex partner, number of sexual partners, condom use, alcohol use prior to sexual intercourse and forced sex.

In Sub Saharan Africa, the initiation of sexual activity increases steadily between age 15 and 19, with about three-quarters of women and close to two-thirds of men engaging in sex intercourse before age 20 (UNAIDS, 2006). A study done in four Sub Saharan Africa countries (Burkina Faso, Malawi, Ghana and Uganda), reported substantially higher proportions of females than males aged 15 to 19 years have had older sexual partners, and in three of the four focus countries more than 40% of female said their last partners were five or more years senior (Neema et al., 2006).

Young men have also been found to report having multiple sexual partners and having intercourse with casual partners while in contrast, young women usually report their first sexual encounters with acquaintances or steady boyfriends (Advocate for Youth, 1995). In Mozambique, 52% of girls in private schools reported to be sexually active with only one sexual partner, while 82 % of girls in government schools reported to be sexually active and were likely to have had multiple sexual partners (Barua and Kurz, 2001).

Adolescents with alcohol use disorders are at risk of contracting sexually transmitted diseases including HIV (Bailey, 1998). The main reason for this is that, sexual intercourse done when one or both partners are under the influence of alcohol is more likely than otherwise to be unplanned, and couples are less likely to use condom (TDHS, 2004).

A comparative study of safe sex practices among girls at private and government schools in Mozambique showed that 56% of girls from private schools always used condoms, compared to just 32% from government schools. Girls at both types of schools had received information at school about HIV/AIDS (Barua and Kurz, 2001). What is evident is that knowledge of condom use has played an important role in the prevention of HIV/AIDS and other sexually transmitted infections, as well as unwanted pregnancies for young women (THIS, 2004).

### **Sexual and Reproductive Health Education in Tanzania**

Sex education is the lifelong process of acquiring information and forming attitudes, beliefs, and values about identity, relationships and intimacy. It encompasses sexual development, reproductive health, interpersonal relationships, affection, intimacy, body image, and gender roles (NGTF, 1996). In Tanzania, sexual and reproductive health followed after the emphasis from the various frameworks, strategies and policies. Tanzania's strategic framework of 1998 -2002 for prevention and control of HIV/AIDS/STDs stated that, the in-school youth are to be provided with HIV/AIDS education at primary and secondary levels, with Ministry of Education and Culture (MOEC) being the key actor (URT, 1998). Also the National Strategy for Growth and Reduction of Poverty, in cluster number eleven, goal two, focuses on improvement in quality of life and social well-being through the reduction of HIV prevalence from 11 per cent in 2004 to 10 per cent in 2010 (between the ages of 15 and 24 years) and increasing the knowledge of HIV/AIDS transmission to the general population. Moreover, the National HIV/AIDS policy emphasised that the prevention of transmission of HIV/AIDS can be achieved by creating and sustaining an increased awareness through information, education and communication for behaviour change at all levels by all sectors (URT, 2001).

### **Contents of Sexual and Reproductive Health Education**

Unfortunately, there is no one definition of adolescents' sex education, and also its existence varies from one place to another. Therefore, the best way of addressing sexual and reproductive

health needs of adolescents is a matter of serious discussion and decision within each country (WEF, 2000).

Coverage of sexual reproductive health education curricula in different countries such as United Kingdom and Germany focus on the reproductive system, foetal development, and the physical and emotional changes of adolescence. In Germany, it normally covers all subjects concerning the growing-up process, the changing of the body, emotions, the biological process of reproduction, sexual activity, partnership, homosexuality, unwanted pregnancies and the complications of abortion, the dangers of sexual violence, child abuse, and sexual-transmitted diseases, but sometimes things like sex-positions are also included ( Sawsan et al., 2004).

In Tanzania, sexual and reproductive health issues are addressed in secondary schools through the subject of biology. The topics that are under sexual and reproductive health issues include: good health, immunity and concept of diseases, sexual transmitted diseases including HIV/AIDS, lifestyle choices and consequences, risk behaviours and situations, responsible decision making, assertive behaviour, delayed sex, protected sex, care and support for the people living with HIV, family planning and contraceptive and maternal and health care (URT, 1999; 2005)

### **Students Awareness of Sexual and Reproductive Health Matters**

Acquisition of knowledge is usually the first stage in the process of behaviour change, although knowledge alone is often not sufficient in itself to produce change in sexual behaviour to most people (Coates, 1991). Awareness on sexual and reproductive health matters includes awareness on HIV/AIDS and STD, contraceptives and pregnancies. A study conducted in West Africa by Neema et al. (2006), reported that, more than 90% of 15 to 19 years old were aware of HIV/AIDS. Awareness of other STI was lower while patterns of knowledge about pregnancy prevention were similar to those of HIV and AIDS. In contrast, levels of detailed knowledge on HIV/AIDS assessed using a composite measure recommended by the World Health Organization (WHO, 2004) were found to be low.

