

Health Related Quality of Life among Patients with Ischaemic Heart Disease in Kano, Nigeria

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Abstract

The study examined the quality of life of patients with Ischaemic Heart Diseases (IHD). IHD has been projected to be one of the primary causes of disability and morbidity in many developing countries around the globe. The disease is therefore a vital indicator of patient morbidity and long term disability. It is associated with significant physical, emotional, social and cognitive consequences and contributes greatly to escalating cost of health care. A cross-sectional study design was employed, and a purposive sampling technique was used to recruit the total sample size of eighty. The data was obtained using a standardized data collection form of Short Form Health Survey (SF-36). The data was analyzed using SPSS version 16. The study revealed that (63.7%) of the subjects were between the age group of 61-80 years, and 47.5% had no western education. The study showed that hypertensive disorders, depressive ailments and history of cigarette smoking were the major contributing factors to poor quality of life. The study concluded that there is an overwhelming limited quality of life in patients with IHD. Therefore, it is recommended that health education, non pharmacological programs, and improvement in the health care sector is needed to achieve promising results.

Keywords: Patient; Health; Quality of life; Ischaemic heart disease

Background

Ischaemic heart disease affects and kills an increasingly large number of people [1]. It is a diagnosis characterized by increased mortality rates and hospitalizations as well as poor quality of life [2]. It is already the leading cause of deaths in men and the second leading cause of deaths in women in the African region [3]. The World Health Organization [WHO] estimated that in 2005, IHD caused approximately 361,000 deaths in the African region, and current projections suggest that this number will nearly double by 2030. More recent projections of mortality and burden of disease suggest that by 2030, IHD will become the leading cause of death in low income countries, contributing 13.4% of total deaths, versus 13.2% from HIV/AIDS and other chronic diseases [4]. In addition, IHD is projected to rank fifth among the 10 leading causes of disability-adjusted life years [DALYs] in low-income countries by 2030 [5].

The epidemiological transition provides a useful framework for understanding the rise of ischaemic heart disease in low income countries (such as most African, South American and Asian countries). Previous reports [5], state that the epidemiological transition posits that populations initially start with low life expectancies with mortality primarily driven by infections, under nutrition, and illnesses and injuries related to childbirth. As sanitation, education and agriculture improve, these causes of death gradually recede until Non Communicable Diseases [NCD], particularly IHD and cancers, dominate the causes of low quality of life and death [6]. Later, as cancers and IHD becomes preventable or controllable, the burden of these diseases became unbearable to the patients' quality of life. Some researchers [7] suggested that in light of recent adverse trends in physical activity, diet, ageing, and obesity have led to the epidemiological transition and reduced quality of life of patients with ischaemic heart disease. There has also been a dramatic rise in several IHD risk factors that affect client's quality of life, which is attributed to poor compliance to treatment, incapacitation and reoccurrence of angina pain [8]. Ischaemic heart disease is one of the primary causes of disability and morbidity in many developed

countries as well as some developing countries around the globe [9]. Patients with ischaemic heart disease may live with a chronic illness that may subjects to poor quality of life that may cause further cardiac damage and death [9,10]. The World Health Organization estimated that in 2005, ischaemic heart diseases caused approximately 361,000 deaths in the African region, and current projections suggest that this number will nearly double by 2030 [9,10].

Methodology

Study design

A descriptive, cross-sectional design was employed for the study.

Study setting

The study setting was at Murtala Muhammed Specialist Hospital (MMSH), Kano, Nigeria. It is located in the historical city of Kano. It has a capacity of 688 beds and serves as a referral centre for the state with a projected population of 15 million people.

Target population

The total number of eighty (80) subjects with a diagnosis of ischaemic heart disease were recruited. These subjects were serially recruited from the cardiac clinic as well as from the male and female medical wards of the hospital after obtaining an informed consent.

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Research instrument

“WHO Quality of Life-BREF (WHOQOLBREF), SF-36 (Short Form Health Survey) questionnaire” was the adopted questionnaire that was used to obtain information from the respondents. The value of the SF-36 has been previously compared with that of other generic questionnaires in patients with CHD. Some studies have concluded that the SF-36 is the most appropriate generic instrument to assess the Quality Of Life (QOL) of cardiac patients. The questionnaire is divided into three sections, with section A composing of socio-demographic data such as: sex; age; marital status; religion; place of residence; level of education; occupation; habit; financial support system, type of family; number of support persons; primary cause of patients’ Ischaemic heart disease; co-morbidity that accompanied the Ischaemic heart disease. While section B is on SF-36 Survey, which comprises of: general health; limitations of activities; physical health problems; emotional health problems; social activities; pain; energy and emotion. Section C is on Family support information.

Methods of data collection

The data were collected by the researchers and trained research assistant. The questionnaire were administered to the respondents and interpreted verbally to their language of understanding.

Data Analysis

The obtained data were inputted into a SPSS (Statistical Package for Social Sciences) software V.16, and analyzed using descriptive (frequency distributions and percentages using tables)

Results

In Table 1, it shows that there were 51 males and 29 females in the study, giving a male to female ratio of 1:7:1. Majority of the respondents (63.7%) were aged 61-80 years and a near similar percentage were married. Over forty-seven percent (47.5%) had no western education, while only (3.8%) had tertiary education. Most of the subjects were urban dwellers (80%).

