ASSESSMENT OF SELF-CARE ACTIVITIES AMONG PATIENTS WITH HEART FAILURE

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ABSTRACT

Objective: aimed to assess self-care activities among patients with heart failure and to find out the relationship between the patient self-care activities and clinical data (diabetes mellitus, Kidney failure, Thyroid disease, C.V.A.

Methodology: a descriptive study was carried out through the present study in order to achieve the early stated objectives. The study was begun from November, 1st, 2016 to April, 22nd, 2016. The study is conducted in Al-Najaf City/Al-Najaf Al-Ashraf Health Directorate / Al-Sadder Medical City in cardiac units (CCU, Medical ward and Al-Najaf Center for Heart Disease and Surgery). A non-probability (Convenience) sample of (60) patients with Heart Failure, were included in the present study. The data was collected on structured questionnaire designed specifically for this study, and it is consist of three parts:Part 1 Included Socio-demographic characteristics and clinical data, and Part 2 Include (Chronic disease). Part 3 include Information regarding self-care activities. Validity of the study instrument is conducted through a panel of experts who have years of experience in nursing field. Data analysis by using descriptive statistics (percentage, frequency &mean of score) and inferential statistics (Chi-Square, Standard deviation and Contingency Coefficient).

Results: revealed that the heart failure patients were failure at all studied domains regarding self-care activities. Also there was a non-significant association between self-care activities of heart failure patients and their clinical data except with diabetes mellitus there is a significant association at P-value equal or less than 0.05.

Conclusion: The researcher can conclude that the patients in rural residential area are more vulnerable to get heart failure than those in urban areas and Heart failure has strong effect on overall domains of patient self-care activities.

Recommendation: The study recommends that increasing medical and nursing care for heart failure patients to promote self-care activities.And Further studies should be conduction with a larger sample (national level) including both rural and urban populations.

Key wards: assessment, patient, heart failure, self-care activities.

Introduction

Heart failure (HF) is considered as a worldwide problem in the 21st century with increasing effect on healthcare systems (Ertl and Ruschitzka, 2014). The prevalence of HF is rising in both industrialized and developing countries (Chow, et al., 2013). According to the American Heart Association (AHA), about 1 in 5 over age 40 years suffers from HF, in America about 4.9 million complain from Congestive heart failure (Cawley and Grantham, 2011; Dunbar, et al., 2013).It is a chronic illness that is associated with poor quality of life (QOL), frequent hospital readmissions, and early death (Riegel& Dickson, 2008). Negative outcomes may be averted through adherence to recommended treatment and recognizing worsening symptoms. Self-care is essential for improving QOL for those with HF. The diagnosis of heart failure requires a change of lifestyle in order to adhere to treatment (Washburn &Hornberger, 2008).

Living with HF means often to live with physical impairments such as breathlessness, fatigue and pain (Brännström, et al., 2007; Hägglund, et al., 2008). Patients have described that this limitations causes significant changes in their daily life (Pihl, et al., 2011). For many patients, it is not possible to do the things they did before and they might lose contact with social networks and even their role in society. Patients with HF can also feel uncertain concerning how much they can do on a particular day in that their strength and energy to perform activities vary from day to day (Brännström, et al., 2007).

Self-care in chronic diseases is related to the maintenance of the appropriate level of physical and psychological well-being, decrease in morbidity and mortality and in the use and cost of healthcare, increase in patient's satisfaction, improvement of control sense and life quality, reasons by which self-care is a central concern in the care for people with chronic diseases (Schnell-Hoehn, et al., 2009). The self-care concept has evolved over the years. It is associated with autonomy, independence and individual responsibility for healthy behaviors,

as well as for the development of activities required to manage and monitor health conditions (Riegel, et al., 2009; Wilkinson and Whitehead, 2009).

Methodology:

Design of the Study:

A descriptive study was carried out through the present study in order to achieve the early stated objectives. The study was began from November, 1st, 2016 to April, 22nd, 2016.

The Sample of the Study:

A descriptive study was carried out through the present study in order to achieve the early stated objectives. The study was began from November, 1st, 2016 to April, 22nd, 2016.

Setting of the Study :

The study is conducted in Al-Najaf City/Al-Najaf Al-Ashraf Health Directorate / Al-Sadder Medical City in cardiac units (CCU, Medical ward and Al-Najaf Center for Heart Disease and Surgery).