## **METHODOLOGY**

### **Study Areas and Population**

The study was conducted in Morogoro Municipality, Morogoro Region. Morogoro Municipality is one of the five districts in Morogoro region with high population. Because of its metropolitan nature, it attracts many people looking for employment in industries and the surrounding

sisal estates as well as social and leisure industry such as entertainment services, hotels, offices, etc. (URT, 1997). The study area was selected because, firstly, adolescent pregnancies are common and higher in eastern zone of Tanzania which also includes Morogoro (TDHS, 2004). Secondly school drop-outs are high with a recorded drop-out of 493 secondary school students in 2005 (URT, 2005). Thirdly, Morogoro Municipality has high concentration of secondary schools i.e. there are 30 secondary schools out of 72 secondary schools present in the region (URT, 2005).

## **DATA COLLECTION**

### **Sampling**

A combination of simple random and purposive sampling procedures was employed. Simple random sampling was used to obtain five secondary schools from the Municipality. Lottery as simple random sampling techniques was used to get 125 students and two biology teachers from the sampled secondary schools. Purposive sampling was used to obtain one discipline teacher from each of the five selected schools and (in the case of some schools) two teachers of biology subject.

### **Data collection tools**

Primary data were collected through the following methods: group administered questionnaires, structured interviews, and focus group discussions. The students were grouped in one class and given questionnaire each to fill independently in given time under supervision. This eliminated the

physical and other limitations associated with interviews, where in this study respondents answered confidentially so the issue of being shy was eliminated. Structured interview was done to their teachers to gather more information on SRHE and Students Sexual behaviours. Four Focused Group Discussions were done each containing about 12 students basing on their level of education. The questionnaires with close and open ended questions, on sexual behaviours were adopted from Family Health International HIV/AIDS/STD Behavioural Surveillance Surveys (BSS) of 2000 with some little modifications. Group administered questionnaires were found to be proper for this study due to common interest of respondents and their quality of eliminating physical and other limitations associated with interviews (Buddenbaum, 2001), like respondents answering the questions confidentially thus the issue of being shy was eliminated.

### **Data Analysis**

Statistical analysis was done by using Statistical Package for Social Science (SPSS) version 12 to determine the distribution of variables and

compute descriptive statistics. Index scale was used to establish risky sexual behaviours. Hypotheses were tested by F-test at significance level of 5% or  $p < 0.05$  through one way ANOVA.

## RESULTS AND DISCUSSION

### Sexual behaviours among adolescent students in Morogoro Municipality

The study revealed involvement in sexuality issues to discuss sexual behaviours among adolescents.

#### Ever had boy / girl friend (lovers)

Having lovers is defined to having a friend of the opposite sex, someone who is willing to have sex with, sometimes referred as boy/girl friend. In FGDs a respondent defined a boy/girl friend to be a person who is a lover; the one you can ever share secrets. Results in Table 1, show that about 27% of students exposed that they had lovers, 15.9% out of them were boys and 11.11% were girls. Results also indicate that male adolescents initiate love affair relationships earlier than female adolescents. These results concur closely although not directly with those of Masengi (2005) who reported that boys were more likely to have sexual partners earlier than girls. Even the African culture defined that male are the ones who initiate all issues related to sexual affairs. It was further revealed that, majority of adolescent boys (47.1%) had single girl friend compared to adolescents girls who were 26.5%.

