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The Relationship of Respecting Inherent Dignity with Anxiety, Depression, Stress and Quality of Life in Patients with Heart Failure

Kobra Salehi [1], Farimah Shirani [2], Vajihe Atashi [3,*] and Somayeh Ghafari [4]

[1]Midwifery and Reproductive Health Department, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran
[2]Cardiac Rehabilitation Research Center, Cardiovascular Reasearch Institute, Isfahan University of Medical Sciences, Isfahan, Iran
[3]Adult Health Nursing Department, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran
[4]Nursing and Midwifery Care Research Center, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran

[*]*Corresponding author*: School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran. Email: vajiheatashi@gmail.com

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Abstract

Background: Respecting inherent human dignity has a prominent role and is of great importance in health care discussions. Respect for people's dignity is the basis of nursing care and is a step toward increasing patients' satisfaction with the services provided by the staff.

Objectives: The present study aimed to investigate the relationship of respect for dignity with anxiety, depression, stress and quality of life in patients with heart failure.

Methods: This is a descriptive analytic study. The study population consisted of the patients with heart failure hospitalized at Isfahan University of Medical Sciences from 2017 to 2018. In this research, samples were selected through purposive sampling, consisting of 150 patients with heart failure from the research population. Then personal characteristics questionnaire, Inherent Dignity questionnaire (IDQ), Minnesota Living with Heart Failure questionnaire (MLHF), as well as Depression, Anxiety, Stress scale (DASS) were completed by samples. Statistical analysis was performed using descriptive statistical methods, Pearson's correlation coefficient, one-way ANOVA and independent *t*-test.

Results: The mean total score for patients' inherent dignity was 102.21 out of 144, with a standard deviation of 17.92. Pearson correlation coefficient showed that the total score of the patients' inherent dignity had no significant relationship with age ($P = 0.57$) and the number of heart failure-related hospital admissions ($P = 0.71$). Pearson correlation coefficient showed that the total score of the patients' inherent dignity had an inverse relationship with their scores of the quality of life ($P = 0.002$), depression ($P = 0.004$), anxiety ($P = 0.001$), and stress ($P < 0.001$).

Conclusions: Considering the fact that nowadays the improvement of service quality is one of the priorities of healthcare and, on the other hand, as research findings show, respecting the dignity of heart failure patients plays an important role in reducing stress, anxiety, and depression as well as increasing the quality of life, these results can be used in planning to support and improve the treatment, and the care provided for patients, and to guide the future researches regarding the inherent dignity of these patients.

Keywords: Dignity, the Quality of Life, Anxiety, Stress, Depression

1. Background

Chronic patients may be considered one of the most vulnerable social groups, as patients not only lose the physical skills they once possessed as a healthy person but also undergo psychological, social and economic tensions they face in the course of illness (1). Among chronic diseases, heart failure is considered one of the most significant cardiovascular disorders and one of the main issues of the present century. It is the most common cause for hospitalization of patients over 65 years of age (2). Approximately, 15 million people in the world are affected by heart failure (3). According to the World Health Organization (WHO), the annual incidence of this disease in the world is estimated to be 660,000 per year, and it is expected to double in the next 30 years (4). According to the latest investigation done by the Iranian Ministry of Health and Medical Education, the prevalence of this disorder is 10% in the population over the age of 60, and its mortality rate in Iran is 2 times higher than in Asia (5).

Heart failure has a much more severe impact on the quality of life than other chronic diseases such as arthritis and chronic obstructive pulmonary diseases, due to its debilitating complications, leading to the destruction of the individual's functional roles in social, familial, and marital relationships and disturbance in professional perfor-

mance (6). Moreover, patients with heart failure live with disabilities caused by their disease for a longer period of time in comparison to patients with cancer. Many patients, especially at the final stages of the disease, suffer from distress and poor control of their symptoms (7). Depression and anxiety, are symptomatic scenarios often observed in patients with heart failure. These comorbidities complicate the therapeutic approach and increase hospitalizations and mortality rate (8). Depression affects at least one-fifth of patients with heart failure. Depression affects these patients two to three times more than the general population (9). Anxiety is another often overlooked symptom, increasing the hospitalization and mortality rates. Anxiety can negatively affect the quality of the breath, creating panic and chest pain, and exacerbating the symptoms of heart failure (10). The current literature does not exhaustively discuss the reasons for the presence of the anxiety; anyway, anxiety can be probably correlated with a dysfunction of the hypothalamic-pituitary-adrenal axis, usually observed even in heart failure (11). Depression and anxiety negatively affect the quality of life and functional status of the patient, decreasing the level of physical activity and worsening the survival rate (12).

