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Original research article

Chronic heart failure, depression, and its links to selected aspects: a cross-sectional study

Is palliative care a potential option in management of the disease?

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Abstract

Background: The symptoms of chronic heart failure affect patients' emotional and physical well-being.
Objectives: The aim of this cross-sectional study was to determine the prevalence of depression in hospitalized patients with chronic heart failure and its links to selected aspects.
Methods: Depression was assessed with the Patient Health Questionnaire-9, data were obtained on functional independence, NYHA classes, illness perception, quality of life, and social support. Data were analyzed using descriptive statistics, the Kruskal–Wallis test, and Spearman's correlation coefficient at a 5% level of significance.
Results: The sample comprised 173 patients with a mean age of 71.51 years (min. 50; max. 92), of whom 56.07% were males. Depression was identified in 47.40% of subjects; the mean score was 5.65 (SD = 4.61). Depression was more frequent in NYHA classes III and IV ($p = 0.0018$), as well as in patients with decreasing independence ($p = 0.0002$). Correlation analysis using Spearman's coefficient suggested that an increasing prevalence of depression was associated with lower quality of life ($r_{Sp} = 0.5470$; $p < 0.05$), illness perception ($r_{Sp} = 0.537$; $p < 0.05$), and social support ($r_{Sp} = -0.2439$; $p < 0.05$).
Conclusions: Depression may be influenced by numerous aspects. To effectively manage depression, these aspects must be known. In hospital patients, one option could be a comprehensive intervention by a palliative team.

Keywords: Chronic heart failure; Depression; Links; NYHA

Introduction

Heart failure treatment is focused on influencing the symptoms, as well as on influencing the progression of heart failure and decreasing mortality (Kudlová et al., 2019). The cardinal symptoms of heart failure are breathlessness, fatigue, and ankle swelling (McDonagh et al., 2021). These symptoms are responsible for impairing physical activity, as well as the aspects of patients' mental and social life (Bekfani et al., 2021). As coping with the symptoms may be challenging, the emotional and physical well-being of these patients is quite poor (Park and Lee, 2020). Therefore, it is not uncommon to observe a relatively high prevalence of depression (Rutledge et al., 2006) and other mental disorders independently associated with more deaths and hospital readmissions (Bekfani et al., 2021; Sokoreli et al., 2018). Although the association between depression and heart failure has long been known, depression is still underrecognized and thus undertreated (Sbolli et al., 2020), despite the fact that it is listed among the comorbidities of heart failure in the European Society of Cardiology (ESC) guidelines for the diagnosis and treatment of acute and chronic heart failure (McDonagh et al., 2021).

Increasingly, more patients are now progressing into a phase of advanced heart failure due to increasing prevalence, demographic changes (namely population aging), and improved therapy. At this stage of the disease, patients struggle with persistent symptoms of heart failure, despite maximum therapy (McDonagh et al., 2021). Given the fact that chronic heart failure is progressive, patients diagnosed with the condition may also represent a target group for palliative care. This is because the palliative approach may improve a range of patient outcomes such as the burden of symptoms or quality of life (Kavalieratos et al., 2017). Dying patients do not demand active treatment, but effective relief from the symptoms of the disease, and the presence of close relatives – *i.e.*, securing comprehensive help and support (Filej et al., 2018). According to a systematic review and meta-analysis by Diop et al. (2017), the outcomes of heart failure patients are improved by home- and team-based palliative interventions. In 83% of the studies included in the review, patient quality of life improved, while 67% of the studies showed an increase in satisfaction. The symptoms most frequently positively influenced by palliative care interventions were quality of sleep, breathlessness, and depression. These interventions were also associated with a statistically significant decrease in the use of healthcare services, resulting in reduced overall costs of care for these patients.

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In the context of heart failure progression that may be difficult to predict, early initiation of palliative care interventions could make heart failure management more effective and thus improve patient quality of life. This is supported by the current state of scientific knowledge (Shah et al., 2013). The latest ESC guidelines state the indications for initiation of palliative care and its key components. Also recommended are proactive decisions and advanced planning with regard to palliative and end-of-life care discussions (McDonagh et al., 2021). According to Kavalieratos et al. (2017), incorporating palliative interventions into care for patients with heart failure is promoted by major US cardiology societies such as the American Heart Association (AHA) or American College of Cardiology Foundation (ACCF).

