International Journal of Multidisciplinary Research and Development
Online ISSN: 2349-4182, Print ISSN: 2349-5979; Impact Factor: RJIF 5.72
Received: 21-05-2019; Accepted: 23-06-2019
www.allsubjectjournal.com
Volume 6; Issue 7; July 2019; Page No. 100-106

Pupils'sources of information about sexual and reproductive health: A Case of selected secondary schools in Lusaka province

Maurice Moono[1], Crispin Maambo[2], Siamoongwa Phanety[3], Maiba Rosta[4], Godfrey Sichamba[5], Beatrice Chirwa[6]
[1] School Humanities and Social Sciences, Chalimbana University, Zambia
[2-6] School of Education Chalimbana University, Zambia

Abstract
The study aimed at establishing the sources of information about sexual reproductive health among school pupils in selected schools in Lusaka province. The objectives of the study were to: establish the prevalence of sex among pupils in secondary schools and to determine pupils' sources of information about sexual health in selected secondary schools in Lusaka Province.
A descriptive survey was used in conducting this research. The study used both qualitative and quantitative methods of data collection. The sample consisted 172 respondents: 88 girls and 84 boys drawn from six secondary schools in Lusaka province. In selecting the participants, simple random sampling technique was used. The study employed the questionnaire and focus group discussion to ensure validity of the findings. The quantitative data was analysed using the statistical package for social sciences computer software while the qualitative data was analysed by coding and grouping the emerging themes.
The study has revealed that comprehensive sexuality education lessons were the main sources of information about sexual health of adolescents in secondary schools. 62% of pupils reported that they learnt about safe sex from CSE lessons at school. The study also has shown that more pupils in the age group of 20-21 years were involved in sex more than any other age groups. It also emerged from the study that 65% of pupils are in relationships and 65% had a protected sex.
Arising from the findings of the study, the following recommendations were made:
1. The ministry of education should supply more books on sexuality education.
2. The Ministry of Education should make CSE a stand-alone subject rather than integrating it in other subject.

Keywords: comprehensive sexuality (CSE), Assertiveness, prevalence and sexual reproductive health

Introduction
In contemporary society, young people are exposed to a lot of information often from unreliable sources. Mixed messages from modern media such as videos, cell phones and the Internet are bewildering them from every direction. A lot of such information is distorted, unbalanced, unrealistic and often degrading on sexuality. Informal lessons from parents and other stakeholders on sexuality are inadequate to shape young peoples' sexual lives. These informal sources often lack the necessary knowledge, particularly when complex and technical information is needed (such as that pertaining to contraception or transmission modes of Sexually Transmitted Infection (STI).
Owing to the lack of formal and institutionalized sexuality education, few young people globally receive realistic information regarding their sexual lives. This has led many young people to be vulnerable to coercion, abuse and exploitation, unintended pregnancies and sexually transmitted infections (STIs), mainly HIV. Lack of openness by parents and other stakeholders in discussing sexual matters have been met with embarrassment, silence or disapproval (UNESCO, 2009) [29].
Comprehensive sexuality education programmes emerged to counteract and correct misleading information and images conveyed through the media and other conventional sources (UNESCO, 2009) [29]. Institutionalization of sex education can influence social and gender norms, which may benefit not only the adolescents but the general population as well (UNESCO, 2012) [30].
Kirby (2012) indicates that well organised comprehensive education programmes can reduce behaviours that put young people at risk of untended pregnancy, HIV and STIs (Kirby, 2012). It is with this understanding that the Zambian Government through the Ministry of General Education decided to introduce Comprehensive Sexual Education (CSE) in the school curriculum.

Statement of the Problem
Pregnancies and other sexual risk behaviours are deemed to be a common occurrence among the adolescents with an estimated two–third of unwanted pregnancies ending up in unsafe abortion (Source). Statistics for Zambia, reveal that the adolescent's birth rate stands at 146 birth per 1000 girls between 15-19 years and about 28 per cent of adolescent girls become pregnant before age of 18 (MoGE, 2015). These statistics appear to be on the increase.
The World Health Organisation (WHO) strategies on adolescence sexual and reproductive healthy recommend that schools be avenues for children to learn healthy related issues (UNESCO, 2012) [30]. Following this recommendation, The Government of the Republic of Zambia in 2016 introduced comprehensive sexuality education to help address these challenges. Very little information is known about pupils' sources of information on sexual and reproductive health in schools. This study

therefore, examines the pupils' sources of information on sexual and reproductive health in selected secondary schools.