The Study Instrument:

An assessment tool used to assess of self-care activities for patient with heart failure in Al- Sadder Medical City. The final study instrument consisted of two parts as the following:

Part I: Demographic characteristics:

This part is concerned with the collection of basic socio-demographic data, this part include (age, gender, residency, marital status, socio-economic status, education level, occupation status and smoking).

Part II- A: clinical data (chronic disease):

This part of the questionnaire was comprised of (4) items concerned with the clinical data (diabetes mellitus, Kidney failure, Thyroid disease and C.V.A).

Part II- B: Information regarding self-care activities:

This part of the questionnaire was comprised of (8) domains, including the eating domain, which measures through (3) sub-domains; dressing domain, which measures through (4) sub-domains; toileting domain, which measures through (3) sub-domains; bathing domain, which measures through (2) sub-domains; transferring domain, which measures through (5) sub-domains; social adaptation domain, which measures through (3) sub-domains; sleep domain, which measures through (2) sub-domains and finally medication domain, which measures through (2) sub-domains.

Data Collection:

The data were collected through the utilization of the developed questionnaire and by means of structured interview technique with the subjects who were individually interviewed, by the using of English version of the questionnaire and they were interviewed in a similar way, in the same place, by the same questionnaire for all those subjects who were included in the study sample.

Data Analyses:

In order to achieve the early stated objectives, the data of the study were analyzed through the use of statistical package of social sciences (SPSS) version 19 through descriptive and inferential statistical analyses. The statistical data was analyzedby using descriptive statistics (Frequency, Percentage and Mean of score) and inferential statistics (Chi-Square, Standard deviation and Contingency Coefficient).

Ethical Consideration:

This is one of most essential principles before collecting the data, to protect the patient's values and dignity. The researcher obtained this permission from the Ethical committee at the

Groups		Frequency (total 60)	Percentage (%)
Age (years)	26 - 40	5	8.3
	41 - 55	15	25.0
	56 - 70	27	45.0
	71 - 85	11	18.3
	86 - 100	2	3.3
Gender	Male	32	53.3
	Female	28	46.7
Residence	Rural	43	71.7
	Urban	17	28.3
Socio-economic Status	Satisfied	8	13.6
	Satisfied to some extent	38	64.4
	Unsatisfied	13	22.0
Educational Level	Illiterate	16	27.6
	Read & Write	25	43.1
	Primary School	4	6.9
	Secondary School	9	15.5
	Graduate	4	6.9
	College and Postgraduate	16	27.6
Marital status	Single	1	1.7
	Married	34	56.7
	divorced	4	6.7
	Widowed	18	30.0
	Separated	3	5.0
Occupation	Housewife	27	45.0
	Retired	27	45.0
	Employed	5	8.3
	Private jobes	1	1.7
Smoking	Passive	21	35.0
	Heavy	36	60.0
	Extra-smoking	3	5.0

Faculty of nursing / UOK. The researcher promised to keep the patient's information confidential, and use these data for this study only then he explained the purpose of this study

to each participant without affecting the routine visiting and care. In addition to above the researcher told each participant that this is an involuntary work, and they can leave any time even the interview process is not completed.

Results

Table (1): The observed frequencies and percentages of patients' groups according to socio-demographic data

Table (1) shows that (45%) of study sample at group (56-70), and most of them were male (53.3%). In regarding to the patients residency, the results indicate that the majority of study sample (71.7 %) were from rural area. In addition, the study results indicate that (64.4 %) of patients were exhibit Satisfied to some extent in related to socio-economic status. Also the study results indicate that the high percentage (43.1%) of study sample were able to read and write related to the level of education. Regarding to the marital status the study results indicate that the majority study sample were married. Furthermore, the study results indicate that the study sample distributed between housewife and retired (45%) in related to the occupation. Finally in this table the results indicate that (60%) study sample were heavy smoking.

Table (2): The observed frequencies and percentages of patients' groups according to Clinical data

Groups		Frequency (total 60)	Percentage (%)
Diabetes Mellitus	Present	48	80.0
	Absent	12	20.0
Thyroid Disease	Present	2	3.3
	Absent	58	96.7
Kidney Failure	Present	43	71.7
	Absent	17	28.3
CVA	Present	6	10.0
	Absent	54	90.0

This table shows that high percentage of patients with heart failure was diagnosed with diabetes mellitus and kidney failure.

