HEALTHCARE RESOURCES ORGANISATION AS A DETERMINANT OF UTILIZATION OF PUBLIC HEALTH FACILITIES AMONG RETIRED CIVIL SERVANTS IN DELTA STATE

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Abstract

Health promotion efforts should also be directed at retired civil servants since they constitute a large proportion of the populace. These efforts should start with the determination of the extent to which healthcare resources organisation is affecting healthcare services utilisation by the retired civil servants. This study was therefore carried out to find out if existing healthcare resources organisation would determine utilization of public health facilities among retired civil servants in Delta Central Senatorial District. The descriptive survey research design of the ex-post facto type was adopted to study a total population of 4,575 (males = 2, 070 males and females = 2, 505) retired civil servants listed on the Delta State Pensions Management Board as retirees from Delta Central Senatorial District of Delta State. The purposive sampling technique was used to draw a representative sample size of 400 participants. A validated self-structured questionnaire titled "Healthcare Resource Organisation as a Determinant of Utilization of Public Health Facilities among Retired Civil Servants Questionnaire (HRODUPHFQ)" with a Chrombach alpha reliability coefficient of 0.89 was used to collect data for this research. Obtained data were analysed using multiple regression analysis. Results showed that existing healthcare resources organisation negatively predict utilisation of public

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health facilities among retired civil servants in Delta Central Senatorial District. It was concluded that the current organisation of healthcare resources may not be suitable for Utilization of Public Health Facilities among retired civil servants in Delta State. Based on the findings of this study, it was recommended that there is need to rearrange the organisation of our healthcare resources so as to make them more suitable for utilisation by retired civil servants.

Keywords: *Healthcare resources organisation, Health seeking behaviour, Healthcare services utilisation, Older adults, Wellbeing.*

Introduction

The healthcare system includes health policy, resources and organisation, as well as the changes in these over time. Resources comprise the volume and distribution of both labour and capital including education of healthcare personnel and available equipment (Andersen, 1995). Organisation refers to how a healthcare system manages its resources, which ultimately influences access to and structure of healthcare services. How an organisation distributes its resources and whether or not the organisation has adequate labour volume, will determine if an individual or group of individuals use the healthcare services.

Retired civil servants are individuals who have retired from active service having attained the age where the body's physiological systems have reached a state of functional degeneration resulting in reduced capacity for work and optimal health (Robergs & Keteyian, 2003). According to the United Nations Economic Commission for Africa (2007), the population of retired civil servants is growing rapidly. It is estimated that the current population of Nigerians aged 60 and above (majority of whom are retired civil servants) is approaching 6% of the entire population or 11.5 million people. It projected that this figure will increase to 25.5 million people or 9.9% of the entire population in Nigeria by the year 2025. This large number of people, who are naturally prone to ill health and reduced physical work capacity (Nabofa, 2009) need specifically, directed health promotion efforts.

The healthcare system is an organizational framework for the distribution or servicing of the healthcare needs of a given community. It is a fairly complex system of inter-related elements that contribute to the health of people - in their homes, educational institutions, in work places,

the public (social or recreational) and the psychological environments as well as the direct health and health-related sectors. According to Asuzu (2004), it is in view of this that the healthcare system in Nigeria is structured along the three universal levels; the primary, secondary and tertiary levels of care. The system is run concurrently such that the three levels of government - local, regional/ state and national/federal, even though they hold primary responsibility for only one level of the system each, can exceed it and provide services at any of the other two levels of care.

A system of this nature is expected to affect a nation's health promotion efforts. One of the effects of this fluid system, in the face of the many social and infrastructural problems facing Nigeria is that the pursuit of the politically attractive tertiary healthcare can remain the only attractive area of the healthcare system, to the detriment of the other two levels of care (Shehu, 2000). Shehu postulated that the neglect of the primary healthcare system, its mal-distribution as well as the neglect of the secondary healthcare, will result in an inverted healthcare pyramid and so cannot produce any health benefits for all people.

It was therefore necessary to reform the healthcare delivery system. Asuzu (2004) posited that the reason for healthcare system reforms in Nigeria was because the system was not working or producing the optimal health status possible and deserved by the people. According to him, the 2000 World Health Report, ranking Nigeria as the 187th of the 191 member nations for its health systems performance shows that our healthcare system is not working. In line with the need for reforms in the healthcare sector, various Nigerian governments made numerous efforts towards the organisation of its healthcare resources for the provision of healthcare facilities for her populace. Notable among these efforts were the expansion of medical education, improvement of public healthcare, and provision of tertiary and secondary health facilities in the urban areas plus Primary Health Care (PHC) in many rural areas (Awoyemi, Obayelu & Opaluwa, 2011).

