International Journal of Sociology and Anthropology Vol. 3(7), pp. 245-252, July 2011
Available online http://www.academicjournals.org/IJSA
ISSN 2006- 988x ©2011 Academic Journals

Full Length Research Paper

Predictors of elderly persons' quality of life and health practices in Nigeria

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Accepted 17 March, 2011

The exploratory, descriptive and cross-sectional study which was undertaken from March 2008 to June 2009 examined the elderly person's life styles in terms of nutritional preferences, health care measures adopted and why they were adopted to achieve healthy ageing. It also assessed whether there would be association between quality of life predictors (social support, living with spouse, finances and formal education) and health practices of the elderly persons in Osun State, Nigeria. The study was conducted in 10 purposively selected traditional core health districts in Ife/Ijesa zone of Osun State, Nigeria. Three hundred elderly 60 years and above were selected using key informants and snow balling techniques. Each of the 300 elderly persons identified one adult family member who was most involved in their care. Three hundred elderly persons and 300 caregivers were interviewed and fully participated in the study. Data collected were analyzed with the use of computer at two main levels in form of descriptive and inferential statistical methods. The study found that the participants traditional life styles, educational status, having personal money in old age and gender were major predictors of quality of life and positive health behaviors among the elderly. Variation on the influence of some other socio-demographic and economic characteristics of the participants such as living with spouse, peer relationship, type of marriages and residential location were also reported. In conclusion, elderly traditional life styles, educational background, state of finance, gender and marital stability contributed much to positive health practices and quality of life.

Key words: Predictors, positive health practices, elderly Nigerians.

INTRODUCTION

Quality of life (QOL) is presented as a global, uni-dimensional, and subjective assessment of one's life which has emerged as a focal concern in planning treatments for patients, yet confusion remains over the definition and measurement of this concept. Few studies address QOL issues in the context of perceived. An improved QOL often is cited as an outcome of interventions, but the health care literature displays considerable confusion and even contradiction in the meanings assigned to QOL. QOL, health-related QOL (HRQOL), health status, functional assessment, and even needs assessment have been used indiscriminately to describe the same dimensions and even the same instruments (Smith et al., 2004; Lim et al., 2007; Netuveli and Blane, 2008).

QOL often is considered a multidimensional construct, but some arguments supporting this view confound the dimensionality of a concept with the multiplicity of the causal sources of that concept. The many causes of QOL do not determine the dimensionality of the concept. Until patient data lead researchers to question the existence of QOL as a uni-dimensional entity, it is consistent to claim that QOL is both uni-dimensional and multiply caused (Smith et al., 2004).

Subjective QOL has been defined as the satisfaction of needs that are determined by the perceived discrepancy between one's aspirations and achievements (Smith et al., 2004; Hoang et al., 2008; Netuveli and Blane, 2008). Health perceptions were related to both mortality and an

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adaptive psychological profile including high perceptions of control and the use of active coping strategies in dealing with age-related difficulties. While hope in health is described as the process through which a person works to emerge from the life situation at hand toward the resultant state of transcendence, labeled the reformulated self, and becomes a person with re-evaluated priorities and news life perspectives. Hence, health potential of the individual, family and community is the capacity to prevent illness, promote health in balance and maintain or establish health balance. The health resources, vary with individuals be it old or young. The resources are safe water and adequate nutrition continued through to the complex features of health culture. Components of the health culture include health beliefs, the knowledge level of the individuals that may determine behaviors, life styles, and use of services as well as social network factors such as familial support and stability. Within these later features exists more complex concepts such as coping ability, self care and self esteem (Shrestha, 2000; Cutler, 2001; Fajemilehin, 2009).

Social support and health

Meaningful social relationships provide a sense of security and opportunities for companionship and intimacy which are important for the well being of older people (McNicholas, 2002; Fajemilehin, 2009; Giang and Dfau, 2009). Those who provide social supports give advice about health practices, disease prevention and encourage the practice of positive health behavior. This means that social support can influence specific health behavior such as diet, exercise, compliance with medical regime, smoking, drinking of alcohol by providing information about positive health practices and by establishing norms that will encourage good health behavior.

In the olden days Africa, there was cultural respect and acceptability for the elderly. During the period, the elderly subgroup practiced traditional farming system and polygamy as the vogues of wealth and survival, and hence, enjoyed a level of social support as the relational provision of attachment, social integration, opportunity to nurture, feeling of worth, sense of reliability and guidance which has contributed to quality of life of the elderly in the sub region. Also of concern is the increasing record from the central, south and east Africa that elderly persons' are subjected to various level of abuses rather than being cared for. The aforementioned scenario is unlike what is obtains in Japan and Sweden, where the culture of family care and support for the elderly are still not only maintained but improved upon by all and sundry. A positive number of findings/ researchers (HelpAge, 2002; Fajemilehin, 2001, 2009; Giang and Dfau, 2009; Kelley, 2005; Shamas et al., 2003) had suggested that social support is antecedent to cultural values, health behavior and positive health practices.