As mentioned above, palliative care interventions may also positively influence depression, a common comorbidity seen in patients with heart failure. Compared to usual care, interdisciplinary palliative interventions improve depression as a symptom in advanced heart failure (Rogers et al., 2017). However, depression prevalence estimates in these patients are rather heterogeneous. The prevalence of depression was approximately 9% to 60% in a meta-analysis by Rutledge et al. (2006), and 10% to 79%, with a mean rate of about 29%, in a meta-analysis by Sokoreli et al. (2016).

Although data on the prevalence of depression in these patient populations are varied, they are far from negligible. Therefore, early detection of depression in such patients is crucial for the initiation of optimal therapy aimed at preventing a worsening of their quality of life. We believe that it is now essential to direct research to characteristics related to depression in patients with chronic heart failure, so that subsequently specifically targeted interventions may help them manage depression more effectively. Such findings may also be of use to the field of palliative care that is both patient- and family-centered, taking into account all the symptoms experienced by patients in the context of improving the quality of life and ensuring a dignified period of dying and death.

Materials and methods

Study design and objective

This cross-sectional study aimed to determine the prevalence of depression in patients with chronic heart failure and to describe selected characteristics (heart failure severity, functional independence, age, illness perception, quality of life, and social support). The following research null hypotheses were defined:

- Depression is not related to heart failure severity according to NYHA classification.
- Depression is not related to the category of functional independence according to the Barthel Index.
- Depression is not related to the age of patients with heart failure.
- Depression is not related to the illness perception of patients with heart failure.
- Depression is not related to the quality of life of patients with heart failure.
- Depression is not related to the social support of these patients.

Data collection

Data were collected in a cardiovascular unit of University Hospital Ostrava between July 2020 and November 2021. The data were collected personally by the first author of this article via purposive sampling. It was an assisted face-to-face completion of the questionnaire (it took an average of 35 minutes to complete one questionnaire). The sample comprised 173 subjects, older than 18 years, who had been diagnosed with chronic heart failure but their acute condition was already controlled, and who consented to participate in the study. Apart from assessing depression, functional independence, quality of life, social support and illness perception, data on heart failure severity and sociodemographic data were obtained.

Depression assessment – Patient Health Questionnaire-9

In the study, depression was assessed with Patient Health Quiestionnaire-9 (PHQ-9). The instrument, consisting of nine items, not only detects depression but also has the potential to make a diagnosis of a depressive disorder as well as to objectify the degree of depression severity (reflecting the DSM-IV diagnostic criteria for depressive disorders). In patients scoring 0–4 points, depression is not identified. Scores 5–9 suggest mild depression; scores 10–14 indicate moderate depression; 15–19 points mean moderately severe depression; and scores 20–27 points suggest severe depression. An additional item asks "How difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?". The PHQ-9 has been shown to have excellent internal consistency (Cronbach's α 0.86–0.89) and test-retest reliability. Both sensitivity and specificity reached 0.88 (Kroenke et al., 2001). No permission is required for the reproduction, translation, display or distribution of the questionnaire. A Czech version of the questionnaire is freely available on the Pfizer website.

Functional independence assessment – Barthel Index

The Barthel Index (BI) is designed to assess performance in 10 activities of daily living. It measures the patient's ability to care for oneself with respect to feeding, dressing, bathing, grooming, fecal/urinary continence, toilet use, bed-to-chair transfers, walking and climbing stairs. The patient may reach a maximum of 100 points, meaning they are independent. Scores of 65–95 and 40–65 indicate slight and moderate dependence, respectively. Severely dependent individuals reach scores of 0–40 points (Mahoney and Barthel, 1965). The tool is free to use for non-commercial purposes. For the purposes of this study, a translation created by the Institute of Health Information and Statistics of the Czech Reublic, which is freely available on their website, was used.