Therefore, the primary goal of caring for patients with heart failure is to increase their life expectancy and the quality of life (13). In order to provide proper care, caregivers need to establish an honest relationship with the patients, respect their individual and professional rights and values, and pay attention to individual differences (14).

One of the factors that can affect the outcomes of chronic diseases, such as heart failure, is respecting the patient's human dignity. On the basis of human dignity, which is also referred to as "basic dignity" or "inherent dignity", all human beings are created free and equal in terms of dignity and rights, and they all possess this type of dignity equally (14). In fact, respect for inherent human dignity means respect for their basic rights in different environments. As inherent dignity is equal to all humans, it cannot be the source of social inequalities; therefore, it is the basis of legal rules. Human dignity or inherent dignity is related to the existence of each individual and his/her being a human, and is referred to the care system more frequently (15). Human dignity plays a prominent role and is of special importance in health care discussions, as well as in health equity issues (14). In its reports, WHO has also emphasized the importance of respect for human dignity as the basis for peoples' health and the improvement of patients' health (16). Dignity is a fundamental and important concept in nursing, and the central aspect of nursing care. The main focus of nursing is respecting human dignity, which is independent of their nationality, race, religion, skin color, age, gender, or sociopolitical status (17).

Respecting patients' dignity plays an important role in their treatment and in improving their quality of life (18). Dignity is respected when a person is able to have control over his or her behaviors and the surrounding environment, receive information and make decisions, and feel comfortable with his/her physical and mental conditions. Self-respect, self-esteem, and privacy are the most important parameters with which the concept of dignity can be explained (19).

If the patient's dignity is respected, he/she will feel empowered and have a positive image of himself/herself. In this case, one may feel valued, his/her self-esteem will be increased and may feel more respect for oneself and others. On the contrary, if his/her dignity is not respected, one may get depressed and feel a loss of control (20, 21). Therefore, identifying and improving patients' dignity can enhance their trust and satisfaction with the provided care, reduce the length of hospitalization and increase their health outcomes, and on the other hand, ignoring patients' dignity can weaken their health in both physical and mental aspects (16, 17).

According to the searches made in various databases, most of the conducted researches have examined patients' dignity and privacy in the healthcare environment and have not mentioned the relationship of dignity and the quality of life with mental health. For example, in a study conducted by Ferri et al. (22), the patients' view on respecting their dignity in the hospital was examined. In another study conducted by Sabatino et al. (23), the nurses' perspective on respecting patients' dignity in the healthcare environment was examined.

2. Objectives

On the other hand, due to the increasing incidence of heart failure in Iran, the present study aimed to determine the relationship of respecting dignity with the quality of life, stress, anxiety and depression in these patients, so that the findings of this research will pave the way for intervention plans in this regard while supporting the patients with heart failure.

3. Methods

This is a descriptive analytic cross-sectional study. The study population consists of the patients with heart failure hospitalized in the Cardiology Ward of the Heart Specialist Hospital Affiliated with the Isfahan University of Medical Sciences from 2017 to 2018. In this research, samples were selected through convenience sampling method, based on the inclusion criteria. The sample size was determined

based on similar studies (14) and the sample size formula $N = \frac{(Z1+Z2)^2(1-r^2)}{r^2} + 2$, where Z1 is the confidence level of 95%, equal to 1.96 and Z2, is the power factor of 80% equal to 0/84. R is an estimation of the correlation coefficient of the dignity score with stress, anxiety and depression, which was considered to be at least 23%. The minimum sample size for this study was calculated to be 142, which was considered to be 180 from the beginning, regarding a drop rate of 20% in the samples. Finally, 30 people were excluded due to the lack of cooperation in completing the questionnaires and a sample of 150 people was selected from the research population. The diagnosis of heart failure was done by a cardiologist in all participants. The inclusion criteria consisted of having class 2 to class 4 heart failure according to New York Heart Association Functional Classification, being capable of speaking Farsi, and being interested in participating in the study. The patients were of both genders.

