Predictors Of Risky Health Behaviours Among Secondary School Students With Hearing Impairment In South-West, Nigeria

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Abstract
Like every adolescent, students with hearing impairment engaged in Risky Health Behaviour (RHB) such as alcohol consumption, cigarette consumption, drug abuse, inadequate physical activities, unhealthy dietary behaviour as well as indiscriminate sexual acts. These activities have therefore become issues of public health concern. Previous studies have focused majorly on the academic performance, emotional stability and psychological adjustment of students with hearing impairment than on their RHB and its socio-economic predisposing factors. This study, therefore, examined social (discrimination, home, health awareness, peer influence and false belief) and economic (poverty and purchasing power) factors as predictors of RHB among Secondary School Students with Hearing Impairment (SSSHI) in south-west, Nigeria. The study adopted a descriptive survey design. Purposive sampling technique was used to select 980 students with hearing impairment from some secondary schools in south-west Nigeria. Five hypotheses were tested at 0.05 level of significance. Data was analysed using descriptive statistics, multiple regression. Social and economic factors had significant composite contribution to RHB ($F(7,973)=22.80; R=0.37$) and accounted for 17.0% of the variance of RHB. The relative contributions of the independent variables to risky health behaviour are: Peer influence ($\beta=0.25$), Purchasing power ($\beta=0.23$), discrimination ($0.15$), poverty ($\beta=0.10$) home ($\beta=0.08$), false belief ($\beta=0.07$) and health awareness($0.02$). Unfriendly home situation, negative peer influence, false beliefs, poverty and low purchasing power predicted risky health behaviour among secondary school students with hearing impairment.
Therefore, government should organise periodic health and sensitization programmes on health issues for students, parents and teachers.

**Keywords:** False belief, Risky health behavior, Students with hearing impairment

**Introduction**

Proper health knowledge, attitude and behaviour are of utmost importance for young people, because these factors are important to their existence and contributions to national development. For anyone to contribute meaningfully and productively to the Gross Domestic Product (GDP) of his or her country, there is the need to aspire to maintain good health. Good health is very important for man to achieve his goals in life and it is also man’s greatest need for survival.

It has been observed that investment in the health of children and youths is very crucial to every nation’s development, because the future of any nation depends largely on what is done to improve the health of her citizens, especially that of the youths. The types of health programmes made available will determine the qualities of a nation’s citizens as reflected in their contributions to the nation’s growth and development through their performances and productivity (Children and Youth Health, 2010). Hearing impairment is the loss in hearing that totally or partially prevents a person from receiving sounds through the ear. Olusanya, Okoloko and Adeosun (2004) reported that hearing loss is a prevalent and significant disability that impairs functional development and educational attainment of school children mostly in developing countries Castro Giovanni (2004) documented that as many as 738,000 individuals in the US have severe to profound hearing loss, of which almost 8% are under the age of 18 years. He stated further that profound early onset deafness is present in 4 – 11 per 10,000 children in the U.S. The World Health Organization (2010), documented that about 278 million people in 2005 had moderate to profound hearing impairment, 8% of who live in low and middle income countries. Studies on childhood hearing loss among Nigerian school children revealed that one in seven Nigerian children suffers from hearing loss (Hear-it.org., 2000). Also, the National Ear Care Programme (NECP) (2001) reported that the prevalence of hearing loss in school-age population ranges from 6.7 to 8.9 % in Nigeria.