Purpose of the Study

The purpose of this study was to establish pupils' sources of information about sexual reproductive health among school pupils in Lusaka province.

Objectives

The objective of this study were to:

- Establish prevalence of sex among adolescents in secondary schools in Lusaka province
- determine pupils source of information about reproductive health

Literature Review

A study conducted by Kirby, Laris and Rolleri (2007) [23] found that sexually active adolescents who received sex education at school were more likely to use birth control at first intercourse and to have fewer unwanted pregnancies. Mueller, Gavin and Kulkarni (2008) [26] summarized evaluations of school-based sexuality and HIV education programs covering both abstinence and contraception and concluded that some of these programmes can delay the onset of intercourse, reduce the frequency of intercourse, decrease the number of partners, and increase condom use. Therefore, formal reproductive health education is not associated with increased sexual activity (Kirby, 2002; Kirby, Laris, & Rolleri, 2007; Mueller, Gavin, & Kulkarni, 2008) [21-22, 26].

In Portugal, rates of pregnancies, births, and STIs among adolescents continue to present public health challenges due to the health implications associated with these events (Matos, 2011) [25]. An increase in the use of condoms and contraceptives among adolescents may help reduce the effect of sexual risk behaviours on health. Matos *et al*., (2011) [25] further, points out that condom use (82.5%) and use of birth control pills (53.5%) at last sexual intercourse among sexually active adolescents suggest room for improvement.

Mueller, Gavin and Kulkarni, (2008) [26] argue that risk-reduction strategies do not promote more general developmental skills that would enable and motivate young people to employ these prevention strategies in their lives.

Positive youth development strategies that promote general developmental skills have been seen as an alternative to approaches that promote adolescent health by focusing solely on risk factors (Abma, Martinez, Mosher, & Dawson, 2004) [1]. A growing amount of research stresses the importance of understanding the role that promotive and/or protective factors play in reducing negative health outcomes for youth, including adolescent sexual and reproductive health outcomes (Rangel, Gavin, Reed, Fowler, & Lee, 2006) [16].

There is some evidence that a positive youth development approach can be effective for producing long-term behavioural change and ultimately reduction in teen pregnancy and sexually transmitted infection (STIs). (DiCenso, Guyatt, Willan, & Griffith, 2002) [10]. The most recent systematic review of randomized controlled trials of adolescent pregnancy and sexual transmitted infections prevention programmes calls for future research into sex education programmes developed from suggestions made by young people that emphasize negotiation skills in sexual relationships and communication (House, Bates, Markham, & Lesesne, 2010) [18].

For this reason, most research emphasizes the importance of sex education from the earliest school years and identifies young people as an important target group for prevention. There are several good reasons to study sex education and its use in the adolescent population. The question remains as to the best way to educate individuals about sex and sexuality in developing countries (Esere, 2008; Kirby, Laris & Rolleri, 2007; Mueller, Gavin & Kulkarni, 2008) [23, 26].

According to behaviour theory - the model of information-motivation behavioural skills (IMB), if the aim of sex education is to improve safe sexual behaviour of individuals, the first aim must be to improve knowledge, and then foster motivation (that includes attitudes, behavioural intentions and subjective norms - perceived social support to perform these actions) and behavioural skills (Fisher & Fisher, 1992; Fisher & Fisher, 1993) [14-15]. This means that young people who have knowledge, information, motivation and skills can change their attitude and subsequently their sexual behaviour (Bell, 2009) [4].

Evidence from intervention efficacy research accumulated during the past 20 years shows that some, but not all, sex education curricula can effectively reduce adolescent sexual risk behavior (House *et al*., 2010) [18]. It is possible that the changes in how and when sex education is provided (i.e., increased coverage of sex education, providing sex education at earlier ages, and availability of evidence-based curricula) will be translated into a greater impact at the population level.

Adolescence is the period when many young people begin to explore their sexuality, implying that access to sexual and reproductive health information and services is necessary for their well-being. Early unprotected sex, including sex with older men, especially for girls, can result in early child-bearing, and increases the risk of HIV infection (Kirby, 2001) [24].

