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## Research Article

# Health Risk Behavioural Factors among Secondary School Students: A Challenge to Life Expectancy

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## Abstract

**Objective:** This study focused on decline in life expectancy situation in Nigeria from the perspective of health risk behaviours (HRBs) factors among secondary school students in Okitipupa Local Government Area, Ondo state. **Methodology:** Seven research hypotheses, based on the selected variables, were tested. The descriptive survey research design was adopted for the study; the multi-stage and stratified sampling techniques were used to select seventeen (17) public schools and one thousand three hundred (1300) senior secondary school students who are the participants for the study and a closed-ended self-structured questionnaire was employed for data collection. The descriptive statistics of frequency counts and percentages were used for the demographic data while inferential statistics of chi-square ( $\chi^2$ ) was employed to test the hypotheses formulated at 0.05 alpha level. **Results:** The results of the study reveal that gender, religious belief and isolation were not significant ( $p < 0.05$ ) rather festival practices, parental influence, peer pressure and civilization/modernization were significant HRB factors among secondary school students Okitipupa Local Government Area of Ondo State, aiding decline in life expectancy. **Conclusion:** Life expectancy decline may pragmatically minimized when parents are made to religiously play their roles in the lives of youngsters through periodic health risk behavioural intervention programmes that centered on the activities of the secondary school students. Additional research may further the understanding of the debilitating effects of these health risk behaviors and facilitate development of effective increase in life expectancy

**Key words:** Life expectancy, Secondary schools students, Health risk behaviours

## INTRODUCTION

Infant and child mortality remain disturbingly high in developing countries despite the significant decline in most parts of the developed world. In a country like Nigeria with high infant mortality rates (Oladepo, 2010), the life expectancy at birth is highly sensitive to the rate of death in few years of life. Because of this sensitivity to juvenile mortality, one has to believe that a population with a low overall life expectancy will necessarily have a small proportion of older people. Life expectancy rate in Nigeria has always being on the decline from 51.56 years in 2000 to 46.94 years in 2010 (CIA World Factbook, 2010) irrespective of gender.

The decline according to Ogunjuyigbe (2004) is influenced by factors of both biological and socio-economic, operating through proximate determinants. These determinants are health risk behaviours (HRBs) that entails smoking, sex and drugs abuse, physical inactivity, poor diet, alcohol misuse behaviours and tobacco use (Miller & Jones, 2007) which had been indicted as the leading causes of death regardless of one's age (Centers for Disease Control and Prevention, 2010). Centre for Disease Control and Prevention (2002) reports that lack of physical activity, low fruit and vegetable intake, a low-fiber diet, obesity, alcohol consumption and tobacco use contribute to the risk of colorectal cancer.

It has been estimated that 20–25 per cent of Australian children are not sufficiently physically active and are at risk of becoming inactive adults (Booth, 2000).

These behaviours not only influence individuals' health but also create burdens for the nation and society as a whole (Igbunugo and Akeredolu, 2003) due to life expectancy threatening effects. It is well documented that these behaviours also hamper national growth and development (Ademuyiwa, 2004; National Institute on Alcohol Abuse and Alcoholism, 1996; Ellickson, Bell and McGuigan, 1993). Secondary school students are continuously experimenting while adults try to break with the habits formed (Royal College of Physicians, RCP, 2005) which

expose them to various behaviours that they may not even realize can be inimical to their health. Studies have reported that children develop the intention to involve in HRBs from age ten to about twenty (Global Youth Tobacco Survey, 2002; Oghenekevwe, 2002). These periods are characterized with peer influence, inability to make self-enhanced decision devoid of the attention of parents and peers (Okafor, 2005).

In the study conducted by Okafor, (2005), it was reported that knowledge, attitude, refusal skills, assertive skills, anxiety reduction, self-control, cigarette use intention and normative believe form the patterns of initiation into cigarette smoking in secondary schools in Nigeria.

