

Knowledge on HIV/AIDS, Prevalence of Sexual Activities and Condom use Among Students in Higher Learning Institutions in Dodoma Municipality, Tanzania. A case of Institute of Rural Development Planning (IRDP)

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ABSTRACT

HIV/AIDS is among the major health challenges facing the world, specifically in Sub-Saharan African countries. Youth are the most affected group, with most of new infections occurring among youths. Students in higher learning institutions in which most of them are youth are also at risk of the infection. Increased condom use can help in preventing the spread of the infection. This study was carried out at Institute of Rural Development planning in Dodoma municipality, central Tanzania to determine awareness among students to HIV/AIDS, sexual activities including condom use, and the attitude and perception towards condom among students. This study involved a cross-sectional survey to 220 students from different undergraduate courses. Data were collected from respondents through interviews using a pre-tested questionnaire. Furthermore, three Focus Groups Discussions, and two in-depth interviews with key informants were also carried out to collect qualitative information. Data from questionnaires were analyzed using Statistical Package for Social Sciences program version 16.

Results of this study revealed that despite high level of awareness to HIV/AIDS among students, sexual activities were prevalent at substantial rate. For example, 69% had sex in past 12 months prior to survey, and for those who had sex in that period 38% had ever had sex with non-regular partner, while 35.5% had multiple sexual partners. Main reasons for engagement in sex included poverty (sex for money), peer pressure, body temptation. Result also indicated substantial number of students (61.2%) that had sex within the past 12 months prior to survey did not use condom in all sexual encounters despite majority were not married. Identified reasons for not using condom include trusting each other, and negative attitude and perception towards condom. Based on these findings it is recommended that campaign to reduce sexual activities among students should be initiated, this

could be through Youth Clubs; Seminars to tackle negative attitude and perception towards condom should also be initiated.

Keywords: HIV/AIDS, Students, Higher Learning, Institution

1.0 INTRODUCTION

Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome (HIV/ AIDS) is among of the health challenges in the world. The infection has caused significant number of deaths in Sub-saharan African countries including Tanzania. (Wagbatsoma and Okojie, 2006; Biddlecom *et al.*, 2007). Nearly two-thirds (65%) of all people living with HIV/AIDS and nearly three-quarters (72%) of death related to HIV/AIDS are from Africa (Wagbatsoma and Okojic, 2006; UNAIDS 2009). Studies also show that youth are the most affected group, in which 60% of all HIV infected people are in the age group of between ages of 10-25 years and that 40% of new infections occur among this group (Mwambete and Mtaturu, 2006; Wagbatsoma and Okojie, 2006; Biddlecom *et al.*, 2007; Bello *et al.*, 2009). Students in higher learning institutions, in which majority of them are youth are also at risk of the infection (Mengistu *et al.*, 2009; Mutinta and Govender, 2012; Arisukwu, 2013). Therefore, targeting these institutions for campaigns against HIV/AIDS would protect a significant number of people from the infection. Dodoma municipality in Dodoma urban district is among of the areas in Tanzania with high population of students studying in higher learning institutions. In total there are five higher learning institutions with a population of more than 20,000 students.

Condom use has been advocated in many HIV/AIDS campaigns as one of the best ways for preventing the spread of the infection (URT, 2013). However, designing of effective campaigns to increase condom use in a target population depends on thorough understanding on level of awareness towards the pandemic, sexual practices including condom use, as well as the attitude and perception toward condoms (Guiella and Madise, 2007; Ochieng *et al.*, 2011; Siegler *et al.*, 2012), little is known on these aspects for students in higher learning institutions in Dodoma Municipality. Therefore, this study was carried out to reveal these information by taking a case of Institute of Rural Development Planning (IRDP).

2.0 METHODOLOGY

2.1 Study Area

This study was conducted at the Institute of Rural Development Planning (IRDP) located in Dodoma Municipality, in Dodoma Urban district, Central Tanzania. The municipality is among the fastest growing areas in the country in terms of

population and infrastructures and it is the capital city of the country. In recent years there had been an influx of large number of people in the area due to increased number of higher learning institutions. IRDP is among the five Higher Learning Institutions' located in the area with a population of 4120 students.

2.2 Study Design

The study involved a cross-sectional survey to 220 undergraduate students carried in the Institute in June 2012. The sample size (n) was estimated as:

$$\left[\frac{(Z_{\alpha/2})^2 pq}{\lambda^2} \right] DEFF$$

Where, $Z_{\alpha/2}$ = Critical value at 5% level of confidence in estimations = 1.96; p = Proportion students that are engaged in sexual activities at the Institute. Since its value was not known, it was assumed to be 0.5 as it ensures maximum sample size (Nwankwo and Nwoke, 2009); q = 1-p = 0.5; λ = maximum error = 10%; and DEFF = Design effect = 2. Furthermore, in calculation 10% non-response rate was assumed.

