Predictors of Perceived Quality of Care in People with Heart Failure

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Abstract: Understanding patients' perception of quality of care is a crucial step in improving healthcare service, but understanding patients' experiences of quality of care is limited, including those with heart failure. This predictive descriptive study aimed to: describe perceptions of quality of care among people with heart failure and determine factors influencing their perception of quality of care including preferences for participation in care, symptom distress, and patient-related factors of age, gender and education. Convenience sampling was used to recruit 92 participants with heart failure at one tertiary university hospital in Bangkok, Thailand. The measures used were Personal Characteristics Questionnaire, Control Preference Scale, Memorial Symptom Assessment Scale-Heart Failure and the Quality of Care from Patients' Perspectives Questionnaire.

The results revealed that most participants reported balanced-high quality of care. The most distressing symptom was difficulty when lying flat, and symptom distress and preference for participation in care were significant predictors of patients' perception of quality of care. Participants with high preference for participation (passive-shared, collaborative) perceived quality of care lower than participants with low preference for participation (passive). The findings of this study can be used to design nursing intervention programs for managing symptom distress and promoting patient participation in care to improve perceived quality of care among patients with heart failure during hospitalization.

Pacific Rim Int J Nurs Res 2019; 23(1) 87-99

Keywords: Care participation, Heart failure, Patient-related factors, Quality of care Symptom distress

Received 3 November 2017; Accepted 24 April 2018

Introduction

Heart failure (HF) is an increasingly prevalent health problem that affects 1-3% of the global adult population (over 26 million people).[1] In Thailand HF exerts a major burden on health resources; despite low prevalence of 0.4% of the adult population, it accounts for 19% of total hospitalizations,[2] with high rates of readmission.[3] High rates of readmission for HF are associated with the progression of the underlying

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disease and the reporting of poor perceived quality of care (QOC) during hospitalization.[4]

The World Health Organization[5] (WHO) considers QOC to be a serious concern even in well-developed heath care systems. According to WHO, QOC is defined as "the extent to which health care services provided to individuals and patient populations improve desired health outcomes" (p.9[5]). QOC is, therefore, an essential element to achieve successful outcomes in patient care. Importantly, patients as service users are considered as a vital source of information for reflecting the existing care received.[6] QOC from patients'perspectives is the most influential component and is increasingly used as an indicator of QOC in general.[6-8] Studies consistently support that improved patient perception of QOC is associated with higher QOC.[4, 9-11] Better perceptions of QOC are associated with shorter length of stay[10] and lower risk of hospital readmission.[4, 11]

QOC is a multidimensional concept in its nature, and the relative importance of its dimensions vary according to the context, such as in terms of time and culture; the individual, organizational or social levels; and the perspectives involved, including those of patients, relatives, medical personnel, policy makers and researchers.[7, 8]

Patients'perceptions of QOC have been widely studied in many populations such as cancer,[12, 13] and diabetes.[14] However, there is a dearth of research on persons with HF perceived QOC, despite HF being one of the most prolific critical challenges facing hospitals.[2] Moreover, many studies evaluated the service care quality in terms of satisfaction with care,[15-17] which may have different meanings, and global satisfaction questions cannot measure all important aspects of perception of QOC.[18]

Previous studies found that perception of QOC was influenced by individuals'preferences for participation,[15, 19] person-related factors and illness characteristics such as age,[17, 20] gender,[17, 20, 21] education,[20] and symptom distress.[12,16,22] However, research findings have been inconclusive across research studies to date. Knowledge regarding QOC from persons with HF perspectives is very limited. Furthermore, no reports of perceived QOC and its influencing factors conducted among Thai persons with HF were found. Thus, the current study investigated the perceived QOC and the factors influencing it in Thais with HF during hospitalization in order to address this research gap.

