EFFECT OF HEALTH EDUCATION ON HEALTH CARE SEEKING BEHAVIOUR OF PEOPLE LIVING WITH HIV AND AIDS IN NIGERIA

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ABSTRACT

The aim of this study was to determine the effects of health education intervention on the health care seeking behaviour of people living with HIV and AIDS (PLWHA) in Rivers State, Nigeria. The study adopted the non-randomized control group pre-test post-test quasi experimental research design. The sample for the study comprised 80 newly enrolled PLWHA from two Zonal Hospitals in Rivers State: 30 for the experimental group and 50 for the control group selected using a multi-stage sampling procedure. Health care Seeking Behaviour Questionnaire (HSBQ) with a reliability index of 0.81 was used to collect data during the pre and post-tests. Only the experimental group were exposed to health education. Data collected were analysed using mean and Analysis of Co-variance (ANCOVA) set at 0.05 alpha level. The results showed a mean score gain of 4.70 for the experimental group as against -0.56 for the control group. There was significant improvement in the health care seeking behaviour (HCSB) of PLWHA ($F_{1,77}$= 7.439, P<0.05) following the intervention. Conclusively, a well-articulated and appropriately delivered health education improves HCSB of PLWHA and thus should be a significant part of health care for PLWHA in Nigeria.

Keywords: Health Education, Health Care Seeking Behaviour, Intervention, PLWHA, Nigeria

INTRODUCTION

One of the core determinants of health which has become of great interest to experts in the fight against HIV and AIDS is the health care seeking behaviour of PLWHA. This is so because HCSB determines how available services and facilities are utilized and the consequent health outcomes such individuals enjoy or suffer. Those with negative HCSB are most likely to manifest with poor health outcomes, while those with positive HCSB will expectedly demonstrate enhanced health conditions.[1]

Health care seeking behaviour refers to any set of actions undertaken by people who perceive themselves to be ill for the purpose of finding an appropriate solution.[2] It is also seen as a sequence of remedial actions taken by people who experience signs or symptoms of illness in order to rectify perceived conditions of ill-health.[3] Health care seeking behavior is rooted in a theory propounded by Diane Lauver in the early 1990s to provide explanations for healthcare avoidance behaviours of cancer symptomatic patients.[4] The theory of Care Seeking Behaviour proposes that the action taken by a person who is ill is significantly influenced by his/her self-assessment of the efficacy or otherwise of available treatment options or preventive behaviour.

HCSB of PLWHA can be described in terms of attribution of cause, time difference between awareness about the ailment and getting in contact with a health care professional, type of

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health care provider patients seek help from, the levels at which patients comply with recommended treatments, reasons patients advance for their choices of health care professionals and reasons for seeking help from non-professionals where applicable.[5] This is so because the nature of care seeking varies from one person to another depending on the individuals' levels of cognition of the perceived health challenge or other socio-cultural as well as economic factors. HCSB of PLWHA can further be measured by their choices of health care provider and their response to treatment in terms of adherence to clinical appointments, adherence to medication, adherence to referral and adherence to social support services among others.[6] It also measures the actual response of PLWHA to illness conditions in terms of interpretation of symptoms, acceptance or avoidance of healthcare,[7] compliance to all referrals, adherence to antiretroviral (ARV) medications, keeping to clinical appointments and developing coping skills against stigmatization and discrimination among others.[8]

Sadly, while experts are lamenting dangerous trends in HIV which is re-emerging stronger in recent times, [9] Africans are still deep into adverse unconventional health care practices which are rooted in social and cultural norms and constitute barriers to disease eradication. HIV/AIDS patients still face stigmatization and discrimination in many parts of Africa including Nigeria. The fear and actual experience of stigmatization and discrimination weakens a person's readiness to accept HIV services, seek for care and adhere to treatment.[10]