Table (3): Descriptive statistics of self-care activities assessment among Heart failure patients towards eating domain

Eating domain	Groups	Freq. (60)	Percentage (%)	Chi Square	P value	Sign.
Self-feeding without assistance	Never	6	10.0	56.55	0.000	HS
	Sometimes	25	41.7			
	Always	29	48.3			
feeds self except for cutting meat	Never	6	10.0	56.55	0.00	HS
	Sometimes	25	41.7			
	Always	29	48.3			

HS : High Significant

This table shows that the majority of patients with heart failure were need assistance during eating.

Table (4): Descriptive statistics of self-care activities assessment among Heart failure patients towards dressing domain

Dressing domain	Groups	Freq. (60)	Percentage (%)	Chi Square	P value	Sign.
gets clothes and gets completely dressed without assistance	Never	5	8.3	65.73	0.000	HS
	Sometime	24	40.0			
	Always	31	51.7			
gets assistance in tying shoes gets assistance in tying shoes	Never	5	8.3	58.73	0.000	HS
	Sometimes	26	43.3			
	Always	29	48.3			

HS : High Significant

This table shows that the most of study sample getting assistance when dressing.

Table (5): Descriptive statistics of self-care activities assessment among Heart failure patients towards bathing domain

Bathing domain	Groups	Freq.	Percentage (%)	Chi Square	P value	Sign.
able to oral care ,washing face and hands and able to clean your body without assistance	Never	5	8.3	58.73	0.000	HS
	Sometime	26	43.3			
	Always	29	48.3			

HS : High Significant

The results of this table shows that the high percentage of study sample always need assistance in bathing.

Table (6): Descriptive statistics of self-care activities assessment among Heart failure patients towards toileting domain

Toileting domain	Groups	Freq. (60)	Percentage (%)	Chi Square	P value	Sign.
goes to bathroom,cleans self and manages clothes without assistance	Never	5	8.3	62.08	0.000	HS
	Sometimes	25	41.7			
	Always	30	50.0			
receive assistance in going to bathroom cleans self , manageing clothes or empting bed pan	Never	5	8.3	62.08	0.000	HS
	Sometimes	25	41.7			
	Always	30	50.0			

HS: High Significant

The results of table (3-6) shows that the majority of heart failure patients unable to goes and managing clothes during toileting without assistance.

Table (7): Descriptive statistics of self-care activities assessment among Heart failure patients towards transferring domain

Transferring domain	Groups	Freq.	Percentage (%)	Chi Square	P value	Sign.
I can move from the bed with or without the tool or help	Never	7	11.7	58.08	0.000	HS
	Sometimes	23	38.3			
	Always	30	50.0			
I can stand	Never	8	13.3	60.28	0.000	HS
	Sometimes	21	35.0			
	Always	31	51.7			
I can climb stairs	Never	3	5.0	114.75	0.000	HS
	Sometimes	17	28.3			
	Always	40	66.7			
I can walk for short distances	Never	9	15.0	51.00	0.000	HS
	Sometimes	22	36.7			
	Always	29	48.3			
I have ability to bend knees	Never	5	8.3	62.08	0.000	HS
	Sometimes	25	41.7			
	Always	30	50.0			

HS: High Significant

The results of table (3-7) reveals that the high percentage of study sample receive assistance when transferring.

Table (8): Descriptive statistics of self-care activities assessment among Heart failure patients towards social adaptation domain

Social Adaptation domain	Groups	Freq. (60)	Percentage (%)	Chi Square	P value	Sign.
I can deal with others and take responsibility	Never	5	8.3	55.68	0.000	HS
	Sometimes	27	45.0			
	Always	28	46.7			
I don't feel sad because living out side of my community who I live in it	Never	2	3.3	52.33	0.000	HS
	Sometimes	38	63.3			
	Always	20	33.3			
I have a desire	Never	5	8.3	43.33	0.000	HS

to visit friends and relatives and talk to them	Sometimes	40	66.7			
	Always	15	25.0			

HS: High Significant

This table shows that high percentage of study sample sometimes unable to social adaptation because heart failure.

Table (9): Descriptive statistics of self-care activities assessment among Heart failure patients towards sleep domain

Sleep domain	Groups	Freq. (60)	Percentage (%)	Chi Square	P value	Sign.
can you sleep without drug , can you good sleep during the night	Never	8	13.3	32.28	0.000	HS
	Sometimes	35	58.3			
	Always	17	28.3			

HS : High Significant

This table shows that the majority of study sample with heart failure sometime need drug to able sleep.

