

HAZARDS AND HEALTH CHALLENGES ASSOCIATED WITH TEACHERS IN PUBLIC SECONDARY SCHOOLS IN RIVERS EAST SENATORIAL DISTRICT, RIVERS STATE

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Abstract

This study investigates the perceived health challenges associated with teachers in public secondary schools in Rivers East Senatorial District, Rivers State. A descriptive survey design was adopted as the research design for this study. The population of the study comprised of all the one thousand, seven hundred and fifty two (1752) teachers in the public secondary schools in Rivers East Senatorial District. A non-proportionate stratified random sampling technique was adopted to select a sample of 400 for the study. The instrument for data collection was a self-structured questionnaire with a reliability coefficient of 0.69. Data collected was analyzed using Statistical Package for Social Science (SPSS) version 20. Statistical tools such as frequency, percentage, mean and ANOVA were used for relevant variables. The findings of this study showed that both physical and biological hazards resulted to health challenges among teachers. Specifically, (64.5%) of the respondents agreed that lifting heavy object as teaching aid in an awkward position causes strain and 55.0% agreed that poor class arrangement lead to accident. More than half of the respondents 236(59.0%) each agreed that, laryngitis and pharyngitis is caused by extensive use of the voice and a variety of illness can be transmitted through contact with affected students. The ANOVA result showed a significant difference between physical hazards ($p < 0.05$) and biological hazards ($p < 0.05$) and health challenges among respondents. It was concluded that the teaching profession is not without hazards which contribute to work related illnesses such as strain, laryngitis and pharyngitis. It was recommended that, Educational campaign should be launched for teachers in secondary schools to enforce the control and safety regulatory measures to control hazards among teachers.

KEYWORDS: Teachers, Health challenges, Hazards, Rivers State.

Introduction

A hazard is an agent which has the potential to cause harm to a vulnerable target. A hazard is any agent that can cause harm or damage to human's property, or the environment. An occupational hazard is a hazard experienced in the workplace. Hazard

can encompass many types of hazard which can also lead to accidents and diseases including workplace violence (physical hazard), and disease transmission (biological hazard). Physical hazards are the most common hazards and they include extremes of temperature, ionizing/non-ionizing

radiation, excessive noise, electrical exposure, hot environment, cold environment, workplace violence, slips, trips and falls, lifting heavy object pending to help student, standing and seating down for a long period time, repetitive movement. Biological hazards include the existence of viruses, bacteria, fungus, parasites, or any living organism that can cause disease to human beings.

Health challenges are illnesses and disabilities facing individual state of health which need ways of promoting healthier living. These include depression, violence, poverty, humiliation and feeling devalued can increase the risk of developing mental health problems. The health challenges workers faces are infectious diseases, sewage disposal, health insurance, water supply, air pollution, noise pollution, environmental radiation, housing, solid waste disposal, disaster management, control of vector some diseases, doctor-population ratio, population-bed ratio, population per health facility, payment system, methods, utilization of care, access to care, improper co-ordination as donor funds, material mortality, infant mortality, health financing, poor sanitation and hygiene, disease.

School teachers are potentially very influential in shaping children. The classroom teachers generally hold the key position in relating to students especially the secondary school level. Due to the teacher's strategic position in instruction and the daily contact the teacher has with the students. The teachers are affected by numerous hazards and health challenges. The work of a teacher involves not only teaching students, but also preparing lessons, assessing students work

and extracurricular activities, such as sports. These activities may cause teachers to suffer adverse health issues due to their unique and wide variety of job function. (Younghusband, 2005). It is based on this background that this study intends to investigate the health challenges associated with teachers in secondary schools in Rivers East Senatorial District, Rivers State.

