Subjective quality of life and emotional pain among subjects with heart failure in a West African Teaching Hospital.

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Abstract

Objective: Heart failure (HF) is a common pathology worldwide. Associated emotional pain is an important risk factor of increased morbidity and secondary psychopathology.

Methods: Subjects in stable state of HF attending the cardiology clinic of Lagos University Teaching Hospital (LUTH) were recruited into the study. World Health Organization Quality of Life-Bref (WHOQoL-Bref), Psychache Scale (PAS) instruments were administered on subjects that consented to the study.

Results: One hundred and forty four (144) subjects of equal sex distribution were studied. The mean age was 31.7±10.2 years. The highest number of subjects, 57 (39.6%) rated their overall QoL as good; while 30 (20.8%) rated it as very poor. When the QoL score was dichotomized to good and poor, females subjects significantly scored lower with X^2=5.69, p=0.017*.The mean score on PAS by the male subjects was 30.88±9.80; and for the females it was 29.90±9.95. For all the subjects combined, the overall mean score was 30.39±9.85, with range of 13-50. When the PAS scores were dichotomized, there was no significant gender difference. There were significant negative correlations between PAS scores and socio-demographic variables of age and educational levels; that is r=-0.212 with p=0.011*and r=-0.207 with p=0.013* respectively.

Conclusion: High number of subjects in our study had emotional pain which is an important risk factor of suicide.

Keywords: Quality of life, Heart failure, Emotional pain, Nigeria.

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Subjective qualité de vie et la douleur émotionnelle chez les sujets souffrant d'insuffisance cardiaque dans un hôpital ouest-africain d'enseignement.

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Resume

Objectif: insuffisance cardiaque (IC) est une pathologie fréquente dans le monde entier. la douleur émotionnelle associée est un important facteur de risque d'augmentation de la morbidité et de la psychopathologie secondaire.

Méthodes: Les sujets à l'état stable de HF assister à la clinique de cardiologie de l'hôpital universitaire de Lagos (LUTH) ont été recrutés dans l'étude. Organisation mondiale de la santé Qualité de vie Bref (WHOQOL-Bref), douleur psychique Scale (PAS) des instruments ont été administrés sur des sujets qui ont consenti à l'étude.

Résultats: Cent quarante-quatre (144) sujets de la répartition par sexe égale ont été étudiés. L'âge moyen était de 31,7 ± 10,2 années. Le plus grand nombre de sujets, 57 (39,6%) ont évalué leur qualité de vie globale aussi bon; tandis que 30 (20,8%) l'ont jugée très faible. Lorsque le score de QV a été dichotomisée à une bonne et une mauvaise, les sujets femelles scores significativement plus faible avec X2 = 5,69, p = 0,017 * .Le score moyen sur PAS par les sujets de sexe masculin était 30,88 ± 9,80; et pour les femmes, il était de 29,90 ± 9,95. Pour tous les sujets combinés, le score moyen global était de 30,39 ± 9,85, avec la gamme de 13-50. Lorsque les scores de PAS ont été dichotomisés, il n'y avait pas de différence significative entre les sexes. Il y avait une corrélation négative significative entre les scores de PAS et les variables socio-démographiques de l'âge et les niveaux d'éducation; qui est r = -0,212 p = 0,011 et r * = -0,207 p = 0,013 *, respectivement.

Conclusion: Le nombre élevé de sujets dans notre étude avait la douleur émotionnelle qui est un important facteur de risque de suicide.

Mots-clés: Qualité de vie, l'insuffisance cardiaque, la douleur émotionnelle, Nigeria.

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INTRODUCTION

Heart Failure (HF) is a major health problem worldwide and it is one of the leading pathologies among hospitalized patients, accounting for over 30% of admission in specialized cardiac units (1, 2).

In Africa, HF tends to occur at a relatively younger age and with attendant high mortality compared to other parts of the world (3, 4). Furthermore, HF is with attendant high economic costs and burden due to impaired productivity, lengthy and repeated hospital stay and high cost of management (5, 6). A number of studies have shown that HF affects the patient's quality of life; thus, work, social and pleasurable activities can be affected (7). Consequently, in the management of HF, symptomatic relief is therefore not the sole aim, but also improvement in the quality of life of the affected patients (8, 9).