Risky behaviour is an important health issue among school age children. Youths are prone to high risky health behaviours because of their susceptibility to peer influence. Oyediran and Oladimeji (2000) reported that they seek information from magazines, newspapers and movies which place the youth at health risks. Isaiah (2010) reported that risky health behaviours
are often exhibited by secondary school students with hearing impairment because majority of them are adolescents who want to engage in risky behaviours like sexual activities, smoking, drinking, stealing, bullying, and all other kinds of behaviours that are inimical to their health. In addition, Borofice (2004) and Aiyewa (2002) asserted that adult behaviour pattern, including drinking, smoking and sexuality issues are established during the secondary school period, and these constitute the major health problems of the secondary school students. In search for identity and autonomy that is characteristic of secondary school students, risky behaviours frequently come into play Moreover, social factors that are likely to predict risky health behaviours among students with hearing impairment include discrimination, home factor, health awareness, peer influence, and false belief. Whilst economic conditions such as poverty and purchasing power could also predict their risky health behaviour. People with disabilities frequently receive insufficient and inappropriate health care information. Adolescents with disabilities, according to Berman, Harris, Enright, Gilpin, Cathers and Bucovy (1999), may be uninformed or misinformed about sexual matters and safe sex practices. Moreover, Busari and Danesy (2004) noted that adolescents are at risk because no one, including parents, counsellors or health workers taught them about HIV/AIDS and how to protect themselves and others. Also, materials on reproductive health and personal safety issues are scarcely made available and not many people understand sign language which is their language of communication.

Moreover, Okanlawon (2004) documented that most adolescents do not belief that they are at risk. Nzioka (2001) for instance, found out that in Kenya, boys perceive sexual activity as part of their initiation into manhood, and getting a girl impregnated makes one to be respected as a real man, while contracting a sexually transmitted infection is a sign of being initiated into manhood. Also, Osowole (2004) reported that many misconceptions about the sexuality of persons with disabilities exist. Many believe that persons with disabilities are asexual and consequently do not need education about their sexuality.

Besides, Adeniyi, Olayinka, Oladepo, Delana and Idowu (2007) submitted that students with hearing impairment actively involve themselves in sexual activities for monetary gain. They reported that 35% of their samples were sexually active for different reasons, 17% had been involved in abortion for a sexual partner, while 28% were raped, 9% tested positive for HIV/AIDS, while 16% reported previous episodes of various sexually transmitted infections. Supporting these findings, Touko, Mboa, Tohmintain and Perrot (2010) discovered that the students with hearing impairment are highly involved in risky behaviours, with 25% of the respondents reporting having had sexual intercourse before the age of 15. It
was noted in this study that HIV prevalence rate among students with hearing impairment in Yaounde was 4% of which is close to the HIV prevalence rate in the city’s general population, which is 4.7%.

In addition to the foregoing, a number of research studies revealed that poverty and purchasing power are among many risk factors that affect children, both as they grow up and when they reach adulthood. It was stated further that parental purchasing power is positively correlated with virtually every dimension of child well-being, and that the influence of parental income is positive for issues such as social and emotional well-being, mental health as well as behavioural problems such as drinking, smoking, drug abuse and other related health matters. (Mayer 2002) Also, Brooks-Gum and Duncan (1997) documented that different studies on influence of poverty on children found out that persistent poverty is a significant predictor of behavioural problems such as anxiety, unhappiness, hyperactivity, peer conflict and headstrong behaviours. Corroborating the above, Mayer (2002) submitted that in most countries of the world, children of low income parents have poorer health than children of more affluent parents. Moreover, Busari and Danesy (2004) noted that young girls in many countries seek support from men by trading sex as a result of economic hardship. According to them, this practice is encouraged by parental expectation of financial support from their children. They also observed that economic hardship and civil unrest have pushed more and more young boys and girls away from home into towns and cities to look for jobs. Based on the foregoing, this study examined the predictors of risky health behavior of secondary school students with hearing impairment in south-west Nigeria.

Statement of the Problem

Risky health behaviours are often exhibited by secondary school students with hearing impairment because majority of them are adolescents who want to experiment adult behaviour such as drinking, smoking and indiscriminate sexual practices without considering the consequences of their actions. Furthermore, the period of adolescence has a way of contributing to many behavioural problems of the adolescents because it is characterized by changes and crises biologically, emotionally and socially. Based on this, students with hearing impairment involve themselves in different kinds of behaviours that are inimical to their health.