Sexual activity among girls starts earlier than it does among boys. For Zambia, the median age at first sexual intercourse is 17 years for women aged 20-49 and 18 years for men in the same age group. Although 52% of adolescent girls aged 15-19 years have never had sexual intercourse compared with 55% of their male counterparts, 12.3% of adolescent girls and 16.2% of their male counterparts had had first sexual intercourse by exact age 15 (Zambia Update of the situation analysis of children and women, 2013, 2013).

In terms of trends in age at first sexual intercourse, adolescent girls aged 15-19 who have had sex before age 15 declined from 22% in 1996 to 12% in 2007. As for adolescent boys aged 15-19 who have had sex before age 15, this declined from 39% in 1996 to 16% in 2007. Meanwhile, only 28% of adolescent girls aged 15-19 and 20% of adolescent boys aged 15-19 used a condom at first sexual intercourse (Zambia Update of the situation analysis of children and women, 2013).

Condom use is one of the most effective strategies for combating the spread of HIV. Use of condoms during higher-risk sex, especially with a non-marital, non-cohabiting partner is an important indicator in assessing progress towards the MDG 6 target on HIV and AIDS. Among women who had had sexual intercourse in the 12 months prior the 2007 ZDHS, the percentage who had engaged in higher-risk sex was highest for girls aged 15-19

(52%), followed by those living in urban areas (23%); those in Western province (36%); those with more than a secondary education (30%); and those in the highest wealth quintile (25%). Among men who had had sexual intercourse in the 12 months prior to the survey, the percentage of respondents engaging in higher-risk sex was highest among those aged 15-19 (96%), followed by those living in urban areas (47%); those in Lusaka and Wester) provinces (51% and 52%, respectively); those with secondary education (47%) (Zambia Update of the situation analysis of women and children, 2013)

It is evident that young adolescent boys and girls are having sex early and, in most instances, especially for the boys, it is higher-risk sex. In an environment of generalized HIV epidemic like the one in Zambia, having sex with older men and to some extent women may introduce HIV into younger and uninfected generations or cohorts.

In many developing countries, and Sub-Saharan Africa in particular, laws and policies may restrict adolescent boys and especially girls' access to condoms, testing and accurate comprehensive information UNICEF, 2012).

It is clear from the discussion on adolescent fertility and contraceptive prevalence among women that use of contraception for purposes of family planning and to avoid unwanted early pregnancies is not common among adolescents, possibly because of a lack of a clear policy direction on how to deal with this category of the population – an intersection between childhood and adulthood.

Barnett and Hurst evaluated an abstinence-only curriculum entitled the Life's Walk programme. They evaluated the efficacy of this curriculum as it was implemented in northwest Missouri. The curriculum was designed to give a clear and consistent message to wait until marriage to have sex. The only mention of birth control and condoms is to discuss their failure rates. The programme's goals were to "improve adolescent-parent communication about sex, increase factual knowledge about sex, and increase student understanding about the realities of teen parenthood, and foster the belief that abstinence is the best way to avoid negative consequences of early sexual activity (Barnett *et al*. 2003) [3]. The study found a significant increase in parent-adolescent communication about sex but no overall change in students' attitudes about sex or their levels of self-esteem. When asked which method the students would use to avoid pregnancy and STIs there was an increase in the number of students who chose abstinence and a decrease in the number who chose condoms. The study also found a statistically 6significant increase in sexual behavior. This finding is particularly confusing since the majority of students claimed to use abstinence as their preferred method of avoiding pregnancy and STIs, yet an increasing number of students were becoming sexually active. Barnett *et al*. (2003) [3] recommend that if this statistically significant increase is replicated, it is crucial that more of an emphasis be placed on condom and birth control use so that these adolescents have effective methods of birth control and STI protection available to them.

