 Factors Affecting Quality of Life for Patients with Congestive Heart Failure

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Abstract

Background: Congestive Heart Failure (CHF) is associated with poor Quality of Life (QoL).

Aim of the Study: To assess factors affecting QoL for patients with CHF. A descriptive design was adopted in the current study.

Methodology: A convenience sample including 90 patients with CHF at Critical Care Units (Intensive Care Units and Cardiac Care Units) affiliated to Mansoura University and Belqas Hospital during the period from September, 2013 to December, 2013 was recruited in this study. Two tools were used for data collection, interviewing questionnaire sheet and Minnesota Living with Heart Failure Questionnaire (MLHFQ).

Results: The QoL for patients with CHF statistically affected negatively. The highest percentage of elderly (32.2%), female (52.2), reside in rural areas (61.1), illiterate (42.2%), non-occupied patients (57.8), and married patients (61.1) were affected by the factors, which negatively affect the QoL more than other patients.

Conclusion: The study concluded that; CHF is affected the QoL negatively. It is recommended to educate patients with CHF about the needed interventions to improve their QoL.

Key Words: Congestive Heart Failure (CHF) – Quality of Life (QoL).

Introduction

HEART Failure (HF) is a condition that causes the muscle in the heart wall to slowly weaken and enlarge, preventing the heart from pumping enough blood. The weakened muscle prevents left ventricle from pumping enough blood [1]. Failure in pumping the amount of blood necessary to perfuse the tissues of the body, leads to appearance of symptoms such as; fatigue, weakness, shortness of breath, cough, and swelling in the legs [2].

The CHF is a common cardiovascular disease with poor QoL, high morbidity, and early mortality [3]. According to World Health Organization (WHO) [4], the percentage of people suffering from cardiovascular diseases in Egypt was 46.0% of the total population. The prevalence of CHF increases with the age from less than 1% among the 20-39 years old age group to over 20 percent among the people age 80 years or older.

The QoL is a broad multidimensional concept that usually includes subjective evaluations of both positive and negative aspects of life. Although health is one of the important domains of overall QoL, there are other domains as jobs, housing, schools, the neighborhood [5]. Health-Related Quality of Life (HRQoL) is the functional effect of a medical condition and/or its consequent therapy upon a patient. HRQoL is thus subjective and multidimensional, encompassing physical and occupational function, psychological state, social interaction and somatic sensation [6].

The CHF significantly decreases QoL, especially in the areas of physical functioning and vitality. Lack of improvement in QoL after discharge from the hospital is a powerful predictor of re-hospitalization and mortality. Women with CHF have consistently been found to have poorer QoL than men [7]. Also, depression, younger age, higher Body Mass Index (BMI), greater symptom burden, lower systolic blood pressure, sleep apnea, low perceived control, and memory problems may also contribute to poor QoL [8].

During the past decade, qualities of life of chronic patients have significantly increased, and improving daily function and QoL of individuals with chronic diseases have become an objective. Nurses have a leading role in this “CHF team” due

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to their excellent clinical assessment and communication skills as well as due to their ability to work closely with the patient [9]. Specialized in HF care, nurses can assess the signs and symptoms of cardiac destabilization, monitor therapy compliance, provide health education, emotional support, counsel, develop behavior modification techniques, and also act as the healthcare liaison for the patients and their family [10].

**Significance of the study:**

The CHF has a negative impact on the QoL of the patients. The patients with CHF have impaired cognition and suffer from debilitating physical symptoms (dyspnea, edema, fatigue and pain), frequent hospitalizations, forced retirement, role changes, financial pressure and disruption of the usual sources of social support [11]. All of these characteristics and changes can lead to limited daily physical and social activities and result in depression and reduction in QoL among patients; the most severe forms of the disease are associated with a worse QoL. The factors related to this aspect of the disease need to be identified in order to improve the QoL of the patients, but the factors affecting QoL for these patients are not fully understood, for that the current study is conducted to assess factors affecting QoL among patients with CHF.

**Aim of the study:**

The aim of this study is to assess factors affecting quality of life for patients with congestive heart failure.

**Research questions:**

(1): What are the factors affecting quality of life for patients with congestive heart failure?

(2): Is there a relation between demographic characteristics and factors affecting quality of life for patients with congestive heart failure?

**Subjects and Methods**

**Research design:**

A descriptive design was used to conduct the current study.

**Setting:**

This study was conducted at Critical Care Units (Intensive Care Units and Cardiac Care Units) at Mansoura University Hospitals, Mansoura Specialized Medical Hospital, and Bilqas General Hospital from Sep. 2013-Dec. 2013.