Conceptual Framework and Review of Literature

The conceptual framework used to guide this study was based on the theoretical model for QOC from patients' perspectives developed by Wilde,[8] and the literature review of patients' perceived QOC. This model was formative in shifting the measurement of QOC away from health professionals' evaluation toward patient perceptions, which has subsequently guided research in numerous patient populations, such as diabetes,[14] palliation,[23] and operative.[24] According to Wilde,[8] QOC from patients'perspectives is formed by patients' norms, expectations and experiences and by previous and current encounters with care. The two core elements of this model are patients' preferences and resource structure of care organization. The resource structures are person-related qualities pertaining to the caregivers, and physical and administrative environmental qualities that refer to infrastructural components of the care environment, such as organizational rules and technical equipment. Patients' preferences consist of a rational aspect that refers to the patient's wish for order, predictability and calculability in life, and a human aspect that refers to the patient's expectations that her/his unique situation is taken into account.[8] In the context of patients with HF receiving care during hospitalization, patients' preference refers to their expectations of wanting to take a role in their situation at a particular level; for instance, some patients benefit from more active participation in hospital care, such as contributing to their care plan, in terms of improving their perceived QOC.[15] Patients' preferences for participation in their own care has been increasingly recognized as a key component for QOC improvement to date.[25] Patients who prefer to actively participate in treatment tend to rate their QOC as better than patients who prefer passive participation,[19] although some studies were reported that preference for participation in care was not associated with perception of QOC in persons with cancer.[12, 13] However, there is a lack of data accordance with preference for participation in care on persons with HF focusing on their perception of QOC. Moreover, patients' preference for participation in care is highly subjective, depending on the context and circumstance.[25] Therefore, the influence of patients' preference for participation in care on patients' perception of QOC among Thai persons with HF is an interesting and important research area that needs further exploration.

Previous studies indicate patients' perception of QOC differs according to patient-related characteristics such as age,[17, 20] gender,[17, 20, 21] education,[20] and illness-related factors such as symptom distress.[12, 16, 22] Older patients have a more positive perception of QOC.[20, 21] Females tend to rate QOC higher than males,[20, 21] and patients with higher education tend to rate QOC lower than patients with lower education.[20] Low symptom distress is generally associated with improved perceptions of QOC.[16, 22] However, QOC from persons with HF perspectives has received little scientific attention. Consequently, this study aimed to describe perception of QOC, and investigate the predictive relationship of patients' preference for participation in care, symptom distress, age, gender, education and perceived QOC in persons with HF during hospitalization.

Methods

Design: A predictive descriptive study.

Sample and Setting: The sample size was estimated using the G* power program version 3.1. Based on previous similar studies[19, 26] the average probability of perceived high QOC was 0.77 and odd ratio was 2.93. In this study, using an alpha of 0.05, and power of 0.90, the estimated required sample size was 94. Two medical units at one tertiary university hospital in Bangkok, Thailand were used to collect data. Convenience sampling was used based on the following inclusion criteria: aged 18 years and older, admitted at least three days before collecting data (in order for them to have sufficient exposure by which the meaningfully evaluate QOC) and with stable symptoms on the day of data collection (to avoid any burden or distress for participants). Participants with documented psychiatric illness and/or severe complications were excluded.

Initially, 96 in-patients with HF were invited to participate. One potential participant declined due to discomfort in answering the Quality of Care from Patients' Perspectives (QPP) Questionnaire. Three participants were excluded before completing the QPP questionnaire as they died during the data collection period. Over nine months of the data collection period only 92 participants were finally able and eligible to be included. The final sample of 92 was sufficient to determine the factors influencing perception of QOC in persons with HF with power equal to 0.973, giving an alpha of 0.05 by G* power program. Thus, the sample used in this study was 92.

Ethical Considerations: This study was conducted with the approval of the Ramathibodi Hospital Institutional Review Board (Certificate of Approval no. MURA2015/157). Each potential participant was informed regarding the study objective, their right to withdraw, and assurance of privacy and confidentially. Those who agreed to participate were asked to sign consent form.

Instruments: The instruments for data collection were: (1)The Personal Characteristics Questionnaire; (2) The Control Preference Scale (CPS); (3) Memorial Symptom Assessment Scale-Heart Failure (MSAS-HF); and (4) The Quality of Care from Patients' Perspectives (QPP) Questionnaire.

The Personal Characteristics Questionnaire was developed by the principal investigator (PI) to gather general demographic information concerning age, gender, education, medical payments, cause of admission, underlying disease, and New York Heart Association (NYHA) classification at admission and the data collection time. Age was measured by participants' self-reported age in years. Education referred to the highest educational level obtained.