Literature labels adolescence as a period in which young people's vulnerability is amplified due to their engagement in risky behaviours (Dietrich, 2003) [11]. The trepidations pertaining to adolescents' indulgency into reckless behaviour have a long history. Stanley Hall in 1904 attributed adolescents' misbehaviour to the storm and stresses of the transition from childhood to adulthood. Subsequently, social scientists produced substantial evidence that the storminess of adolescence is largely an over generalisation which has not been empirically substantiated. For instance, Margaret Mead's research among Samoans indicated that adolescence in Samoa was a smooth transition. Mead's efforts, therefore, became a milestone in which social scientists, anthropologist and other scholars had to view the adolescence period from a separate perspective. Efforts made in adolescence study culminated into dualistic view of the period with other scholars acknowledging it as a period of unrest (storm and stress) and others looking at it as a smooth transition. Numerous scholars (Dietrich, 2003) [11] have tried to unveil the underlying perception of a risk and risk taking in adolescents. Elkind came up with the theory of social cognition in which he argued that adolescents are franked with personal fable, thinking that I am unique (Elkind, 1984); I can handle anything; that won't happen to me; I can never be hurt, hence, do not perceive themselves to be at risk (Mwale, 2011) [27]. Personal fable in youths can be a potential drive to sexual risk-taking but the risk takers themselves feel distanced and safe from any possible risk. This thinking amongst the youth lessens their fears pertaining to undertaking risk activities including sexual risks. Likewise, Weinstein advanced the theory of optimistic bias which contends that individuals are likely to lessen their risk by attributing much of the vulnerability to others instead of themselves (Bruine de Bruin, Downs, & Fischhoff, n.d; Helweg-Larsen & Shepherd, 2001) [6].

According to Kendi, Mweru and Kinai (2010) people who hold this kind of orientation when asked to evaluate their own chances of developing certain diseases compared to others of the same sex usually evaluate their own risks to be significantly lower than that of others. Young people especially adolescents are not an exception in this context. They underestimate their risk compared to others especially in situations where they accurately or inaccurately perceive some element of personal control (Bruine de Bruin *et al*., 2010.) [6]. Adolescents usually feel a false sense of authority when they perceive themselves to be at the centre of control of their lives. Greene *et al*. (2000) [17] maintain that most of the adolescents have the ability to perceive risks accurately yet do not weigh these risks in their decision-making. Their faulty decisions blindfold them to view themselves in isolation of any possible risk. In connection to the study, there is a shift in locus of risk from one individual to another with adolescents downplaying their vulnerability. For instance, adolescents having two sexual partners perceive themselves safer than those having three or more sexual partners (Kilman *et al*., 2012) [20]. Such thinking lessens their vulnerability to any sort of risk they are likely to encounter in any situation like contracting HIV/AIDS and getting pregnant. The current study indicates that despite HIV/AIDS awareness brought through sex education, students engage in risky sexual activities believing that this would not impact negatively on their sexual lives except in the lives of their colleagues. Their understanding is that HIV/AIDS can only affect their friends, not them (Kilman *et al*., 2012) [20]. Adding to that, some adolescents see themselves as having less control over their lives (Bruine de Bruin *et al*., 2010) [6]. Having less control over one's life then becomes a recipe for easy coercion either by peers or older sexual partners to engage in unsafe sex.

Methodology

Research Design

According to McCaig (2010), a research design is an overarching strategy for unearthing useful answers to research problems. A descriptive survey design was used when conducting this research. Bless and Achola (1988) define a descriptive survey design as a mode of collecting information by interviewing or administering a questionnaire to a sample of individuals. Since the research sought to collect information about the respondents' opinions on the topic at hand, the descriptive research design was ideal. The study used both quantitative and qualitative methods of data collection.

Since no single method ever, adequately solves the problem of rival causal factors, multiple methods of observation must be employed; triangulation is now a final methodological rule that should be used in every investigation (Denzin, 1978). The strategy of triangulation was used as a way of cross validation of research findings.

Target Population

The population for this study comprised all pupils in secondary schools in Lusaka province in Zambia.

Sample Size

The sample size was 172 respondents of which 88 were girls and 84 boys from Six public secondary schools from chongwe and Lusaka districts respectively. (three school were selected per district).

In selecting the respondents, Simple random sampling procedure was used to pick pupils who participated in this study. This was in order to provide each population element an equal probability of being included in the sample (Bless & Achola, 1988).

Research Instruments

In this research, structured questionnaires and focus group discussions were used to collect data.

Data Collection Procedure

The researcher got permission from the Lusaka Provincial Education Office and from the District Education Board Secretaries (DEBS) of the respective districts in which the research was conducted.