Despite the involvement of students with hearing impairment in various kinds of risky behaviours like their counterparts without hearing impairment, most available programmes in terms of health promotion and strategies specific to health needs of youths are targeted to suit other students without any impairment, while little has been done to address the risky health behaviours of secondary school students with hearing impairment.
impairment. In addition, a lot of programmes on health behaviour targeted at school age children do not benefit this category of students. Also, most available programmes and materials on health education do not accommodate students with hearing impairment. Hence they are not carried along by the organizers of such programmes. Consequently, students with hearing impairment have limited access to information as regards their health issues because of their special need. This makes them to be vulnerable to various kinds of risky behaviours such as alcohol consumption, cigarettes smoking, drug abuse and misuse, indiscriminate sexual behaviour, inadequate physical activities, poor dental/oral hygiene, as well as unhealthy dietary habit. Therefore, the study investigated the predictors of risky health behaviours among secondary school students with hearing impairment in south-west, Nigeria.

Hypotheses

The following hypotheses were tested at 0.05 level of significance:-

1. Social Factors (discrimination, home factor, health awareness, peer influence and false belief) will not significantly predict risky health behaviours of secondary school students with hearing impairment.

2. There will be no significant relative contributions of social factors (discrimination, home, health awareness, peer influence and false belief) to risky health behaviours of secondary school students with hearing impairment.

3. Economic factors (poverty and purchasing power) will not significantly predict risky health behaviours of secondary school students with hearing impairment.

4. There will be no significant relative contributions of poverty and purchasing power to risky health behaviours of secondary school students with hearing impairment.

Methodology

Research Design

The descriptive survey research design was used to carry out the study. The design was suitable for the study because the researcher did not manipulate any of the variables of interest in the study.

Sample and Sampling Techniques

A total of 980 students with hearing impairment were drawn from selected secondary schools in south-west, Nigeria. The purposive sampling techniques was used to select the participants for the study.
**Instrument**

The instrument used to collect data for the study was a self-developed questionnaire in a close-ended form and 4-point Likert scale of Strongly Agree, (SA) Agree (A) Disagree (D) and Strongly Disagree (SD) with allotment of points in the following order: SA = 4, A = 3, D = 2, and SD = 1. The instrument was pretested on 20 secondary school students with hearing impairment who were not originally part of this study. The reliability index was 0.83.

**Data Collection and Analysis**

Some of the teachers and sign language interpreters were used as research assistants to administer the questionnaire. Screening audiometer was used to screen the degree of hearing loss of the participants through assistance of audiologists. Only those with mild and severe hearing loss were selected for the study. Data analysis was done with multiple regression analysis.

**Results**

This section presents the results of the study. The results are presented based on the hypotheses tested in the study.

**Test of Hypotheses.**

Hypothesis 1: Social Factors (discrimination, home factor, health awareness, peer influence and false belief) will not significantly predict risky health behaviours of secondary school students with hearing impairment.

Table 4.1: Regression showing joint effect of social factors on risky health behaviour

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of square</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>18603.155</td>
<td>5</td>
<td>3720.631</td>
<td>25.532</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>42081.71</td>
<td>975</td>
<td>145.725</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>160684.86</td>
<td>980</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R = .340, R² = .116, Adj. R² = .111

Table 4.1 shows that the joint contribution of independent variable (discrimination, home, health awareness, peer influence and false belief) on risky health behaviour was significant ($F_{(5,975)}=25.532$, $R= .340$, $R² = .116$, Adj. $R² = .111$, $P<.05$). About 12% of the variation in the risky health behaviours was accounted for by the independent variables. This indicates that social factors of discrimination, home, health awareness, peer influence, and false belief had cumulative effect on risky health behaviours among secondary school students with hearing impairment. Therefore null hypothesis which states that social factors (discrimination, home factor,
health awareness, peer influence and false belief) will not significantly predict risky health behaviours of secondary school students with hearing impairment was rejected.

**Hypothesis 2:** There will be no significant relative contributions of social factors (discrimination, home, health awareness, peer influence and false belief) to risky health behaviours of secondary school students with hearing impairment.