A study on youth risk behaviours in the urban and rural secondary school students in Salvador reported by BMC International Health and Human Rights (2006) indicated that the prevalence of specific HRBs varied considerably depending upon gender, geographical location of schools and to a lesser extent, age and subjective economic status. HRBs have far-reaching implications for individuals, families and communities (Schlosser and Wenzel, 2004). Behavioural change theorists have identified a number of factors believed to play important roles in the life of students as attitudes, intentions, skills, emotions, self-standards, self-efficacy, social norms, intrinsic and extrinsic motivation and environment (Schlosser and Wenzel, 2004).

Family risk factors for teenagers developing drinking problems include low parent supervision or communication, family conflicts, inconsistent or severe parental discipline, and a family history of alcohol or drug abuse. Individual risk factors include problems managing impulses, emotional instability, thrill-seeking behaviors, and perceiving the risk of using alcohol to be low. Girls who drink, as well as teens who begin drinking prior to the age of 14 years and those whose mothers have drinking problems, are more likely to develop alcoholism. Teen risk factors for alcoholism differ a bit between the 14- to 16-year-old and 16- to 18-year-old age groups, in that 16- to 18-year-olds tend to be less likely to drink in excess when they have a close relationship with their mothers.

The earlier an individual quits HRBs the less the hazard and the longer the life expectancy, as evidence suggests that much of the projected mortality from HRBs can be prevented by stopping. Little is known about life expectancy threatening health risk behavior factors among adolescents from this part of the country. The researchers therefore decided to carry out a cross-sectional survey on life expectancy decline situation from the perspective of health risk behaviours (HRBs) factors among secondary school students in Okitipupa Local Government Area, Ondo state.

## MATERIALS AND METHODS

Participants for the study were One thousand three (1300) students drawn from public senior secondary schools within the age of 9-18 years. Seven hypotheses that centered on festival practices, parental influences, isolation, gender, religious belief, peer pressure and civilization/ modernization as health risk behavior factors among secondary school students in Okitipupa Local Government Area, Ondo State will not significantly lead to decline in life expectancy were set. Data were collected from seventeen (17) public secondary schools out of the 23 public secondary schools in Okitipupa Local Government Area. A multistage and stratified random sampling design was used to select schools and respondents from the schools. A likert-type questionnaire was developed and administered for the study. A respondent was required to respond to each of the question items on a 4-point rating scale of Strongly Disagree (1), Disagree (2), Agree (3) and Strongly Agree (4). The questionnaire had two sections with the first was used to obtain background information on each respondent. The second section contained three question items on each of the seven factors of HRBs. A test-retest reliability analysis conducted on the instrument using Croabach Alpha yielded  $r = 0.87$ .

The test instrument was administered to one thousand four hundred (1400) participants through subject teachers in each of the schools selected. Copies of the instrument were collected after some weeks leading to a lost of 100 copies where 1300 (92.9%) were finally analysed. The descriptive statistics of frequency counts and percentages were used to describe the demographic data. The frequency count and percentage response for all the items under each of the variables were established while inferential statistics of chi-square ( $\chi^2$ ) was employed to test the hypotheses formulated at 0.05 alpha level.

## RESULTS

The results obtained shows that 445 (35.0%) were in SSS1, 459 (35.3%) were in SSS2 as 386 (29.7%) were in SSS3. 900 (69.2%) of the participants were male and 400 (30.8%) were female. In the age group category, 9-11years were 56(4.3%), 12-14 years were 351 (27.0%), 15-17years were 733 (56.4%) and 18years and above were 160 (12.3%). On religious affiliation, 967 (74.3%) were Christians, 225 (17.3%) belonged to Islam as 108 (8.4%) belonged to other religions