The researcher distributed a consent form and questionnaires to the respondents who were sampled and willing to complete them. Enough time was given to the respondents so that they could complete the questionnaires, after which the researcher collected the questionnaires. After collecting the questionnaires, the researcher randomly selected twelve pupils and eight teachers at each secondary school so that they could take part in focus group discussions. During focus group discussions, the researcher moderated all discussions and used a voice recorder so that, the flow of the discussions could not be disturbed. The recorded discussions were later transcribed and analysed.

Data Analysis

McCaig (2010, P. 45) describes data analysis as "a process that involves organising what you have seen, heard and read, so that you can make sense of what you have learnt."

The data for this study was analysed both quantitatively and qualitatively. The quantitative data was analysed using the statistical package for social Sciences (SPSS) computer software to generate tables of frequencies and percentages which were used in describing distributions of the variables. Qualitative data was analysed by coding and grouping the emerging themes.

Ethical Considerations

The study took into consideration ethical issues. The information that was collected was kept strictly confidentially. Consent was sought from all the respondents and their participation was voluntary. At the onset of data collection, the researcher sought permission of the head teacher who introduced the researcher to the pupils. In addition, each questionnaire contained an opening introductory letter requesting for the respondent's cooperation in providing the required information for the study. The respondents were further assured of confidentiality of the information provided and that the study findings were to be used for academic purposes only. Respondents were further assured of their personal protection and that they had authority to refuse or accept to be interviewed.

Findings and Discussion Pupils sources of information on sexual and reproductive health source of information on prevention of unwanted pregnancy

Pupils were asked to indicate their source of information on prevention of unwanted pregnancy. Figure 1 shows their responses.

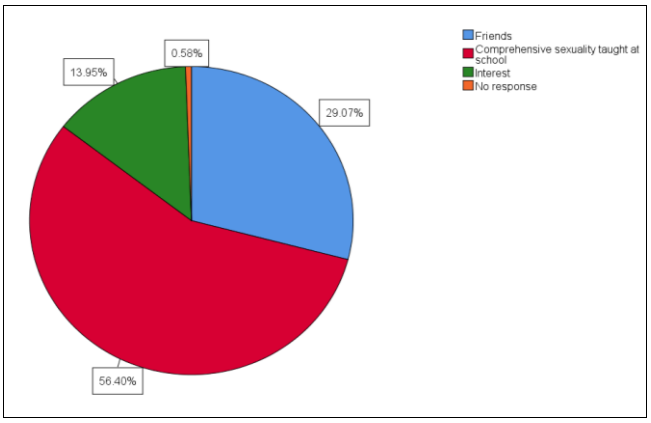

Fig 1: source of information on prevention of unwanted pregnancy

Figure 1: shows that the majority of the pupils 56.4% learnt about prevention of unwanted pregnancy from comprehensive sexuality lessons taught at school. 29.1% from friends and only 14.0% from the internet. This study has shown that most pupils 56.4% learnt about prevention of unwanted pregnancy from CSE lessons. This is because it is mandatory for all pupils in Zambian secondary schools to learn CSE. One pupil in a focus group discussion said "*CSE is a major source of information on sexuality.* "These findings are similar to those of Bruine (2010) [6] study.

Source of information on the use of contraceptives (such as condoms)

Pupils were asked to indicate the Source of information on the use of contraceptives (such as condoms) their views are presented on the table 1 below.

Table 1: Source of information on the use of contraceptives (such as condoms)

	Frequency	Percent
Friends	47	27.3
Comprehensive sexuality taught at school	97	56.4
Interest	27	15.7
No response	1	.6
Total	172	100.0

As can be seen from table 1 above the majority of the pupils 97(56.4%) got information on the use of contraceptives (such as condoms) from CSE lesson. 47(27.3%) from friend and only 27(15.7%) got information from the internet. This analysis shows that the majority of pupils (56.4%) get information about use of contraceptives from CSE.

Source of sexual information on sexual relationships and safe sex

Pupils were asked to indicate the Source of information on sexual relationships and safe sex. Their views are presented on the table 2 below.

Table 2: Source of information on sexual relationships and safe sex

	Frequency	Percent
Friends	62	36.0
Comprehensive sexuality taught at school	78	45.3
Interest	31	18.0
No response	1	.6
Total	172	100.0

As can be seen from table 2 above the majority of the pupils 78(45.3%) got information on sexual relationships and safe sex from CSE lesson. 62(36.0%) from friend and only 31(18.0%) got information from the internet. When it comes to the source of information about sexual relationship CSE lessons dominate as a source of information due to the reason alluded to earlier. This finding is similar to the study of Kirby (2012) which also revealed that schools where CSE was taught was major source of reproductive health information to pupils.