**Table 1: Sexual behaviour of adolescents by sex**

| Sexual behavior  | Percentage by Sex |        |       |
|--|-------------------|--------|-------|
|  | Male              | Female | Total |
| <b>If ever had a lover (n = 126)</b>                       |                   |        |       |
| Had a lover  | 15.9              | 11.1   | 27.0  |
| had no lover   | 31.7              | 41.3   | 73.0  |
| <b>Number of lovers (n = 34)</b>                           |                   |        |       |
| One  | 47.1              | 26.5   | 73.6  |
| Two  | 8.8               | 8.8    | 17.6  |
| Three  | 5.9               | 2.9    | 8.8   |
| <b>If ever had sex (n = 104)</b>                           |                   |        |       |
| Had sex  | 19.2              | 9.6    | 28.8  |
| had no sex   | 30.8              | 40.4   | 71.2  |
| <b>Age at first sex (n = 30)</b>                           |                   |        |       |
| 10 to 15   | 33.3              | 0.0    | 33.3  |
| 16 to 24   | 33.4              | 33.3   | 66.7  |
| <b>Age difference with first sex partner (n = 30)</b>      |                   |        |       |
| Below 10   | 46.7              | 20.0   | 66.7  |
| Above 10   | 20.0              | 13.3   | 33.3  |
| <b>Incidence of sex within past 30 days prior (n = 30)</b> |                   |        |       |
| Once   | 25.0              | 41.7   | 66.7  |
| More than one  | 25.0              | 8.3    | 33.3  |
| <b>If ever use condom within past 12 months (n = 30)</b>   |                   |        |       |
| Use condom   | 40.0              | 23.3   | 63.3  |

|   |      |      |      |
|---|------|------|------|
| Not use condom  | 26.7 | 10.0 | 36.7 |
| <b>Alcohol use prior having sex within past 12 months (n = 30)</b>    |      |      |      |
| Use alcohol   | 10.0 | 0.0  | 10.0 |
| Not use   | 33.3 | 56.7 | 90.0 |
| <b>If ever been forced to have sex within past 12 months (n = 30)</b> |      |      |      |
| Had been forced   | 10.0 | 13.3 | 23.3 |
| Had not been forced   | 56.7 | 20.0 | 76.7 |
| <b>Incidence of STD within past 12 months (n = 30)</b>                |      |      |      |
| Incidence of STD  | 10.0 | 0.0  | 10.0 |
| No incidence of STD   | 56.7 | 33.3 | 90.0 |
| <b>Incidence of abortion within past 12 months (n = 10)</b>           |      |      |      |
| Incidence of abortion   | 0.0  | 30.0 | 30.0 |
| No incidence of abortion  | 0.0  | 70.0 | 70.0 |

### **Ever had sex**

The study revealed that about 28.8% of the respondents had practised sex, out of which 19.2% were males and 9.6% were females. This indicates that young men often begin sexual activities earlier than young women. Similar observations were reported in Guinea by Gorgen et al. (1998) that young men often begin sexual activities earlier and have more sexual partners than young women. FGD revealed various reasons for adolescents' involvement in sexuality, one being the economic status of their parents. The poor economic status of parents makes them seek sources of extra funds and the only alternative source available is attracting men to meet this need. Another reason which was reported by male participants was that sexual relationship is caused by the indecent behaviour of girls who put on dresses which encourage boys to seduce them. Key informants reported that adolescents are nowadays sexually active since some begin sexual activities at an early age as early as 12 years. All five discipline teachers reported adolescents (students) to be sexually active. Results also revealed that among the sexually active adolescents 66.7% of them had experienced sex at least once during the past 30 days preceding the study. This indicates how sexually active these adolescents are, especially female who were the majority (41.7%) compared to male (25%).

### **Age for first sexual intercourse**

Age for the first sex is one of the indicators of risky sexual behaviour since it is reported that initiating sex at younger age is positively associated with increased lifetime number of sexual partners and consequently increased chances of infections with HIV/STD (Nyanzi et al., 2001). The study showed that, adolescents start sex as early as 10 - 15 years and 16 - 24 years (Table 1). There were more male adolescents who reported to have had sex compared to female ones. The study also revealed the earliest self-reported ages for the first sex was 13 and 17

years for male and female adolescents respectively. The mean age at first sex was 16.5 for male and 19.1 for female adolescents, and the median age was 15.5 and 19 for male and female respectively. It was further revealed that about 63.3% of all adolescents had had sex around the age of 18 years. These results correspond with findings reported by TDHS (1996) and THIS (2005) in which more than half of girls and boys had sex before their 18th birthday and 95% had sexual intercourse by their 25th birthday respectively

### **Age difference with the First sex Partner**

Results showed that students had sex with the partners who were older than themselves. About (66.7%) respondents agreed to have their first sex with partners who had age difference ranging from 1 to 10 years, the majority of whom were male students (46.7%) and few female students (20 %). In FGD a boy reported the existence of a relationship between adolescents and adults, if it is between girl and adult male, the adult male is known as sugar-daddy and between a boy and adult females, it is known as sugar mummy. Other respondents also reported that, the sugar-daddies and sugar-mummies prefer students for sex because they are cheap, as they do not demand much in exchange for sex.