**Descriptive and Chi-square analysis Table on the Health Risk Factors**

| Variables                          | Response   | SD      | D       | A       | SA      | Total  | X <sup>2</sup> | df    | Remark |
|------------------------------------|------------|---------|---------|---------|---------|--------|----------------|-------|--------|
| <b>Festival practices</b>          | Frequency  | 204     | 360     | 438     | 298     | 1300   | .092           | 6     | S      |
|                                    | Percentage | (15.7%) | (27.7%) | (33.7%) | (22.9%) | 100.0% |                | P>.05 |        |
| <b>Parental influences</b>         | Frequency  | 193     | 209     | 503     | 395     | 1300   | .139           | 6     | S      |
|                                    | Percentage | 14.9%   | 16.0%   | 38.7%   | 30.4%   | 100.0% |                | P>.05 |        |
| <b>Isolation</b>                   | Frequency  | 248     | 332     | 398     | 322     | 1300   | .000           | 6     | NS     |
|                                    | Percentage | 19.1%   | 25.5%   | 30.6%   | 24.8%   | 100.0% |                | P>.05 |        |
| <b>Gender</b>                      | Frequency  | 264     | 346     | 479     | 211     | 1300   | .001           | 6     | NS     |
|                                    | Percentage | 20.4%   | 26.6%   | 36.8%   | 16.2%   | 100.0% |                | P>.05 |        |
| <b>Religious belief</b>            | Frequency  | 475     | 461     | 264     | 100     | 1300   | 15.780         | 6     | NS     |
|                                    | Percentage | 36.5%   | 35.5%   | 20.3%   | 7.7%    | 100.0% |                | P>.05 |        |
| <b>Peer pressure</b>               | Frequency  | 166     | 198     | 523     | 413     | 1300   | .889           | 6     | S      |
|                                    | Percentage | 12.8%   | 15.2%   | 40.2%   | 31.8%   | 100.0% |                | P>.05 |        |
| <b>Civilization/ Modernization</b> | Frequency  | 189     | 264     | 482     | 365     | 1300   | .526           | 6     | S      |
|                                    | Percentage | 14.5%   | 20.3%   | 37.1%   | 28.1%   | 100.0% |                | P>.05 |        |

In the table, 204(15.7%) students strongly disagreed with the notion that festival practices as HRB factor lead to decline in life expectancy, 360(27.7%) disagreed, 438 (33.7%) agreed while 298 (22.9%) strongly agreed with the assertion. The chi-square ( $\chi^2$ ) value was .092 with df of 6 at significant level of 0.05. Then the formulated hypothesis was rejected as festival practices as HRB factor leads to decline in life expectancy.

The table shows that 193 (14.9%) of the respondents strongly disagreed with the notion that decline in life expectancy can be as a result of parental influence as HRB factor, 209 (16.0%) disagreed, 503(38.7%) agreed while 395(30.4%) strongly agreed with it. Chi-square value of 9.689 was returned as against calculated  $\chi^2$  value of 0.139 at df of 6 and 0.05 alpha level. Thus, the null hypothesis was rejected as parental influence as HRB factor leads to decline in life expectancy.

The table also shows isolation as HRB factor lead to decline in life expectancy: 248 (19.1%) of the students strongly disagreed to the idea that isolation as HRB factor lead to decline in life expectancy, 332 (25.5%) disagreed, 398 (30.6%) agreed and 322 (24.8%) strongly agreed to the fact. The chi-square statistics indicates 0.000 and df = 6 at 0.05 alpha level. This means that isolation as HRB factor does not lead to decline in life expectancy. Hence, the formulated null hypothesis was not rejected.

The table further presents data on gender as HRB factor that lead to decline in life expectancy. Out of the 1300 students sampled, 264 (20.4%) strongly disagreed with the hypothesis, 346 (26.6%) disagreed, 479 (36.8%) agreed whereas 211 (16.2%) strongly agreed. The chi-square analysis revealed obtained value was .001; the degree of freedom was 6 at 0.05 alpha level. Hence, the null hypothesis was not rejected: therefore gender as HRB factor does not lead to decline in life expectancy.

Furthermore the table shows responses of students that religious belief as HRB factor can lead to life expectancy. Of the respondents, 475 (36.5%) strongly agreed with the hypothesis, 461 (35.5%) disagreed, 264 (20.3%) agreed and 100(7.7%) strongly agreed. The chi-square analysis showed an obtained value of 15.780, with df = 6 at 0.05 alpha level. The table also revealed that  $P < .05$ , meaning that the formulated null hypothesis was accepted. Religious belief as HRB factor significantly leads to decline in life expectancy.