**Sample:**

A convenience sample of 90 patients diagnosed with CHF over a period of four months was recruited.

**Tools of data collection:**

Two tools were used for data collection.

**Tool (I): Interviewing questionnaire sheet:**

It was developed by the researcher after reviewing and utilizing the most recent and relevant literature; it consists of two parts:

*First part:* Deals with the patient’s general characteristics such as; age, gender, marital status, employment status, residence, and level of education.

*Second part (2):* Includes patients’ past and present medical history such as; disease, onset of the disease, family history of any disease, smoking habits. In addition, symptoms associated with the disease, the diagnostic measures related to the disease.

**Tool (II): The Minnesota Living with Heart Failure Questionnaire (MLHFQ):**

It was adapted from Rector, Kubo, and Cohn (1987), and modified by researcher and translated into Arabic language, it contains 21 items that ask about patients’ perceptions of the effects of CHF and its treatment on physical, psychological, and socioeconomic aspects of their life. Assess the impact of inter-related subgroup of 8 questions related to the physical symptoms; shortness of breath, fatigue, difficulty at walking-climbing stairs, doing things with family or friends, needed rest during the day, working around the house or yard, going to the places away from home and sleeping.

Another inter-related subgroup of 5 emotional domain questions related to the psychological distress; worry, loss of self-control, being a burden to other, difficulty at concentrating or remembering and depression. In addition to the effects of CHF on physical/social functions of 8 subgroup include edema, working to earn a living, recreational activities, sexual activities, side effect of medical care, costing, staying at hospital and eating, timed allowed to fill this part from 10 to 15 minutes through interviewing with patient.

**Scoring system:** The scoring system for this measure rated on 6-point scale from 0 (no effect on QoL) to 5 (highest impact on QoL), with a total maximum score of 105. High scores on the MLHFQ
scales indicate worse QoL. The total scoring system for the MLHFQ as the following:

<table>
<thead>
<tr>
<th>Severe effect</th>
<th>Very much effect</th>
<th>Much effect</th>
<th>Little effect</th>
<th>Very little effect</th>
<th>No effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>84–105</td>
<td>63–84</td>
<td>42–63</td>
<td>21–42</td>
<td>5–21</td>
</tr>
</tbody>
</table>

**Content validity:**

The tool validity test was done through seven panels of expertise in the field of medical and surgical nursing to test the content validity. Modification was carried out according to the panel's judgment on the clarity of sentences and appropriateness of content.

**Pilot study:**

A pilot study was conducted on 10.0% of the total sample to test the reliability of the present study tools study, it also helped to estimate the time needed for data collection. Patients included in the pilot study were excluded from the sample of the study.

**Ethical considerations:**

The present study was conducted under the approval of the Faculty of Nursing, Port Said University. Participants were given explanations about the aim of the study, and they were also informed that they could withdraw from the study at any time before the completion of the study without giving any reasons. Oral consent was taken from each patient and their family in order to participate in the study. Confidentiality of participants’ information was assured and the data were accessed only by the investigators involved in the study.

**Procedure of the study:**

The study proceeded as follows:

Data were collected over a period of four months starting from September, 2013 up to the end of December, 2013. After obtaining the official permission to conduct the study and after finalization of the tools, the researcher met patients individually and the purpose of the study was explained, oral consent of each eligible patient was obtained before their participation. The researcher filled in the tools according to the patients’ answers.

**Statistical analysis of data:**

The obtained data were organized, categorized, and analyzed through a personal computer using the Statistics Package for Social Science (SPSS) version 22; raw data were coded and transformed into coding sheets. The results were checked. Output drafts were checked against the revised coded data for typing and spelling mistakes. Finally, analysis and interpretation of data were conducted. The following statistical measures were used: Descriptive statistics including frequency, distribution, mean, and standard deviation were used to describe different characteristics. The observed differences and associations were considered as the following:

- Non-Significant (NS) \( p > 0.05 \).
- Significant (S) \( p \leq 0.05 \).
- Highly Significant (HS) \( p < 0.01 \).

**Results**

**The main findings of the present study were:**

Table (1) shows that, slightly less than one third of patients in the study (32.2%) were at age group of >60y. The high percentage of them (52.2%) was female. About two fifths of the studied patients (42.2%) were illiterate, while the minority of them (8.9%) were university level. Regarding residence, about two third of studied patients (61.1%) were from rural areas. In addition, more than half of studied patients (57.8%) had no work, and about two third of studied patients (61.1%) were married while the minority of them (3.3%) was divorced.