The CPS developed by Degner et al.,[27] consists of one item with five statements indicating varying degrees of preference for participation in care. Participants were asked to choose the statement which represents their preferred role for participation in care from passive =1, passive-shared = 2, collaborative=3, active-shared=4, and active participation=5. The Thai version of the CPS was translated and verified using the back-translation method by Pongthavornkamol et al.[12] and has been used in populations with cancer during hospitalization. It has high (acceptable) validity with a test-retest value of 1.0.[12] For this study, the test-retest was used to examine reliability among 10 participants. The test-retest value of CPS was 0.98.

MSAS-HF was modified from the original MSAS by Zambroski et al. for persons with HF. MSAS-HF measures the distress associated with 32 symptoms.[28] For the Thai version, the translated and back-translated process by Suwanratsamee et al. was used.[29] Participants were asked to respond "yes" or "no" regarding whether they experienced each symptom during the past week before collecting data. A positive response to any given symptom led to a request to rate the distress of the respective symptom. The level of symptom distress was rated on a 5-point Likert scale ranging from "0 = not at all" to "4 = very much". To obtain a total score, the values for symptom distress were summed and the average was calculated, whereby higher mean scores indicate greater symptom distress.[28] MSAS-HF was pilot-tested with 10 participants, and found to have internal consistency reliability with a Cronbach's alpha coefficient of 0.72 for symptom distress. For the main study, the Cronbach's alphas coefficient was 0.78.

The Short-Version QPP was developed by Wilde-Larsson and Larsson.[30] For the Thai version, the QPP was translated into Thai using the back-translation process by Pongthavornkamol et al.[12] QPP assesses patients' perceptions of QOC using 24 items. Evaluation is performed based on the patient's perception in two parts: (1) perceived reality of QOC (PR), which represents patients' perceptions of the actual care received; and (2) subjective importance of care (SI), which represents the relative importance of various aspects of care for individual patients.The items cover four dimensions: the medical-technical competence of the caregivers, the care organization's physical-technical condition, the identity-orientation approach of the caregivers, and the care organization's socio-cultural atmosphere (**Table 5**). To measure perception of QOC, perceived reality (PR) was measured using a 4-point Likert scale ranging from "1 = do not agree at all" to "4 = fully agree". For subjective importance of care (SI), a 4-point Likert scale was used ranging from "1 = of little or no importance" to "4 = of the very highest importance". The four QPP dimension scores were calculated by summing the raw scores for each dimension (PR and SI) and dividing it by the number of items in each dimension. In order to derive a score representing the overall perception of QOC, the Personal QOC Index (PQI) is calculated based on the rank order of the combination between SI and PR part. PQI for every item is then summed and the level of QOC assessed into one of seven categories ranging from "1 = inadequate quality" to "7 = excess quality".[31] For dichotomous outcome, variables reflecting high or low perception of QOC were performed on PR, according to the median: scores below or equal to the median formed a low category and scores above the median formed a high category.[32] A Cronbach's alpha coefficient was 0.94[12] for the Thai version of QPP. For this study, QPP was pilot-tested with 10 participants, obtaining Cronbach's alpha coefficients of 0.96 for PR and 0.91 for SI.

In the actual study, the Cronbach's alpha coefficients were 0.91 for PR and SI.

Data Collection: Before approaching the participants, PI collected information regarding their health status from their medical record, then potential participants according to the inclusion criteria were approached by the PI at their bedside and the objectives and nature of the study were explained. Those who were willing to participate were asked to sign the informed consent form. Participants were instructed to complete Personal Characteristics Questionnaire, CPS, and MSAS-HF by themselves after 3 days of hospitalization. Each participant completed all three instruments within 30-45 minutes, then the PI retrieved the complete questionnaires and checked to verify the completeness of data. When missing data items were identified, the PI asked the respective participant to respond. QPP questionnaires were given to the participants on the day of discharge. The PI coded the number of QPP questionnaire matching with the three instruments which were completed. The participants were instructed to complete the questionnaires by themselves and return it in a sealed envelope by mail within two weeks. After the first week the PI followed up by telephone. If the QPP questionnaire was not returned within the stipulated fortnight, follow-up strategies at OPD were employed to ensure all QPP questionnaires were returned. If missing data were identified, the PI asked the participants to respond by telephone or during the follow-up visit at OPD.

