

Research
In
EDUCATION

Vol. 19. No. 1 December, 2013

Research Journal

Research in Education

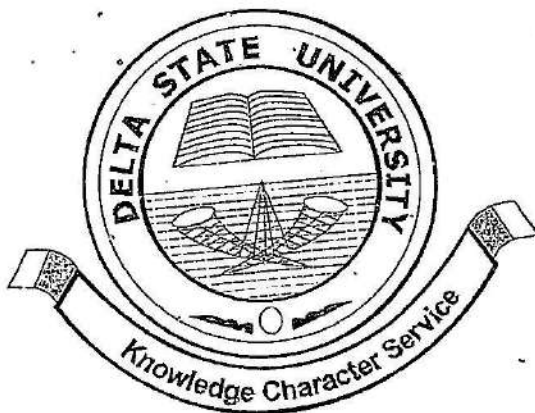
ec., 2013

A Research Journal

Volume 19 No 1. December, 2013

ISBN: 978-33872-5-8

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PSYCHO-SOCIO FACTORS ASSOCIATED WITH HYPERTENSION IN DELTA NORTH SENATORIAL DISTRICT OF DELTA STATE: IMPLICATIONS FOR HEALTH EDUCATION

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Abstract

The focus of the study was to investigate the psycho-socio factors associated with hypertension and its implications for Health Security Education. To guide the study many research questions and hypotheses were raised. A self structured questionnaire was the instrument used for the collection of data. The validity of the instrument was ascertained at surface and content validity, reliability of instrument was ascertained through test-retest process, data generated was analysed using simple percentage analysis for the research questions and multiple regression for the hypotheses at 0.5 level of significant. The findings showed that divorce of consummated marriage, failure to achieve political/double barred and emotional stress contributed to the incidence of hypertension. Based on the findings the following recommendations were made: counseling services should be provided for married couples, individuals should not allow emotion to govern them to the level of developing hypertension. Hypertension as a topic should be inculcated in to the primary and secondary school syllabus.

Keywords: Hypertension, Arteriosclerosis, Non-communicable diseases, silent killer

Introduction

Hypertension is among non communicable diseases and it is known as high blood pressure (Vincent, 1994, Ross, 1995). Stanley and Ronald (1974) opined that hypertension is a physical sign of stress on the blood vessels, and not a disease. Hypertension is a threat to life, family and society, because it affects the health of man. A good number of individuals live with high blood pressure of 170 systolic and 110 diastolic for more than 10 years without knowing. Vincent (2004) referred to hypertension as a "silent killer" because it exists within the individual for a period of 10 years without manifesting signs and symptoms. He further stated that hypertension can only be identified with the aid of blood pressure monitoring instrument known as sphygmomanometer. Without it an individual may not know that he is suffering from high blood pressure and may also not know the harm it may cause if not controlled. Medical Records Statistics (2011) in the hospitals have revealed that hypertension is affecting a large population of people. For instance, visits to private clinics, individual homes in the communities and government hospitals in the stated area of study (Delta North Senatorial District) show that a good number of hypertensive cases reported were on the high side. Hypertension is a dangerous condition because of the complications associated with it such as ventricular failure, renal failure, ischemic heart disease, eye problem (retinal hemorrhage) and stroke (cerebrovascular accident (CVA) (McKean and Jones, 1985). Launer, (2003) in his study showed that middle aged men with hypertension are likely to suffer from impaired memory judgment once they reach their late 70's. This is because in every ten points increase in systolic blood pressure, there is likelihood of diminished brain functions by a certain percent (McEwen, 1993).

Parry and Ikeme (1999), Oviasu (1994) noted that hypertension is the most common cardiovascular disease in Africa. Oviasu (1994) observed that hypertensive heart disease is the most common type of disease in Nigeria affecting 34 percent of millions of people. Oviasu (1998) opined that arteriosclerosis, aortic valve, stress, coronary heart disease are responsible factors of hypertension.

According to Davidson (1999) failure to achieve any intended aspiration is a disappointment and it leads to psychological distress. Awake (2003) stated that failure to achieve success leads to grinding of teeth and emotional distress. It appears that failure to achieve individual aspiration has contributed to health problems such as smoking and excessive drinking of alcohol.