Table (2) clarifies the patient’s past and present medical history. It was noticed that, more than two thirds of patients (70.0%) had no family history, and the majority of participants (92.2%) were suffering from hypertension and (85.6%) from coronary artery disease, while (11.4%) of them were suffering from congenital heart disease. Concerning smoking, less than two thirds of patients (64.4%) were not smoke. The same table reveals that, the most common symptoms were easy fatigability (98.9%), chest pain (90.0%), and dyspnea (93.3%).

Table (3) clarifies that, one third of patients (33.3%) had very much effect, while (15.6%) of them had little effect regarding physical aspects. Also, one third of them (33.3%) had much effect, while 6.7% of them had very little effect as regards to psychological aspects. Moreover, 31.1% and 2.2% of the studied patient had moderate and little effects on social aspects respectively. Finally, the total scores were ranged from moderate, much, very much, and little effect (24.0%, 41.1%, 22.2%, 12.2%) respectively.

Table (4) manifests that, there was a statistically significant relation between the quality of life and patients’ general characteristics.
### Table 1: Frequency distribution of patients according to their general characteristics (n=90).

<table>
<thead>
<tr>
<th>General characteristics</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age group:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-40y</td>
<td>11</td>
<td>12.2</td>
</tr>
<tr>
<td>40-50y</td>
<td>22</td>
<td>24.4</td>
</tr>
<tr>
<td>50-60y</td>
<td>28</td>
<td>31.1</td>
</tr>
<tr>
<td>&gt;60y</td>
<td>29</td>
<td>32.2</td>
</tr>
<tr>
<td><strong>Sex:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>43</td>
<td>47.8</td>
</tr>
<tr>
<td>Female</td>
<td>47</td>
<td>52.2</td>
</tr>
<tr>
<td><strong>Educational level:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>38</td>
<td>42.2</td>
</tr>
<tr>
<td>Read and write</td>
<td>19</td>
<td>21.1</td>
</tr>
<tr>
<td>Secondary</td>
<td>25</td>
<td>27.8</td>
</tr>
<tr>
<td>University</td>
<td>8</td>
<td>8.9</td>
</tr>
<tr>
<td><strong>Residence:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>35</td>
<td>38.9</td>
</tr>
<tr>
<td>Rural</td>
<td>55</td>
<td>61.1</td>
</tr>
<tr>
<td><strong>Occupation:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free work</td>
<td>23</td>
<td>25.6</td>
</tr>
<tr>
<td>Official work</td>
<td>15</td>
<td>16.7</td>
</tr>
<tr>
<td>Not work</td>
<td>52</td>
<td>57.8</td>
</tr>
<tr>
<td><strong>Marital status:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>55</td>
<td>61.1</td>
</tr>
<tr>
<td>Divorced</td>
<td>3</td>
<td>3.3</td>
</tr>
<tr>
<td>Widow</td>
<td>28</td>
<td>31.1</td>
</tr>
<tr>
<td>Single</td>
<td>4</td>
<td>4.4</td>
</tr>
</tbody>
</table>

