
**The Effect of Peer Education on Student's Knowledge of Genital Scabies in Senior
Secondary Schools in Uyo Senatorial District of Akwa Ibom State**

BY

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ABSTRACT

The aim of this paper was to examine the effect of peer education on student's knowledge of genital scabies in senior secondary schools in Uyo senatorial district of Akwa Ibom State. This study was an intervention research using a quasi-experimental research design with a non-equivalent control group design. The area of this study was Uyo Senatorial District of Akwa Ibom State. The target population for this study was all the senior secondary school students studying within Uyo senatorial districts of Akwa Ibom State. A sample size of 417 subjects was used for the study. This sample was adopted because extensive work involved in conducting and monitoring an intervention. The study developed an instrument titled "Peer Education on Student's Knowledge of Genital Scabies Questionnaire (PESKGSQ). The instrument was submitted to three experts in the Department of physical and Health Education, Educational foundation, Guidance and Counselling in the University of Uyo, Uyo for face and content validation. The reliability of the instrument was established by using a pilot group that was not part of the main study, but was found to be equivalent in all respect to the study. Five research assistants were trained and finally three research assistants were used by the researcher for the intervention and administration of the questionnaire. Based on the study it was concluded that peer education is one of the most widely used strategies to address the sexually transmitted infections among adolescence. One of the recommendations was that policy makers in government who are major stakeholders in peer programme should formulate policies that will promote the success and sustainability of the peer education programme in order to promote knowledge of reproductive health and sexually transmitted diseases such as genital scabies among secondary school students and youths in our communities.

KEYWORDS: Peer Education, Students, Sexually Transmitted Infections, Genital Scabies, Uyo Senatorial District

Introduction

Education needs to be an ongoing process. This is because each generation of young people needs to be informed about how they can protect themselves from sexually transmitted diseases including HIV and AIDS as they grow up. Older generation who have already hopefully received some sexually transmitted infections education, may need the message reinforced, so that they continue to take precaution against sexually transmitted infection and are able to inform younger people of the dangers, (Population Council, 2008). The three main reasons for AIDS education according to Sherma (2002) include preventing new infection from taking place, to

improve equality of life for HIV positive people and to reduce stigma and discrimination. Hence peer education programme is regarded as an effective strategy, tool or instrument for the reduction of sexually transmitted infections including HIV and AIDS among secondary school adolescents in Akwa Ibom State and Nigeria.

Adolescence is a concept comprising a lengthy period of transition from childhood to adulthood, associated with an emerging awareness of sexuality and an age – specific desire to experiment with sex (Dehne & Reidner, 2005). Adolescence is also described as transition in which although no longer considered a child, the young person is not yet considered an adult (McCauley, 1995). The term “adolescence”, “young people” and “youth” have been used for sometimes to describe individuals in the age group 10-9, 10-24 and 15-24 respectively. According to Achalu, (2008) there are biological, legal, socio-historical, demographic and behavioural makers which render adolescence a dynamic concept – one that in some countries and setting is only just emerging; while in other it is already well established. World Health Organization (WHO 1995) observed that adolescence is commonly associated with physiological changes occurring with the progression from appearance of secondary sexual characteristics to sexual and reproductive maturity. Also WHO (1995) noted that even biological makers are subject to change overtime such as the fall in the age at onset of menarche in recent decade which attributed to improved health and nutrition.

Macaulay (1995) highlighted that the concept of adolescence as a life stage with legal boundaries did not exist in the developed world until the late 1800s and early 1900s. Today most Western European societies use legal markers for the passage to adulthood, commonly set at 16, 18, or 21 years of age. Thus, according to international Planned Parenthood Federation, (1994) there is a legal minimum age to vote in elections, drive a car, enter in to a business contract and be held liable for ones’ actions, just as there is one marriage, consensual intercourse and access to sexual and reproductive health services without parental consent. Begovac, Kolaric and Tesic, (2006) pointed out that the school climate allows the adolescent to explore avenues for future goal and direction while being guided by significant others outside the family circles. During the late secondary school years, many adolescents make preliminary decisions about vocation of careers and take definite steps toward achieving their goal. Nzeagwu (2004) asserted that school prolongs adolescents well beyond the period encompassed by puberty, customs and this lead boys and girls to a level of autonomy or independence not previously expressed. Following this, an adolescent spend and increasing period in school. This leads to delayed marriage. This behavior according to Anjum *et.al.*(2005) more often than not ushers in the risk of unwanted pregnancies, abortion, and sexually transmitted diseases. By age 19, eighty percent (80%) boys and sixty-six percent (66%) girls have had intercourse, with 16 years as the average age of first sexual experience (Ene, 2006). Thus leading to increasing sexual activities, in addition Zabin and Keragu (1998) also stated that secondary school student is risk of early premarital exposure to sexual activity even in societies of early marriage as a result of declining age at puberty.