Number of students in each course was taken proportionate to its number to the total population of undergraduate students at the Institute. Data were collected from respondents through interviews using questionnaires. Furthermore, three focus groups discussions (FGDs) with students (1 for certificate course, 1 for Diploma Course and 1 for Bachelor degree courses), and In-depth interviews with Dean of Students and Matron were also carried out to collect qualitative information. Each FGD involved 10 students with equal number of male and female students. Informed verbal consent was sought from respondents before interview.

2.3 Data Analysis

Data collected were verified, coded and then analyzed for descriptive statistics such as percentages using Statistical Package for Social Sciences (SPSS) program. Qualitative information was analyzed using content analysis.

3.0 RESULTS AND DISCUSSION

3.1 General Characteristics of Respondents

The results from Table 1 shows characteristics of respondents in terms of age, sex, marital status, course, sponsorship, and place of residence. Results reveal that most of the respondents (67.0%) were between 20-25years, followed by those

aged above 25 accounting for 26.1% and few (6.9%) had age below 20 years, implying that majority of respondents had already passed adolescence age and hence more likely to have already experienced sex (Zakayo and Lwelamira,2011; Bankole *et al.*,2007). Results from Table 1 also reveal that around two-thirds (67.9%) of total respondents were single; one in every students (10.5%) had a partner living together (cohabiting) and around one-fifth of total respondents (21.5%) were married. Majority of interviewed students (56.4%) were pursuing non-degree courses (Certificate and Diploma). Results from Table 1 also indicate number of females was slightly higher than that of males accounting for 56.4% of total respondents. Results further reveal that majority of respondents (72.8%) were privately sponsored with nearly one in every ten students (39.9%) staying in rented rooms outside the Institute. As it has been observed in other studies (Zakayo and Lwelamira, 2011), student monitoring in such housing arrangement is usually minimal and hence the student is more likely to be involved in risky activities such as sex, drug and alcohol abuse.

3.2 Knowledge on HIV/AIDS

Results indicate most of students had a good knowledge on HIV/AIDS (Table 2). All respondents interviewed were aware of the pandemic and 98.2 % of respondents knows where to get tested for HIV/AIDS. Furthermore, most of respondents were also aware of the preventive measure for HIV/AIDS with most the mentioned method being use of condom (70.1%) followed by be faithful to one partner (48.0%) and abstinence 28.9%. Popularity of condom among youths as one of the possible way for preventing sexual transmission of HIV/AIDS has also been reported elsewhere (Onkonta, 2007; Mtaturu and Mwabete, 2006; Zakayo and Lwelamira, 2011), although consistent use can sometimes be minimal.

Table 1: Characteristics of the Respondents

| Variable | Frequency | Percents |
|------------------------|-----------|----------|
| Age (n=218) | | |
| <20 | 15 | 6.9 |
| 20-25 | 146 | 67.0 |
| >25 | 57 | 26.1 |
| Sex (n=220) | | |
| Male | 96 | 43.6 |
| Female | 124 | 56.4 |
| Marital status (n=209) | | |
| Married | 45 | 21.5 |
| Single | 142 | 67.9 |
| Cohabiting | 22 | 10.5 |

| Variable | Frequency | Percents |
|--------------------------------|-----------|----------|
| Course (n=220) | | |
| certificate | 42 | 19.1 |
| Diploma | 82 | 37.3 |
| Bachelor degree | 96 | 43.6 |
| Sponsorship (n=217) | | |
| Private | 158 | 72.8 |
| Government | 29 | 13.4 |
| Both private and government | 30 | 13.8 |
| Residence (n=218) | | |
| IRDP hostel within the campus | 87 | 39.9 |
| IRDP hostel outside the campus | 44 | 20.9 |
| Private hostel/Rented room | 87 | 39.9 |

3.3 Prevalence of Sexual Activities among Students

This study was also interested in determining prevalence of sexual activities in the study population and factors for their existence. In this regard each respondent was asked to indicate if she/he had a boyfriend/girlfriend or in union (i.e. had a sexual partner), if had sex within the past 12 months, if ever had sex with casual partner (non-regular partner) and number of sexual partner in the past 12 months prior to survey. Findings from Table 3 reveal that overwhelming majority of respondents (84.5%) had a sexual partner although majority of them were not married. Further, nearly seventy percent (69.7%) reported to ever had sex within the past 12 months prior to survey and 38.8% of individuals in this group, that is nearly four in every ten, indicated to ever had sex with non-regular partner in that period. When asked to indicate number of sexual partners in the last 12 months before the survey, around one-third (35.5%), had sex with more than one partner within the stated period (Table 3). These observations indicate sexual activities in the study population to exist at substantial rate, despite high awareness to HIV/AIDS and hence individuals in this population are at high risk of HIV/AIDS infection, therefore need special attention.

