Introduction: Worldwide, sexual debut for most young people occurs during their teenage years in Uganda, the evidenced rate of 24% teenage pregnancies UDHS (2011) points out a gap and deficit in the way young people are exposed to sex education and the sexual behaviors they exhibit. The study focused on the influence of sex education exposure on students' sexual behavior where several questions regarding quality sex education have been raised. To establish this, the study sought to determine the different avenues of sex education exposed to secondary school students' in Kapchorwa district, to assess the nature of sex education information delivered by various avenues to secondary school students in Kapchorwa district and to determine the relation between the nature of sex education exhibited by secondary school students in Kapchorwa district.

Methodology: A descriptive cross sectional study design was conducted, qualitative and quantitative study of 267 respondents. The study population were secondary school students aged 18 years and above. Data was collected by use of self administrated questionnaire and key informant constituted of head teachers, teachers and counselors.

Results: The results of the study showed that majority (91.45%) of the respondents had been exposed to sex education with friends being their first source of sex related information while mothers were a regular source of sex education; this could either lead to reduction in risky sexual behavior or increase depending on the quality of information received from these sources.

However, it was found that most students were taught by their teachers about physical body changes that take place as a person grows, pregnancy and consequences of criminal abortion at school. The study also established that there is a relationship between the nature of sex education exposed to students and their sexual behavior.

Conclusion: The findings confirmed that the common avenues of sex education exposed to secondary school students were friends, mothers and teachers/school. The students who had been exposed to sex education at school through class lesson and from friends were most likely to have a good sexual behavior compared to those who received from parents.

Recommendations: Parents especially mothers should be sensitized on provision of comprehensive sexual health education since they are the most regular source of sex education to adolescent children and male parents be encouraged to participate in provision of sex education through community based programmes and media. Secondary schools should also be provided with more up to date resources and knowledge to enable both students and teachers to provide more comprehensive sex education.