

12 Summary

Title: Analysis of factors affecting rationing and quality of nursing care in cardiac units.

Introduction: Rationing of care refers to essential tasks in nursing care that are stopped or omitted due to limited time, understaffing, or lack of competence. Rationing is a factor that negatively affects the quality of patient care. Many nurses experience high levels of stress, job burnout, and excessive responsibilities, indicating problematic nursing care delivery, including insufficient time to complete necessary tasks during patient care. To date, there is a lack of research on the level of care rationing among cardiac nurses. The aim of this thesis was to analyze the factors affecting the rationing and quality of nursing care in cardiac units.

Material and methods: The study group consisted of 217 nurses with a mean age of 43.33 years (SD = 9.72) working in cardiology, cardiac intensive care, and cardiac surgery departments at Wroclaw hospitals. Standardized research tools were used in the study: Nursing Rationing Care Questionnaire PIRNCA, Professional Burnout Questionnaire MBI, Satisfaction with Life Scale SWLS, Perceived Stress Scale PSS10, Inventory for the Measurement of Coping with Stress Mini-COPE. The questionnaire of the PhD candidate's authorship was used to obtain primary sociodemographic and occupational data. The level of significance was set at $p < 0.05$.

Results: A total of 217 respondents (210 women, 5 men, 2 did not respond) with a mean age of 43.33 years were surveyed. Most of the respondents had a bachelor's degree in nursing (n=108), a Master's degree (n=62), or graduated from a medical high school (n=46). Length of service averaged 21.55 years. The mean score on the PIRNCA questionnaire was 0.87, indicating that the respondents have rationed care "rarely". Patient emotional and psychological support (mean 1.24) and patient education (mean 1.22) were the most frequently rationed. The mean score for quality of patient care was 7.5, and the job satisfaction score was 6.53. The general burnout index of the MBI questionnaire averaged 39.13/100 points and for each subscale averaged 49.84 points for emotional exhaustion, 37.4 points for depersonalization, and 30.14 points for lack of professional accomplishment. Analyzing the results of the SWLS questionnaire, it was shown that 45.16% of the respondents had a high sense of life satisfaction, while 35.02% had an average and 18.43% had a low. In the analyses of the results of the PSS10 questionnaire, it was shown that 44.24% had high-stress levels, 41.01% had medium-stress levels, and 14.29% had low-stress levels. Analyzing the results of the Mini-COPE questionnaire, the strategy "Active Coping" was used between "often" and "almost always"

(mean between 2 and 3). The strategies "Planning," "Positive Overvaluation," "Acceptance," "Sense of Humor," "Turning to Religion," "Seeking Emotional Support," "Seeking Instrumental Support," "Attending to Something Else," "Discharge," and "Blaming Yourself" were used between "rarely" and "often" (mean between 1 and 2). The strategies "Denying," "Using Psychoactive Substances," and "Stopping Actions" were used between "almost never" and "rarely" (mean between 0 and 1). It was shown that statistically, significantly higher rationing of care was affected by being single ($p=0.006$) and living in a rural area ($p=0.029$). Quality of care was statistically significantly better among: those with completed specialties ($p=0.012$) and working in a cardiac surgery department ($p=0.001$). Evaluation of job satisfaction was statistically significantly better among: working in the cardiac surgery department ($p=0.048$). Analysis of the effect of number of patients under care correlates significantly ($p=0.046$) and positively ($r=0.137$) with rationing of care, i.e. the more patients the more frequent rationing of care. Analysis of the influence of net income showed its significant influence on the assessment of the quality of patient care ($p<0.001$) and job satisfaction ($p=0.035$). They were significantly better in the group with income above 4000 PLN than in the group with income 3000-4000 PLN. MBI total score correlates significantly and positively with rationing of care ($p=0.006$, $r=0.189$), significantly and negatively with an assessment of the quality of patient care ($p=0.002$, $r=-0.209$) and assessment of job satisfaction ($p<0.001$, $r=-0.274$). Emotional exhaustion correlates significantly and positively with care rationing ($r=0.141$, $p=0.041$) and significantly and negatively with job satisfaction ($r=-0.309$, $p<0.001$). Depersonalization correlates significantly and positively with rationing of care ($r=0.186$, $p=0.007$). Lack of professional accomplishment correlates significantly and negatively with patient care quality ($r=-0.19$, $p=0.005$). The general score of the SWLS questionnaire correlates significantly and positively with patient care quality ($r=0.285$, $p<0.001$) and job satisfaction ($r=0.348$, $p<0.001$), and significantly and negatively with rationing of care ($r=-0.177$, $p=0.01$). The overall score of the PSS10 questionnaire correlates significantly and negatively with job satisfaction ($r=-0.143$, $p=0.036$). The following Mini-COPE questionnaire strategies correlate with rationing of care: "Seeking Instrumental Support" ($r=-0.21$, $p=0.002$), "Discharge" ($r=-0.186$, $p=0.006$), "Stopping Actions" ($r=0.179$, $p=0.008$). The following strategies of the Mini-COPE questionnaire correlate with the assessment of quality of care: "Active Coping". ($r=0.255$, $p<0.001$), "Planning" ($r=0.256$, $p<0.001$), Positive Values ($r=0.206$, $p=0.002$), "Acceptance" ($r=0.255$, $p<0.001$), "Seeking Emotional Support" ($r=0.229$, $p=0.001$), "Seeking Instrumental Support" ($r=0.236$, $p<0.001$), "Attending to Something Else" ($r=0.152$, $p=0.026$), "Denying" ($r=0.164$, $p=0.016$), "Discharge" ($r=0.193$, $p=0.005$), "Psychoactive Substance Use" ($r=-0.212$,

p=0.002), "Stopping Activities" (r=-0.136, p=0.046). The linear regression model showed that the significant independent predictor of the level of care rationing is the "Discharge" strategy of the Mini-COPE questionnaire (p=0.003), and the predictor of patient care quality assessment is working in the Cardiac Surgery department (p=0.015), while significant independent predictors of job satisfaction assessment are having a Bachelor's degree (p=0.019) and Master's degree (p=0.001), SWLS questionnaire total score (p=0.01), and "Blaming Myself" strategy of the Mini-COPE questionnaire (p=0.047).

Conclusions: Increased levels of care rationing, decreased quality of care, and low job satisfaction were negatively affected by the presence of professional burnout and a higher number of patients being cared for while on duty. Life satisfaction was affected by decreased care rationing, improved quality of care, and job satisfaction. On the other hand, job satisfaction was negatively affected by the occurrence of stress.

Key words: care rationing, professional burnout, quality of care, job satisfaction.