Statement of the Problem

Sexually transmitted infections are not just health problems; they also constitute a social and economic problem with grave consequences for individual and the society at large. Newspaper and Magazines are constantly running headlines expressing fear over the incidence and the prevalence of sexually transmitted infections among the youths. Even concerned authorities,

government and Non-government organizations are crying out on how to curb the menace of sexually transmitted diseases among adolescents in the society. However, there are few studies and few literatures on the effectiveness of peer education. To compliment those studies this research is carried out to examine the extent of students' knowledge of Genital Scabies infections in Uyo Senatorial District of Akwa Ibom State as a result of peer education.

Objective of the study

The specific objective of this study is to:

1. Assess the effect of peer education on student's knowledge of genital scabies in senior secondary schools in Uyo senatorial district of Akwa Ibom State;

Research Question

The study sought to answer the research question

1. What is the mean response of the students exposed to peer education and the control group on knowledge of genital scabies in senior secondary schools in Uyo senatorial district of Akwa Ibom State?

Research Hypothesis

The null hypothesis was formulated to guide the study

HO₁: There is no statistically significant effect of peer education on students' knowledge of genital scabies in senior secondary schools in Uyo senatorial district of Akwa Ibom State.

Conceptual Review

Concept of Peer Education

Peer education is an interactive method of teaching or learning which is widely used for educating school and college students in a variety of different forms, (Charandabi, Vahidi, Marions, & Wahlstrom, 2010). Peer education is an approach to health promotion in which community members are supported to promote health and enhance change among their peers. Rather than health professionals educating members of the public, the idea behind peer education is that ordinary lay people are in the best position to encourage healthy behaviour to each other, (Campbell & Macphail, 2002). Peer education has become very popular in the broad field of HIV prevention. It is the mainstay of sexually transmitted disease prevention in many developing countries among groups including young people, sex worker or intravenous drug users. It is also associated with effort to prevent tobacco, drug or alcohol use among youth and school aged children, (Kelly, 2004).

Peer education programs recruit and train people representatives of or belonging to a larger group that will be focus of a health education intervention. The peer educators are trained to be a health resource for their peers and can often impact individual behavior and social norms. Peer educator groups can be affiliated with a school prison, a community based organization (CBO) a faith based institution or a clinic, (Kelly, 2004). They conduct a wide variety of health education methods that may include informal conversation with peers, in natural social settings, formal

presentation in classrooms or to groups, theatre events, individual education, outreach and organizing health events such as health fairs, dances, concert or walkathons. Peer educators, like others in the field, rely on a wide variety of methods, including social network media to inform and motivate peers about healthy behaviours. Peer educators are often employed in the field of productive health, violence prevention and related advocacy issues. Though commonly associated with youth, young adult, peer educators vary in age, gender and health focus (Van Rompay et al 2008) peer education programs as acknowledged by Ebert (2003) has also been used for children, adolescent, and support groups e.g. for clients with HIV and AIDS, chronic conditions like diabetes, hypertension, alcoholic, drug addiction groups etc.

Concept of Genital Scabies

Scabies is a parasitic infestation of the skin caused by the mite *Sarcoptes scabiei*. In developed countries, scabies outbreaks are common in residential and nursing care homes where they cause significant morbidity and distress (Lassa, 2011; Hewitt, 2015). Diagnosis is challenging and often delayed, and management of outbreaks is costly. Globally, more than 200 million people are affected, with a particularly high prevalence in resource-poor tropical regions (Karimkhani et al. 2017). This review describes recent advances in the understanding, diagnosis and treatment of scabies focusing on the global implications of the infestation across both resource-poor and -rich settings.

Infestation with the scabies mite results in an intensely itchy skin eruption consisting of papules, nodules and vesicles. Mostly this is the result of host hypersensitivity although the direct effect of mite invasion contributes. For this reason, the incubation period before symptoms occur is 3–6 weeks in cases of primary infestation, but as little as 1–2 days in cases of reinfestation (Mellanby 1941). Sensitisation to mite antigens has been demonstrated up to 1 month after primary infestation (Mellanby, 1979), and indeed it can take up to 6 weeks for signs and symptoms of hypersensitivity to resolve. Symptoms that persist beyond this should be reinvestigated. Burrows are formed as the adult female mites consume (Arlian, 2016) their way through the epidermis; detection of even one burrow is pathognomonic; however, they are often unidentifiable due to scratching, crusting or secondary infection, and may be observed only in a minority of cases (Cassell, 2018).