Heart failure severity assessment – New York Heart Association classification

The New York Heart Association (NYHA) functional classification categorizes patients into four categories based on how much they are limited during physical activity due to heart failure. Class I means that ordinary physical activity does not cause undue fatigue, palpitation, or breathlessness. Patients in class II are slightly limited in physical activity, with ordinary physical activity resulting in fatigue, palpitation, or breathlessness. Class III represents a marked limitation of physical activity as patients only feel comfortable at rest. The above symptoms occur when basic activities such as washing are performed. Class IV means that symptoms of heart failure are present at rest, making patients unable to perform any physical activity without discomfort (American Heart Association, 2017). Information on NYHA classes was obtained from patients' medical records.

Illness perception assessment – Brief Illness Perception Questionnaire
The Brief Illness Perception Questionnaire (Brief-IPQ) is a generic instrument developed from the Illness Perception Questionnaire-Revised (IPQ-R). The Brief-IPQ items were created by forming one question that best summarizes the items contained in each IPQ-R subscale. The Brief-IPQ consists of nine items measuring cognitive and emotional representations of patients' illness, the last one being an open-ended question concerning causal factors in their illness based on their subjective perceptions. All of the items are rated using a 0–10 scale, except the causal factor one. The maximum score a patient may achieve is 80. Higher scores indicate poorer subjective illness perceptions (Broadbent et al., 2006). The author's consent was requested for the use and translation of this tool, then the tool was translated into Czech using the forward-back method.

Quality of life assessment – Minnesota Living with Heart Failure Questionnaire
The Minnesota Living with Heart Failure Questionnaire (MLHFQ) is a specific instrument for assessing the quality of life. It is comprised of 21 items evaluating physical, emotional, and socio-economic aspects of heart failure having a negative impact on patients' quality of life. The instrument has physical (score range 0–40) and emotional (score range 0–25) dimension subscales and a total score ranging from 0 to 105. Higher scores indicate a worse quality of life of patients (Rector et al., 1987). A license agreement with the University of Minnesota was obtained for the use of the questionnaire. In accordance with the instructions of the University of Minnesota, a verified Czech translation was subsequently obtained through MAPI Research Trust.

Social support assessment – ENRICHD Social Support Inventory
The ENRICHD Social Support Inventory (ESSI) is a 7-item instrument with six items scored on a scale of 1–5 and one yes/no question (scored 4 for yes and 2 for no). The maximum score is 34 points; higher scores suggest better social support (Mitchell et al., 2003). According to information from the author of the tool, no license agreement or permission for the use and translation of this tool is required – it was published under the public domain. The tool was translated into Czech using the forward-back method.

Data analysis

Data were statistically processed with Stata 14. The sample was characterized using descriptive statistics. Other statistical evaluations were performed with the Kruskal–Wallis test. The relationships between the studied parameters were analyzed using Spearman's correlation coefficient. The level of significance was set at 5%.

Results

Sample characteristics

The sample consisted of 76 females (43.93%) and 97 males (56.07%); the mean age was 71.51 years (SD = 8.62; min. 50; max. 92). Only 30 subjects (17.34%) perceived their health as good, and only 49 (28.33%) were classified as NYHA I or II. Other sample characteristics are shown in Table 1.

Prevalence of depression

Depression, suggested by PHQ-9 scores of five or more points, was identified in 47.40% of patients in the study. The largest subgroup were patients with mild depression, accounting for 31.21% of the sample. This corresponds with the mean PHQ-9 score of 5.65 points (SD = 4.61; min. 0; max. 26). The percentages for all categories of depression severity are shown in Table 2.