Although those aged 60 years and above represent a relatively small fraction of the population of Nigeria, they constitute about 6% and are expected to increase significantly to between 12 to 15% between now and year 2015 (WHO, 2002; Fajemilehin, 2009; Giang and Dfau, 2009). Nigerian society however, like many other developing nations has paid little or no attention to this sub- group of the society. Because of lack of formal structure of care and social support networks, in this part of the world older men and women are largely dependent on the informal traditional family support system and which today has become weakened (Fajemilehin, 2001).

Purpose

The purpose of this study was to examine the quality of life against the back ground of the health behaviours and traditional life style practices of the elderly persons in Osun State, Nigeria that made them to still survive all the odds, and live till 70 years and over. In a society where there is no formal structure of care for the elderly, where the economy is depressed coupled with high youth unemployment and the only informal structure of care (the extended family system) has become so weakened by implications of modernization. Hence the study generated the following four (4) hypotheses that:

- The elderly on a higher socio-economic status would tend to value their health and enjoy more support than those on the lower socio-economic status;
- The elderly who are still married would tend to have more positive health practices (regular check-ups, use of prophylactics etc) than those who have lost their spouses;
- A high proportion of the aged would tend to utilize the traditional health care system more than the modern health care system.

The health and life style practices of the elderly person who reside in the rural area would tend to differ from those of the urban resident.

Operational definitions

In this study health behaviours refer to what the elderly do and eat to keep well, protect, promote and maintain health.

Predictors

It means socio-demographic factors and traditional life style practices that interact with health belief system of the elderly to affect their health decision making and practices.

METHODS

Design

An exploratory, descriptive and cross-sectional approach

was used.

Sample

The convenience sample consisted of 300 elderly 60 years and above enrolled using key informants and snow balling techniques, this was coupled with the identified significant persons in the ten (10) purposively selected traditional core health districts in Ife/Ijesa zone of Osun State, Nigeria were the participants in the study.

Instrument

Data were collected using an interviewer-administered Health Related Quality of Life (HRQL) questionnaire established into scale ranging from high to low. The interviewer-administered HRQL questionnaire was in three (3) parts. The first part elicited information on the socio-demographic data of the elderly, the second part dealt with their health, social complaints, care and support received, what they do to keep healthy, facilities available for their health and social problems, coping strategies, health prophylaxes, who made the decision for the type of care and effects the necessary payment and assessment for the socio-economic status of the elderly before and during old age. The third part of the questionnaire elicited information from the heads of the households, closest family or primary support provider concerned with the health, interpersonal activities and relationship, social needs of the elderly and how their needs were met, their limitations for various activities, problems of feeding, the health behaviors of the elderly, coping strategies, prophylaxes, recreational activities, types of common health and social problems that they had etc. Information was also collected on who the primary support persons were, and the relationship to the elderly persons and type of support being provided.

The instruments were translated into the local language and pilot tested during the training processes and before the actual Field Work. Spot-checks and pre-checks on sample data were done by the principal investigator for quality control. The test-retest reliabilities sampled over a 2 week period ranged from 0.68 to 0.87.

Procedure and ethical consideration

Approval was obtained to conduct the study from the selected various local government areas (LGAS) of Osun state, Nigeria. The 300 elderly, 60 years and above coupled with their social support and or significant persons who after being approached and indicated their willingness to take part in the study were enrolled. Both the elderly and their significant others gave their verbal consents to be participants in the study. The interviews were conducted between March 2008 and June 2009.

Data analysis

Data collected from the study were analyzed with the use of computer at two main levels in form of descriptive and inferential statistical methods. An algorithm was established for converting an individual's response into one number. A score positions the individuals on a numerical health continuum or scale. The descriptive aspect utilized frequency distribution, tables of events or occurrences contingency tables were used to determine the existence of association between the bivariate data such as the socio-demographic characteristics of the respondents and health status, behavior and social support received, the association between marital status and sex of the elderly. Multivariate analysis in form of simple multiple regression models were used to clarify some of the questions arising from the bivariate tabulations. The multiple regression procedure was adopted to estimate the net influence of socio-economic and demographic characteristics of the elderly participants on their health behaviors so as to test, accept and or reject the generated hypotheses.