Table 4.2 Regression analysis on relative contribution of independent variables (discrimination, home, health awareness, peer influence and false belief) to risky health behaviour of secondary school students with hearing impairment in Ibadan

<table>
<thead>
<tr>
<th>Model</th>
<th>Understandized coefficient</th>
<th>Understandized coefficient</th>
<th>Standardized coefficient</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>(constant)</td>
<td>38.684</td>
<td>2.449</td>
<td>15.797</td>
<td>000</td>
<td></td>
</tr>
<tr>
<td>Discrimination</td>
<td>1.058</td>
<td>.171</td>
<td>.002</td>
<td>.062</td>
<td>.951</td>
</tr>
<tr>
<td>Home factor</td>
<td>.434</td>
<td>.182</td>
<td>.084</td>
<td>2.393</td>
<td>.017</td>
</tr>
<tr>
<td>Health awareness</td>
<td>5.432</td>
<td>.139</td>
<td>.015</td>
<td>.392</td>
<td>.695</td>
</tr>
<tr>
<td>Peer influence</td>
<td>.663</td>
<td>.100</td>
<td>.253</td>
<td>6.664</td>
<td>000</td>
</tr>
<tr>
<td>False belief</td>
<td>.327</td>
<td>.162</td>
<td>.071</td>
<td>2.021</td>
<td>.044</td>
</tr>
</tbody>
</table>

Table 4.2 shows the relative contribution of the independent variables to the dependent variables. Discrimination ($\beta=.002, P>.05$); home ($\beta=.084, P<.05$), health awareness ($\beta=.015, P>.05$); peer influence ($\beta=.253, P<.05$) and false belief ($\beta=.071, P<.05$) on risky health behaviour. This indicates that all the independent variables were significant except discrimination and health awareness, meaning that home, peer influence and false belief independently contributed to risky health behaviour of secondary school students with hearing impairment while discrimination and health awareness did not. Hence, the null hypothesis which states that there will be no significant relative contribution of discrimination, home, health awareness, peer influence and false belief to risky health behaviours of secondary school students with hearing impairment was not accepted.

**Hypothesis 3:** Economic factors (poverty and purchasing power) will not significantly predict risky health behaviours of secondary school students with hearing impairment

Table 4.3: Regression analysis on economic factors (poverty and purchasing power) to risky health behaviours.

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>13019.917</td>
<td>2</td>
<td>6509.958</td>
<td>43.116</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>147664.95</td>
<td>978</td>
<td>150.987</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>160684.86</td>
<td>980</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$r=.285, R^2=.081, Adj R^2=.079.$
Table 4.3 shows that the joint contribution of independent variables (poverty and purchasing power to risky health behaviours was significant. ($F(2,978)=43.116$, $R^2=.285$, $R^2=.081$, Adj $R^2=.079$; $P<.05$) with about 28.5% of the variation in risky health behaviours being accounted for by the independent variables. This implies that economic factors of poverty and purchasing power had combined contributions to risky health behaviours among secondary school students with hearing impairment. Therefore the null hypothesis which states that economic factors (poverty and purchasing power) will not significantly predict risky health behaviours of secondary school students with hearing impairment is not accepted.

**Hypothesis 4: There will be no significant relative contributions of poverty and purchasing power to risky health behaviours of secondary school students with hearing impairment.**

Table 4.4: Regression analysis on relative contribution of independent variables (poverty and purchasing power) to risky health behaviours

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized</th>
<th>Standardized</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>44.133</td>
<td>1.987</td>
<td>22.214</td>
<td>.000</td>
</tr>
<tr>
<td>Poverty</td>
<td>.415</td>
<td>.135</td>
<td>.102</td>
<td>3.072</td>
</tr>
<tr>
<td>Purchasing power</td>
<td>1.011</td>
<td>.146</td>
<td>.230</td>
<td>6.943</td>
</tr>
</tbody>
</table>

As indicated in table 4.4, both poverty and purchasing power had significant contribution to risky health behavior. Poverty ($\beta=.102$; $P<.05$), purchasing power ($\beta=.230$; $P<.05$). This indicates that poverty and purchasing power had strong influence on risky health behaviours of secondary school students with hearing impairment. Hence, the null hypothesis which states that there will be no significant relative contribution of poverty and purchasing power to risky health behaviour among secondary school students with hearing impairment was not accepted.

