The adherence to pharmacological treatment in patients with chronic heart failure

Authors:
N Swiatoniowska¹, A Szymanska-Chabowska¹, J Gajek¹, B Jankowska-Polanska¹, ¹Wroclaw Medical University - Wroclaw - Poland,

Topic(s):
Cardiovascular Nursing - Other

Citation:
Despite the efforts to improve the treatment of heart failure (HF), the number of re-hospitalizations and deaths due to HF are still at high level. The efficacy of the treatment depends on patients’ commitment, adherence to recommendations and the ability to self-control. Poor adherence to medications is a common problem among heart failure patients. Inadequate adherence leads to increased HF exacerbations, reduced physical function, and higher risk for hospital admission and death.

The aim was to analyse the level of adherence of pharmacological treatment and the factors influencing the level of adherence.

Material and methods. 475 patients (including 222 women), of mean age 69.7±7.7, with HF were included into the study. The Revised Heart Failure Compliance Scale was used to assess the compliance. The socio-clinical data were obtained from medical records.

Results. The vast majority of the study group were the patients in NYHA II (62.4%) and NYHA III (28.3%), the mean duration of the disease was 6.2±4.9 years, the number of hospitalizations due to exacerbations in the last year was 2±1.5, and the mean ejection fraction of left ventricle (EF) was 48.6±12.6. The patients were most often treated with diuretics (80.8%), beta blockers (68.2%) and angiotensin converting enzyme inhibitors (ACEI) or angiotensin receptor blockers (ARB) (14.5%). The analysis proved that only 60% of respondents adhered scrupulously to the recommended pharmacological treatment. The rest of the study group were the patients who adhere to recommended therapy often (22.1%), seldom (17.9%) and never 2%. The mean level of adherence was 3.3±0.9 (moderate level). In univariate analysis the predictors negatively influencing the adherence were: female gender (rho=-0.325), age below 65 years (rho=-0.014)), loneliness (rho=-0.559), number of hospitalizations (rho=-0.242) and treatment with diuretics (rho=-0.276). The factors influencing positively the adherence were: EF=45% (rho=0.020) and treatment with ACEI/ARB (rho=0.34). In multivariate analysis the significant predictors influencing the adherence were: negatively - loneliness (β=-0.205) and number of hospitalizations (β=-0.117), and positively –EF =45% (β=0.009).

Conclusion: Almost the half of the patients did not adhere to recommended pharmacological treatment. The loneliness and re-hospitalizations were independent determinants of low level of adherence, and EF= 45% was the determinant of high level of adherence.