Assertiveness in relationship

Pupils were asked to indicate the Source of information about assertiveness in relationship. Their views are presented on the figure 2 below.

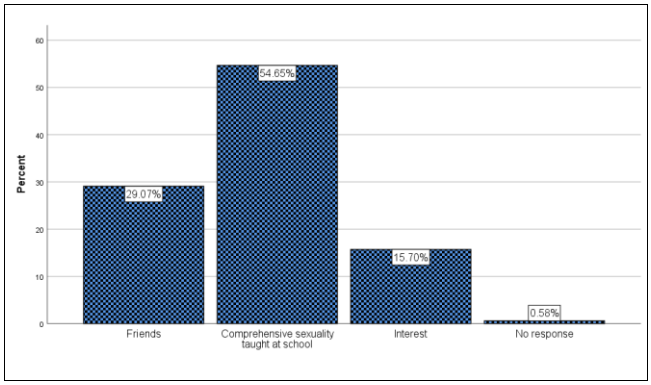

Fig 2: Assertiveness in relationships

Figure 2 above shows that the majority of the pupils 54.7% got information on assertiveness in relationship from CSE lesson. 29.1% from friend and only 15.7% got information from the internet. Again CSE is coming out as a major source of information for assertiveness among learners.

The age at which a respondent had sex for the first time?

Pupils were asked to indicate the age at which they had sex for the first time. Their responses are shown on figure 3 below.

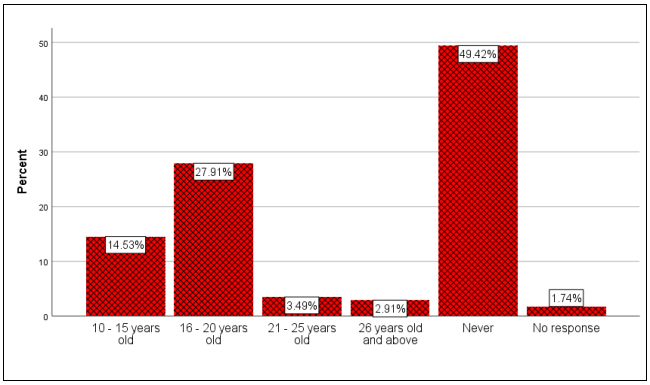

Fig 3: The age at which a respondents had sex for the first time

Figure 3 shows that 27.9% of the pupils had had sex between the ages of 16-20 years, 14.5% had sex when they were between 10-15years. 3.5% of the pupils indicated they had sex when they were between 21-25 years and only 2.9% had sex when they were 26 years and above. While 49.4% %) said they have never had sex. This study has shown that there were more pupils who indulged in sex between the 16-20 years. This could be that; this is the time children begin to gain freedom from their parents and begin to experiment with life. These findings are similar to the findings of Darson (2004).

Frequency of sex among pupils

Pupils were asked to indicate the Frequency of sex. Their responses are shown on figure 4 below.

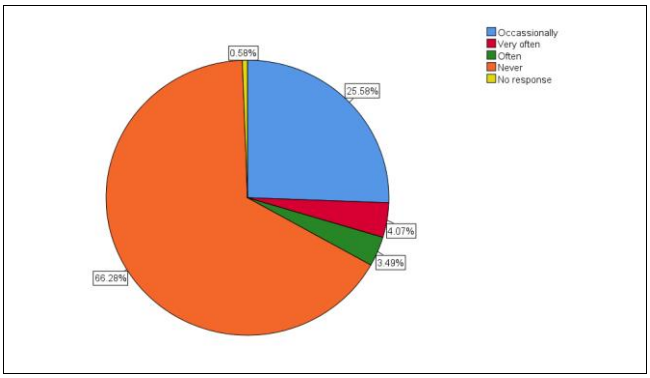

Fig 4: Frequency of sex

The above figure shows that 25.6% occasionally had sex. 4.1% said they had sex very often. 3.5% said they had sex often. The majority 66.3% indicated that they never had sex. 66.3 percent of pupils who did not indulge in sex could be due to CSE which promotes delay in engaging in sexual behaviour. These finding are similar to those of Matos (2011) [25].