Table 1. Sample characteristics (*n* = 173)

Mean age 71.51 (SD = 8.62)	*n*	%
Age		
50–64 years	31	17.92
65–74 years	73	42.20
75–84 years	58	33.53
85 or older	11	6.36
Gender		
male	97	56.07
female	76	43.93
NYHA		
class I	1	0.58
class II	48	27.75
class III	84	48.55
class IV	40	23.12
Education		
primary	24	13.87
vocational	57	32.95
secondary	57	32.95
secondary professional	6	3.47
tertiary	29	16.76
Marital status		
single	16	9.25
married	96	55.49
divorced	32	18.50
widowed	29	16.76
Subjective health		
very good	0	0.00
good	30	17.34
fair	69	39.88
poor	63	36.42
very poor	11	6.36

Table 2. Depression severity and the proportions of patients (*n* = 173)

PHQ-9 degree of depression severity	PHQ-9 score	%
no depression	0–4	52.60
mild depression	5–9	31.21
moderate depression	10–14	9.83
moderately severe depression	15–19	5.20
severe depression	20–27	1.16
Total		100.00

Differences in depression assessment by the NYHA classification

Before statistically analyzing the data for assessing the relationship between depression and heart failure severity, NYHA classes I and II were merged due to the small numbers of patients in the categories. The study found a statistically significant relationship between the PHQ-9 total score and NYHA classes (p = 0.0018). Depression was more common among NYHA III and IV patients than in NYHA I and II subjects (Table 3). This means depression was more frequently present in patients with more severe heart failure.

Table 3. Relationship between depression and NYHA classes

NYHA class	n	PHQ-9 total score					p-value*
		Mean	Median	SD	Min.	Max.	
I + II	49	4.8	3.0	5.44	0	26	**0.0018**
III	84	5.5	4.5	3.95	0	20	
IV	40	7.1	5.5	4.54	0	18	

* Kruskal–Wallis test; PHQ-9 – Patient Health Questionnaire-9.

Differences in depression assessment by functional independence

The mean BI score was 82.17 points (SD = 18.86), suggesting slight dependence. The proportions of subjects in the categories were as follows: severe dependence 4.05%; moderate dependence 17.92%; slight dependence 49.71%; and independence 28.32%. Given the number of subjects in some of the categories, severely dependent and moderately dependent patients were subsequently dealt with as a single group. The study found a statistically significant relationship ($p = 0.0002$) between functional independence and depression. Severely and moderately dependent patients suffered from more severe depression than slightly dependent and independent individuals (Table 4). The highest proportion of independent patients were free from depression (Chart 1).

Table 4. Relationship between depression and functional independence

Barthel Index	n	PHQ-9 total score					p-value*
		Mean	Median	SD	Min.	Max.	
severe + moderate dependence	38	7.6	7	4.52	0	20	**0.0002**
slight dependence	86	5.5	4	4.65	0	26	
independence	49	4.4	3	4.16	0	19	

* Kruskal–Wallis test; PHQ-9 – Patient Health Questionnaire-9.

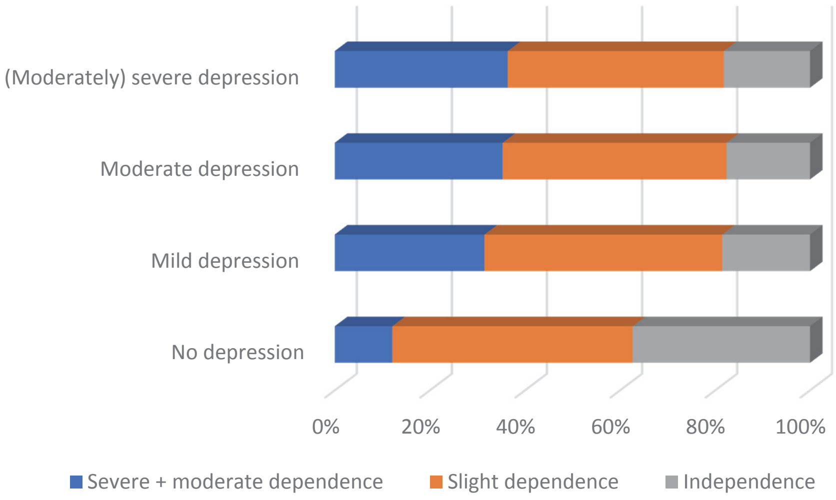

Chart 1. Relationship between depression and functional independence

Relationships between depression and age, illness perception, quality of life, and social support

Analyses using Spearman's correlation coefficient showed the relationships between depression and age ($r_{Sp} = 0.1625$; $p < 0.05$), illness perception ($r_{Sp} = 0.537$; $p < 0.05$), quality of life ($r_{Sp} = 0.5470$; $p < 0.05$), and social support ($r_{Sp} = -0.2439$; $p < 0.05$), see Table 5. The results suggest that the prevalence of depression may increase with older age. However, further statistical tests failed to prove the suggested relationship as statistically significant. There is also a possible increase in the prevalence of depression associated with worsening quality of life, illness perception, and social support.