There has been concentration of attention on physical impairment and pain/discomfort in patient with heart failure without concomitant attention on the possibly associated psychological or emotional pain. In the past few decades, the subject of emotional pain has received a lot of attention due to the high risk of developing anxiety, depression and increased risk of suicide among subjects with emotional pain (10,11). Emotional pain has been described as the experience of emotional distress either from a current or past situation that has affected an individual to some degree, that is a form of mental suffering (12, 13). Thus, the functional and other social limitations from HF can heighten the possible experience of emotional pain. The paucity of studies on this important subject in Nigeria necessitated this work.

METHODS

Study Location and Subjects

The study was carried out in the cardiology clinic of Lagos University Teaching Hospital (LUTH), located in Idi-Araba, mainland area of the cosmopolitan city of Lagos. It is a tertiary healthcare facility with referrals from other hospitals in Lagos and its environs. The cardiology clinic is run twice a week (Tuesdays and Thursdays) with heavy patients' load in each clinic day.

Subjects were drawn using a convenient sampling technique from the population of patients with HF. The convenient sampling used entailed including all the consecutive patients with HF seen over a 12-month period in the cardiology clinic that met the study criteria; that is aged 18 years and above, in stable state and had not been hospitalized in the past three months. All the subjects had their clinical diagnosis of HF confirmed by Echocardiography. Study approval was obtained from the Research and Ethics Committee of the hospital, as well as informed written consent from individual participants.

Instruments and Procedure

Sociodemographic Questionnaire: This was constructed by the Researchers to obtain information on age, sex, levels of Education, Occupation etc.

World Health Organization Quality of Life-Bref (WHOQoL-Bref): This is a 26-item instrument by the WHO to assess the quality of life in four domains in an individual. It is a shorter version of the original 100-item QoL instrument with preserved psychometric properties[14]. Both have been used extensively in the country (Nigeria) (15, 16).

Psycheache Scale (PAS): This is a 13-item instrument designed by Holden et al (2001) to measure psychological or emotional pain characterized by feelings of shame, guilt, humiliation, loneliness, fear, anger, dread and anguish (17). High level of psychache predisposes individuals to suicidal behavior. The original psychometric properties were provided by the authors, Holden et al (2001) on Canadian population[17]; and it was validated in Nigeria by Orieka (2004) to obtain a two-week test-retest coefficient of 0.404[18]. Norm scores obtained on Nigerian population were 33.29 for males, 28.04 for females and 30.66 for both genders combined. Scores equal to or greater than the norms indicate that the client is manifesting psychache and suicidal ideation (14, 15). The instrument had been used in few studies in Nigeria (19, 20).

All the instruments were self-administered and data collection was over a twelve month period. Only very few subjects required one form of clarification or the other.

Data Analyses: Data obtained was entered into a spreadsheet and analyzed with Statistical Package for Social Sciences (SPSS) version 17 for windows. Means and standard deviation (SD) were obtained for continuous variables, and 't' test to determine differences between means. Categorical variables were analyzed using chi-squared statistics, and where appropriate, correlation analysis was done to find relationship between variables. Significant p value was set at ≤ 0.05.

RESULTS

Socio-demographic Characteristics

One hundred and forty four adults in stable state of HF participated in the study, and were of equal sex distribution. The mean age of the subjects was 31.7±10.2 years, with age range of 19-66 years. The male and female subjects were age matched with non-significant t=-0.66 and p=0.51 between their mean ages. Thirty four percent had secondary education followed by post-secondary, that is polytechnics/ colleges of education (32.6%). One hundred and twenty one (84.0%) were employed, and majority were married, 83 (57.6%). One hundred and thirteen (85.4%) had two or more dependants living with them.