Data analysis: Descriptive statistics including frequencies, percentages, means, and standard deviations were used to describe personal characteristics, preference for participation, symptom distress, and perception of QOC. Logistic regression was used to determine factors influencing perception of QOC. Prior to logistic regression analysis, the multicolinearity was tested among five independent variables comprising age, gender, education, symptom distress, and preference for participation in care. This assumption was accepted by tolerance close to 1 and IVF not exceeding 2, indicating five independent variables were not highly correlated with one another. Univariate logistic regression analysis was used to screen the influencing of five independent variables on perception of QOC, then the variables with a p-value < 0.25[33] were included in multivariate analysis by the enter method. Age and symptom distress were coded as a continuous variable, while gender, education, and preference for participation were coded as a categorical scale.

Results

Participant characteristics: There were 92 participants in this study and 50% were male. The largest proportion of participants were primary school educated. The majority were married and Buddhists. At the time of data collection, most participants had NYHA functional class II (**Table 1**).

Table 1 Demographic and clinical characteristics of the participants (n=92)

Demographic	N	(%)	Clinical	N	(%)
Gender			**NYHA at admission**		
Male	46	50	I	-	-
Female	46	50	II	2	2.2
Age			III	43	46.7
Range = 27-87 years			IV	47	51.1
Mean = 68.2					
S.D. = 11.14					

Table 1 Demographic and clinical characteristics of the participants (n=92) (Cont.)

Demographic	N	(%)	Clinical	N	(%)
Ethnicity			**NYHA at the time for collecting data**		
Thai	91	98.9	I	8	8.7
Other	1	1.1	II	72	78.3
Marital status			III	12	13.0
Single	7	7.6	IV	-	-
Married	64	69.6	**Cause of admission**		
Widow	21	22.8	Dyspnea	65	70.7
Education attained			Chest pain	17	18.5
No study	4	4.3	Fever	7	7.6
Primary school	40	43.5	Others	3	3.3
Secondary school	17	18.5	**Co-morbid disease**		
Diploma	10	10.9	No	3	3.3
Bachelor's degree and more	21	22.8	Yes	89	96.8
Religion			**Length of stay**		
Buddhism	83	90.2	Range = 3-49 days		
Islam	6	6.5	Mean = 14.4		
Other	3	3.3	S.D. = 10.0		

Preference for participation in care: The highest proportion of persons with HF preferred a "passive-shared" role for participation in care. Only two participants preferred an active participation role (**Table 2**).

Symptom distress: Participants reported a number of symptoms ranging from 2 to 27 (mean = 10.4, SD = 4.7). The most prevalent symptom was "shortness of breath" while "difficulty when lying flat" was the most distressing symptom. Ten symptoms ranked in order of reported distress (between somewhat to very much levels) are shown in **Table 3.**

Perception of QOC: The majority of participants reported balanced high QOC whereas no participants reported inadequate QOC and excess QOC. Most of the participants perceived high reality of QOC. The overall perception of QOC and perceived reality of QOC is shown in **Table 4.**

As shown in **Table 5**, participants reported their perceptions of PR and SI in four dimensions. The dimension of medical-technical competence achieved the highest score on PR and SI. The items of physical and medical care, useful information, and opportunity to participate had lower scores of PR than SI.

Table 2 Preference for participation by patients with HF (n = 92)

Preference for participation	N (%)
Passive	12 (13)
Passive-shared	40 (43.5)
Collaborative	24 (26.1)
Active-shared	14 (15.2)
Active	2 (2.2)

Table 3 Symptoms ranked in order of distress (n = 92)

Symptom	Prevalence N (%)	Distress Mean (SD)
1.Difficulty breathing when lying flat	46 (50.0)[7]	**3.11 (0.76)**
2. Shortness of breath	**86 (93.5)**[1]	3.01 (0.96)
3.Waking up breathless at night	54 (58.7)[6]	2.92 (0.92)
4. Chest pain	38 (41.3)[8]	2.88 (0.94)
5. Other pain	23 (25.0)[15]	2.75 (1.05)
6. Palpitations	22 (23.9)[19]	2.55 (1.00)
7. Itching	22 (23.9)[17]	2.47 (1.02)
8. Cough	68 (73.9)[2]	2.46 (0.97)
9.Dizziness	23 (25.0)[16]	2.43 (0.82)
10.Change in the way food tastes	12 (13.0)[29]	2.40 (0.96)

$^{n =}$ Ranking of symptom distress; the first ranking of the two dimensions are emboldened

Table 4 Overall perceptions of QOC and perceived reality of QOC (n = 92)

