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Belief in Spiritual Healing, Gender and Adherence to Medication among HIV/AIDS Patients in Benue State, Nigeria

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ABSTRACT: *This study examined belief about spiritual healing, gender and adherence to medication among 143 HIV/AIDS patients attending General Hospital Sankera in Benue State. The respondents were in the age range of 20-67 with a mean age of 33.4 years. Out of this number, 69 (48.3%) were males while 74 (51.7%) were females. Morisky Adherence to Medication Scale (MAMS) and Perceived Potency of Spiritual Healing Questionnaire (PPSHQ) were used for data collection. The results of the Analysis of Variance (ANOVA) indicated that perceived potency of spiritual healing and gender produced main effects on adherence to medication among HIV/AIDS patients. The implications of the study to health professionals were discussed, limitations were highlighted and suggestions for further studies were offered.*

KEYWORDS: Spiritual Healing, Gender, Adherence, HIV/AIDS

INTRODUCTION

Human Immunodeficiency Virus (HIV) causes Acquired Immune Deficiency Syndrome (AIDS) which is a dreaded transmittable disease that has posed a threat to human race. HIV/AIDS has remain a public health burden going by the latest report by the United Nations AIDS Agency (UNAIDS, 2014) that cases of new HIV infections are on the rise globally, with about 45 million new HIV infections and three million deaths occurring yearly. Out of the three million infected people in Nigeria, Benue State records the highest infection rate of 12.7%, while Akwa Ibom is followed with 10.1% infection rate respectively (UNAIDS, 2014).

In response to this pandemic, the highly active antiretroviral therapy (HAART) has been made available to those that require it. However, it has to be taken throughout life (Lal, Kant, Dewan & Ral, 2010). An adherence level of 95% to this therapy is critical in obtaining its full benefits such as maximum and durable suppression of viral replication, reduced destruction of CD4 cells, prevention of drug resistance, promotion of immune reconstitution, slow progression of disease and reducing transmission rates (Chabikuli, Datonye, Nachega & Ansong , 2011; Chesney, 2006).

Adherence may be defined as the extent to which a patient takes a medication in the way intended by a health care provider and it is expressed quantitatively as the percentage of doses that have been taken by the patients (Odumosu, Mahal, Canning & Okonkwo, 2006; Simoni, Frick, Pantalone & Turner, 2003). Adherence to treatment is a very important aspect of health protective behavior. Poor adherence to treatment is considered a critical barrier to treatment success and remains one of the major challenges facing the healthcare professions in Nigeria and beyond (Kirkland 2001). Reinhard (2007) noted that good adherence to medication taking behavior forestalls the psychological, physical, social and

economic consequences of HIV/AIDS. Hence it is necessary to carry out studies on adherence in order to achieve optimal health care for masses. The phenomenon of adherence is related to people's knowledge and belief about illness, motivation to manage it, confidence in their ability to engage in illness-management behaviours and expectations regarding the outcome of treatment and consequences of poor adherence (World Health Organization, 2003).

Adherence to HAART and barriers to adherence have been reported to vary from one country to another and even from one setting to another within the same country (WHO, 2003). The prevailing level for sub-Saharan Africa is 77% (Chabilkuli *et al.*, 2010). Other studies have reported levels of 68% in Uganda (Byakika-Tusiime, et al., 2005), 22% in Cote D' Ivoire (Eholie, et al., 2007) and 71% in South Africa (Chabilkuli *et al.*, 2010). In Nigeria, adherence of 49.2% has been reported in Kano (Nwauche, Erhabor, Ejele & Akani, 2006), 85% in Sagamu (Idigbe *et al.*, 2005) and 58% in Benin City (Erah & Arute 2008). Systematic reviews in developing countries have shown that factors militating against adherence include cost, stigma, alcohol abuse, pharmacy stock-out, distance from dispensing centers, gender inequality and religious belief (Monjok, Smesny, Okokan, Mgbere & Essien, 2010).

In Nigeria, and other African countries, there is a general belief in spirits. Spirits are believed to be of two types: malevolent spirits and benevolent spirits. Malevolent spirits are often believed to cause evils, accidents, disasters and sicknesses including HIV/AIDS. They have possessive, oppressive and obsessive powers with which they afflict their victims (Ebigbo, Elekwachi, Eze, Nweze & Innocent, 2010). Mbiti (1975) gives credence to this belief by saying that 'belief in spirits is an integral aspect of the religious heritage of Africans'' (pp 73-76). Also, Owoeye (2008) found that a typical Nigerian believes that some spirits are benevolent while others are malevolent. These spirits are sent by the divinities to assist people when they are in tune with them. Nevertheless, when there are dislocations in the harmonious flow of life, such occasions are for identifying the supernatural causes of problems through the activities of religious specialists like diviners and priests who through ritual appeasement would normalise the strained relationship either between them and the supernatural or between men and their neighbours (Ebigbo, Elekwachi, Eze, Nweze & Innocent, 2010).