The typical distribution of signs of infestation includes areas between the fingers, the wrists, axillae, groins, buttocks, genitals, and the breasts in women. In infants and young children, the palms, soles and head (face, neck and scalp) are more commonly involved (Heukelbach, 2005). Mites seem to avoid areas with a high density of pilosebaceous follicles (Monsel, 2016). Although effective treatments exist, people living in regions where the pathogen is endemic are susceptible to reinfestation. This can occur rapidly even when household contacts are treated (La Vincente, 2009). With chronic infestation, severe eczematous skin changes occur and so-called “scabies nodules” may be observed particularly on the male genitalia and breasts. The predominant symptom of scabies infection is severe, persistent pruritus which can be highly debilitating and stigmatising. Patients typically describe pruritus as being most intense at night, and this is associated with sleep disturbance and a reduced ability to concentrate.

Empirical Framework

Visser (2007) examined the implantation and evaluation of a peer education and support programme in secondary schools to prevent and reduce high risk sexual behavior among adolescents in South Africa. The aims of programme were to provide accurate information about HIV and AIDS, and establish support for learners. In the programme that was implemented in 13 secondary schools in Tshwane South Africa peer educators were identified and supported to implement the programme in their schools with the assistance of a teacher and post graduate students as facilitators peer educators organized HIV awareness activities facilitated class discussion on risk behavior and gender relationship and supported learners in solving personal problems. Process evaluations included weekly reports and focus group discussion with peer educators and teachers. A quasi experimental design involving an experimental and control group as well as pre and post assessment was done to evaluate the impact of the programme on psychological wellbeing, personal control, school climate and reported high-risk behaviours of learners aged between 13-20 year. The result showed that the percentage of learners in the experimental group who were sexually experienced remained unchanged over the time period of 18 months. In contrast, a significantly increased percentage of learners in the control group were sexually experienced after the same time period. The control group also perceived more of their friend to be sexually experienced; no differences were reported in condom use in either of the groups. The findings of this study that peer education can contribute to delayed onset of sexual activity and can therefore contribute to the prevention of HIV and AIDS among adolescents (Visser, 2007).

Similarly, Onyedunni and Oladimeji (2000) evaluated the effect of an HIV and AIDS education programme on deaf secondary schools' students for HIV knowledge, attitude and perceived susceptibility to HIV and AIDS using peer education. Two secondary schools matched for ownership (government), composition mixture of hearing and deaf). Teaching arrangement (Separate) teaching of deaf students using sign language were used and each secondary school was randomly allocated the intervention and control status. All students complete the questionnaire on HIV and AIDS knowledge at baseline and post intervention. Following baseline, volunteers from intervention school receive four (4) weeks training as peer educators after which they provided HIV and AIDS information to the peers on one to one basis and in groups using a variety of approaches for a period of eight months, while the control subject did not. Pre to post group differential scores for knowledge of causes, modes of transmission and methods of prevention of AIDS among intervention group compared with control groups were significant but not to perceived personal susceptibility. This study suggested the influence of peer education on health knowledge of students but a limitation on changing perception of susceptibility.

There is need to develop peer powered sexually transmitted disease (STD) education programme to address the information needs and to impact positively on behaviour and health practices of youth, some youth who may be greater risk may not attend schools, the message must therefore be carried to youth groups, health clinics, social gatherings where you congregate. In conclusion, the use of peer education employing counseling sessions direct towards increasing and changing attitude and behaviour is viable, veritable and effective combating STD and HIV and AIDS disease by positively impacting attitude that may affect behaviour change for youth in the 21st century.

Methods

This study was an intervention research using a quasi-experimental research design with a non-equivalent control group design. The area of study was conducted in Uyo Senatorial District of Akwa Ibom State. The target population for this study was all the senior secondary school students studying within Uyo senatorial districts of Akwa Ibom State. A sample size of 417 subjects was used for the study. This sample was adopted because extensive work involved in conducting and monitoring an intervention. The study developed an instrument titled “Peer Education on Student’s Knowledge of Genital Scabies Questionnaire (PESKGSQ)”. Face and content validation of the instrument was carried out by three experts in the Department of physical and Health Education, Educational foundation, Guidance and Counselling in the University of Uyo, Uyo. The reliability of the instrument was established by using a pilot group that was not part of the main study, but were found to be equivalent in all respect to the study. Five research assistants were trained and finally three research assistants were used by the researcher for the intervention and administration of the questionnaire.

Results

Research Questions 1: What is the response of the students exposed to peer education and the control group on knowledge of Genital scabies in senior secondary schools in Uyo senatorial district of Akwa Ibom State?