Subjective Overall Quality of Life (Table I)

The highest number of subjects, 57 (39.6%) rated their overall QoL as good; while 30 (20.8%) rated it as very poor (Table I). When the score was dichotomized to good (good and very good) and poor (poor, neither good nor poor and very poor), it was of equal distribution of 72 (50.0%) among the subjects. Furthermore on the dichotomized overall QoL scores, females significantly scored lower with X^2=5.69, p=0.017* (Table on dichotomized scores not shown).

Subjects' Scores on Psycheache Scale (PAS) (Table II)

The mean score on PAS by the male subjects was 30.88±9.80; and for the females it was 29.90±9.95, with no significant difference (t=0.73, p=0.47). For all the subjects combined, the overall mean score was 30.39±9.85, with range of 13-50.

When the PAS scores were dichotomized to below and above cut-off scores, 73 (50.1%) scored below the cut-off made up of 37 (25.1%) males and 36 (25.0%); while 71 (49.9%) scored above the cut-off that is 35 (24.9%) males and 36 (25.0%) females, indicating presence of emotional (psychological) pain in these subjects. There was no significant gender difference in the dichotomized scores on the PAS scale (Table II).

Inter-relationship Between Socio-demographic Variables, Overall Subjective QoL and PAS Scores

When correlation analysis was carried out, significant relationship (negative correlations) existed between socio-demographic variables of only age and educational levels of subjects with PAS Scores, that is r=-0.212 with p=0.011*and r=-0.207 with p=0.013* respectively. There were also significant negative correlations between overall subjective QoL and number of dependants living with the subjects with r=-0.280, p=0.01* and PAS Scores, r=-0.593, p=0.000 (Table not shown).

DISCUSSION

The subjects were relatively young; thus in our environment, and due to its physical limitation, CHF is a disease that negatively affects the productive age group. A high percentage of our subjects was employed (84.0%), but about the same percentage (85.4%) had two or more dependants lived with them with the attendant potential financial burden. In African culture with widely practiced extended family system, it is a common thing for relatives to live with more 'affluent' members of the extended families most especially in cities and towns (21, 22).

Over one-fifth (20.8%) of our subjects rated their overall QoL as very poor. When dichotomized to poor and good QoL, our subjects were of equal distribution and this is in keeping with findings from a number of QoL studies in the past with findings of poor QoL in substantial number of subjects with HF (23, 24).

The relatively poorer QoL in the female subjects could be explained that females in Africa generally undergo many stressful responsibilities, and with fewer means of letting out these stresses when compared to their male counterparts (25, 26).

Thus, with the additional challenge of chronic illnesses such as HF, the overall QoL could possibly be adversely affected in the females more than the males (27).

In our study, about half (49.9%) of the subjects experienced emotional pain. This shows apart from the physical and social limitations imposed by HF, it could exert substantial emotional pain on the affected subjects. The high prevalence of emotional pain is similar to findings from previous similar studies on subjects with chronic medical illnesses in our environment (19). However, Coker et al (2011) found very low rate (3.7%) of emotional pain among subjects with uncomplicated hypertension also in Lagos, Nigeria (20).

An important limitation in this study was that the instruments used were self-administered with possibility of response bias in some cases. Again subjects' selection was using convenient

sampling and not randomized. However, despite these limitations, it is concluded from our study findings that emotional pain is an important co-existing psychological problem in our sample of subjects with HF; which is a known important risk factor of suicide. It is therefore recommended that appropriate psychological treatment be incorporated in the management of subjects with HF.

Conflict of interest: No conflict of interest was declared.

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TABLE I: OVERALL SELF RATING OF QUALITY OF LIFE BY SUBJECTS

QoL	Frequency	Percentage (%)
Very Poor	30	20.8
Poor	23	16.0
Neither poor nor Good	19	13.2
Good	57	39.6
Very Good	15	10.4
TOTAL	**144**	**100.0**

TABLE II: DISTRIBUTION OF PSYCHEACHE SCORES(PAS) BY SUBJECTS

PAS Score	Males(%)	Females (%)	All the Subjects (%)
<Cut off	37(25.1)	36 (25.0)	73(50.1)
>Cut off	35(24.9)	36(25.0)	71(49.9)
TOTAL	**72(50.0)**	**72(50.0)**	**144(100.0)**