RESULTS

Socio-demographic data

The age of the study participants ranged between 60 and 96 years with a mean age of 74.5 years. Regarding educational status, majority 234 (78%) had no formal education, 36 (12%) had primary education, 14 (4.7%) had secondary education and 16 (5.3%) had post secondary education. Concerning their marital status, 160 (53.3%) were currently married, 126 (42%) were widowed, 4 (1.3%) were divorced, 6 (2%) were separated and 4 (1.3%) were never married.

As to their occupation, 66 (22%) were fully retired and rather too old to be engaged in any active employment opportunity at the time of the survey, 128 (42.7%) were engaged in petty trading, 88 (29.3%) were active in subsistence farming, while 18 (6%) were engaged in teaching and other sorts of activities. Regarding their residential location, 145 (48.3%) and 155 (51.7%) were rural and urban residents respectively. The elderly participants were in mutual relationship based on their beliefs, understanding, practice and traditional way of sharing experience, burden, joy and resources.

The estimated T values and Pearson chi-square values as presented in Table 1 showed that educational level and having personal money in old age were the most significant predictors of health behaviours. This implied

Table 1. Effects of Social-demographic and economic factors on health behavior patterns of the respondents.

S/no.	Characteristics	Frequency	T-value	Pearson chi-square
1.	Sex			
	Male	130	2.116**	
	Female	170	-	-
2.	Marital status			
	Living with spouse	160		Use of prophylaxes and traditional remedies 13.35257*
	Widowed	126		16.70664*
3.	Type of Marriage	Yes	No	
	Monogyny	-	78	9.02 957*
	Polygyny	22	184	
4.	Educational Status			
	No formal Education	234		
	Primary level	36	2.840*	Use traditional Rx 29.29158* Use western Rx 28 .84020*
	Secondary level	14	-	-
	University level	10		
5.	Having personal money in old age	292	2.675*	
6.	Choice of health care facilities			
	Self medication	186	2.593*	
	Traditional treatment	170	6.140*	
	Government hospital	84	-4.770*	
	Private hospital	64	-530	
	Faith (church) healers	38	.538	

Significant value at *1 and **5%.

that the more the elderly level of education and financial stability in old age, the more positive is the health behaviour.

Estimated T and X^2 values presented in Panels 2 and 3 of Table 1 indicated that, a positive relationship existed between marital status and health behavior with the estimate T value of 2.557. Importantly, the results on who was closest or most significant social support provider also revealed that the spouse was found to be the most significant predictor of elderly positive health practices. Meaning that elderly respondents still living with spouses who could still act not only as companion, but also advise the elderly from time to time would surely have influence on decision making about health care needs. This position was well corroborated by one of the proverbs presented in the focus group discussions that two heads were better than one, particularly on health issues among elderly couples (*Ironu eniyan meji lo mu oro laakaye wa ju ti olodo enikan lo*). The positions of all the analytically estimated values tend to support that the elderly that were still living with spouses will use more of prophylactics than those that were widowed. In view of the position stressed previously, one can then conclude, that the elderly that were still living with spouses indulged in more positive health behaviour than the elderly who were widowed and alone.

The results presented in Panel 4 of Table 1 revealed that despite the fact that buying of un-prescribed drugs had the highest frequency score of 186 and the use of traditional treatment still had the highest T value of 6.240 and most significant, as against buying of un-prescribed drugs with T value of 2.593 and rated second most significant. Analysis of the reasons for the choice in this study uniquely revealed that cost, belief of individual,

Table 2. Gender difference in health practices of the respondents.

S/no.	Characteristics	Yes	No	Pearson chi-square
1	Sex by ability to continue work			
	Sex			
	Male	50	80	
	Female	92	72	7.24329*
2	Sex by use of traditional remedies	Male	Female	
	Yes	88	88	
	No	42	82	7.70670*
3	Sex by timely feeding			
	Male	88	38	
	Female	140	62	15.59486*
4	Sex by use of prophylaxes			
	Male	106	24	
	Female	108	62	11.68377*
5	Sex and social support			
	Male	4	122	6.62420**
	Female	18	140	

* Significant Pearson chi-square probability at *1 and **5%.

level of attention and proximity/nearness and availability of such facilities were core issues of awareness. The level of such awareness based on the identified factors stood as the bedrock of the statistical prediction for the significance of the use of traditional treatment. Meaning that elderly respondents in the study were strong cultural products, who would always prefer to use traditional methods of care based on their culture and associated beliefs.