It should be noted that the New York Heart Association (NYHA) classification provides a simple way of classifying the extent of heart failure. It classifies patients into one of four categories based on their limitations during physical activity; the limitations/symptoms are in regard to normal breathing and varying degrees in shortness of breath and or angina pain. The NYHA classification consists of the stages of heart failure as the following: class I, no symptoms and no limitation in ordinary physical activity, e.g. shortness of breath when walking, climbing stairs etc. Class II, mild symptoms (mild shortness of breath and/or angina) and slight limitation during ordinary activity. Class III, marked limitation in activity due to symptoms, even during less-than-ordinary activity, e.g. walking short distances (20 - 100 m). Comfortable only at rest. Class IV, severe limitations (14).

The data gathering tool included a demographic questionnaire about age, gender, and the duration of illness, the severity of illness, hospitalization times, educational level and smoking. In addition, the Inherent Dignity questionnaire for heart failure patients, Minnesota Living with Heart Failure questionnaire (MLHFQ), and the DASS-42 questionnaire were used.

The Inherent Dignity questionnaire is a questionnaire consisting of 24 items and the three dimensions of "the inherent dignity in family", "the inherent dignity in the community" and "the inherent dignity in healthcare environment". The questionnaire is a 6-point Likert scale (strongly agree, agree, quite agree, quite disagree, disagree and strongly disagree) and with the scores ranging from 1 to 6 for each item, where 1 stands for strongly disagree, and 6 for strongly agree. The mean total score of the questionnaire falls between 24 and 144. This questionnaire has been developed by Bagheri et al. in 2013. The reliability of the Inherent Dignity questionnaire has been estimated to be 0.94 by calculating the Cronbach's alpha coefficient, and 0.96, using the split-half method (24).

The Depression Anxiety Stress scale (DASS-42) was used to investigate the stress, anxiety and depression in patients. The questionnaire consisted of 42 items, 14 of which related to depression, 14 related to anxiety, and 14 related to stress in patients. The total score of the questionnaire ranges from 0 to 82. This scale can diagnose and screen the symptoms of anxiety, depression, and stress over the past week. There are 4 choices for each item. The responses range from never to always, and scores, from 0 to 3. For depression, a score of between 0 - 9 is considered normal, and a score of higher than 28 considered very severe. Anxiety is normal with a score of 0 to 7, and very severe for 20 and higher. For stress, the score of 0 - 14 is considered normal, and the score of 34 and higher considered very severe. In various studies, its validity and reliability have been confirmed (25-27).

The Minnesota Living with Heart Failure questionnaire (MLHFQ) was another tool used in this study. This questionnaire is specifically designed to assess the quality of life in heart failure patients and consists of 21 items, each of which has 6 criteria, and being scored from 0 to 5. This questionnaire assesses patients' perception of heart failure impacts on physical (12 items), socioeconomic (4 items), and psychological dimensions (5 items). The questionnaire items are related to the symptoms of the disease (physical symptoms such as dyspnea, fatigue, peripheral edema and sleep disorders; psychological symptoms such as depression and anxiety; social relationships such as physical, sexual and occupational activities). Patients answered 21 questions. Each question has 6 criteria ranging from zero to 5 have been scored. Zero was considered the best case and number 5 was considered the worst case, so the minimum score from this questionnaire, zero and maximum will be 105 and higher patient's total score will indicate a poorer quality of life. This tool was developed by Rector in 1984 (24). In Rector's study, the reliability of the tool is reported to be 0.94 (28-30). In most studies, its reliability and validity have been confirmed and the Cronbach's alpha had about 0.9 (31, 32). The validity of the Persian version of the Minnesota questionnaire in Eskandari et al. (33) was assessed using content validity. Also, the reliability of the MLHFQ has been estimated to be 0.96 by calculating the Cronbach's alpha coefficient, and 0.96, using the split-half method.