Table 2: Knowledge on HIV/AIDS

| Variable | Frequency | percent |
|--|-----------|---------|
| If ever heard of HIV/AIDS (n=220) | | |
| Yes | 220 | 100.0 |
| No | 0 | 0.0 |
| Means of preventing sexual transmission of HIV/AIDS (n=204)* | | |
| Don't know | 2 | 1.0 |
| Abstinence | 59 | 28.9 |
| Be faithful to one partner | 98 | 48.0 |
| Use condom | 143 | 70.1 |
| Traditional medicine | 19 | 9.3 |
| Personal Hygiene | 14 | 6.9 |
| If know where to get tested for HIV/AIDS (n=218) | | |
| Yes | 214 | 98.2 |
| No | 4 | 1.8 |

*Data was based on multiple responses

Existence of sexual activities at substantial rate among students in higher learning institutions was also reported in other African countries (Adefuye *et al.*, 2009; Mengistu *et al.*, 2009). When study participants were asked why some students at the Institute are engaging in sexual activities, findings from Table 3 indicate reasons mentioned by most of respondents was body temptations (failure to control sexual desire/sexual emotions) (40.7%) , poverty (i.e. students are doing sex to get money) (37.3%), and peer pressure (18.1%). Similar findings were also reported by (Mengistu *et al.*, (2009), Shumba *et el.* (2011), Mutinta and Govender (2012) and Arisukwu (2013) in some African Universities. Other factors were mentioned by less than 5% of respondents. Sex to fulfill sexual desire (body temptations) and sex for money also featured in all Focus Group Discussions (FGD). Most male FGDs participants complained on current dressing among female students which increases sexual temptations among male students. It was also learnt during FGDs that most female students that engaging in sex they are doing so to get money to sustain their life at the Institute as most students are self sponsored i.e. sponsored by parents and sometimes money from sponsor/parents are not enough or come late (delays in sending money). Likewise, for those having some kind of sponsorship from Government (Loan Board) also faced the problem of delays in getting their money and hence forced to engage in sexual activities to get money to run life at the Institute. Delays in getting money from

Loan Board was also Confirmed by Dean of Students and Matron during in-depth interviews. Similar to findings of this study, in a study by (Shumba *et al.*, 2011) in higher learning institutions in Zimbabwe it was found that female students participates in concurrent sexual partnerships to benefit from the resources of their male partners (such as money) while males were largely motivated around the sex motive.

Table 3: Sexual experiences among students and reasons for having sex

| Variable | Frequency | percent |
|--|-----------|---------|
| If have a boy friend/girlfriend or in union (i.e. a sexual partner (n=219) | | |
| Yes | 185 | 84.5 |
| No | 34 | 15.5 |
| If ever had sex within the past 12 months before the survey (n=218) | | |
| Yes | 152 | 69.7 |
| No | 66 | 30.3 |
| If ever had sex with casual (non- regular) partner in last 12 months (n=152) | | |
| Yes | 59 | 38.8 |
| No | 93 | 61.2 |
| Number of sexual partner in last 12 months (n=152) | | |
| One | 98 | 64.5 |
| Two | 23 | 15.1 |
| More than two | 31 | 20.4 |
| Reason for students to engage in sexual activities(n=204)* | | |
| Failure to control sexual desire/body temptations | 83 | 40.7 |
| Poverty | 76 | 37.3 |
| Peer pressure | 37 | 18.1 |
| Interaction with different sex | 3 | 1.5 |
| Ignorance | 4 | 2.0 |
| Sex to get help in studies at the Institute | 2 | 1.0 |
| Alcohol abuse | 1 | 0.5 |
| Globalization | 1 | 0.5 |
| Lack of youth control/laxity in regulations | 2 | 1.0 |

*Data was based on multiple responses

3.4 Prevalence of Condom use among Sexually Active Students

Condom use is one of the key preventive measures for controlling sexual transmission of HIV/AIDS (Ochieng *et al.*, 2011; URT, 2013). This study also assessed the extent of condom use among sexually active students at the Institute. Although the presence of sexual activities was high and that majority of students

were not married, condoms were not used consistently. Results from Table 4 indicate more than one-third (35.9%) of sexually experienced students in last 12 months did not use condom in last sexual encounter and more than half of these students (61.2%) did not use condoms in all sexual encounters in that period, a situation which predisposes a sizeable number individuals in the study population at a risk of HIV/AIDS.