The relationship between belief in spiritual healing and adherence to ante-retroviral therapy among people living with HIV/AIDS seems to be contentious. Although, spirituality is an important aspect in the lives of most people living with HIV (PHAs) and increases among most PHAs after being diagnosed HIV positive, many care providers (including HIV care providers) get interested in the spirituality of their clients only when it obstructs conventional treatment (Ironson, Stuetzle & Fletcher, 2006)

In some studies, religiosity/spirituality among PHAs has been reported to increase after HIV diagnosis (Cotton, et al., 2006; Ironson *et al*., 2006). In one study of changes in religiousness and spirituality of people with HIV/AIDS, 25% (88/347) of participants reported being more religious and 41% reported being more spiritual after being diagnosed with HIV/AIDS (Cotton, et al., 2006). Also, a study of 18 peri-natally infected youth that measured religious beliefs and practices of these youths, found that participants who had excellent adherence had significantly higher religious beliefs scores and greater religious practice scores than those who had poor adherence (Park & Nachman, 2010). Conversely, Finocchario-Kessler, et al. (2011) found that high religiousity was negatively associated with ART adherence.

Studies conducted in Uganda have also reported mixed findings. Kisenyi, Mulira and Ayebare (2011) in a study that measured religiosity in terms of frequency of attendance at religious services found that high religious belief was associated with high levels of adherence to anti-retroviral therapy. But in a more recent in-depth interviews conducted with 39 very religious people living with HIV (16 had and 23 had never discontinued antiretroviral therapy) to assess the role of religion in their treatment decisions and in coping with HIV, Tumwine, Neema and Wagner (2012) found that participants who had discontinued ART gave reasons such as: teachings and prophecies from religious leaders and supporting Biblical scriptures. All of which led them to feel that God, their faith and testimonies by their already healed peers who had stopped ART would help them. According to Tunewine *et al.* (2012) participants who had never discontinued ART gave reasons such as continuous adherence counseling from multiple sources, improvement in physical health as a result of ART, belief that God heals in different ways and that non-adherence is equal to putting God to a test. They found that high religiosity was reported to help participants cope with HIV through engagement in personal and or community protective behaviours, taking care of other illness and reducing worries.

There is also, evidence that women living with HIV face different barriers to adherence than do their male counterparts, including depression, stress, stigmatization, and specific social roles related to gender. Bonolo, et al. (2013) found that the cumulative incidence of non-adherence was 34.6% and 43.9% among men and women respectively. Marital status and current tobacco use increased the risk of non-adherence among female participants only, whereas a self-reported difficulty with the antiretroviral treatment was associated with non-adherence in men only. Furthermore, researchers suggested that, among females living with HIV, substance abuse and alcohol use are predictive of poor adherence (Berg, et al., 2004; Applebaum, Richardson, Brady, Brief & keane, 2009).

With the literature revealing mixed effects of high religiosity on ART adherence, this paper examines why some PHAs opted to retain high levels of ART adherence, while others opted to rely only on their religious beliefs and as result discontinue ART. The paper also seeks to finding out if there is gender difference in adherence to ART. The finding of the study might pave way for designing appropriate interventions that account for high ART adherence. Thus, it has been postulated as follows:

i. Belief in spiritual healing will significantly influence adherence to ART among people living with HIV.
ii. There will be a significant gender difference in adherence to ART among people living with HIV.
iii. Belief in spiritual healing and gender will jointly influence adherence to ART among people living with HIV

METHOD

Design and Statistics

This study employed cross-sectional survey method in which data were collected using questionnaires. Data for this study were analyzed using Two-Way Analysis of Variance (2-Way ANOVA). Also, descriptive statistics (mean and standard deviation) and simple

percentages were used for analysis of demographic data. The variables tested were belief about potency of spiritual healing and gender are independent variables in this study, while adherence to ante-retroviral drugs was measured as the dependent variable.