Table 5. Correlation analysis

r_{Sp}	Age	Quality of life	Depression	Social support	Illness perception
Age	1				
Quality of life	0.1209	1			
Depression	**0.1625***	**0.5470***	1		
Social support	–0.0847	–0.0639	**–0.2439***	1	
Illness perception	0.1628*	0.4113*	**0.5371***	–0.2333*	1

r_{Sp} – Spearman's correlation coefficient; * $p < 0.05$.

Discussion

As well as increased mortality, the progression of heart failure is commonly associated with depression, which may not be adequately recognized due to overlapping cardiac and psychiatric symptoms. Compared to the general population, patients with heart failure are two to three times more likely to suffer from depression (Celano et al., 2018). But the actual prevalence estimates are rather heterogeneous. According to a meta-analysis by Sokoreli et al. (2016), the prevalence of depression in these patients ranged from 10% to 79%, with a mean of approximately 29%. Sbolli et al. (2020) claim that approximately 30% of patients with heart failure suffer from depression, with even more showing depressive symptoms. These were identified in 47.40% of subjects in the present study. A total of 31.21% of patients suffered from mild depression and this category also corresponded to the overall mean score identified by the assessment instrument. Mild depressive symptoms corresponding to the overall mean score were also reported by Chen et al. (2018) who found depression in as many as 65.3% of subjects in their study. Our findings are most consistent with those of Jani et al. (2016), who identified depression in 42.1% of subjects.

Our results are also close to those of Warraich et al. (2018) who reported clinically unrecognized depression in 38% of patients (depression was not stated in patient's medical records) and a documented diagnosis of depression in 16% of patients – overall the depression was found in 54% patients. Although the 2016 ESC and 2013 ACCF/AHA recommendations suggested that patients with heart failure be routinely screened for depression during their hospital stay and followed-up on later (Ponikowski et al., 2016; Yancy et al., 2013), such screening remains uncommon in the Czech healthcare system. As a result, depression may go unnoticed and thus untreated, potentially impairing the quality of life. In addition to depression, quality of life is influenced by the symptoms of heart failure on their own (Sbolli et al., 2020). Similar to a study by Warraich et al. (2018), the present study showed an increasing prevalence of depression is associated with worse quality of life. Therefore, further research should also be concerned with methods to alleviate depression and improve the quality of life. This is consistent with a study by Chen et al. (2018), which concluded that dealing with uncertainty in illness and symptoms of depression may increase the quality of life of patients. Therefore, systematic interventions need to be developed that control disease symptoms, and alleviate uncertainty and depression. One method to potentially lower depression may be cognitive behavioral therapy, as proposed by a systematic review and meta-analysis by Jeyanantham et al. (2017). According to Ribeiro et al. (2018), however, equally effective interventions are the empowering of the patient and the familial engagement in care of these patients, a multidisciplinary approach to care, and palliative care. Palliative care interventions leading to a statistically significantly reduction in depression among heart failure patients were also reported in a review by Ishak et al. (2020).

Palliative care may also involve planning for the future, a discussion of care goals, providing support to understand disease progression, and information on the possibilities of delivering this type of care. From a certain perspective, the palliative care objectives may be fulfilled as early as from the time of diagnosis. However, this is relatively little used in patients with heart failure (Gorodeski et al., 2018). Palliative care interventions have an inherently positive effect on various symptoms and lead to a decreased use of healthcare services, which in turn reduces the overall healthcare costs (Diop et al., 2017). This clearly suggests that this type of care should be more extensively used in heart failure management. In the hospital setting, for example, palliative and supportive care teams may provide cardiologists with valuable advice on what palliative care should look like during the hospital stay and what facilities patients may be referred to subsequently if needed. This type of care is more patient-centered than usual cardiology care, which is probably why such interventions are so effective in improving the quality of life and reducing symptoms of depression. Another setting where patients with advanced heart failure should be informed of the possibility of utilizing palliative care is cardiology outpatient services and general practitioners' offices. For many patients, these are their first contact with the healthcare system if existing problems become worse. Effective palliative care interventions in the context of improving symptoms of depression were presented in a study by Rogers et al. (2017). This was coordinated care provided by a certified palliative care nurse who coordinated all aspects of care with a physician certified in palliative care. The essence of the intervention was cooperation between the clinical cardiology team and the palliative care nurse and physician, who together, taking into account the patient's priorities, set care goals aimed at improving symptoms. Care was also coordinated by the palliative care nurse in an outpatient setting.