Perception of QOC	N (%)
1. Inadequate quality	0 (0)
2. Somewhat inadequate quality	2 (2.2)
3. Balance low quality	8 (8.7)
4. Balance acceptable quality	33 (35.9)
5. Balance high quality	39 (42.4)
6. Somewhat excess quality	10 (10.9)
7. Excess quality	0 (0)
Perceived reality of QOC **(range 49-96, mean 76.84, SD 10.37, median 77)**	**N (%)**
High	47 51.1
Low	45 48.9

Table 5 Perceived reality care received and subjective importance on four dimension of QPP (n = 92)

Dimension and items	Perceived reality Mean (SD)	Subjective importance Mean (SD)
Medical-technical competence* (4 items)	3.39 (0.56)	3.53 (0.47)
- I received the best possible physical care	3.36 (0.74)	3.40 (0.58)
- I received the best possible medical care	3.51 (0.66)	3.59 (0.68)
- I received effective pain relief	3.36 (0.74)	3.59 (0.60)
- I received examinations and treatment within the waiting time	3.34 (0.76)	3.54 (0.60)

Table 5 Perceived reality care received and subjective importance on four dimension of QPP (n = 92) (Cont.)

Dimension and items	Perceived reality Mean (SD)	Subjective importance Mean (SD)
Physical-technical conditions* **(3 items)**	3.10 (0.56)	3.09 (0.53)
- I received food and drink that I like	2.63 (0.93)	2.58 (0.93)
- I had access to the apparatus and equipment that were necessary for my medical care	3.41 (0.60)	3.46 (0.56)
- I had a comfortable bed	3.27 (0.73)	3.25 (0.75)
Identity-orientated approach* **(12 items)**	3.21 (0.46)	3.32 (0.41)
- I received useful information on how examination and treatment would take place	3.17 (0.82)	3.46 (0.67)
- I received useful information on the results of examinations and treatments	3.27 (0.76)	3.49 (0.67)
- I received useful information on self-care	3.27 (0.65)	3.40 (0.63)
- I received useful information on which doctor was responsible for my medical care	3.15 (0.76)	3.41 (0.56)
- I received useful information on which nurses was responsible for my nursing care	3.14 (0.79)	3.15 (0.81)
- I had good opportunities to participate in the decisions applied to my medical care	3.14 (0.76)	3.30 (0.72)
- The doctors showed commitment	3.35 (0.64)	3.39 (0.65)
- The nurses and assistant nurses showed commitment and cared about me	3.17 (0.75)	3.23 (0.65)
- The doctors seemed to understand how I experienced my situation	3.25 (0.71)	3.37 (0.71)
- The nurses and assistant nurses seemed to understand how I experienced my situation	3.09 (0.74)	3.13 (0.70)
- The doctors were respectful towards me	3.32 (0.65)	3.32 (0.68)
- The nurses and assistant nurses were respectful towards me	3.18 (0.69)	3.18 (0.66)
Socio-cultural atmosphere*(5 items)	3.09 (0.50)	3.11 (0.55)
- I talked to the doctors in private when I wanted to	3.15 (0.77)	3.25 (0.74)
- I talked to the nurses in private when I wanted to	3.07 (0.78)	2.97 (0.81)
- There was a pleasant atmosphere on the ward	3.22 (0.81)	3.32 (0.69)
- My relatives and friends were treated well	3.25 (0.79)	3.09 (0.81)
- My medical care was determined by my own requests and needs	2.76 (0.84)	2.92 (0.87)

Predictors of perception of QOC in persons with HF: This study focused only on perception of QOC in terms of the actual care received (PR). Five independent variables were used to predict perception of QOC in persons with HF: preference for participation in care, symptom distress, age, gender, and education. Three variables including preference for participation in care, symptom distress, and gender were significantly associated with perception of QOC in persons with HF.

As shown in **Table 6**, multivariate analysis using the three remaining factors revealed that symptom distress and preference for participation in care were found to be significantly associated with perception of QOC. The result indicated that after controlling for the effect of other variables, the odds ratio of symptom distress was 3.281. For the factor of patients' preference for participation in care, participants who preferred a passive-shared role and collaborative role reported lower perceived score of QOC than participants who preferred a passive role for participation by 0.128 and 0.189 times. These three factors in this model accounted for 21.9% of the variance of QOC. Gender was not a significant predictor of perception of QOC in persons with HF.