Participants

The study consisted of 143 respondents drawn from population of HIV/AIDS out-patients receiving treatment at General Hospital Sankera in Ukum Local Government Area of Benue State. Out of this number 69 (48.3%) were males and 74 (51.7%) were females. The respondents were in the age range of 20-67 with a mean age of 33.4 years. The distribution of respondents according to religion showed that 85 (59.4%) were in Christians, 26 (18.2%) were Muslims and 32 (22.4%) of the respondents were traditional worshippers at the time of carrying out this research work. The distribution of respondents according to ethnic groups showed 70 (49.0%) were Tiv, 11 (7.7%) were of Idoma origin and 4 (2.8%) from Igede tribe. Results further indicated that 26 (18.2%) of the respondents were Hausa, 13 (9.1%) were Ibos, 7 (4.9%) and 12 (8.4%) were Yorubas and Jukuns respectively. Analysis of respondents' income revealed that 13 (9.1%), 68 (47.6%) and 62 (43.2%) were from high, average and low income backgrounds respectively.

Instruments

The instruments for the study included a socio-demographic questionnaire, Morisky Adherence to Medication Scale and Beliefs about Potency of Spiritual Healing Questionnaire.

Socio-demographic variables: The following variables were recorded: age, sex, religion, marital status, ethnicity and socioeconomic status.

Morisky Adherence to Medication Scale (MAMS) is an 8-item instrument developed by Morisky Green and Levine (1986) to measure level of compliance with health professionals' instructions concerning patients' medication. It measured how patients follow instructions and the extent to which they are committed in taking their medication. Items 1-7 of the scale have YES =1 and NO = 0 responses, while item 8 has responses ranging from Never/rarely = 0; Once in a while to All the time =1. Cronbach's alpha was 0.675 for the total scale with significant intra-class correlation coefficient (Morisky, et al., 1986).

Beliefs about Potency of Spiritual Healing Questionnaire (BPSHQ) is a 10-itemed self-developed instrument to assess patients' beliefs about potency of spiritual healing. Examples from the 10 items include "My health at present depends on my God" and "My quest for spiritual help protects me from becoming worse". The degree of agreement with each statement is indicated on a five point Likert scale, ranging from 1= strongly disagree to 5 = strongly agree. All the items are positively worded and are scored directly. The scores of 10-25 indicate low belief about potency of spiritual healing. On the other hand, he scores of 26-50 indicate high belief about potency of spiritual healing. The scale has Cronbach's alpha of .78 for the current study

Procedure

Prior to the administration of questionnaires, permission was obtained from authority of the hospital. The researchers proceeded and obtained informed consents of the patients with assistance of hospital staff. The questionnaires were administered for the period of one

months. This longer time duration was taken to enable the researchers get responses from many patients. A total of 170 questionnaires were administered to respondents, but only 143 were returned representing 84% response rate. While, 27 (16%) were discarded due to improper completion.

RESULTS

The mean scores of the groups of participants on adherence to antiretroviral therapy are shown in Table 1, while Two-Way ANOVA summary table is tag as Table 2

Table 1: Showing Mean Scores (M) and Standard Deviation (SD) of Groups on Adherence to antiretroviral therapy among People Living with HIV/AIDS

Variables	Levels	Mean	SD	N
Belief in spiritual healing	High	11.24	1.37	82
	Low	13.13	1.32	41
Gender	Male	12.59	1.39	69
	Female	11.54	1.70	74
	Total	12.05	1.64	143

The results of presented in Table 1 revealed that individuals who highly believed in spiritual healing reported lower mean score on adherence to ART (*M* = 11.24, *SD* = 1.37) than those who believed less in spiritual healing (*M* = 13.13, *SD* = 1.32). The results further showed that male participants reported slightly higher mean score on adherence to ART (*M* = 12.59, *SD* = 1.392) than their female counterparts (*M* = 11.54, *SD*=1.70). Tests of significance of the means are reported in table 2 below.

Table 2: Two-ANOVA summary table showing the differences in Belief about Spiritual Healing and Gender on Adherence among People Living With HIV/AIDS

Source	Sum of squares	df	Mean square	F	Eta Sq
Belief in Spiritual Healing (A)	102.004	1	102.004	60.08*	.302
Gender (B)	13.419	1	13.419	7.90*	.054
A x B	4.072	1	4.072	2.40 NS	.017
Error	236.008	139	1.698		
Total	46280.33	143			

Note: * = P < .05; NS=Not significant

Results in Table 2 show that there was a significant difference between HIV/AIDS patients who highly believed in spiritual healing and their counterparts who reported having less belief in spiritual healing on adherence to medication (F (1, 139) = 60.08, p < .05).This implies that belief in potency of spiritual healing is a barrier to effective adherence to medication among HIV/AIDS patients. The results clearly show that belief in the potency of spiritual healing has effect size of 30.2% (*Eta sq* = .302) on patients' adherence to medication. Also, the results indicated a significant difference between male and female

HIV/AIDS patients on adherence to medication (F (1, 139) = 7.90, $p < .05$). This means that gender is one of the determinant of adherence with effect size of 5.4% (*Eta sq* = .054). Results however show that there was no interactive effect of belief in potency of spiritual and gender on adherence to ART.