### Table 2: Frequency distribution of patients according to their past and present medical history (n=90).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Yes</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient's family history</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary artery disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hypertension</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angina pectoris</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rheumatic fever</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congenital heart disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes mellitus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renal failure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological stress</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liver or viral disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cigarettes/day (means; range)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of smoking (means; range)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Symptoms of disease:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower limb edema</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tachycardia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy fatigability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sleep disturbances</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyspnea</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sputum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin discoloration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Onset of disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 1 year</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 year</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 3: Frequency distribution of the effect of MINNESOTA aspects on quality of life among studied patients (n=90).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Very much</th>
<th>Much</th>
<th>Moderate</th>
<th>Little</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>No</td>
</tr>
<tr>
<td>Physical aspects</td>
<td>30</td>
<td>33.3</td>
<td>24</td>
<td>26.7</td>
<td>26.7</td>
</tr>
<tr>
<td>Psychological aspects</td>
<td>17</td>
<td>18.9</td>
<td>30</td>
<td>33.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Social aspects</td>
<td>19</td>
<td>21.1</td>
<td>12</td>
<td>13.3</td>
<td>13.3</td>
</tr>
<tr>
<td>Total aspects</td>
<td>20</td>
<td>22.2</td>
<td>37</td>
<td>41.1</td>
<td>41.1</td>
</tr>
</tbody>
</table>
Table (4): Relation between general characteristics and quality of life among studied patients (n=90).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Very much</th>
<th>Much</th>
<th>Moderate</th>
<th>Little</th>
<th>Very little</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
<td>No %</td>
</tr>
<tr>
<td>Age (year):</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-</td>
<td>1 9.1</td>
<td>4 36.4</td>
<td>2 18.2</td>
<td>4 36.4</td>
<td>0 0.0</td>
</tr>
<tr>
<td>40-</td>
<td>3 13.6</td>
<td>2 9.1</td>
<td>16 72.7</td>
<td>1 4.5</td>
<td>0 0.0</td>
</tr>
<tr>
<td>50-</td>
<td>2 5.4</td>
<td>29 78.4</td>
<td>1 2.7</td>
<td>5 13.5</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Above 60</td>
<td>14 70.0</td>
<td>2 9.1</td>
<td>3 13.6</td>
<td>1 4.5</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>16 37.2</td>
<td>18 41.9</td>
<td>9 20.9</td>
<td>0 0.0</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Female</td>
<td>4 8.5</td>
<td>19 40.4</td>
<td>13 27.7</td>
<td>11 23.4</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Residence:</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>1 2.9</td>
<td>18 51.4</td>
<td>7 20.0</td>
<td>9 25.7</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Rural</td>
<td>19 34.5</td>
<td>19 34.5</td>
<td>15 27.3</td>
<td>2 3.6</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Educational level:</td>
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<td></td>
<td></td>
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<td>Illiterate</td>
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<td>11 28.9</td>
<td>9 23.7</td>
<td>3 7.9</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Read and write</td>
<td>3 15.8</td>
<td>10 52.6</td>
<td>5 26.3</td>
<td>1 5.3</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Secondary</td>
<td>2 8.0</td>
<td>11 44.0</td>
<td>6 24.0</td>
<td>6 24.0</td>
<td>0 0.0</td>
</tr>
<tr>
<td>University</td>
<td>0 0.0</td>
<td>5 62.5</td>
<td>2 25.0</td>
<td>1 12.5</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Occupation:</td>
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<td>Free work</td>
<td>1 4.3</td>
<td>9 39.1</td>
<td>9 39.1</td>
<td>4 17.4</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Official work</td>
<td>1 4.3</td>
<td>9 39.1</td>
<td>3 15.8</td>
<td>2 13.3</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Non-occupied</td>
<td>18 34.6</td>
<td>19 36.5</td>
<td>10 19.2</td>
<td>5 9.6</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Marital status:</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Married</td>
<td>14 25.5</td>
<td>22 40.0</td>
<td>15 27.3</td>
<td>4 7.3</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Divorced</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>0 0.0</td>
<td>3 100.0</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Widow</td>
<td>6 21.4</td>
<td>13 46.4</td>
<td>6 21.4</td>
<td>3 10.7</td>
<td>0 0.0</td>
</tr>
<tr>
<td>Single</td>
<td>0 0.0</td>
<td>2 50.0</td>
<td>1 25.0</td>
<td>1 25.0</td>
<td>0 0.0</td>
</tr>
</tbody>
</table>

Discussion

The aim of present study was to assess factors affecting QoL for patients with congestive heart failure. This aim was achieved through the present study findings and the research questions were answered. As yielded by the current study findings, the most common associated diseases with CHF were coronary artery disease, hypertension, angina pectoris, rheumatic fever, congenital heart disease, stroke, diabetes mellitus, renal failure, psychological stress, chest disease, and liver or viral disease. These findings were supported by American Heart Association [11].

The onset of the disease among the majority of the study samples were from more than one year, while Goreishia, Shajaria, and Mohammadi [12] were found that, two fifths of patients were discovered the disease from more than one year. It was noticed that, slightly less than one third of patients had a past family history. With respect, American Heart Association [11] stated that, the risk may be higher if there is a family history.

In the present study, the patients were reported that they had symptoms related to the disease as; lower limb edema, tachycardia, easy fatigability, chest pain, sleep disturbances, dyspnea, sputum, and skin discoloration. These findings were supported by Chen, Li, Zhu, and Cao [13]. The current study findings revealed that, one third of the patients under study were smokers. Webmd [14] was stated that, smoking is a risk factor for CHF. In addition smoking may lead to cardiovascular problems and CHF.

As shown by the current study, the main factors affecting the QoL of patients with CHF are physical problems, social problems, and psychological problems that could be attributed to the serious consequence effect of the debilitated disease. These results were supported by Chaniotis and Chaniotis [15], who was found that, the main factors affecting the QoL of patients with CHF are the difficulties occurring as the result of functional, cognitive, and emotional impairment, loss of independence depending on the stage of the disease, the level of support from both the family and the social environment.
The current study findings were in accordance with Jaarsma, Johansson, Ågren, and Strömberg [16], who were concluded that, the CHF has serious consequences for patients, often affecting not only physical dimensions of life, but also social and psychological dimensions [16]. Also, the present study findings are correspond with Jeon, Kraus, Jowsey, and Glasgow [17] who were conclude that, the CHF can severely affect people's QoL by reducing their independence and ability to undertake certain activities of daily living, as well as affecting their psychosocial and economic capacity.