4. Results

Based on the results of this study, 65 of the patients (43.3%) were female and 85 of them (56.7%) were male. The patient's age ranged from 25 to 93 years of age, with a mean of 58.72 and a standard deviation of 12.53 years. Meanwhile, the mean number of patients' hospitalizations in the hospital due to heart disease was 3.39 with a standard deviation of 3.74. Table 1 shows the individual characteristics of the present study samples. The mean total score of patients' inherent dignity was 102.21, with a standard deviation of 17.92. The results of the study showed that the highest mean score is related to the dimension of "inherent dignity in family" and the lowest mean score is related to the dimension of "inherent dignity in a healthcare environment" (Table 2).

Pearson's correlation coefficient showed that the total score of patients' inherent dignity has an inverse relationship with the score of disorders in the quality of life (r = -0.247, P = 0/002), depression (r = -0.237, P = 0.004) anxiety (r = -0.257, P = 0.001) and stress (r = -0.284, P $\leq$ 0.001). In other words, with an increase in the score of patients' inherent dignity, the quality of life in patients has improved, and their depression, anxiety, and stress have decreased.

One-way ANOVA showed that there was a significant difference between the mean total score of patients' inherent dignity and their marital status (P = 0.04). The LSD post hoc test showed that the mean total score of patients' inherent dignity was significantly lower in unemployed patients than in three groups of the self-employed, retired, and housewives (P = 0.03). However, there was no significant difference between other occupations (P > 0.05). The LSD post hoc test showed that the mean total score of the inherent dignity in single and divorced patients was significantly lower than married patients (P = 0.04). There was no significant difference between other marital statuses though (P > 0.05) (Table 3). No significant correlation was found between the total score of the inherent dignity and other individual characteristics of research participants.

Table 1. Distribution of Demographic Variables in Patients with Heart Failure[a]

Characteristics	Values
Marital status	
Single	15 (10)
Married	117 (78)
Widowed	14 (9.3)
Divorced	4 (2.7)
Educational status	
Illiterate	56 (37.3)
Elementary	23 (15.3)
Guidance	27 (18)
Diploma	29 (19.4)
Academic	15 (10)
Occupational status	
Employee	5 (3.3)
Nongovernmental job	35 (23.4)
Retired	33 (22)
Unemployed	23 (15.3)
homemaker	54 (36)
Place of living	
City	118 (78.8)
Village	32 (21.3)
Duration of the disease	
< 1	55 (36.7)
1 - 5	47 (31.3)
6 - 10	20 (13.3)
> 10	28 (18.7)
Severity of disease (LV ejection fraction), %	
40 - 50	64 (42.7)
20 - 40	70 (46.7)
< 20	16 (10.6)
Smoking	
Used	28 (18.7)
Not used	122 (81.3)
Underlying disease	
Yes	81 (54)
No	69 (46)

[a]Values are expressed as No. (%).

5. Discussion

The purpose of this study was to investigate the relationship of respecting dignity with anxiety, depression, stress, and the quality of life in patients with heart failure. In this study, 150 patients with heart failure were studied.

The mean of the patients' total score of the inherent dignity was 102.12 with a standard deviation of 17.92, indicating moderate dignity in cardiac patients. Chochinov et al. (34) conducted a similar study on 211 patients with cancer over the age of 18 and examined the level to which the patients' dignity was threatened in four dimensions: physical, mental, social, and existential. The average score was calculated to be 16 out of 22 (34). In other words, the patients' dignity has been low threatened, which is not consistent with the results of this study. One of the rea-

Table 2. Mean Total Score of Patients' Inherent Dignity in Patients with Heart Failure

Dimensions of Patients' Inherent Dignity	Values	Lowest	Highest
Inherent dignity in the family	42.35 ± 7.54	22	54
Inherent dignity in community	33.57 ± 6.46	16	48
Inherent dignity in healthcare environment	26.29 ± 7.03	7	42
Total score	102 ± 17.92	49	144

[a]Values are expressed as mean ± SD.