**Discussion of Findings**

The result revealed that social factors of discrimination, home, health awareness, peer influence and false belief cumulatively are significant predictors of risky health behaviours among secondary school students with hearing impairment. This is in line with the finding of Sangowawa, Owoaje, Faseru, Ebong and Alah (2010) reported that inadequate access to reproductive health information and services exposes young Nigerians to the risk of pregnancy and sexually transmitted infections (STI) and HIV/AIDS. It was stressed further that the risks are worse for those with disabilities as they are unable to access services available to their counterparts because they
frequently suffer from social stigma and various forms of discrimination. The finding of this study also corroborates that of Isaiah (2010) that young people with disabilities and particularly those with hearing impairment are vulnerable to certain risky health behaviour because they are often neglected by the community, especially when it comes to issue of empowering the youth for becoming responsible citizens.

Social factors of home, peer influence and false belief independently contributed to risky health behaviour of secondary school students with hearing impairment while discrimination and health awareness did not. This result is in line with the finding of Isaiah (2010) that the home environment is a major contributory factor to risky behaviours among students with hearing impairment. Behaviours or factors like parental alcohol and drug abuse, chaotic and unstable home life, heavy exposure to media, hawking after school, early loss of parents, use of coercive and corporal punishment, parental disruption due to divorce; all contribute immensely to behaviours which are risky to the health of secondary school students with hearing impairment.

The findings of this study further revealed that economic factors of poverty and low purchasing power, cumulatively contributed to students with hearing impairment’s involvement in risky health behaviours. This finding is in line with that of many researches that economic status of parents determines the health behaviours of their children. The study supports the finding of Busari and Danesy (2004) that young girls in many countries enter into relationship with older men called ‘sugar daddies’ who offer them different inducements as a result of their parental expectation of financial support from them.

The outcome of this study also revealed that economic factors of poverty and purchasing power independently contributed to risky health behaviours, meaning that both variables had strong influence on risky health behaviour. This result agrees with the submission of Isaiah (2010) that stress conditions in the family like joblessness of the parents and poverty may make the child to be socially, emotionally and psychologically maladjusted. This study is also in line with that of Hart and Carter (2000) who affirmed that people living in poverty are more likely to engage in risky adventures, in search of greater economic security. Socio-economic factors of discrimination, home, health awareness peer influence, false belief, poverty and purchasing power jointly contributed to risky health behaviours of secondary school students with hearing impairment. The outcome of this study agrees with Isaiah (2010) that involvement of a child with deviant peers accelerates the development of risky behaviours. It was also posited that as social outcasts form bonds among themselves, aggression and other
antisocial behaviours are encouraged, which may later lead to gang membership

Conclusion

It was revealed in the study that both social and economic factors were predictors of risky health behaviour among students with hearing impairment. Therefore, all hands must be on deck to assist them to find solution to social and economic problems facing them, so that they can maximize their potentials and be contributory members of their society.

Recommendations

Based on the findings of this study, the following are recommended:-

1. Parents should provide cordial and conducive home environment that would enhance self-improvement and socialization for students with hearing impairment. Over protection by parents and restricted exposure to peer culture are important contributory factors to increased health risks among young people, hence this should be discouraged. In other words, parents of students with hearing impairment should give them some level of freedom so that they would have a sense of belonging which would in turn help them to develop positive health behaviour.

2. Parents should endeavour to have cordial relationship with their children (especially those with hearing impairment). This would encourage the children to be opened to them and share issues relating to their health, especially in areas of sexuality instead of receiving wrong counsel from their peers.

3. Seminars/workshops should be organized on regular basis by the government and non-governmental organizations and other stakeholders to educate the society especially parents of students with hearing impairment and correct erroneous belief about people with disabilities in general. This will equally help the parents to acquire the necessary skills for understanding their children’s disabilities.

4. Counsellors should be employed in schools for students with hearing impairment, in order to them maintain healthy behaviours.

5. Health Personnel should be employed in schools so that they can organize seminars for parents, students and stakeholders on health related issues for students with hearing impairment.

6. Parents should try as much as possible provide the basic needs of their children with hearing impairment, so that poverty will not make them engage in risky health behaviours.
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