Delta Central Senatorial District is part of Delta State, one of the 36 states that make up the Federal Republic of Nigeria. It has a population of about four million persons according to the 1999 Federal office of statistics estimate (Ogbe, 2011). There is at least one government owned hospital located in each of the 8 local Government Areas in the district. The hospitals are staffed with one or more qualified medical doctors, nurses, pharmacists, laboratory technician/ scientist,

health assistants and their support personnel. There are also a number of health centres in most communities of the district. These are manned by highly trained nurses and community health extension workers. A few of these centres have qualified medical doctors on their staff list.

The Federal Ministry of Health (FMH, 2004) claimed that the organisation of the country's healthcare system resources through the Primary Health Care innovation has made health services available, accessible, acceptable and affordable by every individual. Despite these governments' serious commitment in the organisation of its healthcare resources, it is observed that a large proportion of people, especially the retirees, still prefer utilizing the non-orthodox healthcare (Fosu, 1994). The FMH (2004) agreed that generally and for various reasons, utilization of public health facilities has been rated low when compared with the western world.

There is need to find out if the low utilization of available health facilities among the retired civil servants in Delta State is due to healthcare resources organisation inadequacies. The Anderson's (1995) model of health services utilization was deemed appropriate in this quest. According to the Anderson's model, there are many things that are responsible for why healthcare systems do not work properly; among the most important of which is the inadequacy of its resources organisation. Scholars have shown that healthcare utilisation of a population is related to the organisation of healthcare resource among other factors (Chakraborty, Islam, Cowdbury, Bari & Akhter, 2003; Manzoor, Hashni & Mukhtar, 2009) and that a healthcare system failure is reflected in the peoples' healthcare system utilization pattern (Awoyemi, Obayelu & Opaluwa, 2011). However, there is need to verify if public healthcare facility utilisation among retired civil servants would be determined by healthcare resource organisation in Delta State. This research was therefore set to answer the question "Would the organisation of health system resources be a determinant of the Utilization of Public Health Facilities among Retired Civil Servants in Delta Central Senatorial District of Delta State?"

Hypothesis:

The following null hypothesis was tested in this research. "Organization of healthcare resources will not be perceived to be a significant determinant of public healthcare facilities' utilisation among retired civil servants in Delta Central Senatorial District."

Delimitations of the Study

The study is delimited to the following:

1. The eight (8) Local Government Areas that ----------constitute Delta Central Senatorial Districts namely, Ethiope East, Ethiope West, Ughelli North, Ughelli South, Sapele, Okpe, Uvwie and Udu local government areas.
2. Only retired civil servants aged 60 years and above, and are registered as pensioners with Delta State Pensions Management Board were the older adults studied.

Methodology

Research Design

The research design adopted for this study was the descriptive survey research design of the ex-post facto type. Egbule and Okobia (2001) postulated that descriptive survey research design provides a basis or explanation for the current state of affairs through the systematic collection and analysis of accurate data. An ex-post-facto type of research is a systematic empirical inquiry, in which the investigator does not have direct control of independent variables because their manifestation have already occurred or because they are inherent and cannot be manipulated (Kerlinger & Lee 2003). Since both dependent and independent variables were not manipulated in this study, this design was deemed appropriate and adopted for this study.

Population of the Study

The study population comprised all the retired civil servants listed on the Delta State Pensions Management Board as retirees from Delta Central Senatorial District of Delta State. The total number of retirees registered with the Delta State Pensions Management Board, as residing in Delta Central Senatorial District of Delta State, as at the end of the year 2011 is 4,575 made up 2, 070 males and 2, 505 females.

Sample and Sampling Procedure

The total sample size used in this study was made up of 400 participants. This sample size was determined by the Cochran's sample size formula for categorical data (Bartlett, Kotrlik & Higgins, 2001):

$$no = \frac{(t)^2 * (p)(q)}{(d)^2}$$

Where, no = required sample size

t = table value for selected alpha level of significance, 0.05 = 1.96.

(p)(q) = estimate of variance = 0.25, since p = maximum possible proportion (0.5) while

q = 1minus maximum possible proportion (0.5).

d = acceptable margin of error for proportion being estimated = 0.05 (error researchers were willing to except).