Table 6 Multiple logistic regression of perception of QOC

Variables	Coefficients (B)	S.E.	Wald	p-value	Odds ratio (OR)	95% CI
Symptom distress	1.188	.496	5.733	.017	3.281	1.241-8.679
Gender						
Male		Ref				
Female	-.710	.469	2.296	.130	.492	.196-1.232
Preference for participation						
Passive		Ref	10.015	.040		
Passive-shared	-2.056	.802	6.572	.010	.128	.027-.616
Collaborative	-1.665	.846	3.875	.049	.189	.036-.993
Active-shared	-.334	.924	.131	.718	.716	.117-4.378
Active	-1.299	1.592	.666	.414	.273	.012-6.173
Constant	-.970	1.270	.583	.445	.379	

-2Log likelihood = 110.990, Nagelkerke R square = 0.219

Discussion

Most participants in this study perceived the QOC they received to be acceptable. This reflects that the setting was a tertiary care hospital with advanced technology and high levels of expertise among healthcare personnel in caring for persons with HF, consistent with previous studies conducted in tertiary care hospitals in Thailand.[12, 13] Moreover, the findings showed that the participants'rated actual care received QOC (PR part) for each dimension as "mostly to fully agree" perception of QOC, congruent with the SI part as "high to very highest importance". Consequently, the overall perceptions QOC were rated as acceptable. However, some items of actual care received QOC (in the PR part) were reported less than in the SI parts, such as "physical and medical care", "useful information", and "opportunity to participate". The results of this study indicate that although the perception of actual care received was mostly to fully agree, participants' experience of engagement in their care was less than they expected. Thus, the issues of providing care and information as well as opportunities for patient participation in their care during hospitalization should be improved.

For the factors influencing perception of QOC, symptom distress was found to be a significant predictor of QOC, inconsistent direction with previous studies[16, 22]. In the present study, the participants reported high symptom distress including difficulty breathing when lying flat, shortness of breath, and waking up breathing at night consistent with a prior study on persons with HF during hospitalization.[34] These symptoms are hallmarks of patients with HF and they are often the main reason they seek treatment.[35] All three of these distressing symptoms are serious problems and life-threatening issues in their own right for persons with HF, and healthcare professionals need more awareness and have to provide more intensive cure about such symptoms and appropriate responsive care.[36] Thus, the participants who had high symptom distress were likely to perceive higher QOC. In addition, the time for collecting data with QPP was post-discharge, while symptom distress was collected during admission. Consequently, the perception of QOC might be affected by the time of reporting relative to the experience of perception symptom distress, which was high during admission and less severe immediately after discharge.

Preference for participation in care was found to be a predictor of perception of QOC. Participants with a high preference for participation (passive-shared, collaborative) perceived QOC to be lower than for participants with a low preference for participation (passive). This finding supports that patients' preferences for participation comprise an important element in their perception of QOC. However, the direction of relationship was found to be inconsistent with a previous study.[19] This might be explained by the fact that the previous study evaluated perceived overall QOC, unlike in the current study. Moreover, most participants in the previous study highly preferred participation in care, while in our study most participants preferred a passive-shared role in terms of participation, due to the impact of reported symptoms such as shortness of breath and cough, which might decrease the functional capacity of persons with HF.[29,37] In addition, participants who had high preference for participation were more likely to actively participate in care and have higher expectations to participate in care, which influences their perception of QOC.[15] Active-shared and active role for participation were not significantly associated with perceived QOC, which could be explained by a small distribution of the participants preferring active or active-shared participation.

Gender was not a predictor of perception of QOC in persons with HF, unlike in previous studies.[20, 21] This might be due to gender being a variable inherent in the interaction between healthcare professionals and patients. Healthcare professionals may be intrinsically aware of the different characteristics and needs of male and female patients when they provide care.[38] Additionally, this study collected data from two medical units which separated male and female patients, thus the care provided to the participants might be considered intrinsically different between male and female.

Age and education were not significantly associated with perception of QOC, inconsistent with the findings of previous studies.[20, 21] This may be explained by the uneven distribution of participants within age and education groups in this study, which may have been a factor in the failure to find an association between perceptions of QOC.

