Heart failure patients self-care behavior and knowledge

Comportamiento y conocimientos de autocuidado de los pacientes con insuficiencia cardíaca.

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Received: 07/20/2022 Accepted: 10/19/2023 Published: 11/25/2023 DOI: http://doi.org/10.5281/zenodo.10214501

Abstract

Objectives: To examine the heart failure patients self-care behavior and knowledge with heart failure.

Methods: A descriptive cross sectional study was conduct, which was carried out at three major hospitals in Iraq started July 28th on 128 patients. Data were analyzed using IBM SPSS version 26. Both parametric and non-parametric statistical analysis approaches were used to analyze the collected data. The Dutch Heart Failure Scale and Self-Care of Heart Failure Index (SCHFI) were used to measure knowledge and self-care behaviors, respectively. Back to back translation approach was used to authenticate the translation in to Arabic language. The mean scores on the subscales of the Self-Care behavior of Heart Failure was poor self-care management 31.14 SD 3.47, self-care maintenance 31.14 SD 3.47, self-care confidence16.15 SD 2.35. The mean heart failure knowledge score was low at 4.28 SD 2.94.

Results: The study indicated that patient had inadequate self-care levels and knowledge deficits

Conclusion: The heart-failure patients showed low levels of self-care and knowledge.

Keywords: Heart failure, Self-care, Chronic non-communicable disease, Patients.

Resumen

Objetivos: Examinar el comportamiento y el conocimiento de autocuidado de los pacientes con insuficiencia cardíaca.

Métodos: Se realizó un estudio descriptivo transversal, que se llevó a cabo en tres hospitales importantes de Irak a partir del 28 de julio en 128 pacientes. Los datos se analizaron utilizando IBM SPSS versión 26. Se utilizaron enfoques de análisis estadístico tanto paramétrico como no paramétrico para analizar los datos recopilados. Se utilizaron la Escala Holandesa de Insuficiencia Cardíaca y el Índice de Autocuidado de Insuficiencia Cardíaca (SCHFI) para medir el conocimiento y las conductas de autocuidado, respectivamente. Se utilizó un enfoque de traducción consecutiva para autenticar la traducción al idioma árabe. Las puntuaciones medias en las subescalas de la conducta de autocuidado de la insuficiencia cardíaca fueron mala gestión del autocuidado 31,14 DE 3,47, mantenimiento del autocuidado 31,14 DE 3,47, confianza en el autocuidado 16,15 DE 2,35. La puntuación media de conocimientos sobre insuficiencia cardíaca fue baja, 4,28 DE 2,94.

Resultados: El estudio indicó que el paciente tenía niveles inadecuados de autocuidado y déficit de conocimientos.

Conclusión: Los pacientes con insuficiencia cardíaca mostraron bajos niveles de autocuidado y conocimiento.

Palabras clave: Insuficiencia cardíaca, Autocuidado, Enfermedad crónica no transmisible, Pacientes.

Introduction

Globally, Non-communicable Chronic Diseases (NCDs) are a major health challenges of the21st century due to high mortality rate[1]. One of the major NCDs, which are responsible for these deaths included heart diseases, responsible of 17.9 million deaths, accounting for (44%) of all NCDs deaths[2]. One of a debilitating NCDs is Heart Failure with profound long term effects on patients and their families including physical, functional, psychosocial, economical status. It also can also cause social isolation and depression as well as complex set of symptoms[3,4]. Such dangerous lifelong limitation's lead to increasing health care costs and reduce patients productivity.5 Heart Failure (HF) is a life-threatening condition .In the last decades heart failure incidence has enormously increased. 6 Heart failure (HF) is "a complex clinical syndrome that can materialize from any structural or functional cardiac disease that lower the capacity of the ventricle to fill or pump blood"[7-11].

Although mortality and morbidity are expected to stay high among older patients; optimal self-care behaviors play a vital role in reducing adversative results for individuals' with HF. Nevertheless, commitment to healthy behaviors is reported repeatedly in the published literature to stay low in patients with Heart Failure[12].

Exacerbation of heart failure (HF) requires that patients carefully self-manage their condition and the key to do so is early care seeking, symptom perception, evaluation and responded accurately, such early intervention lead to prevent recurrent hospitalization and to reduce mortality[13]. Self-care for patients with heart failure includes engaging in behaviors that maintain medical stability and manage problematic symptoms; heart failure is also associated with poorer quality of life relative to similarly aged healthy individuals[14].

In response to these concerns, researchers have identified adequate self-care as an important factor for reducing health care utilization (including hospitalizations) and improving health outcomes in heart failure patients[15].

Methods

Study Design

A cross sectional design was used in this study to examine the heart failure patients self-care levels and knowledge failure.

Settings/Participants:

The study targeted patients with heart failure in outpatient's clinics. The inclusion criteria for the current study included adult patients with heart failure who were attending one of the included outpatient's clinics at the covered hospitals, with minimum of primary school education, willing to participate in all aspects of the study. While the exclusion criteria included patients involved with other studies at the same time as the current study, hospitalized patients.

A purposive nonprobability sample of (n= 128) patients were participating in this study. Non- probability sampling allows to target particular groups within the population and is best use for population with specific health issue. Choosing this method is consistent with the current study design was carried out at three major hospitals in Iraq started July 28th to December 11th /2022.at three different hospitals in Maysan, Iraq:(Maysan Center for Heart Diseases and surgery, Al-Sader Teaching Hospital, and Al-Majer Al-Kapeer General Hospital).