Studies in Ghana and Nigeria revealed that belief in supernatural causation of AIDS and tuberculosis (TB), and the desire to be cured by traditional healers was high among subjects and this wrong perception adversely affected their performance of recommended behaviours.[9, 11] The studies revealed that while majority of the subjects visited hospitals and clinics, reasonable proportions also visited traditional healers or spiritualist for consultation, treatment and protection against HIV/AIDS, and Tuberculosis respectively. Belief in spiritual healing still holds sway among Nigerians irrespective of class and the ailment involved because many sicknesses particularly ones whose aetiology is vague are attributed to spiritual attack. So, it is common in Nigeria, for instance, for a person who notices signs and symptoms of a disease to first consult a pastor for prophecy and miracle healing, then a patent medicine dealer for relief of symptoms, a herbal doctor usually on advice from friends and well-wishers before finally visiting a modern health care facility when the condition has deteriorated. The significance of this includes that many HIV and AIDS patients get tested and commence anti-retroviral therapy (ART) when the disease has progressed reasonably or has reached advanced stage thereby reducing treatment success while increasing mortality rate and chances of spread.

Ability and failure to perform positive health behaviours are largely attributed to individual cognitions of the health condition. Studies have shown that majority of PLWHA failed to engage in positive HCSB due to poor knowledge, attitude and wrong perceptions.[12,13,14, 7] This underscores the role of health education in improving the HCSB of PLWHA. Health education improves knowledge, and changes attitude and perceptions of individuals. This study, on this basis, anchors on the Health Belief Model (HBM) in proving that the HCSB of individuals can be improved by properly positioning their perceptions about the benefits of engaging in positive HCSBs and the consequences of acting otherwise. Thus, improving the knowledge of PLWHA through health education will in turn; improve their HCSBs by positively influencing their perceptions about the disease and treatment options. Health Belief Model is one of the most widely used models in Health Education to explain the concept of health behaviour change.[15]

Evidence on the efficacy of health education interventions in improving knowledge, attitude and HIV/AIDS risky behaviour abound. In Iran, findings revealed that educational

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intervention significantly improved the knowledge, attitude and performance of students regarding AIDS immediately after the intervention and a higher increase after two months demonstrating ability of the impact of the intervention to be sustained over time.[16] Findings in Nigeria showed that health education intervention was very effective in enhancing HIV knowledge and reducing high risk behaviours such as having multiple sex partners, having unprotected sex and patronizing commercial sex workers.[17,18] HIV education intervention implemented among slum dwellers of Dibrugarh in India also yielded improvement in knowledge among the slum dwellers.[19]

The HCSB of PLWHA in Rivers State cannot be said to be satisfactory. So far, most PLWHA still find it tasking to patronize orthodox health professionals, adhere to clinical appointments, adhere to medication and discontinue engagement in risky sexual behaviours.[13] [20] The outcome is poor quality of life and further spread of the infection. Consequently, Rivers State now ranks top among states in Nigeria with a prevalence of 15.2%,[14] [21] further, emphasizing the need for more impactful interventions. The aim of this study was, thus, to determine the effects of health education intervention on the healthcare seeking behavior of PLWHA in Rivers State.

METHODS

The research design adopted for this study was the quasi-experimental research design using the non-randomized control group pre-test and post-test approach. A sample of 80 PLWHA was drawn from a population of 1617 PLWHA that were newly enrolled for HIV care (January-December 2017) at two Zonal Hospitals with the highest HIV enrollments in Rivers State within the period under study.[22] A multi-staged sampling procedure consisting of purposive, proportionate and convenience sampling techniques was employed to arrive at the sample. The instrument for data collection was a 20-item validated Healthcare Seeking Behavior Questionnaire (HSBQ) with a reliability index of 0.81 arrived at using Cronbach Alpha. A teaching guide for the HIV/AIDS Education Intervention was developed by the researchers and validated by eleven experts in the field of Medicine and Health Education. The intervention covered the following topics: Nature of HIV and AIDS; Ways HIV can and cannot be spread; Health and socio-economic effects of HIV; Treatment and prevention of HIV; Proper attitudes and behaviors towards disease treatment and prevention; Consequences of negative HCSB Factors Affecting HCSB; Roles of PLWHA on HIV Prevention; and Barriers to HIV Prevention and Control

Ethical approval was obtained from Rivers State Health and Ethics Committee (RSHEC) before commencing the fieldwork. Four (4) healthcare professionals working in the HIV facilities were properly instructed and used as research assistants for both the intervention and administration of questionnaire. Informed consent was also obtained from the respondents and the wishes of those who declined participation were fully respected.