Limitations

This study has some limitations. First, patients' preference for participation in care and symptom distress was collected at only one data point. Thus, we did not capture change in variables over time regarding the perception of QOC. Second, generalization of the findings is limited by the single site study and convenience sampling. Moreover, this study was also limited in the exploration of the resource structure of care organizational element, which was another core element of patients' perceived QOC.

Conclusions and Implications for Nursing Practice and Future study

This study can be used for improving QOC. The information on perceptions of QOC indicated need for quality improvements in numerous dimensions, including physical and medical care, useful information provision and opportunities for participation. Moreover, this is the first Thai study to clarify the component of patients' preference to explain the perception of QOC based on the perceptions of people with HF. Symptom distress and preference for participation were found to influence the perception of QOC. Thus, nurses must increase awareness of symptom assessment and develop HF symptom management programs for relief of symptom distress. Also, preference for participation should be assessed during hospital stay and nurses should give opportunities for participation according to a patient's preference.

For future research based on preliminary data, other factors about organizational structure and the combination of patients' preference component and organization structure component need to be examined concerning the impact on perception of QOC. Moreover, symptom distress and preference for participation can change overtime. Thus, collecting data at different time points on patients' longitudinal journeys, and repeated measures to monitor system performance over time, must be implemented to determine perceptions of QOC relative to actual health resources and care provision.

Acknowledgement

We would like to thank all of participants with heart failure who participated in this study. Our thanks also go to Dr. Mari Botti for her valuable advice and expertise in quality of care research.

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ปัจจัยทำนายการรับรู้คุณภาพการดูแลในบุคคลที่มีภาวะหัวใจล้มเหลว

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บทคัดย่อ:คุณภาพการดูแลผู้ป่วยตามมุมมองของผู้ป่วยเป็นประเด็นที่มีความสำคัญในการพัฒนาคุณภาพการบริการ อย่างไรก็ดีประเด็นนี้ยังมีการศึกษาจำกัด รวมทั้งสำหรับบุคคลที่มีภาวะหัวใจล้มเหลว การศึกษาเชิงบรรยาย ทำนาย ครั้งนี้มีวัตถุประสงค์เพื่อ อธิบายการรับรู้คุณภาพการดูแลในบุคคลที่มีภาวะหัวใจล้มเหลว และศึกษาปัจจัยทำนายการรับรู้คุณภาพการดูแลในบุคคลที่มีภาวะหัวใจล้มเหลว ได้แก่ ความต้องการมีส่วนร่วมในการดูแล ความทุกข์จากอาการ และปัจจัยส่วนบุคคล (อายุ เพศ และระดับการศึกษา) เลือกกลุ่มตัวอย่างบุคคลที่มีภาวะหัวใจล้มเหลวโดยสะดวกจำนวน 92 รายในโรงพยาบาลระดับตติยภูมิแห่งหนึ่งในกรุงเทพมหานคร ประเทศไทย เครื่องมือที่ใช้ประกอบด้วย แบบสอบถามลักษณะส่วนบุคคล แบบสอบถามความต้องการมีส่วนร่วมในการดูแล แบบประเมินอาการผู้ป่วยภาวะหัวใจล้มเหลว แบบสอบถามคุณภาพการดูแลตามการรับรู้ของผู้ป่วย

ผลการศึกษาพบว่ากลุ่มตัวอย่างรับรู้คุณภาพการดูแลอยู่ในระดับคุณภาพสูงตรงกับความต้องการ (balanced high quality of care) อาการหายใจลำบากเมื่อนอนราบเป็นอาการที่มีความทุกข์มากที่สุด ความทุกข์จากอาการและความต้องการมีส่วนร่วมในการดูแลสามารถทำนายการรับรู้คุณภาพการดูแลได้ ผลการศึกษาสามารถนำไปใช้ออกแบบโปรแกรมการจัดการความทุกข์จากอาการและส่งเสริมความต้องการมีส่วนร่วมในการดูแลของผู้ป่วยเพื่อเพิ่มการรับรู้คุณภาพการดูแลของบุคคลที่มีภาวะหัวใจล้มเหลวระหว่างรับการรักษาในโรงพยาบาล

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คำสำคัญ: ภาวะหัวใจล้มเหลว ปัจจัยส่วนบุคคล การรับรู้คุณภาพการดูแล ความต้องการมีส่วนร่วมในการดูแล ความทุกข์จากอาการ

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