Therefore the sample required for this study is

$$no = \frac{(1.96)^2(0.5)(0.5)}{(0.05)^2} = 384$$

This number was rounded up to 400 so that an equal number of 50 respondents can be used from each of the eight local governments in the district. The Cochran's sample size formula was used so that generalisations can be made to the whole of Delta State and those older adults who are not registered with the State Pensions Management Board. This is in line with Bartlett, Kotrlik and Higgins' (2001) recommendation that the Cochran's sample size formula could be used for obtaining an adequate and representative sample size that would enable generalisations to be made to a given population even if the sample is obtained from just a part of the population.

Purposive sampling technique was used to select a total of 50 respondents from each of the eight (8) Local Government Areas in Delta Central Senatorial District in Delta State. The reason for choosing this sampling method is in accordance with Nworgu's (1991) assertion that purposive sampling technique ensures that only elements relevant to the research are included and guarantees that extra care is taken to select those elements that satisfy the requirements of the research. This sampling method ensured that an adequate number of male and female retirees were selected from each of the local governments as participants.

Research Instrument

A self-structured questionnaire titled "Healthcare System Resource Organisation as a Determinant of Utilization of Public Health Facilities among Retired Civil Servants Questionnaire (HSRODUPHFQ)" was used to collect data. The questionnaire was divided into two sections. Section 'A' comprised items on socio-demographic characteristics of the respondents while Section B elicited data regarding the dependent (current level of healthcare services utilisation among retired civil servants) and the independent variables (self-reported healthcare facility utilisation pattern). The responses in section 'B' were structured based on a four point Likert-type rating scale ranging from "4" for strongly agree to "1" for strongly disagree.

Validity of the Instrument

Face and content validity was established by five experts in health educational measurement and evaluation of Delta State University, Abraka. The questionnaire was vetted, in terms of clarity of the questions; the suitability of the variables and capability of the questionnaire to elicit the required information for the study. The instrument was found by these experts to possess face and content validity.

Reliability of the Instrument

The research instrument was pre-tested by administering copies of the questionnaire to 30 retirees who attended the Delta State Retirees Workshop from Delta South Senatorial District of Delta Sate of Nigeria. Respondents from Delta South Senatorial District were used because they were not part of the population studied and so did not produce any 'halo effects' on the actual copies completed and used. The filled and returned copies of the questionnaires were analysed using Chrombach alpha reliability scale. The analysis yielded an alpha coefficient of 0.89. This value obtained was regarded high enough to establish the reliability of the instrument for this study.

Method of Data Collection

The researcher personally administered copies of the questionnaire to the respondents during the meetings of the Delta State Retiree Association. Completed copies of the questionnaire were collected from the respondents, immediately after completion on the same day, to avoid questionnaire mortality and forestall a situation where some respondents may be influenced in their responses by others.

Data Analysis

Completed copies of the questionnaires were sorted and coded by the researcher. Data obtained were analysed using frequency distribution and multiple regressions.

Table 1: Suitability of Healthcare Resources Organisation for Retired Civil Servants in Delta Central Senatorial District

Suitability of Healthcare Resource organisation for Retired Civil Servants Item	Frequency of Responses in number and percentages			
	Strongly Disagree	Disagree	Agree	Strongly Agree
The policy for organising healthcare system health centres, hospitals, doctors, nurses and protocol in Delta State is favourable to the retired civil servants' health needs in terms of special recognition given to them as senior citizens.	208 (52.0%)	192 (48.0%)	0 (0.0%)	0 (0.0%)
Special attention is given to the retired civil servant any time he/she visits any public health facility (Political Resource Organisation).	176 (44.0%)	200 (50.0%)	24 (6.0%)	0 (0.0%)
Public health facilities in Delta State have such structures that are organised in a way that enables the retired civil servants have physical access without assistance (Physical Resource Organisation) %) 8 (2.0%)	40 (10.0%)	40 (10.0%)	312 (78.	
Healthcare charges are organised in such a way that retired civil servants pay less for services in Delta State public health facilities (Economic Resource Organisation).	208 (52.0%)	192 (48.0%)	0 (0.0%)	0 (0.0%)

Using the 'Enter' method of multiple regression analysis, a significant model emerged, ($F_{12, 386} = 13.095, p < 0.05$) with R square = 0.289 and an Adjusted R square = 0.267.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651[a]	.424	.403	1.62296

a. Predictors: (Constant), Suitability of healthcare system resource organisation for retired civil servants in Delta Central Senatorial District score.