From the table, it shows that 166 (12.8%) of the students strongly disagreed that peer pressure as HRB factor among secondary school students in Okitipupa Local Government Area of Ondo State will not significantly lead to decline in life expectancy, 198 (15.2%) disagreed, 523 (40.2%) agreed as 413 (31.8%) strongly agreed. The chi-square ( $\chi^2$ ) statistical analysis revealed a critical value = 2.311, calculated  $\chi^2$  value = .889 and df = 6 at 0.05 level of significance. Hence, the tested null hypothesis was accepted, meaning that peer pressure as HRB factor leads to decline in life expectancy.

In the table, data on civilization/modernization as HRB factor that lead to decline in life expectancy. Out of the 1300 students sampled, 189 (14.5%) strongly disagreed with the hypothesis, 264 (20.3%) disagreed, 482 (37.1%) agreed whereas 365 (28.1%) strongly agreed. The chi-square analysis revealed obtained value that the  $\chi^2$  critical value was 5.140, obtained  $\chi^2$  value was 0.526, df = 6 at 0.05 level of significance. Hence, the null hypothesis was rejected. Therefore, civilization/modernization as HRB factor does lead to decline in life expectancy.

**DISCUSSIONS**

The findings from this indicate that parental influence, festivals practices, peer pressure and civilization are factors that should be addressed on the problems of health risk behaviours among secondary school students. Parental influence is one of the HRB factors leading to life expectancy. The very prevalence of regular HRB found in this age group suggests that prevention programmes in schools may be beneficial. Teenagers do not

make decisions to smoke in a vacuum, the uptake is a combination of factors. The reasons given for these behaviours in general, are similar to those obtained in other surveys. In accordance with the study of Al-Yousaf and Karim (2001), one or both parents who are smokers is associated with the initiation of adolescent smoking in both age groups. Glorification of HRBs in films has a potential to influence such initiation among the young (Gale, Fry and Smith, 2006).

The implications of the findings in this study are that life expectancy decline takes its root from the homes and that homes contribute to the dreadful behaviours of the teenagers who are to be healthy leaders of tomorrow since they learn from their parents and elderly ones. These gave birth to the habits of their peers who had also learned the same thing from their parents. These phenomena then spread to the social life of the youth at large. The festival activities observed in the country ought to be correcting social vices but rather give support to them. These findings agree with Nelson, Patience and McDonald (1999) who found that parents are still the primary role models and that they continue to have a strong direct influence on their children even throughout adolescence. It also confirms the opinions of Hathaway and Tousaw (2008) that peers' influence on sexual initiation reflects the idea that adolescents' decisions about whether or not to initiate sexual activity are strongly bound to social context, with peer playing an important role in creating a sense of normative behaviour.

Modern practices, in the society and schools (a subset), that reduce the rate of punishment has resulted to a situation in which, in many countries, HRBs between teacher and student seen as not a serious disciplinary offence and policies on sexual harassment in schools (public schools in particular) either do not exist again or are not implemented. Educational attainments seem to be a moderating influence on perceived harmfulness as some studies have been shown that regular involvement in HRBs decreases with level of education.

## CONCLUSION

Parental influence, peer pressure, civilization/modernization and festival practices are health risk behaviour factors that bring about decline in life expectancy in Nigeria. The home, though not specifically mentioned in this study as a variable, is indicted as a place that produces and nurtures the trails which when fully manifested upshot to decline in life expectancy. Conclusions that can be drawn from this study are limited by the small sample size and there being more males than females; therefore, our findings may not be representative of the entire country.

Painful, yes. The life expectancy of the nation should not be handled with levity by our paying lip service to health risk behaviours of secondary school students: all concerned; parents, community leaders and policy makers should "act fast now". Hence, intervention programmes in line with health risk behaviours to increase life expectancy should periodically be organized for parents in Okitipupa Local Government Area of Ondo State.

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