DISCUSSION

It was found that belief in potency of spiritual healing affects adherence to medication among HIV/AIDS patients. This implies that HIV/AIDS patients who belief that their current health predicament can be cured spiritually are less likely to adhere to therapy, but instead spend much of their time praying, doing religious rituals and visiting prayer houses and herbalists for cure. This category of patients tends to attribute their ill health to hand work of perceived enemies who use the mystical power of witchcraft to attack them.

These patients seem to believe that their perceived spiritual enemies cannot be overcome with medication. They may believe that the sure way to recover is to fight the spiritual agents using spiritual warfare such as divination, prayers, protective charms and evoking the spirits of their ancestors to come to their aid via religious sacrifices. Sometimes their religious leaders may ask them to discontinue with medication and should rekindle their hope in spiritual healing. Patients who indulge in spiritual warfare may be less likely to remember when to take drugs and the right dose to take. In as much as medical professionals thrive to create awareness for effective adherence to medication, their efforts may dwarted with recurrent trend of adverts on radios and television announcing healing mass, miracle crusade and traditional healing interventions. On the contrary, HIV/AIDS patients who have limited belief about spiritual healing may belief more in the potency of orthodox medicine and as such they are better willing to take their drugs according to prescription with the confidence that their health status would improve.

This finding supports the outcome of Wanyama and colleagues' (2007) research report that some participants discontinued ART as a result of the belief that they had been cured of HIV infection after prayers by religious leaders. The finding is also in tandem with finding of Finocchario-Kessler *et al.* (2011) who measured religiosity in terms of engagement in religious services/practices and found that high religiosity/spirituality was negatively associated with ART adherence. Furthermore, this finding is in line with the position of van Dyk (2001) that traditional and spiritual healers function as psychologists, physicians, priests, tribal historians, legal advisers, marriage and family counselors in their communities. He found that traditional and spiritual healers have credibility with their community than health workers on all issues including HIV/AIDS and its treatment.

It was also found that gender has a significant influence on adherence to medication among HIV/AIDS patients. This finding indicated clearly that male HIV/AIDS patients adhere to medication better than female patients do. This may stem from gender inequality in of society where a woman needs to take permission from the husband or parents before seeking medical health care for any ailment thereby placing women at the mercy of their male counterparts. This may also be due to economic disadvantage position of female gender. This finding supports the research outcome by Bonolo *et al*. (2013) which showed that females reported poor adherence as compared to males. These scholars argued that one possible explanation is that this relationship may be confounded by unexamined social or

behavioural factors. This finding is also not different from the finding of a study by Buve, Bushikwabo-Nsarhaza and Mutangadura (2002) which reported that women are still subordinates of men in many parts of Sub-Saharan Africa and as such depend on men for health seeking decisions. However, this finding contradicts the outcome of Omeje and Ogili's (2012) research which investigated adherence to ART among people living with HIV/AIDS in Enugu State and revealed that there is a significant gender difference in adherence to antiretroviral drugs with females adhering more than males.

CONCLUSION AND RECOMMENDATION

Based on the results, it was concluded that belief in potency of spiritual healing and gender difference have remain barriers to effective adherence among HIV/AIDS patients in the study area. It was therefore, recommended as follow:

i. Clinical psychologists should use cognitive therapy to change patients' attitudes and belief about spiritual healing and made them to belief in potency of medication as a way of enhancing adherence.
ii. Governments at all levels and non-governmental organizations should organize HIV/AIDS enlightenment campaigns to educate religious leaders and their members on the need to develop positive attitude towards medical treatment for HIV/AIDS
iii. Female patients should be monitored by professionals and be supported by family caregivers to ensure complete adherence.
iv. The policy makers and Non-governmental Agencies involved in prevention and management of HIV/AIDS should take note of gender differences in adherence to ART as they plan and execute their programs.

Limitations and Suggestions for further Studies

This study has contributed immensely to knowledge. However, study employed was made up of small sample size which is an impediment to effective generalization. It was therefore, suggested that further studies should have large sample.

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