It is also important to note that government and private health care settings were estimated with net negative T values of –4.770 and –530 respectively, a position which indicated a sign of lack of awareness and interest in the use of such health care facilities. Hence, awareness in terms of its type, cost, level of attention and proximity had influence on health behaviour patterns of the elderly participants.

On the association between health behaviors of the elderly respondents and their age revealed that there was a progressive desire for the use of traditional treatment as longevity increases ($X^{2} = 6.909$ at $p< 0.05$) and an inverse position for the use of orthodox or western treatment ($T =- 4.770$ at $p< 0.01$) as its use decreased with increasing age status.

In Tables 2 panel 1and 3 Panels 1 to 5 revealed an association with respect to sex. The results were positively associated in favour of the female respondents. The female elderly persons were involved in several activities to occupy themselves. Among such activities were caring for the younger off-springs, being a housewife wife, she prepares the food for the husband and she also engages in the cleaning of the immediate environment. In all, she was always up and about. The event of having to go with married children to care for their off- springs promoted a close relationship with the children and grand-children, a situation which the elderly males were culturally deprived of; except for mutual peer relationship. It is therefore not surprising, that in the table, more of the females still continue to work than the proportion of the males in that category. Also, they were more likely to eat regularly and eat well, partly because they were most of the time with their married children and in the company of their grand-children. Even though the level of care and support for the elderly were generally low (as seen in their responses), the females still enjoyed more of the care and support than the male counterparts.

The cross tabulation results presented in panels 1 and 2 of Table 3 showed significant Pearson chi-square probability for the four variables. Food consumption pattern 6.76 at $p< 0.01$, sleep rest pattern/ mutual peer relationship 6.36 at $p< 0.05$ ability to continue to work 26.78 at $p< 0.01$, and the use of prophylaxes 3.82 at $p< 0.05$. The results of the multiple regression procedure (Panel 2 of the table) on the use of all the health care system against their residential locations revealed virtually not significant except for one (specifically use of various prophylaxes) estimated for the use of traditional health care system which indicated an inverse

Table 3. Effect of residential location on health practices of the respondents.

1	Health behavior	Distribution by residential location		Pearson chi-square
		Rural	Urban	
	Food consumption			
	Yes	108	128	6.76029*
	No	33	17	
	Sleep rest pattern /mutual peer relationship			
	Yes	14	30	6.36311**
	No	126	144	
	Use of prophylaxes			
	Yes	111	103	3.8249.4
	No	33	51	

2	Use of health care facilities by living location	T value
	Traditional health care system	-482
	Buying of UN-prescribed drugs	1.205
	Government hospital	0.458
	Private hospital	1.087
	Faith (church) healers	1.253
	Others (use of prophylaxes)	1.944**

Significant cross tabulation Pearson chi-square at *1 and **5%, ** Significant multiple regression findings.

relationship, implying that residential locations of the respondents in this study did not seem to affect their health behaviour in terms of utilization of traditional health care system, more so, that the various residential locations were of much similar background while the respondents were of the same socio-cultural origin.

DISCUSSION

Effects of socio-economic and demographic factors on social support and health behavior patterns of the elderly respondents

This study revealed that financial resources at the disposal of the elderly had significant influence on health status, marital cohesion and ability to obtain support and their behaviour patterns. For instance, most of the elderly in the study who happen to operate private enterprises and thus appeared to have a control over large sum of money (higher socio-economic status, HSES) got more care, better housing and nutrition, and support from their children, family members and others, than those with small or no resources (low socio economic status, LSES) which afterward affect their quality of life.

To buttress the positions, some of the respondents stressed and asserted as follows: *"osi ni je tani moori, owo ni I je mo ba o tan*" implying literally that money was the basis of social support coupled with positive relationship and it also determined the extent of association with the aged. While everybody laid claim of relationship and association with the rich, it was the opposite for the poor, who was openly disowned. This aspect of the findings indicated a change from the position of Fajemilehin (2009) that in the traditional Nigerian society, the aged knew no poverty, deprivation, malnutrition, neglect or isolation due to the descent and kinship ties which enhanced group solidarity and reverence for the elderly. Findings on the change from traditional value and support for the elderly person and support system in this study agreed with the findings of several studies (Rahman and Barsky, 2003; Kowal et al., 2010; Smith and Goldman, 2007; Alberg-Yngwe et al., 2001) that stability in family contracts, socio economic status of the elderly accounts for the possibility that a reciprocal of relationship would exist between the elderly and their family members, and ability to purchase needs in the culture where the studies were conducted. Of importance was the fact that women enjoyed more social support through care giving of grand children and also their engagement in some form of petty trading which made them to live longer (Mascitelli et al., 2006) while elderly peer relationships is embraced by the male. These might serve as areas of differences with other findings in literature.