Methodology

This study adopted the descriptive survey research design. The population of the study consists of all the public secondary school teachers in Rivers East Senatorial District in Rivers State. The Rivers East Senatorial District has 77 public secondary schools with a total of 1752 teachers (Rivers State Secondary School Board, 2018) with 8 Local Government Area namely: Port-Harcourt Local Government Area, Obio/Akpo Local Government Area, Ikwerre Local Government Area, Emohua Local Government Area, Omuma Local Government Area, Etche Local Government Area, Ogu-Bolo Local Government Area and Okrika Local Government Area. A simple random sampling technique was used to select 400 teachers for the study. A structured questionnaire with a reliability coefficient of 0.69 was used as the instrument for data collection. The questionnaire was administered directly to the respondents by the researcher with the help of three trained research assistance and instructions pertaining to the filling of the instrument was thoroughly explained to the respondents and it was retrieved at the same spot. Analysis was done using descriptive statistics and ANOVA for relevant variables.

Results

Research Question 1: Would physical hazards result to health challenges among teachers in public secondary schools in Rivers East Senatorial District, Rivers State?

Table 1: Physical Hazards and Health Challenges

Items	SA F(%)	A F(%)	SD F(%)	D F(%)	Mean
Teaching violent students lead to high blood pressure	-	39(9.8)	14(3.5)	347(86.8)	1.23
Lifting heavy object as teaching aid in an awkward position causes strain	85(21.3)	258(64.5)	17(4.3)	40(10.0)	2.97
Poor class arrangement lead to accident	136(34.0)	220(55.0)	14(3.5)	30(7.5)	3.15
Excessive noise of students lead to stress	138(34.5)	218(54.5)	30(7.5)	14(3.5)	3.40
Unhealthy environment leads to depression	149(37.3)	207(51.8)	14(3.5)	30(7.5)	3.19
Grand mean					2.79

Table 1 showed that the grand mean = 2.79 is greater than the criterion mean = 2.5 indicating that physical hazards resulted to health challenges among teachers. 258(64.5%) agreed that lifting heavy object as teaching aid in an awkward position

causes strain and 220(55.0%) agreed that poor class arrangement lead to accident.

Research Question 2: Would biological hazards contribute to health challenges among teachers in public secondary schools in Rivers East Senatorial District, Rivers State?

Table 2: Biological Hazards and Health Challenges

Items	SA F(%)	A F(%)	SD F(%)	D F(%)	Mean
Laryngitis and pharyngitis caused by extensive use of the voice	159(39.8)	236(59.0)	14(3.5)	17(4.3)	3.28
A variety of illness transmitted through contact of affected students	133(33.3)	236(59.0)	11(3.0)	19(4.7)	3.21
Poor personal hygiene before and after class can emanate to bacterial or viral infection	177(44.2)	192(48.0)	7(1.8)	24(6.0)	3.33
Poor environmental condition within the school compound result to illness among teachers	169(42.3)	214(53.5)	8(2.0)	9(2.2)	3.30
Many illnesses are caused by contact with colleagues	174(43.2)	175(43.8)	24(6.0)	27(6.8)	3.32
Grand mean					3.29

Criterion mean = 2.5

Table 2 showed that the grand mean = 3.29 is greater than the criterion mean = 2.5 indicating that biological hazards contributed to health challenges among teachers. The highest proportion in each of the items showed that, 236(59.0%) each agreed that laryngitis and pharyngitis is caused by extensive use of the voice and a variety of

illness can be transmitted through contact with affected students.

Hypothesis 1: There is no significant difference between biological hazards and health challenges among teachers in public secondary schools in Rivers East Senatorial District, Rivers State.

Table 3: ANOVA Result showing the significant difference between physical hazards and health challenges among respondents

Source	Sum of Squares	Df	Mean Square	F-cal	P-value	Decision
Between groups	179.381	3	44.845	218.666	.000	Rejected
Within groups	81.009	396	.205			
Total	260.390	399				

P<0.05 = Significant

Table 3 shows the One-Way ANOVA on the significant difference between physical hazards and health challenges among respondents. The finding of this study shows a significant difference at $p < 0.05$, $F(3,396) = 218,666$, $p = 0.000$. The null hypothesis which states that there is no significant difference between physical hazards and health challenges among teachers in public

secondary schools in Rivers East Senatorial District, Rivers State is rejected.