Table 1: Mean Analysis of Response of Students Exposed to Peer Education and the Control Group on Knowledge Genital Scabies

Variable	N	Pre-test (\bar{X})	Post-test (\bar{X})	Mean gain score	post-test difference
Experimental Group	210	5.15	9.16	4.01	3.03
Control Group	207	5.14	6.12	0.98	
Total	417	10.29	15.28	4.99	

Table 1 shows that the mean gain score of experimental group (4.01) is greater than the mean gain score of control group (0.98) besides, the post-test mean score of experimental group (9.16) is greater than that of control group (6.12) with a difference of 3.04. This shows a remarkable difference between the two groups in favour of the experimental group.

Testing of Hypotheses

Hypotheses 1: There is no statistically significant effect of peer education on students’ knowledge of genital scabies in secondary schools in Uyo senatorial district of Akwa Ibom State.

Table 2: One-Way Analysis of Covariance (Ancova) of Effect of Peer Education on Students Knowledge of Genital Scabies.

Sources of Variation	SS	df	Ms	f-cal	f-crit
Pre-test (covariates)	5.343	1	5.343	8.495	3.84
Main effects (post-test treatment)	966.665	1	966.665	1537.042	
between groups	972.513	2	486.256	773.170*	

within groups (error)	260.370	414	.629
Total	1232.882	416	

***=Significant at $p < .05$ alpha level**

Table 2 indicates that the calculated F-value (773.170) was greater than the F-critical (3.84) at df of 1 & 414 degree of freedom at .05 level of significance. Therefore, the null hypothesis that states that there is statistically significant effect of peer education on students' knowledge of genital scabies in senior secondary schools in Uyo senatorial district of Akwa Ibom State is rejected. Hence, there is a statistically significant effect of peer education on students' knowledge of genital scabies in senior secondary schools in Akwa Ibom State.

Discussion

The analysis of data as shown in table 1 research question 1 revealed that the mean gain score of experimental group 9.16 was also greater than that of the control group which stood at 6.12 with the difference of 3.04. In addition, the one-way analysis of covariates (ANCOVA) it could be observed that the f-calculated 1537.042 was greater than the f-critical 3.84 at 1.414 degree of freedom and .05 alpha level of significance. This information encouraged the researcher to reject the null hypothesis and accept the alternative hypotheses. Thus there is a statistically significant effect of peer education on students' knowledge of genital scabies in senior secondary schools.

Indeed, through friends educating them, senior secondary school students have knowledge that genital scabies could be contracted through sexual intercourse, by sharing of personal items like towel. It could be prevented by observing good personal hygiene. Also they have knowledge of the harmful effect of genital scabies and that genital scabies could as well cause itching of genital area called private parts.

This finding is confirmed by UNICEF (2002) who reported that people are often willing to listen to and follow advice from their peers and those similar to themselves in a background and interest with basic training and support. Also, the UNICEF (2002) asserted that adolescent can carry out a range of educational activities with their peers, these activities range from informal conversation to organized group sessions and can take place in communities, school, workplace etc. Cate and Durning (2008) pointed out that only do youth listen to their peers but that when health information is given to considerable younger peers there is successful behaviour change hence peer education will help youth gain leadership, expand their social interaction, build strong resumes and continue to build healthy communities through developing skills for healthy decision making. The present study is supported by Kalesanwo and Adetuniji (2002) who observed that peer education method has a significant influence on the reduction of sexually transmitted diseases among secondary schools' adolescent.

This study also corroborates with Kirby et.al. (2005) who confirmed that the overall objective of peer education is to help youth develop knowledge and is widely used as a strategy to address the issue of sexually transmitted infection, reproductive health and sexually transmitted disease among secondary schools in Uyo senatorial district of Akwa Ibom State. Policy makers in government who are major stake-holders in peer programme should formulate policies that will promote the success and sustainability of the peer education programme in order to promote reproductive health and reduce sexually transmitted diseases such as genital scabies among secondary school students and youths in our communities.

Conclusion

Based on the study, it was observed that peer education trains people on family life education and related issues such as choice of the life partners etc. it could be observed that following intervention, peer programme was successful in improving students' knowledge of sexually transmitted infections. Hence, it could be concluded that peer education is a powerful preventive tool in community health.

Recommendations

1. Policy makers in government who are major stakeholders in peer programme should formulate policies that will promote the success and sustainability of the peer education programme in Nigeria so as to promote knowledge of reproductive health and sexually transmitted diseases such as genital scabies among secondary school students and youths in our communities.
2. Conferences and seminars should be organized for stakeholders-parents, teachers, students and policy makers to create awareness on the effectiveness of peer education in improving and promoting students knowledge of sexually transmitted diseases and other reproductive health issues.
3. Based on the findings of the study, the researcher recommends that the peer education should be introduced to all secondary schools in both urban and rural areas of the state to improve students' knowledge of reproductive health issues and also reduce sexually transmitted infections among students in Uyo senatorial district of Akwa Ibom state.

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