Number of pupil's in relationships

The pupils were asked to state whether they were in a relationship. The responses are on figure 5 below.

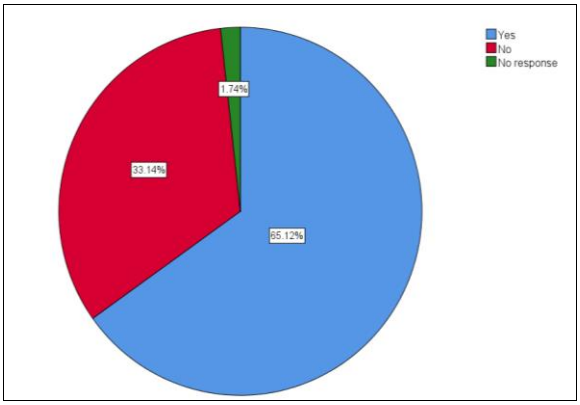

Fig 5: Number of pupil's in relationships

The majority of the pupils indicated that they are in relationships 65.1 and 33.1% said they were not in relationships. This is normal as the age group under study is in adolescence stage when experimentation is the order of the day.

Number of pupils who had protected sex

Pupils were asked to indicate whether they had protected sex before. Their views are indicated on figure 6 below.

Table pupil who had unprotected sex before

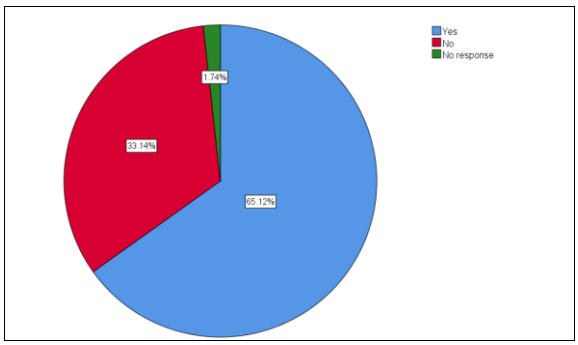

Fig 6: shows that 65% of pupils had protected sex while only 33% said they did not. This big number is due to the stage of development (adolescent stage) the respondents are.

Conclusion

The study has revealed that comprehensive sexuality education is the main source information about sexual health of adolescents in secondary schools. 62% of pupils reported that they learnt about safe sex from CSE lessons at school. The study also has shown that more pupils in the age group of 20-21 years were involved in sex more than any other age groups. it also emerged from the study that 65% of pupils are in relationships and 65% had a protected sex.

Recommendations

Arising from the findings of the study, the following recommendations were made:

1. The ministry of education should supply more books on sexuality education.
2. The Ministry of Education should make CSE a stand-alone subject rather than integrating it in other subject.