### **Condom use**

Condom use during sexual intercourse is the best way for prevention of HIV/AIDS, sexually transmitted diseases and unwanted pregnancy. Adolescents who had sex were asked if during their sexual intercourse within the past 12 months preceding this study, they had made use of condoms in sex. About (63.3 %) of the respondents admitted using condoms, out of which 40% were males and 23.3% were female adolescents (Table 1). Low rate of female using condom may be due to women lack of decision making in sexual and reproductive issues i.e. have no choice and cannot control that. Observation from one study done in Angola by Vahdina et al. (2005) showed that males were significantly less likely than females to feel embarrassed about buying condoms (8% vs 19%) i.e. it is easy for male to go and buy condom compared to women. The low rate of use of condom among female adolescents during sexual activities may promote the unwanted pregnancy and sexual transmitted infections (STI).

These results concur with those reported by Pick de Weiss et al. (1993) in Mexico, who found that condom use by adolescents and young adults is rather low ranging from 10 to 66%. However, it has been observed that increasing trend toward greater condom use is a function of the frequency of sexual intercourse (Du Rant and Sanders, 1989). This may

imply that, use of condoms increases sexual activities, a practice which is opposed by religions and parents alike.

### **Alcohol use Prior to sexual Intercourse**

It was reported that among the sexually active adolescents only few male students (10.0%) used alcohol prior to sexual intercourse in the past 12 months while no female adolescents used alcohol before sexual intercourse. Alcohol and drug use are associated with other risk behaviours in relation to sex (Prince et al., 2003). The extent of drug abuse among the young people is unclear, although reports indicate that it is more common among young men compared to young women.

### **Incidence of STD**

Sexually active respondents were asked if they had been affected by STD in the past 12 months preceding the study. Only male adolescents reported to have had incidences of STD (Table 4). These results are probably reasonably true because the percentage of sexually active adolescents were reported practising safe sex through use of condoms. These results are however contrary to earlier findings by WHO (1998) that indicated, infections among females being higher than among males by the ratio of 2:1. This could also be true because the regular inspection of these adolescent in issues concerning pregnancies made them to be worried and hence reporting every issues and aspects of sexual and reproductive issues very easily.

### **Adolescent's Sexual behaviours Consequences and Poverty**

It has been observed from the findings that some adolescents (28.8%) in secondary schools in Morogoro Municipality are sexually active. Among them, few adolescents involve in risky sexual behaviour such as having multiple partners, practising sex at early age, condom use and big age difference with sexual partners. Their involvement in sexual behaviour brings a lot of impact economically and socially. One of the results is the impairing of the morale of studying and concentrate in study work and these leads to poor performance in schools. This is what our Government, community; teachers and parents are complaining; performance in secondary schools. Also other results of these risky sexual behaviours is the exposure to health related problems mainly adolescents pregnancy and HIV/AIDS.

According to Moore, (1995) poverty is the factor most strongly related to teen pregnancy. State comparisons show that states with higher poverty rates also have higher proportions of non-marital births to adolescents. The poverty perpetuate to these girls because, most of them are isolated by their parents and community and exposed to hardship of life such as

lack of food, shelter and even clothing before and even after birth. Poverty status is one of the strongest predictors of low birth-weight, especially among teenage mothers (Alan Guttmacher Institute, 1994). Government and parents at large are investing in school expenses for this young generation so as to prepare the future nation with poverty alleviated to some extent.

That is creating experts in various economic productions, government development strategies planner and implementers. Knowing the situation will enable the stakeholders to be in a position to create and develop the strategies of treating adolescents in a good ways

### **Sexual Reproductive Health Education and Students' Involvement in Risky Sexual Behaviour**

Awareness in this study is defined as ability of the respondents to respond correctly to issues of sexuality and reproductive health. Responses to questions on modes of transmission, preventions of sexually transmitted diseases and pregnancy were categorized into high awareness, medium awareness and low awareness depending on the scores. In identifying the adolescents' level of awareness of sexual and reproductive health matters, a total of 10 statements describing detailed matters on awareness of sexual and reproductive health matters were used in summation scale and later converted into an index scale.

The indicator of awareness of sexual and reproductive health matters in this paper was obtained from established index which ranged from 0 (meaning low awareness) to 10 (high risk). Minimum and maximum scores obtained were 3 and 10 respectively with a mean score of 6.3. Further analysis was done to categorize the indicators into three categories such as low awareness, medium awareness and high awareness. Scores of 0 to 4 represented low awareness level, 5 to 6 for medium awareness and 7 to 10 were considered to stand for high awareness level of sexual and reproductive issues (Table 2).