From point of view of researcher; the patients with CHF are suffering from psychological problems could be due to their illness symptoms, and poor QoL; they may fear from and thinking about the complications of disease, hospitalization, and death. Depression can lead to increased symptoms of CHF, poorer functional performance, decreased QoL and an increased risk for premature death. In addition, physical symptoms such as; pain, dyspnea, and general weakness are representing a burden for work especially the work needs physical efforts.

The present study findings are supported by Dekker [18], who were mentioned that, depressive symptoms in patients with CHF were associated with number of contributing factors, including those not specifically related to their disease, and serious consequences that reduced their self-care ability and affect their QoL. In the current study, most of patients had sleep disturbance.

The present study showed a highly statistically significant relation between patients' age and factors affecting on QoL (p=0.001); the elderly patients at age group of (50-60 years) had poor QoL compared with younger patients, this result is similar to the result of Fares [19], who were showed a significant relationship between age and QoL. In respect, the current study finding is in disagreement with Dehkordi and Far [20] who was found that, there was no significant relationship between age and QoL. From point of view of the researcher, the elderly patients have weak muscles, need assistant from others more than younger patients, and don't have the ability to bear the burden. Also aging associated with subclinical dysfunction across multiple organ systems and leads to an increased risk for morbidity and mortality.

Regarding to the gender, the results of the current study were illustrated that, females were affected negatively QoL more than males, which agreement with Yaghoubi et al., [21], who were showed a significant relationship between sex and patients' QoL in a way that men's QoL is better in many aspects compared with that of women. On the other hand, Erceg et al., [22] were reported that, there was no significant relationship between sex and QoL. From a point of view of researcher, it may be a result of differences in biological and psychological characteristics of men and women. Also the reason of this fact especially in our society could be resulted from cultural differences, since men have more physical activity than women do and men are in communication with the society more than women are. Although hard physical activity could decrease the level of physical quality, lack of activity and functioning could also be a factor in decreasing QoL.

The present study was showed a statistically significant relation between patients' residence and factors affecting the QoL; patients who reside in rural areas had poor life than those reside in urban areas. This may be due to lack of facilities, medical centers, and lake of awareness about the disease nature, its complications, and who to deal with it. This result is in accordance with Kurpas, Mroczek, and Bielska [23], who found that, patients from rural areas consider their QoL is more severely decreased as compared to patients from urban areas.

Higher educational level and having a job had a positive effect in improving some aspects in patients' QoL in the current study with a statistically significant. These results are supported by Emad, Shdaifat, Mohd, and Manaf [24], who were stated that, there are factors improving patients' QoL such as high education, and having a job. From point of view of researcher, patients who had a higher educational level, have a good ability to adapt and coping with the disease, can read articles about CHF and how to improve the QoL, also extradite care from a cardiologist and nurse.

The results of the current study shows that, there was a highly statistically significant relation between patients' marital status and factors affecting QoL; married female are more affected by the factors, which influencing their QoL. These finding are similar to the findings reported by Yousefi, Sakineh, Sakineh, and Aliakbar [25]. While, Kato et al., [26] reported that, marital status had no influence on QoL. From point of view of researcher, married female may have children, and have responsibilities with them; they may have duties in the house like as cleaning, washing clothes, cooking, which need physical effort.
Conclusion:
Based on the findings of the present study, it can be concluded that:

The QoL for majority of patients with CHF (87.8%) is significantly affected negatively related to many factors; physical (chest pain, dyspnea, general weakness, and nausea and vomiting), psychological (sleep disturbances, cry, shyness, self-regard, anxiety, and depression), and social factors (work problems, home problems, and dependence on family members). Also, their QoL is affected by age, gender, residence, educational level, patients’ work, and marital status.

Recommendations:
Based on the findings of the present study, the following recommendations were suggested:

- It is advised to conduct health educational programs about lifestyle recommendations, complications as well as how to deal with their disease.
- Enhance patients’ knowledge about evidence based management, taking into consideration the studied factors for improving the QoL throughout educational programs, booklet, mass media, and articles.... etc.
- It is recommended to develop a strategies to improve the QoL in patients with CHF.

References
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