Copies of the instrument were firstly served on all the respondents and baseline data obtained before any kind of intervention. Health Education was then given to the experimental group alone for four (4) weeks. The health education package was subjected to validation by eleven experts including health educators, nurses and medical doctors. Topics addressed in the intervention included: the meaning, causes, signs and symptoms of HIV/AIDS; mode of transmission; preventive measures; anti-retroviral therapy; coping skills against stigmatization; benefits of adherence and consequences of non-adherence to treatment regimen; and available HIV screening, counselling and treatment centres in Rivers State and environs. After eight (8) weeks of the intervention, copies of the same instrument were again served on and retrieved from all the respondents, bringing the total copies of questionnaire to

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160. Retrieved copies of the instrument were coded and analyzed using the Statistical Package for Social Sciences (SPSS) software version 20. Descriptive statistics of percentage was used to analyze the demographic characteristics of respondents; mean, standard deviation and Analysis of Co-variance (ANCOVA) were used to establish the effects of the health education intervention on the HCSB of the PLWHA.

RESULTS

In table 1 majority of the respondents in both experimental (43.3%) and control group (56%) were between 30-39 years.

Table 1. Distribution of Respondents by Age, Sex, Marital status, Religion, Educational level and Employment status (N = 80)

Variable	Control Group (n=50) Frequency (f)	%	Experimental Group (n=30) f	%
Age				
Less than 20 years	1	2	5	16.7
20-29 years	12	24	8	26.7
30-39 years	28	56	13	43.3
40 years & above	9	18	4	13.3
Sex				
Male	14	28	6	20
Female	36	72	24	80
Marital status				
Married	27	54	14	46.7
Single	13	26	7	23.3
Divorced	1	2	1	3.3
Separated	2	4	3	10
Widowed	7	14	5	16.7
Religion				
Islam	4	8	4	13.3
Christianity	43	86	23	76.7
Traditionalist	3	6	3	10
Educational Level				
No formal education	5	10	3	10
Primary	5	10	2	6.7
Secondary	25	50	21	70
Tertiary	15	30	4	13.3
Employment Status				
Public Sector Employee	7	14	2	6.7
Private Sector Employee	10	20	7	23.3
Self-Employed	20	40	9	30
Unemployed	13	26	11	36.7
Retired	0	0	1	3.3

The table also revealed that 28% of the respondents were males and 72%, females for the control group while 20% and 80% of the respondents were males and females respectively for the experimental group. Again, majority of the respondents in the control group (54%) and experimental group (46.7%) were married, whereas 26% and 23.3% of them represented the single status for both control and experimental groups respectively. Respondents in the control group had a pre-test mean score of 34.08±3.06 and a post-test mean score of 33.52±3.96 with a mean gain of - 0.56 as shown in Table 2.

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Table 2. Summary of Mean Scores of Respondents Showing Effects of Health Education Intervention on the Healthcare Seeking Behaviour of PLWHA in Rivers State

Group	N	Pre-test		Post-test		Gain Score	
		$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$ Gain	Gain%
Control	50	34.08	3.06	33.52	3.96	- 0.56	0.83%
Experimental	30	34.23	4.40	38.93	3.65	4.70	2.42%

However, their counterparts in the experimental group obtained a pre-test mean score of 34.23±4.40 and a post-test mean score of 38.93±3.65 with a mean gain of 4.70.