Findings on the effects of marital status on health

behaviour pattern in old age in this study indicated that the result of those living with spouses against those that were widowed was statistically significant. The findings implied that living with spouse and type of marriage (be it mono or polygynous) were relevant for positive health behaviours such as utilization of health facilities, using their drugs as prescribed, eating and drinking on time in clean and wholesome environment promote quality of life in old age. Of importance was consumption of only grown green leafy vegetables without the use of fertilizer within the household compound or their local farm and food on trolley or refrigerated items like today. The findings paralleled that of Fjemilehin (2009) on the positive role of polygyny among the Yorubas in terms of many wives and children. It is also similar to the findings of Smith et al., (2004), Netuveli and Blane (2008) that marital status was indeed, associated with health and survival outcome in old age. The finding that marital status was an important determinant of health behaviour among the elderly agreed in part with that reported by Smith and Goldman (2007), McNicholas (2000) that the risk factors for individual's health status differ in terms of association with social networks. The difference could be a result of cultural variations in the study populations. Findings on health behaviour of the respondents that the use of traditional health care system increased with sex have a similar perspective with the health workers position that the more elderly they are, the more frightened they get about visit to and use of modern health care facilities. Elderly expressed fear about hospital, inject able drugs and have difficulties in swallowing tablets. In addition, the respondents in this study were mainly social products, who were brought up purely with rural traditional doctrines and more so, modern health care facility was a rare commodity and traditional health care system was flourishing and readily available. Therefore, the awareness of the respondents about the existence of traditional health care system and its uses was high.

The findings on the effects of awareness (such as availability, cost, accessibility, beliefs and values as well as orientation) on health behaviour of elderly respondents in this study fairly agreed with Kabir et al. (2003), Adegbehingbe et al. (2006); WHO (2002) and Giang (2008) that access to health services has made the prevalence of temporary ailments to be higher in the rural areas where health facilities and services were less easily available than in the urban setting, since a bird in hand is worth thousands in the bush (*notiri ohun ani ni a nnani*). It is worth noting that all the respondents utilized various local health remedies before they sought help from any western trained health personnel or health facilities. Among the common remedies used were *aboki, kanfo, rub, alabarm* (these were in cream forms applied topically), and local herbs (*agbo, agunmu* and other preparations). Buying of un-prescribed drugs from chemists as well as consultation with herbalists and faith Healers (*aladura*) were highly utilized. On why government hospitals were not regularly patronized, majority (72%) of the subjects (be it in the quantitative or qualitative) mentioned, inability to move around, inadequate financial resources, lack of transportation, too much time being wasted in the waiting and consultation rooms and that the private clinics that provided ready attention were rather too expensive. The various positions on utilization of traditional health care remedies was summarized by an elderly aged 80 years that, before the advent of maize, the fowls have been feeding on a thing and that thing was the use of herbs and other traditional medication (*ki agbado to daye se be nkan ladiye nje, pataki nkan naa ni isegun i tiwatiwa).* Findings in this area were similar to an aspect of Fajemilehin (2001, 2009) on adopting traditional life style practices, preference for and utilization of traditional mode of treatment. The latter's position on awareness and utilization of health care, mal-distribution of health facilities (which ranged from 1 to 200 people in Lagos and 1 to 130,000 in the fairly rural communities). Also noteworthy was the under staffing and ill-equipped state of the few health care facilities that were available in the rural areas. Also mentioned were poor and unreliable transportation system coupled with its high cost which tends to make follow-ups visits to the urban hospitals extremely difficult.

CONCLUSIONS

The elderly persons' socio-economic status traditional life style practices were strong determinant of health behaviours and quality of life. The findings in a vastly changing society cannot be analyzed in isolation of the family poverty ridding situation (youth un-employment compounded by extreme corruption in governance) today and the level of mismanagement in the national economy in Nigeria amidst global economic meltdown. These had combined and weakened the much cherished traditional extended family relationship which made the level of care and social support to the elderly today a product of self/personal economic worth, Moreover, if satisfaction is to be achieved, a rational form of experience is required which will show inter relationship between the actor and the society without reducing one to the other. The need to financially strengthen the family as an open social system which provides its members with a framework of their interactions, relationships, rule of behaviour, modes of action and satisfaction cannot be over-emphasized.

ACKNOWLEDGEMENT

The authors gratefully acknowledge the financial assistance of the Social Science Academy of Nigeria.

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