Ethical Considerations and Official Agreements

The study protocol was developed by the researcher and submitted to the Adult Nursing Department. Both the scientific committee and the Institutional Review Board (IRB) approved the study proposal. Finally, approval was granted from the Council of Nursing College, University of Baghdad, officially authenticated the study proposal researcher explained the purpose of the study for every patient before participation Informed consent form was signed by every patient prior to data collection phase. The patient was assured that the study maneuver will cause no actual or potential harm.

Clinical Registration

The study was registered under the umbrella of the Iranian Clinical Trial Registry reference number (IRCT20220924056029N1). Date of enrollment: 1/15/2023

Results

Table 1: Distribution of the Study Sample (Study and Control) According to Demographic Characteristics (N=128)

Variables		Study group n (%) n = 64
Age	Older than 53	52 (81.3 %)
Gender	Male	45 (70.3%
	Female	19 (29.7%)
Educational status	Primary school	55 (85.9%)
Occupation	unemployed	53 (82.8%)
	Employed	

Table 2 Descriptive Statistics of Patients' Clinical Data N=128

Variable		f.	%
Duration of illness (Years)	1-2	32	50.0
Previous admission	1-2 admission	52	81.3
Comorbidities	Hypertension Diabetes mellitus Diabetes & hypertension	32 13	50.0 20.3
Other Comorbidities	Yes No	54 10	82.8 15.6
Classification of HF	Don't know	54	84.4
Self-education about of HF	No	60	93.8

Table 3: Evaluation of Patients' Self-care and knowledge levels

Self-care and knowledge levels	Self-care		knowledge	
	f.	%	f.	%
Poor	102	79.7	104	81.3
Fair	26	20.3	24	18.8
Total	128			

f: Frequency, %: Percentage

Discussion

The result of the current study is illustrated by the frequency and percentage in the tables. mean age of the study group was (54.6±9.3) at the time of data collection. This finding is comparable to a USA study finding that the mean age of patients was 60 years old[16]. These results are not surprising due to the fact that heart failure commonly affect old age population and the numbers of patients living with heart failure have been increasing, as a result of aging of the population, global population growth and improved survival after diagnosis. However, incidence remained stable or increased in patients (<55 years) and in the very old (>85 years), population ageing have contributed to a sustained increase in prevalence[17], groups that have thus far received fairly little attention[18].

The study findings showed that more than half of the study sample has primary school education (82.8%), which is similar to the results of the study conducted by AbuAlreesh& Alburikan, (2019) who studied the correlation of low health literacy level and low education level and low socioeconomic status, whereas most of the study sample had low education[19].

Concerning to occupational status of the patients, a high percentage (82.8%) of the study, were unemployed. This result was supported by a cross-sectional studies to investigate the inpatient burden of heart failure readmission and to identify the factors associated with early readmission, unemployment represented 95% of the study sample and a direct factor led to readmission[20,21].

Which can be attributed to the sample's dominant age group. Whereas most of the patients fell within the age group ≥ 53 years old or may be a true reflection of the country's overall socioeconomic status. Poverty remains a constraint to growth and a serious challenge for many Iraqis, Iraq already has the highest poverty rate in all upper-middle income countries[22].

In relation to duration of disease and hospitalization the results showed that (81.3%) have been experiencing HF for at least (1-2 years) and have been admitted to the hospital at least (1-2) times. The aforementioned findings are similar study showed that the average heart failure patient is hospitalized about once a year. Approximately half of the patients will be admitted at least once within 1 year after diagnosis, 20% will be readmitted again within that same year[23].

Half (50.0%) of the study group were diagnosed with hypertension. These results are consistent with a previous a cross-sectional survey of the prevalence of hypertension in Iraq confirmed that approximately

(54.7%) of the 1480 study participants had hypertension. which may explain the findings of the present study[24].

The finding of study regarding overall assessment of patients' knowledge; the findings reveals that patients in the study are showing low level of knowledge and these results similar to a previous study which was conducted in Singapore a total of 225 HF patients participated[25], in which they assessed HF patients' knowledge on the disease and self-care management, and to explore factors influencing their knowledge level. The total mean score of HF knowledge in this population was 10.1 (±2.4) and more than 50% of the respondents were unable to recognize signs and symptoms of worsening HF. Our results revealed that the mean scores obtained for the scales of self-care maintenance, management and confidence of the SCHFI, were all below 70 points which is the lowest limit score indicate poor self-care. These findings are consistent with other studies[26,27]. Of equal importance the results of the current study revealed that (79.7%) HF patient have poor levels of self-care behavior. These findings consistent with a descriptive study in Brazil that aimed to evaluate self-care behavior and its associated factors, the mean scores on the subscales of the Self-Care of Heart Failure Index indicated inappropriate self-care behaviors[26].

Conclusions

The heart-failure patients showed low levels of self-care and knowledge. Despite being medically diagnosed with a chronic progressive disease like heart-failure; most of the subjects in this study did not focus on self-education about their disease prognosis reflecting a serious indifference among patients that needs to be addressed both effectively and urgently.

Recommendation

Professional's healthcare providers, in particular nurses, are advised to explore new strategies in supporting patients to be better informed and more active.

Limitation

A limitation of this study is the small number of participants, which means that generalization of the results may not be possible.

Funding Information

The budget of this research work was not support by any governmental or governmental organization. The authors of this manuscript covered all the research work related expenses.

Conflicts of Interest

None

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