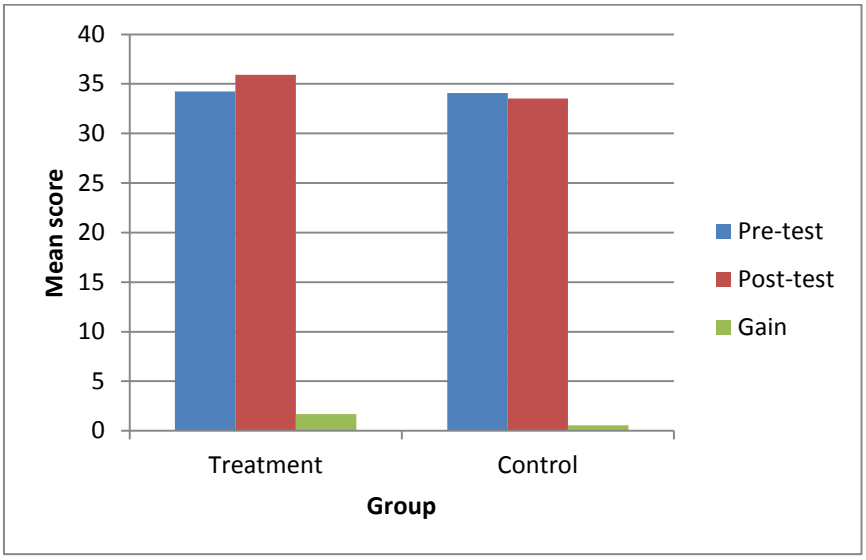

Fig 1: Bar Chart Showing Effects of Health Education Intervention on Healthcare Seeking Behaviour of PLWHA in Rivers State

In table 3 the calculated F-value for the groups is 7.439 at degrees of freedom of 1 and 77 at 0.008 level of significance which is less than 0.05 ($F_{1,77}$= 7.439, P<0.05). This result is statistically significant and lies within the acceptable limits of this study. This implies that health education intervention had significant effects on the healthcare seeking behaviour of PLWHA in Rivers State.

Table 3. Summary of ANCOVA Showing Effects of Intervention on the Healthcare Seeking Behaviour of PLWHA

Dependent Variable: POSTTEST

Source	Type III Sum of Squares	Df	Mean Square	F	p-value
Corrected Model	118.174[a]	2	59.087	3.979	.023
Intercept	1242.263	1	1242.263	83.660	.000
PRETEST	8.971	1	8.971	.604	.439
GROUPS	110.461	1	110.461	7.439	.008
Error	1143.376	77	14.849		
Total	96068.000	80			
Corrected Total	1261.550	79			

a. R Squared = .094 (Adjusted R Squared = .070) P<0.05

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DISCUSSION

A mean gain score of 4.70 from the experimental group is quite impressive. The significance of the effect is confirmed by the summary of ANCOVA ($F_{1,77}$= 7.439, P<0.05). This indicates that the intervention was very effective in positively changing the HCSB of PLWHA. This result agrees with the findings of Atulomah[23] in which, two health education interventions significantly improved adherent behaviour of respondents to antihypertensive medications in selected tertiary health facilities in Southwestern Nigeria. This also agrees with the findings of Bisallah, Rampal, Lye, Sidik, Ibrahim, Iliyasu and Onyilo;[18] Peyman and Jangi,[16] where health education intervention significantly improved the healthcare seeking behaviour of Tuberculosis and HIV patients at General Hospital Minna, Nigeria and high school girls in Iran respectively.

The implication of this finding to health education is that evidence continues to pile to the effect that building the knowledge base of PLWHA about basic issues in HIV has proven to be impactful in significantly improving their health outcomes and will consequently, reduce the risk of spread of the virus. Education is, therefore, necessary for achieving positive health care seeking behavior. This finding is emphasized by a study carried out in Italy on adherence to anti-retroviral therapy (ART) in which adherence-related information improved adherence-related behavioural skills and adherence-related behavioural skills significantly improved adherence behaviour.[24] This is also in agreement with the findings of a study which observed that only respondents with good HIV knowledge were adherent to ART.[12]

Theoretically, the findings of this study corroborate the positions of the HBM and the Care Seeking Behavior Theory in showing that good knowledge and right perceptions as well as improved self- efficacy among other factors can significantly result in positive HCSB.

CONCLUSION

Appropriately designed and well implemented health education intervention can significantly improve the healthcare seeking behaviour of PLWHA. This will not only improve the health outcomes of PLWHA in Rivers State but will also prevent further spread of the virus.

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