Table 3. The Mean Total Score of Patients' Inherent Dignity and Their Demographic Characteristics in Patients with Heart Failure[a]

Characteristics	Values	r	P
Occupational status			0.03
Employee	99.60 ± 14.52		
Nongovernmental job	105.09 ± 18.10		
Retired	105.42 ± 16.27		
Unemployed	93.35 ± 22.69		
Homemaker	101.96 ± 16.24		
Marital status			0.04
Single	94.33 ± 17.20		
Married	103.82 ± 17.95		
Widowed	99.64 ± 18.90		
Divorced	93.50 ± 5		
Smoking			
Used	100.54 ± 18.59		
Not used	102.59 ± 17.82		
Place of living			
City	102.19 ± 17.47		
Village	102.28 ± 19.81		
Educational status		0.085[b]	0.30
Duration of the disease		-0.005[c]	0.95
Severity of disease (LV ejection fraction)		0.149[b]	0.07

[a]Values are expressed as mean ± SD.
[b]Spearman's correlation coefficient.
[c]Pearson's correlation coefficient.

sons for this difference in the results can be the type of research community. In the current study, the research population was patients with heart failure, but in the research of Chochinov et al. (34), the research population was the patients with cancer at the final stage. In addition, the dimensions of patients' dignity in the research of Chochinov et al (34) included physical, mental, social and existential. However, in the present study, the questionnaire's dimensions are "the inherent dignity in the family", "the inherent dignity in the society" and "the inherent dignity in health care environments". Jacelon et al. (35) reported the score of perception of 19 elderlies over 65 to be at a moderate level using the scale of dignity attributed in three dimensions (self- worth, self-respect and respect for others). The results of the present study are confirmed by the results of the study conducted by Jacelon et al. (35), although the research population in the present study is different, the dimensions of dignity measurement tools are overlapping in these two studies.

The findings of this study showed that there is a significant relationship between marital status and respecting inherent dignity; married patients had a higher average of dignity score than single and divorced patients. This could be due to the high sensitivity of married people to respecting their dignity or the staff's paying more attention to respecting dignity and privacy of these individuals. The results of the present study are similar to those of the study conducted by Bagheri et al. (14). Moreover, Ross et al. (36) found out that being married improves the mental state of patients and thus enhances their dignity.

In this research, there was a significant relationship between the employment status of the patients and respecting their dignity; the employed individuals had a higher score than the unemployed ones. Unemployed people experience a greater degree of dependence on others, and eventually, their dignity will be decreased. The results of the present study are consistent with the results of Amininasab et al. (37). It seems that economic and employment statuses are among the most important requirements in feeling and perceiving dignity respect in these patients (37). Employed people experience a greater sense of independence, and eventually, their dignity will enhance (14).

Based on the results of the present research, the highest mean score belongs to the dimension of the inherent dignity in the family. This means that patients' dignity is respected more in the family. The reason is that in the countries with Islamic culture, like Iran, health and illness are looked upon as divine blessings, and also the aspect of the human's existence or the inherent dignity of individuals and the family as one of the dimensions of the Inherent Dignity questionnaire is given special significance. That is why when a family faces situations like illness, their communication, respect, and support for each other will increase and the existence of such a culture of promoting the patients' dignity and supporting them contributes to the development of their dignity (21).

Findings show that the lowest mean score belongs to the dimension of the inherent dignity in health care environments. This means that not enough attention is paid to patients' dignity and privacy in medical settings like hospitals. In a study conducted by Amininasab et al. (37),

the results showed that the human dignity score is low in medical environments. Researchers' investigations in other parts of the world similarly show an inappropriate level of respect for patients' dignity. In this regard, researches such as Ferri et al. (22) and Tauber-Gilmore et al. (38) showed that patients believe that their health care providers do not respect the patients' privacy and dignity as well as they are expected to. This issue may be the result of health care providers' lack of awareness in this regard (39). For example, cases such as asking the patient personal questions in the presence of other patients, not caring to cover the patient's body, interviewing and consulting the patient in a public room along with other patients lead to not respecting the privacy of patients and, as a result, puts their dignity and respect at risk (40). Gallagher et al. (41) also believe that nurses will seriously threaten human dignity in cases such as leaving patients in bed or dirty clothing, not spending enough time to help patients put on their clothes, or not caring about patients wearing improper and untidy clothes. When patients are admitted to a ward, they expect their privacy and dignity to be respected. Respecting privacy is one of the essential components of holistic care in meeting individual needs. This practice gives patients dignity and creates a range of mutual trust; a safe environment leads the patient to physical and mental health and accelerates recovery and early discharge from the hospital (23).