In the context of population aging and increasing incidence of heart failure, patients with heart failure may be expected to have certain functional status problems. As heart failure is increasingly observed in the elderly, these patients are unlikely to be able to independently satisfy their basic needs, becoming dependent in activities of daily living. This may pose problems with compliance and heart failure management in the home setting. The present study identified only 28.32% of patients classified as functionally independent; these were also more likely to be free from depression. Thus, decreased functional independence was associated with increased depression. Marked impairments in physical function were reported by Warraich et al. (2018), who also mentioned high rates of frailty and impaired cognition. Reduced physical activity, potentially making patients more dependent, is also correlated with the severity of heart failure, as measured by the NYHA classification. In the present study, nearly 72% of subjects were stratified into NYHA classes III or IV, suggesting a marked limitation of their physical activity due to heart failure. Those patients with more severe heart failure had higher rates of depression.

It can be assumed that patients with heart failure will need help and support in the saturation of basic life needs, which is also related to the management of heart failure and maintaining the quality of life. Examples of such aid may be having a close carer or using specialized services provided by nursing facilities (especially in the case of patients with inadequate social support), or palliative care facilities. For healthcare workers caring for these patients, sufficient knowledge of functional independence and social support is crucial for recognizing the need for further care. Of utmost importance is information about the patient's social environment, extent of family support, and financial aspects. That is why the present study was also concerned with assessing social support, a parameter potentially influencing heart failure management. It suggested an association between low social support and a higher prevalence of depression, a finding consistent with a study by Chen et al. (2018), which showed that better social support resulted in fewer symptoms of depression and, subsequently, better quality of life. The authors claim that symptoms of depression are directly and specifically influenced by emotional support. Moreover, high levels of social support are significantly linked to stronger adherence to treatment (Maeda et al., 2013), once again supporting the need for social support assessment to determine if additional care is required. Patients with higher social support levels are likely to have more sources of encouragement or information around them. An instrument that may provide them with such sources may be – among others – palliative care. However, according to Chung et al. (2013), interventions to increase social support will only improve the quality of life if symptoms of depression are effectively managed. Given the comprehensive focus of palliative care on all symptoms, quality of life and social-spiritual aspects, this instrument appears to be ideal for patients with chronic heart failure.

Psychological well-being markers, such as depression, may also be associated with illness perception (Morgan et al., 2014). In the present study, illness perception worsened with an increasing prevalence of depression. This is consistent with findings from a systematic review and meta-analysis by Broadbent et al. (2015) showing that a belief in serious consequences, a strong illness identity, stronger emotional representations and concern, are associated with depression, low quality of life and so on. Finally, according to Timmermans et al. (2017), some of the most important correlates of illness perception are depression or poor quality of life.

Depression has numerous consequences for patients with heart failure that need to be considered when caring for them. A holistic approach and comprehensive care are essential. An integral part of routine clinical practice should inevitably be the assessment of variables reflecting heart failure patients' priorities, such as screening for depression.

Although many interventions have been shown to contribute to reducing symptoms of depression and improving the quality of life of patients with heart failure, relatively little data exists on their functional capacity improvement (von Haehling et al., 2021). Given the progressive nature of the condition, interventions aiming to improve functional capacity are likely to have limited effects. Better quality of life, symptom burden alleviation, and improved functional capacity may be achieved by addressing the comorbidities of heart failure (von Haehling et al., 2021), with one of these definitely being depression. It is therefore essential to focus further research on searching for interventions that may relieve symptoms of depression, which in turn may aid in improving the quality of life of these patients.