Eferakeya (2001) in his inaugural lecture cited a Russian scientist who produced hypertension in chimpanzees by making them emotional. Taking male chimpanzees that had been living happily with several females in a large compound and suddenly isolating them from the female unscreened cages where they could see the females but could not reach them to accomplish their intentions. A vigorous male was then introduced into the compound to enjoy with the female and rule the territory. The encaged males witnessed this with screaming rage but were helpless to intercede. The male chimpanzees subjected to emotional stress died of hypertension within three months. Divorce of consummated marriages abruptly may lead to unpredictable consequences of hypertension when one party is highly interested in the marriage (Awake 2002). Unexpected divorce plugged individuals into psychological stress and increased their family responsibility. The work or activities that are meant for two people are now being added by one person. A broken home has social and psychological problems. It affects the behaviour of the children. Load of work i

one parent which may amount to stress. Thompson (1978) opined that the hypertensive patients are described sometimes as those who have particular difficulty in dealing with their aggressive impulses. They do things to remedy a hardly compromised situation in a lighter form.

Hypertension has developed very negative effects on socio-economic life. For instance, certain persons may not wish to marry from families with history of hypertension for fear of transmitting familiar gene to their offsprings. According to Anderson (1982) hypertension as hereditary factor, runs in the family. There is financial involvement because of cost of treatment, periodic checkups and fears that the blood pressure will rise thereby leading to constant anxiety, which may adversely affect individuals. Hypertension is increasing and spreading among young people of promising endeavors. The income of a home is affected when a bread winner is involved.

As a result of these problems associated with hypertension, the researcher decided to investigate the subject matter. The focus of this study was to find out the role in which divorce of consummated marriages, failure to achieve success and emotional stress have played in the incident of hypertension in Delta North Senatorial District of Delta State. That is, it sought to answer this question to what extent do divorce of consummated marriage, failure to achieve success and emotional stress contribute to incidence of hypertension?

This study attempted to provide answers to the following questions:

- 1. Does divorce of consummated marriage contribute to incidence of hypertension in Delta North Senatorial District?
- 2. Does failure in the achievement of political aspiration contribute to incidence of hypertension in Delta North Senatorial District?
- 3. Does emotional stress contribute to incidence of hypertension in Delta North Senatorial District?

The following hypotheses were formulated to guide the study:

1. Divorce of consummated marriage would not significantly contribute to the incidence of hypertension in Delta North Senatorial District.
2. Failure in achievement of political and other aspirations would not significantly contribute to the incidence of hypertension in Delta North Senatorial District.
3. Emotional stress would not significantly contribute to the incidence of hypertension in Delta North Senatorial District.

The purpose of the study was to investigate the psycho-social factors associated with hypertension in Delta North Senatorial District. The result of the study would be beneficial to health workers, hypertensive patients, policy formulators and those who will use the result of the subject matter to educate masses. The study was delimited to government hospitals in Delta North Senatorial District of Delta State. The study used descriptive survey method of the ex post facto to collect data, record, analysis and interpret or describe information as they exist (Babbre, 1975; Gay, 1976 and Best, 1986).

The population for this study was made up of all the high blood pressure patients undergoing treatment in the General Hospital in the 9 (nine) Local Government Area that make up the Delta North Senatorial District. The information available in medical records showed that a total of 360 (three hundred and sixty patients) were receiving treatment for high blood pressure in the 9 (nine) General Hospitals in the area of study.

Sample and Sampling Technique

The total number of respondents (hypertensive patients), which the researcher used as sample for this, was 90 (ninety). That is, 10 (ten) respondents were drawn from each of the nine General Hospitals in Delta North Senatorial District. The number was decided upon because it was not generally common to have a very large number of hypertensive patients coming to the hospital for the treatment at the same time, when they were needed to complete the questionnaire. From the number of patients available at the time (which was greater than ten) in each hospital, the required numbers of respondents were picked using the ballot method of random sampling technique. Sample size comprised – Male n = 50; Female n = 40, Age below 30 years n = 15, 30 – 49 years n = 30, 50 years and above 45, married n = 25, single n = 30, divorce n = 35, employed n = 5, unemployed n = 40; politician n = 30, pensioners n = 15, level of education: below primary school 6 (six) n = 30, primary 6 (six) n = 25, secondary n = 25, post secondary n = 10.