3.5 Reasons for not Using Condom among Students

Reasons for not using condom given by majority of sexually active students was trusting each other and perception that condom reduce sexual pleasure indicated by at least 42% of respondents (Table 5). Furthermore, findings from Table 5 indicate nearly one- third of interviewed students were not confident in insisting use of condom during sexual encounter, i.e. lacked condom- self efficacy (Guiella and Madise, 2007; Babalola, 2006; Bogale *et al.*, 2010; Maticka-Tyndale and Tenkorang, 2010). In this regard 30% of total respondents thought that they can not resist sex if partner do not have condom or refuse to use condom, habit which might hinder condom use in the study population.

Table 4: Condom use among sexually active students

| Variable | Frequency | Percent |
|--|-----------|---------|
| If ever had sex in past 12 months if condom was used in last sex (n=149) | | |
| Condom was used | 98 | 64.1 |
| Condom was not used | 51 | 35.9 |
| If ever had sex for two or more times in past 12 months, frequency of condom use (n=139) | | |
| Used all the time | 54 | 38.8 |
| Used in some instances | 50 | 36.0 |
| Never used | 35 | 25.2 |

To further explore factors that might hinder use of condom in a study population, this research further studied a range of attitude/perceptual variables towards condom that have been reported in other studies (Thomsen *et al.*, 2004; Guiella and Madise, 2007; Kabiru and Orpinas, 2009; Siegler *et al.*, 2012) to determine whether if they exist in a population under study (Table 6 and 7). Findings from Table 6 and 7 reveal that a sizeable proportion of study participants had negative

attitude and perception towards condom and hence threat to condom use among students. In nearly all variables related to attitude towards condom considered in this study, at least 20%, that is one in very five students had negative attitude towards condom. For example 38.2% agree that use of condom is a sign of lack of trust, 69.5% agree that condoms reduce pleasure, 61.4% agreed that condoms causes infections i.e. rashes, and around 30%, that is nearly one-third of total respondents agreed that condoms are expired and frequently break during sexual encounter (Table 6). Likewise, nearly one-third of total respondents perceived effectiveness of condom in preventing sexual transmission of HIV/AIDS to be low (Table 7).

Table 5: Reasons for not using condom

| Variable | Frequency | Percent |
|--|-----------|---------|
| Reasons for not using condom(if not used all the time) (n=85)* | | |
| Trusting each other | 40 | 47.1 |
| Condom reduce sexual pleasure | 36 | 42.4 |
| Condom not available | 5 | 0.6 |
| Condom have negative effects | 10 | 11.8 |
| Hurry/not time to use condom | 3 | 3.5 |
| If can resist sex if partner don't have condom/or refuse to use condom(n =220) | | |
| Yes | 97 | 44.1 |
| No | 66 | 30.0 |
| Not sure | 57 | 25.9 |

*Data was based on multiple responses

Table 6 : Attitude of students towards condom (n=220)

| Items/variable | Response (%) | | |
|---|--------------|----------|----------|
| | Agree | Disagree | Not sure |
| It is embarrassing to talk about condom | 15.4 | 75.4 | 9.1 |
| It is embarrassing to buy /ask condom | 22.3 | 66.8 | 10.9 |
| Condoms reduce pleasure | 69.5 | 15.9 | 14.5 |

| Items/variable | Response (%) | | |
|---|--------------|----------|----------|
| | Agree | Disagree | Not sure |
| Use condom is a sign of lack of trust | 38.2 | 48.2 | 13.6 |
| Condoms are infected with HIV/AIDS | 20.0 | 43.2 | 36.8 |
| Condoms cause infections i.e. rashes | 61.4 | 17.3 | 21.4 |
| Most condoms are expired | 32.3 | 22.8 | 45.0 |
| Condoms have holes | 20.9 | 30.0 | 49.1 |
| Condoms frequency break during sexual encounter | 31.4 | 35.0 | 33.6 |
| Condoms are stinking | 35.4 | 40.0 | 24.5 |
| Condoms are readily available | 33.7 | 52.2 | 14.1 |
| Condoms are expensive | 32.3 | 58.6 | 9.1 |

Table 7: Perception on effectiveness of condom in preventing sexual transmission of HIV/AIDS (n=220)

| Perception on Effectiveness | Frequency | Percent |
|-----------------------------|-----------|---------|
| Low | 70 | 31.8 |
| Moderate | 68 | 30.9 |
| High | 71 | 32.3 |
| Don't know | 11 | 5.0 |

4.0 CONCLUSION AND RECOMMENDATIONS

Although all students are aware of HIV/AIDS, however sexual activities are prevalent at substantial rate. Main reasons for engagement in sex include poverty (sex for money), peer pressure, body temptation. Substantial number of students do not use condom consistently and hence at risk of HIV/AIDS infection. Identified reasons for not using condom include trusting each other, and negative attitude and perception towards condom. Based on these findings it is recommended that campaign to reduce sexual activities among student should be initiated, this could be through Youth Clubs; Frequent seminars to tackle negative attitude and perception towards condom should also be launched and given due weight.

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