The study limitations are the sample size and single-center design due to which the results cannot be generalized for the entire population. However, we believe the study is very valuable in terms of verifying the applicability of the research instruments in Czech clinical practice. The results are also helpful for improving care in the particular healthcare facility. Further research should focus on assessing the effectiveness of interventions provided by a palliative care team.

Conclusions

Depression was identified in 47.40% of patients with chronic heart failure, suggesting it is a significant comorbidity. Depression was more frequently present in patients with impaired functional independence and those with more severe heart failure, or NYHA classes III and IV. The features associated with depression in this group of patients were lower quality of life, worse illness perception, and decreased social support.

Patients with chronic heart failure require a comprehensive approach. Methods to alleviate depression need to be searched. Given the progressive nature of the disease, palliative and supportive care intervention, which can be provided in a hospital environment through consiliar palliative care teams, appears to be an ideal option. This care or support can be provided by healthcare workers (physician, nurse), a psychologist, social worker, or hospital chaplain. Hospital-based palliative interventions may include effective treatment of refractory symptoms, communication with the patient and family about goals of care/treatment at each stage of the disease, and determination of an end-of-life care plan, as well as assistance with adaptation to the disease and associated limitations, and emotional support. In accordance with current scientific findings, the combination of palliative care interventions with clinical cardiology care in the context of the consideration of the patient's current symptoms and priorities appears to be effective. The continuity of this care within the outpatient environment also has key importance.

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Ethics approval and conflict of interests

The study respected the principles of the Declaration of Helsinki. It was approved by the Ethics Committee of the University Hospital Ostrava (reference number 250/2020) and by the Ethics Committee of the Faculty of Medicine, University of Ostrava (reference number 08/2020). Patients' participation was voluntary and anonymous. By filling in the questionnaire, respondents agreed to participate in the study. The authors have no conflict of interests to declare.

Chronické srdeční selhání, deprese a její souvislosti: průřezová studie

Je paliativní péče možností v léčbě srdečního selhání?

Souhrn

Úvod: Příznaky chronického srdečního selhání mohou ovlivnit emocionální i fyzickou pohodu pacientů.

Cíl: Cílem této průřezové studie bylo zjistit prevalenci deprese u hospitalizovaných pacientů s chronickým srdečním selháním a její vazby na vybrané aspekty.

Metodika: Deprese byla hodnocena pomocí dotazníku Patient Health Questionnaire-9, dále byly získány údaje o funkční nezávislosti, třídách NYHA, vnímání nemoci, kvalitě života a sociální podpoře. Data byla analyzována pomocí deskriptivní statistiky, Kruskal–Wallisova testu a Spearmanova korelačního koeficientu na 5% hladině významnosti.

Výsledky: Soubor tvořilo 173 pacientů s průměrným věkem 71,51 let (min. 50; max. 92), z toho bylo 56,07 % mužů. Deprese byla identifikována u 47,40 % subjektů; průměrné skóre deprese bylo 5,65 (SD = 4,61). Deprese se častěji vyskytovala u pacientů hodnocených dle NYHA jako NYHA III a IV ($p = 0{,}0018$) a u pacientů s klesající nezávislostí ($p = 0{,}0002$). Korelační analýza pomocí Spearmanova korelačního koeficientu naznačila, že rostoucí prevalence deprese byla spojena s nižší kvalitou života ($r_{Sp} = 0{,}5470$; $p < 0{,}05$), vnímáním nemoci ($r_{Sp} = 0{,}537$; $p < 0{,}05$) a sociální podporou ($r_{Sp} = -0{,}2439$; $p < 0{,}05$).

Závěr: Deprese může být ovlivněna mnoha aspekty. Aby bylo možné depresi účinně zvládat, je nutné tyto aspekty znát. U hospitalizovaných pacientů s chronickým srdečním selháním by jednou z možností mohla být komplexní intervence týmu paliativní péče.

Klíčová slova: deprese; chronické srdeční selhání; NYHA; souvislosti

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