This study examined the effect of knowledge of HIV prevention on casual sex among sexually active persons in Ghana in the fight against HIV and AIDS.

Provide information on how HIV/AIDS resulting from casual sex may be reduced in Ghana.

The proportion of the sexually active population that uses any contraception in Ghana has been low (Baiden and Rajulton, 2011; Darthe and Nnorom CCP, 2012). The generally low reported prevalence rate of condoms and other contraceptives in Ghana has been attributed mainly to a socio-cultural environment that cherishes large family size, despite the benefits of family planning in terms of promoting the health of the mother and child.

In a situation of low use of contraception especially condoms, HIV prevention programmes have relied more on educating people on how to avoid infection through provision of right and accurate information in the hope that when individuals have a high knowledge about HIV prevention, they will adopt lifestyles less prone to exposing them to the risk of HIV infection.

One of the lifestyles that expose people to HIV infection is casual sex especially when it is unprotected.

This study is founded on the hypothesis that a good knowledge of how to prevent HIV infection would contribute to reduction in casual sex among sexually active people.

The study is based on a nationally representative sample survey in Ghana in 2011.

A total of 6,027 respondents were interviewed, made up of 2,074 males and 3,953 females.

The question on casual sex focused on how many sexual partners the respondents have engaged on casual sex in the last four weeks. Those who did not have a casual sexual partner in the last four weeks were coded as "0" and those with one or more were coded as "1".

Three questions were used to assess the knowledge of HIV prevention. They included questions on whether HIV can be prevented through abstinence, use of condom and being faithful to one's partner. An index score was created for knowledge of HIV prevention and a higher score indicates a higher knowledge on HIV prevention.

Descriptive statistics like frequency tables were used to describe the characteristics of the respondents.

A binary logistic regression was used to determine the predictors of having a casual sexual partner within the context of knowledge of HIV prevention.

Two models were run. The first model included only knowledge of HIV prevention as the predictor. In the second model, sex, level of education, age, place of residence, religion, ethnicity, and marital status were controlled for.

The P-value was set at a minimum of 95%.

The study showed that there is no statistical significant relationship between knowledge of HIV prevention and having a casual sexual partner. This is consistent with a study which shows that although knowledge of HIV prevention is considered as one of the most important weapons for fighting the AIDS epidemic (Kiragu, 2001), it does not always translate into positive sexual behaviour (Odebiyi, 1992; Cleland, 1995). Other studies have also shown that knowledge of HIV prevention does not necessarily translate into appropriate sexual behaviour (Awanuwa-Asare et al., 1999; Odebiyi, 1992).

Further, that high-risk sexual behaviours are too complex to be changed by simply increasing education or providing health-related information (Campbell, 2003). This is because rather than being a matter over which an individual can exercise rational control, sexuality is shaped by a complex process of identity formation nested within the dynamic web of cultural, psychological and social factors (Campbell, 2003).

Studies have shown weak link between knowledge of HIV prevention and perceived severity of HIV/AIDS. Findings by Fapohunda et al., (1999) and Ikle and Ikole (2002) may provide a possible explanation for the weak link between knowledge, perceived risk and behaviour. In their studies, respondents had a fatalistic attitude towards AIDS. The expression 'after all you have to die of something’ was cited to justify high-risk behaviour. This fatalistic attitude has been noted in other studies where participants are aware of modes of transmission and prevention of HIV and yet continue to engage in risky sexual practices (Obbo, 1993). Other studies have, however, unearthed positive associations between knowledge and condom use (Basen-Engquist, 1992; Baiden and Rajulton, 2012).

The implication of the findings is that the acquisition of HIV prevention knowledge alone may not be enough to equip the individual to want to avoid engaging in casual sex. This calls for the need for a comprehensive education on the effects of casual sex on HIV and AIDS to be promoted among sexually active Ghanaians. Such comprehensive sex education has been shown to work in helping people make healthy decisions about sex and in adopting a healthy sexual behaviour (Harrison, 2009).