In Table 2 it shows over forty-seven percent (47.5%) have history of hypertension, this is followed by history of smoking (18.8%). Then diabetes mellitus with 13.8%, with small proportion of 12.5% having obesity.

In Table 3 it shows over forty-one percent (41.25%) of respondent’s general health were fair and, small proportion (11.25%) were of poor health.

In Table 4, it shows over sixty-two percent (62.5%) of respondents were much limited in vigorous activities, small proportion (2.5%) of respondents were not limited in vigorous activities. Over sixty two (62.5%) percent of respondents were partly limited in a moderate activities and over 48% of respondents were depressed.

Discussion

Most of the respondents in this study were males (63.7%). The male predominance is similar to the observations in other studies [11]. The median age of subjects in this study is 70 years, similar demographic observation was reported from other parts of the world [12]. This study also found that most of the subjects lacked western education and were elderly. Chambless and his colleagues [13] reported similar demographic observation in their study. The reason for this can be explained by the fact that ischaemic heart diseases mainly affect older people, perhaps due to the increase in prevalence of hypertension and

Variable N=80	Frequency	Percentage
Gender:		
Male	51	63.7
Female	29	36.3
Total	80	100
Marital status:		
Single	5	6.2
Married	51	63.7
Divorced	13	16.3
Widow	11	13.8
Total	80	100
Age(years)		
20-40	10	12.5
41-60	15	18.7
61-80	51	63.8
81-100	4	5
Total	80	100
Religion:		
Islam	72	90
Christianity	8	10
Total	80	100
Place of residence:		
Urban	64	80
Rural	16	20
Total	80	100
Level of education:		47.5
No formal education	38	47.5
Primary	37	46.3
Secondary	2	2.5
Tertiary	3	3.8
Total	80	100
Occupation:		
Unemployed	18	22.5
Government	8	10
Private	40	50
Retired	14	17.5
Total	80	100
Type of family:		
Monogamy	12	15
Polygamy	68	85
Total	80	100

Table 1: Socio-demographic characteristics of the respondents.

Variable N=80	Frequency	Percentage
Primary factors:		
Hypertension	38	47.5
Diabetes mellitus	11	13.8
Obesity	10	12.5
Familial history	6	7.5
Cigarette smoking	15	18.8
Total	80	100

Table 2: Associated factors related to respondents' condition.

diabetes in the elderly. Lack of western education can predispose an individual to poor healthy life style which may have remote negative impact on the heart and blood vessels.

The result of the present study show that high blood pressure, cigarette smoking and depression had adverse effect on the quality

Variable N=80	Frequency	Percentage
How is your health now?		
Excellent	9	11.3
Very good	12	15
Good	16	20
Fair	33	41.3
Poor	10	12.5
Total	80	100
How was your health few days back?		
Much better	9	11.3
Somewhat better	36	45
About the same	23	28.7
Somewhat worse	10	12.5
Much worse	2	2.5
Total	80	100

Table 3: Respondents' health related factors.

Variable N=80	Frequency	Percentage
Engaging in vigorous activities:		
Limited a lot	50	62.5
Limited a little	28	35
Not limited	2	2.5
Total	80	100
Engaging in moderate activities:		
Limited a lot	18	22.5
Limited a little	50	62.5
Not limited	12	15
Total	80	100
Carrying light objects:		
Limited a lot	10	12.5
Limited a little	22	27.5
Not limited	48	60
Total	80	100
Climbing several flight of stairs:		
Limited a lot	25	31.3
Limited a little	0	0
Not limited	80	100
Total		
Climbing one flight of stair:		
Limited a lot	46	57.5
Limited a little	25	31.3
Not limited	80	100
Total		
Bending, kneeling or stooping		
Limited a lot	42	52.5
Limited a little	38	47.5
Not limited	80	100
Total	87.5	
Walking more than a mile		
Limited a lot	10	0
Limited a little	0	100
Not limited	80	
Total		
:Bathing or dressing:		
Limited a lot	50	62.5
Limited a little	18	22.5
Not limited	80	100
Total		

Walking one block	16	20
Limited a lot	40	50
Limited a little	24	30
Not limited	80	100
Total		
Walking several blocks:		
Limited a lot	25	31.3
Limited a little	3	3.8
Not limited	80	100
Total		
Do you feel depressed		
All of the time	15	18.75
Most of the time	26	32.5
None	80	100
Total		

Table 4: Respondents limiting factors to quality of life.

of life in individuals with IHD. In another study, the quality of life of patients with IHD was found to be associated with some modifiable factors such as smoking, depressive symptoms and angina pectoris [14]. The findings are also similar to reports from Malaysia in which it was reported that the quality of life of patients with IHD was associated with some demographic and clinical factors [15]. The apparent negative effect of smoking has a theoretical assertion; as smoking decreases oxygenation and also cause vasoconstriction there by increasing the cardiac stress.

However, this study found some demographic factors that did not have negative effect on health related quality of life such as gender, advancing age and low educational level. A different study reported by some researchers [15] observed that young age was associated with better quality of life. This is not surprising as old age is accompanied by problems of mobility, metabolism, decreased immunity and psychologic problems. Studies from other countries [16] reported that the quality of life of patients with IHD may be improved from time of admission up to 12 months after discharge.

Conclusion

Majority of the subjects have moderate to severe limitation of physical activity and presence of hypertension, cigarette smoking and depressive ailments in patients with ischaemic heart disease are associated with limitation of quality of life.

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