Hypothesis 2: There is no significant difference between biological hazards and health challenges among teachers in public secondary schools in Rivers East Senatorial District, Rivers State.

Table 4: ANOVA Result showing the significant difference between biological hazards and health challenges among respondents

Source	Sum of Squares	Df	Mean Square	F-cal	P-value	Decision
Between groups	115.153	3	38.384	168.433	.000	Rejected
Within groups	90.245	396	.228			
Total	205.397	399				

P<0.05 = Significant

Table 4 shows the One-Way ANOVA on the significant difference between biological hazards and health challenges among respondents. The finding of this study shows a significant difference at $p < 0.05$, $F(3,396) = 168.433$, $p = 0.000$. The null hypothesis which states that there is no significant difference between biological hazards and health challenges among teachers in public secondary schools in Rivers East Senatorial District, Rivers State is rejected.

Discussion of Findings

The findings of this study showed in table 1 that physical hazards resulted to health challenges among teachers. Specifically,

(64.5%) of the respondents agreed that lifting heavy object as teaching aid in an awkward position causes strain and 55.0% agreed that poor class arrangement lead to accident. This finding is in keeping with that of Leigh (2006) where accidents and violent behaviour leading to injuries were reported by the study respondents who were teaching in secondary school. The finding of this study is also similar to that of Owaidat and Hamdi (2000) where a good proportion of the teachers reported a work related stress. The finding of this study also showed that 37.3% of the respondents strongly agreed that unhealthy environment led to depression. This finding is in line with that

of Edic and Osei (2011) where teachers complained of the school environment not being suitable for teaching and learning to take place.

The findings of this study showed in table 2 that biological hazards contributed to health challenges among teachers. More than half of the respondents 236(59.0%) each agreed that, laryngitis and pharyngitis is caused by extensive use of the voice and a variety of illness can be transmitted through contact with affected students. This finding corroborates the finding of the General Mutual for National Education Services (2010) which showed that, among their study respondents, teachers had a higher lifetime prevalent of laryngitis and pharyngitis which are two infections of the upper respiratory tract due to the extensive use of the voice during teaching. Especially in a large class setting where the teacher have to do a lot of shouting to ensure that his/her voice is heard by everyone. This condition exposes teachers to a greater risk for respiratory tract disorders. Another biological hazards identified in this study was illness transmitted through contact with affected students (59%). This finding is not surprising because, when an individual is always around a room full of people every day, it is easy to catch diseases especially contagious ones. This finding is in keeping with that of Patience and Derek (2015) where it was shown that an assortment of diseases can spread in a classroom because. The similarity between the previous studies and the present one might be due to the fact that, overcrowding carries with it some health challenges and makes the transmission of diseases from one person to another so easy. The case of Rivers East Senatorial district is not left out as most of the schools in the area were found to be overcrowded or congested with students, accommodating greater number of

students beyond the specification of the class size. This condition exposes the teachers to health challenges.

Conclusion

Based on the findings of this study, it was concluded that the teaching profession is not without hazards which contribute to work related illnesses such as musculoskeletal disorders, varicose vein, laryngitis and pharyngitis among others.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. The ministry of education should incorporate the services of safety personnel's in the educational sector, who will be responsible for identifying hazards, putting control measures in place and enforcing safety practices in every school. This will help to boost safety practices in the school environment.
2. Health educators should emphasize hazards recognition and control measures during their lectures from time to time. This will help to be a reminder to both students and teachers on the need to minimize hazardous conditions that are deleterious to health.
3. Educational campaign should be launched for teachers in secondary schools to enforce the control and safety regulatory measures to control hazards among teachers.
4. The government should provide educational equipment and communication technologies for the secondary school teachers to reduce the voice-related illness among them due to the extensive use of their voice.

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