Table 3: ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	745.267	14	53.233	20.210	.000[a]
	Residual	1014.093	385	2.634		
	Total	1759.360	399			

a. Predictors: (Constant), Suitability of healthcare system resource organisation for retired civil servants in Delta Central Senatorial District score, Political resource organisation, Physical Resource Organisation, Economic resource organisation.

Table 4: Coefficients

	Unstandardized Coefficients		Standardized Coefficientst		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	12.847	1.872		6.863	.000
Suitability of existing policy for organising public healthcare facilities for retired civil servants in Delta State.	-.475	.059	-.412	-8.057	.000
Suitability of existing political resources for organising public health care facilities for retired civil servants in Delta State.	-.257	.079	-.184	-3.259	.001
Suitability of available physical resources for organising public health care facilities for retired civil servants in Delta State.	-.549	.174	-.196	-3.151	.002
Suitability of available economic resources for organising public healthcare facilities for retired civil servants in Delta State.	-.261	.115	-.112	-2.277	.023

a. Dependent Variable: Utilisation of Public Healthcare Facilities

All the variables were found to be significant determinants with negative coefficients in this model.

Discussion

Organisation of healthcare resources was found to be a negative predictor of healthcare facility utilisation by retired civil servants in Delta Central Senatorial District. In other words, a negative relationship that is deterministic was found to exist between healthcare resources organisation and public healthcare facility utilisation among retired civil servants in Delta Central Senatorial District of Delta State. It thus appears that Nigeria's healthcare system's structural organisation along the primary, secondary and tertiary levels of care (Asuzu, 2004) is not achieving its goal in the district. Since a healthcare system failure is reflected in the peoples' healthcare system utilization pattern (Awoyemi, Obayelu & Opaluwa, 2011), the observed large proportion of people, especially the retirees, still preferring to utilize non-orthodox healthcare in Nigeria (Fosu 1994) could therefore be attributable to the inability of healthcare resources organisation to deliver on its goals. Therefore resources organisation failure could be counted among the various reasons adduced by the FMH (2004) to be responsible for the generally low rating of utilization of public healthcare facilities in Nigeria when compared with the western world. By implication, this finding could be seen as a sign of policy failure in terms of healthcare resources organisation for utilisation by retired civil servants.

This study has also shown that there is a negative deterministic relationship between the political resources organisation and utilisation of healthcare facilities by retired civil servants in Delta Central Senatorial District of Delta state. This finding therefore provides empirical justification for the claims of Shehu (2000) that the neglect of the primary healthcare system, its mal-distribution as well as the neglect of the secondary healthcare, will result in an inverted healthcare pyramid and so cannot produce any health benefits for the people. The political resources organisation of healthcare services in Delta Central Senatorial District of Delta state may thus be posing serious impendiment to the utilisation of healthcare facilities by retired civil servants.

It was also found that there is a negative deterministic relationship between the physical resources organisation and utilisation of healthcare facilities by retired civil servants in Delta Central Senatorial District of Delta state. This finding confirms Shehu's (2000) earlier position that there are infrastructural problems facing healthcare delivery in Nigeria.

Organisation of economic resources for healthcare delivery in Delta Central Senatorial District was found in this study to have a negative relationship that is deterministic with utilisation of public health facilities by retired civil servant in Delta Central Senatorial District. This finding is reasonable, given Hargreaves' (2002) position that the costs of receiving healthcare in modern day Nigeria's public healthcare facilities are so exorbitant that the retired civil servant whose economic power has been reduced drastically is effectively shut out.

Conclusion and Recommendation

Healthcare resources organisation was found in this study to be a hindrance to the utilisation of public healthcare services among retired civil servants in Delta Central Senatorial District of Delta State. It was therefore concluded that the current organisation of healthcare resources may not be suitable for utilization of public health facilities by retired civil servants. Based on the findings of this study, it was recommended that there is need to rearrange the organisation of our healthcare resources so as to make them suitable for retired civil servants. The rearrangement should be such that there is an appropriate policy that takes cognizance of retired civil servants as a special group of people who require special attention. The public healthcare facilities should be organised in such a manner that makes retired civil servants pay reduced amount for healthcare needs.

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