According to the results of the present study, with the increase in the patients' score of inherent dignity, their quality of life will be improved and their depression, anxiety, and stress will be decreased. In patients with heart failure, due to the illness's becoming chronic and the lack of a certain treatment, patients will be affected by fatigue, anxiety, stress and hopelessness. The use of multiple medications, the symptoms and physical discomfort, and the feeling of being dependent on others in these patients can threaten their quality of life and, ultimately, their human dignity (21). Respecting patients' dignity is really essential in establishing effective communication between the patient and the health care staff as well as maintaining the patient's comfort. On the other hand, the consequences of not respecting the patient's dignity are greatly noticeable and too unpleasant. Hiding parts of the history of the illness, refusing physical examination, increasing anxiety, stress, as well as provoking aggressive and violent behaviors are among these consequences (23, 42). When patients with heart failure feel the lack of supportive communication, they feel that they are losers in these supportive communications, so they feel hopeless and depressed (38). Respecting patients' dignity leads to stress reduction, an increase in their trust in care services, their satisfaction with nursing care, a reduction in the length of hospital stay, and ultimately, improving their quality of life (43). Not respecting patients' dignity, in spite of providing them with special care, may consciously or unconsciously cause anxiety and stress in patients (37). If patients with heart failure are treated respectfully and with bonhomie by care providers, they will feel comfort, hope, and reassurance (19). In nursing care, if the patient is not respected, his/her ability to take care of himself/herself is denied, his/her privacy is invaded and he/she is not assured, the recovery process will face difficulties because the individual will be hurt mentally, which will be irreparable. Respecting the individual and allowing him/her to take care of himself/herself are the signs of desirable nursing (12). When the patient feels he/she is respected, in threatening and agitating situations, he/she will feel safe through placing trust in the health care team, and as a result of this care, his/her stress and anxiety will decrease and his/her quality of life will be improved (19). The main limitation of this study might be that patients' responses do not reflect true feelings, especially their unpleasant experiences. Another limitation of this study was convenience sampling method which affects the generalizability of the findings.

5.1. Conclusions

Respecting patients' dignity reduces their stress, anxiety, and depression and ultimately improves their quality of life. However, as the results of the present study show, patients' dignity is hardly respected in health care environments. Therefore, it is suggested that some strategies may be modified in order to ensure the respect for patients' dignity in health care environments. Besides, it is recommended that students and nurses take part in workshops and training courses in order to get more familiar with the concept of dignity. Moreover, it is especially suggested that the subject of respecting patients' privacy and dignity may be included in the systematic education of nursing students in colleges. In addition, tactful managers must be chosen at all levels in order to support patients' dignity's being respected by enforcing the laws regarding patients' dignity and through careful monitoring and following up on the implementation of the proposed strategies. Ultimately, while designing care environments and providing the facilities and equipment, enough attention must be paid to respecting patients' privacy.

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Footnotes

Authors' Contribution: Study concept and design: Vajihe Atashi and Kobra Salehi. Analysis and interpretation of data: Vajihe Atashi and Kobra Salehi. Drafting of the manuscript: Kobra Salehi. Critical revision of the manuscript for important intellectual content: Somayeh Ghafari, Farimah Shirani, and Vajihe Atashi. Statistical analysis: Kobra Salehi.

Conflict of Interests: The authors declare that there is no conflict of interests with respect to this publication.

Ethical Approval: Permission was obtained from the authorities and the Ethics Committee of Isfahan University of Medical Sciences (code: IR.MUI.REC.1395.307), introduction to hospital authorities was done, and the research goals were explained to the patients before the initiation of the study.

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