The instrument used for this study, for the collection of data was a self-structured questionnaire. The questionnaire items were provided with optional answers from which the respondents chose responses that suit them best. The content validity of the research instrument was ascertained by the experts in department of Physical and health Education, Delta State University, Abraka. The reliability of the instrument was ascertained using test-

retest process. This was to ensure that the questionnaire was capable of providing the same results whenever, and wherever it is used for data collection. The data collected through test-retest process was analyzed using Pearson Product Moment Correlation Coefficient. The instrument was considered reliable because it had a correlation value of 0.75 for divorce subscale 0.95 for failure to achieve aspiration and 0.85 emotional stress subscale. The distribution of the questionnaire was done through the assistance of nurses working in the hospital. For the oral interview, the researcher sought information from some of the patients available at the hospital. Information gathered in this way was infused into the discussion that was accompanied with the analysis of data. The simple percentage statistics was used to analyze the tabulated data gathered while multiple regression analysis was used to test the stated hypotheses at 0.8 level of significance.

Research Question 1

Does divorce of consummated marriage contribute to incidence of hypertension?

Table 1

Percentage Analysis for divorce

Variable	Agreed	%	Disagreed	%	Total	%
Divorce in Marriage	65	71.5	25	27.8	90	100

Table 4.11 is the summary of the responses supplied from the respondents in divorce in marriage 65 (71.5%) respondents accepted that divorce in marriage caused them a lot of emotional imbalance and their present case of hypertension while 25 (27.8%) respondents disagreed. Conclusion can be drawn that divorce of consummated marriage led to cases of hypertension in Delta North Senatorial District of Delta State.

Research Question 2

Does failure to achieve political aspirations contribute to incidence of hypertension in Delta North Senatorial District?

Table 2

Percentage analysis of failure to achieve political and other aspiration as a factor responsible for hypertension.

Variable	Agreed	%	Disagreed	%	Total	%
Loss of political and other aspiration	82	91.3	8	8.9	90	100

Table 2 above shows that out of ninety respondents suffering from hypertension who supplied information about failure to achieve political and other aspiration as possible contributing factors to the case of hypertension, 82 (91.3%) accepted that their condition was caused by failure to achieve political/ other aspiration, while 8 (8.7%) did not agree. Conclusion can be drawn that failure to achieve success and other aspiration contribute to incidence of hypertension in the of study.

Research Question 3

Does emotional stress contribute to incidence of hypertension in Delta North Senatorial District?

Table 3

Percentage analysis of emotional stress contributing to hypertension.

Variable	Agreed	%	Disagreed	%	Total	%
Emotional stress contributing to hypertension	75	83.33	15	16.67	90	100

The above table 3 indicates that 75 (83.33%) hypertensive patient supplied information about emotional stress as a contributing factor to hypertension agreed, to the fact, while 15 (16.17%) disagreed. Conclusion can be drawn that emotional stress contributed to incidence of hypertension in Delta North Senatorial District.

Hypothesis 1

Divorce in consummated marriage would not significantly contribute to incidence of hypertension.

Table 1
Hierarchical analysis of multiple regression of divorce in marriage as a factor to hypertension.

Model		R	R ²	R ² Adjusted	Std Error of the estimate
		0.38	0.50	0.82	12.31
ANOVA	DF	SS	MS	F	
Regression	1	1441361	208287	11.320	
Residual	198	444233	498131		
Total	199	234576			
Constant		Unstandardized Coefficients		Standardized Coefficients	
Divorce of consummated		B	SEB	B	T
		25093	34644		30985
		-6.789	209	255	2199

The table 4 shows that Divorce of consummated marriage has a significant relationship with incidence of hypertension among people of Delta North Senatorial District involved in this study. The computed R = 0.38, was found significant at $F = (+ - 198) = 11.320$, $P = <0.05$. Therefore, the null hypothesis, which states that divorce of consummated marriage would not significantly contribute to the incidence of hypertension, was accepted. Divorce as a factor accounted for 4.1% amount of variance in hypertension. In order to test for both statistical and political significance of this contribution, Divorce of consummated marriage and hypertension, the regression coefficient 26 was subjected to a t-test. The computed beta weight of Divorce was 21 which yielded a significant t value = 220 $P < 0.5$. This conclusion can be drawn that Divorce of consummated marriage contributes to hypertension.

Hypothesis 2

Failure to achieve political and other aspiration would not significantly contribute to hypertension.

Table 4: Multiple Regression Analysis of failure to achieves political aspiration.