Table (10): Association between demographical characteristics and overall assessments due to self-care activities towards heart failure patients

Demographical Characteristics & Overall assessments due to lifestyle	Contingency Coefficient	P-value	C.S.
Age Groups	0.233	0.062	NS
Gender	0.113	0.680	NS
Residence	0.045	0.760	NS
Soci-economic Status	0.019	0.872	NS
educational Level	0.224	0.064	NS
Marital Status	0.499	0.049	S
Occupation	0.029	0.653	NS
Smoking	0.284	0.720	NS

NS: Non Significant: P>0.05; S: Significant at P<0.05

This table shows that there is a non-significant association between self-care activities of heart failure patients and their demographic data except with their marital status at P-value equal or less than 0.05.

Table (11): Association between clinical data and overall assessments due to self-care activities towards heart failure patients

Clinical Characteristics & Overall assessments due to lifestyle	Contingency Coefficient	P-value	C.S.
Diabetes Mellitus	0.525	0.034	S
Thyroid disease	0.168	0.361	NS
Kidney disease	0.169	0.152	NS
CVA	0.235	0.066	NS

NS: Non Significant: P>0.05; S: Significant at P<0.05

Table (3-13) shows that there is a non-significant association between self-care activities of heart failure patients and their clinical data except with diabetes mellitus there is a significant association at P-value equal or less than 0.05.

Discussion:

Part-I: Discussion of the Socio-Demographic Data and clinical data related to the tuberculosis patients: (Tables-1):

The results of the present study show that the majority of the sample living in urban residential area. This result match with the result of Manji*et. al.,* (2016) who find in their study that the majority of the study subjects age were living in urban area. Pulmonary tuberculosis commonly spread in urban area due to many factor like overcrowding,mass burning and air pollutant. Regarding to the study subjects gender, the results indicate, that the higher percentage of the study sample are malesthis result is in consistency with Manji*et. al*., (2016), they mentioned that the male is dominant gender of study sample. Also Mejri*et al.,* (2016), mentioned that the main patients were men .

Regarding to the sample age groups, the study results indicate that the higher percentage of the study sample are within (21 - 28) years old. Soni*et. al*., (2016), in their study "Impact of pulmonary tuberculosis sequelae on functional status" who pointed that the highest percent were between (18–30) years old.Regarding occupational status, the highest

percentage is for Private or self-Job followed by the employed patients. This result is supported with Mejri*et al.,* (2016), the results indicated that the highest percentage are for free work (23.8%).

Concerning Socio-economic status, the highest percentage of study group are unsatisfied. This results came along with Hedhli*et al.,* (2016) in their results indicate that the majority of study sample were unsatisfactory. In regarding to the duration of disease, the higher percentage for those who are suffering from the disease are between (2-4) years which is in consistency with Soni*et al.,* (2016) in his dissertation "Impact of pulmonary tuberculosis sequelae on functional status" who mentioned that the majority of study subjects suffer from disease ≤ 3 years.

In addition to the smoking, the higher percentages of study sample are smoker. Many previous studies were in agreement with this result they found that the majority of study subjects were smoker ((Kiryukhina*et al.,,* 2016; Soni*et al.,* 2016).

Part-II: Discussion of the study sample by their Responses to the Studied Domains:

The study results supported by many previous studies which mentioned that there patients practice self-care actions, with difficulties perceiving clinical deterioration related to recent weight gain and peripheral edema, communication with the health care team, transferring, bathing and adherence to medication (; Jaarsma, et al., 2009; Nascimento and Püschel, 2013).

Also, the study results is an agreement with Lyngå (2012), "who indicates that deterioration in self-care activities over time was seen and might lead to adverse outcomes in all domains e.g. (dressing ,bathing, eating, adherence to medication, transferring and others). in patients with HF.

Conclusions:

According to the result of present study, the researcher concluded that:the patients in rural residential area are more vulnerable to get heart failure than those in urban areas, male also more vulnerable to get heart failure than females; heart failure has strong effect on overall domains of patient self-care activities.The study indicates that there is a significant association between diabetes mellitus and overall assessment due to self-care toward heart failure patient.

Recommendations:

Base on the result of the present study the researcher recommended are following:

1. Increasing medical and nursing care for heart failure patients to promote self-care activities.

2. Continuous follow-up of all heart failure patients especially who are over than (50) years of age.

3. Further studies should be conduction with a larger sample (national level) including both rural and urban populations.

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