References

1. Abma J, Martinez G, Mosher W, Dawson B. Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2002. National Center for Health Statistics. Vital Health Stat. 2004; 23(24):1-87.
2. Babbie E. The Practice of Social Research, Eleventh Edition, Thomas Higher Education, 10 Davis Drive USA, 2007.
3. Barnett Jerrold, Cynthia Hurst S. Abstinence Education for Rural Youth: An Evaluation of Life's Walk Program. The Journal of School Health. 2003; 73(7):195-208.
4. Bell J. Why embarrassment inhibits the acquisition and use of condoms: A qualitative approach to understanding risky sexual behaviour. Journal of Adolescence. 2009; 32:379-391.
5. Bless C, Achola P. Fundamentals of Social research methods. Lusaka: Government printers, 1988.
6. Bruine de Bruin W, Downs JS, Fischhoff B. Adolescents' thinking about the Risks of Sexual Behaviour, 2010.
7. CSO (Central Statistical Office). Zambia Demographic and Health Survey 2007. Lusaka: CSO, 2007.
8. CSO (Central Statistical Office). Zambia Sexual Behaviour Survey 2009. Lusaka: Government of UNICEF (UN Children's Fund) Zambia and Government of Zambia (2013) Update of the Situation Analysis of Children and Women in Zambia. Lusaka: UNICEF Zambia and Government of Zambia: Zambia, 2010
9. CSO (Central Statistical Office). Zambia 2010 Census of Population and Housing – Population Summary Report. Lusaka: CSOm, 2012a.
10. DiCenso A, Guyatt G, Willan A, Griffith L. Interventions to reduce unintended pregnancies among adolescents: systematic review of randomised controlled trials. BMJ. 2002; 324:1420-3o.
11. Dietrich V. An exploration of adolescent risk taking behaviour: A case study analysis. Retrieved 14 June 2014-2003. from http://contentpro.seals.ac.za/iii/cpro/app?id=5118994984671725&itemId=1004152&lang=eng & service =blob&suite=def
12. Elkind D. Egocentrism in adolescence. Child Development. 1984; 38(4):1025-1034.
13. Esere M. Effect of sex education programme on at-risk sexual behaviour of school-going adolescents in llorin, Nigeria. African Health Sciences. 2008; 8(2):120-125.
14. Fisher J, Fisher W. Changing AIDS risk behaviour. Psychological Bulletin. 1992; 111:455-474.
15. Fisher W, Fisher J. Understanding and promoting AIDS preventive behaviour: A conceptual model and educational tools. The Canadian Journal of Human Sexuality. 1993; 1:99-106.
16. Fowler Jr, Floyd J, Carol Cosenza. Writing Effective Questions. in International Handbook of Survey Methodology, edited by Edith D. de Leeuw, Joop J. Hox, and Don A. Dillman. Lawrence Erlbaum, 136-60, 2008.
17. Greene K, Krcmar M, Walters LH, Rubin DL, Hale J, Hale L. Targeting adolescent risk-taking behaviours: The contributions of egocentrism and sensation seeking. The journal of Adolescence. 2014-2000; 23(4):439-461. Retrieved. from http://www.idealibrary.com.
18. House L, Bates J, Markham C, Lesesne C. Competence as a predictor of sexual and reproductive health outcomes for youth: A systematic review. Journal of

Adolescent Health. 2010; 46(3):(suppl1):S7-S2.
19. Kendi L, Mweru M, Kinai T. HIV/AIDS knowledge and risk perception of visually impaired and sighted pupils in Kenya. European Scientific Journal. 2012; 8(8):168-179.
20. Kilman A, Binagwaho A. Adolescents and the right to health: Eliminating age-related barriers to HIV/AIDS services in Rwanda. AIDS Care. 2012; 24(7):936-947.
21. Kirby D. Sexuality and sex education at home and school. Adolescent Medicine; 10,195 -209. Kirby, D (2002), the impact of schools and school programs upon adolescent sexual behavior. The Journal of Sex Research. 1999; 39(1):27-33.
22. Kirby D. Reducing Sexual Risk Behaviour among Young People: A Training Kit for Curriculum. Washington Dc: Scots Valley, 2002.
23. Kirby D, Laris BA, Rolleri L. Sex and HIV education programs: Their impact on sexual behaviors of young people throughout the world. Journal of Adolescent Health. 2007; 40:206-217.
24. Kirby D. Emerging Answers: Research Findings on Programs to Reduce Teen Pregnancy. Washington, DC: National Campaign to Prevent Pregnancy, 2001.
25. Matos MG, Simões C, Tomé G, Camacho I, Ferreira M, Ramiro L, *et al*. A Saúde dos Adolescentes Portugueses ± Relatório do Estudo HBSC 2010. ACS/FMH/ UTL/CMDTUNL, 2011.
26. Mueller TE, Gavin LE, Kulkarni A. The association between sex education and youth's engagement in sexual intercourse, age at first intercourse, and birth control use at first sex. Journal of Adolescent Health. 2008; 42:89-96.
27. Mwale M. Adolescent psychology: The Malawian perspective. Lilongwe: Corporate Publishers, 2011.
28. Neuman LW. Social Research Methods, Qualitative and Quantitative Approaches, Fifth Edition, London, 2003.
29. UNESCO. International Technical Guidance on Sexuality Education: an evidence informed approach for schools, teachers and health educators (vol. I). Paris, 2009.
30. UNESCO. Impact of HIV and Sexual Health Education on the Sexual Behaviour of Young People: A Review of Updates. Geneva: UNAIDS, 2012.
31. UNICEF. Health and family life education: teacher training manual, 2013.
32. UNICEF (UN Children's Fund). Progress for Children: A Report Card on Adolescents. Number 10. New York: UNICEF, 2012b.