Model		R	R ²	R ² Adjusted	Std Error of the estimate
		0.41	0.86	0.99	20.22
ANOVA	DF	SS	MS	F	
Regression	2	3440240	8421.18	11.320	
Residual	197	134804	421214		
Total	199	289855			
Constant		Unstandardized Coefficients		Standardized Coefficients	
achieve political aspiration		B	SEB	B	T
		48875	6374		14.334
		-4.820	3024	295	7025

The table 5 shows that failure to achieve political/other aspirations has a significant relationship with incidence of hypertension. The computed multiple R = 0.41 was found to be significant at $F = (2 - 197) = P < 0.5$. Therefore the null hypothesis, which states that failure to achieve political/other aspiration would not significantly contribute to incidence of hypertension, was accepted. Failure to achieve political/other aspiration accounted for 4.8% amount of variance in the incidence of hypertension. In order to tests the practical relevance of the observed statistical significance of the association between failure to achieve and hypertension the R² and R² adjusted were computed. The corrected R2 value shows that failure to achieve political/other aspirations was a contributory factor to incidence of hypertension. The conclusion can be drawn that failure to achieve political/other aspiration is practically associated with incidence of hypertension.

Hypothesis 3

Emotional stress would not significantly contribute to hypertension.

Table 5: Multiple Regression Analysis of emotional stress of hypertension.

Model		R	R ²	R ² Adjusted	Std Error of the estimate
		0.338	0.925	0.119	33.89
ANOVA	DF	SS	MS	F	

Regression	3	2338819	44534	10.310
Residual	196	334285		355232
Total	199	2324592		
Constant		Unstandardized	Standardized Coefficients	
Divorce of consummated		Coefficients		
		B	SEB	B
		28575	7398	9455
		-4.820	43887	405
		-3789		5517

The table 6 shows that emotional stress has a significant relationship with hypertension. The computed multiple R=0.338 was found to be significant at $F(3, 196) = P < 0.5$. Therefore the null hypothesis which states that emotional stress would not significantly contribute to hypertension was accepted. Emotional stress accounts for 6.1% amount of variance in the incidence of hypertension. In order to test the practical relevance of the observed statistical significance or association between emotional stress and hypertension the R^2 and R^2 adjusted were computed which yielded and respectively. The corrected R2 value shows that emotional stress was a contributing factor to incidence of hypertension. The conclusion can be drawn that emotional stress practically associated with hypertension.

Discussion

The analysis of data showed the psycho-socio factors that were associated with hypertension in Delta North senatorial District of Delta State. Such factors included Divorce, failure to achieve political/other aspiration and emotional stress. Table 3 shows that Divorce of consummated marriage contribute to incidence of hypertension. It was discovered that sudden separations in relationship highly influence emotional state of individual which possibly led to the problem of hypertension. This is in line with Eferakeya (2001) that separation of the male from female chimpanzees subjected the male chimpanzees to emotional stress died of hypertension within three months. Divorce of consummated marriage abruptly may lead to unpredictable consequences of hypertension when one party is still much interested in the marriage. Failure to achieve political/other aspiration from the investigation in table 4 shows that from the total number of respondents who supplied information in the above subject matter 8 out of 90 hypertensive patients agreed that failure to achieve success contributed to hypertension.

Unruly lifestyle such as smoking, drinking of alcohol and use of cannabis has been confirmed as factors contributing to high blood pressure. It was discovered that age below 20 years was seen having high blood pressure without trace of medical of complication modern strain in social life has led many young men having hypertension.

Findings of the Study

1. That divorce of consummated marriage was a significant factor contributing to the incidence of hypertension.
2. That failure to achieve political/other aspiration was a significant factor contributing to incidence of hypertension.
3. That emotional stress was a significant factor contributing to hypertension.

Conclusively, based on the findings of the study, it was obvious that high blood pressure is highly associated with psychological trauma and those who allow emotion to becloud their sense of reasoning

Recommendations

1. Counseling service should be provided to married couples as a means of reducing cases of broken manages in the families Marriage partners should be encouraged to be faithful to whatever promises given to their partner.
2. Parents should allow their children to make their own choice in marriage, to avoid problems of wrong choice that may end affect the marriage.
3. Individuals should learn how to govern their emotion not allowing emotion to degenerate to the level where they could be predisposed to hypertension.
4. Individuals especially Politicians, should not make whatever aspirations, they may have become a do-or-die affair. If they fail they should bear it with a strong heart and try other comforting alternative thing to do.
5. Individuals should control their level of anger burst and avoid pent-up emotion.

5. Individual should have the ability of tolerating one another even when offended, life should be taken very easy.
7. • Periodic medical checkup is encouraged.
8. Hypertension as a topic should be introduced into primary and secondary schools' health education syllabus.

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