The study revealed that respondents' awareness on sexual and reproductive health issues was good i.e. 46.8% of the respondents had high awareness on sexual and reproductive health matters while 13.5% had low awareness. The overall mean for awareness levels is 2.3 while mean of awareness levels for female and male adolescents are 2.4 and 2.2 respectively. This implies that awareness is higher for female adolescents compared to male adolescents contrary to WHO (2004) report which showed that, adolescents' awareness on HIV prevention (ABC) is somewhat lower for female 58 - 83% than for males 64 - 87%.

**Table 2: Frequencies and Levels of Awareness on Sexual and Reproductive Health Issues**

| Score                      | Percentage by Sex |        |       |
|----------------------------|-------------------|--------|-------|
|                            | Male              | Female | Total |
| 3                          | 0.8               | 0.8    | 1.6   |
| 4                          | 7.1               | 4.8    | 11.9  |
| 5                          | 9.5               | 7.9    | 17.5  |
| 6                          | 13.5              | 8.7    | 22.2  |
| 7                          | 8.7               | 14.3   | 23.0  |
| 8                          | 4.8               | 8.7    | 13.5  |
| 9                          | 3.2               | 6.3    | 9.5   |
| 10                         | 0                 | 0.8    | 0.8   |
| <b>Levels of awareness</b> |                   |        |       |
| Low                        | 7.9               | 5.6    | 13.5  |
| Medium                     | 23.0              | 16.7   | 39.7  |
| High                       | 16.7              | 30.2   | 46.8  |

It was hypothesized in this study that, adolescents with high level of awareness on sexual and reproductive health are less likely to get involved in risky sexual behaviour than those whose levels of awareness was medium and low. To test this hypothesis the mean comparison analysis was done using one way ANOVA and F-test at 5% level of significance. In the results presented in Table 3, the mean awareness level was high for adolescents with low level of involvement in risky sexual behaviours compared to adolescents with medium levels of involvement in risky sexual behaviour for which the F-value of 0.8 and ( $p = 0.3$ ) were recorded. However, this relationship was not statistically significant, therefore, the null hypothesis was rejected. This is probably due to the fact that, only two levels (low and medium) of involvement in risky sexual behaviours were compared, instead of three levels of awareness.

**Table 3: Mean comparison of levels of awareness and levels of involvement in risky sexual behaviours**

| Levels of involvement in risky sexual behaviours | Mean | F-value | p   |
|--|------|---------|-----|
| Low  | 2.3  | 0.8     | 0.3 |
| Medium   | 2.0  |         |     |

### **The implication of sexual and reproductive health education on sexual behaviours**

The practical benefits for greater investment in sexual and reproductive health education, include delayed initiation of sex, reduced unplanned and too-early pregnancies and their complications, fewer unwanted children, reduced risk of sexual abuse, greater completion rate of

education, late marriages, reduced recourse to abortion and the consequences of unsafe abortion and slower spread of sexually transmitted diseases, including HIV/AIDS (UN, 2000).

According to Kirby et al. (2006) school-based sex education should cover risk and protective factors that affect sexual behaviour and incorporate multiple activities, use sound teaching methods that actively involve participants and employ instructional methods and messages that are appropriate to adolescents' culture, age and sexual experiences.

## CONCLUSION

Adolescents in secondary schools in Morogoro Municipality are involved in sexual behaviours despite of the sexual and reproductive health education they are receiving at school. This can be due to the fact that, their awareness of sexual reproductive health matters is fair with some misconceptions on condom use and HIV/AIDS infection through superstitions. Fortunately this awareness seemed to have positive influence on students' risky sexual behaviours i.e. students with high level of awareness on sexual reproductive health are less likely to engage in risky sexual behaviour.

Therefore a call to improve sexual and reproductive health education in schools is crucial through reviewing the syllabi and conducting needs assessment to the adolescents so that the knowledge acquired to be appropriate to the needs of particular adolescents. Also there is necessity of a calling community sensitization campaigns. These campaigns could convey correct knowledge, challenges and misconceptions on sexual and reproductive health issues that exist in the community. Due to misconception of the knowledge and awareness the teaching methodology should be well taken care and addressed.

There is a need for a mixture of stakeholders such as NGOs, CBOs and Government to invest in sexual and reproductive health education to adolescents targeting all people in the community including adults and out of school adolescents. Lastly but not least the community is advised to take the role of addressing sexual behaviour issues of students to every member in a society including parents, guardians, religions leaders and community leaders.

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