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Rationing nursing care and nurses' work environment as a factor influencing the occurrence and level of rationing care – a scoping review

Racjonowanie opieki pielęgniarskiej i środowisko pracy pielęgniarek jako czynnik wpływający na częstość występowania racjonowania – zakresowy przegląd piśmiennictwa

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STRESZCZENIE

RACJONOWANIE OPIEKI PIELĘGNIARSKIEJ I ŚRODOWISKO PRACY PIELĘGNIAREK JAKO CZYNNIK WPŁYWAJĄCY NA CZĘSTOŚĆ WYSTĘPOWANIA RACJONOWANIA – ZAKRESOWY PRZEGLĄD PIŚMIENNICTWA

Cel pracy. Celem pracy jest poszukiwanie i analiza dostępnych badań opisujących racjonowanie opieki pielęgniarskiej i środowisko pracy pielęgniarek.

Metody. Poszukiwania przeprowadzono w czterech naukowych bazach danych Ovid Nursing, ProQuest, PubMed i Scopus. Do przeglądu włączono jedenaście badań opublikowanych w latach 2000-2020.

Wyniki. Przeanalizowano jedenaście badań przekrojowych i korelacyjnych w celu udokumentowania rozpowszechnienia racjonowania opieki pielęgniarskiej w warunkach doraźnej opieki szpitalnej. Badania oceniające racjonowanie opieki pielęgniarskiej potwierdzają silny związek z pielęgniarskim środowiskiem pracy. Tak więc środowisko pracy jest jednym z istotnych czynników determinujących racjonowanie opieki pielęgniarskiej. Do najczęściej stosowanych narzędzi należą narzędzie PIRNCA służące do oceny niejawnego racjonowania opieki oraz narzędzie PES-NWI służące do monitorowania środowiska pracy pielęgniarek. Gdy środowisko pracy jest oceniane jako niekorzystne, występuje wyższy wskaźnik racjonowania opieki pielęgniarskiej.

Podsumowanie. Alokacja opieki pielęgniarskiej jest zjawiskiem monitorowanym w skali globalnej, a jej ocena jest niezbędna w świadczeniu opieki zdrowotnej. Głównymi przyczynami rozwoju ukrytego racjonowania opieki są niewystarczające zasoby kadrowe i lokalowe. Czynniki, które w znacznym stopniu przyczyniają się do racjonowania opieki pielęgniarskiej opierają się na środowisku pracy – głównie na relacjach interpersonalnych i komunikacji, współpracy multidyscyplinarnej.

Słowa kluczowe: racjonowana-niezakończona opieka pielęgniarska, środowisko pracy pielęgniarek, zakresowy przegląd piśmiennictwa

ABSTRACT

RATIONING NURSING CARE AND NURSES' WORK ENVIRONMENT AS A FACTOR INFLUENCING THE OCCURRENCE AND LEVEL OF RATIONING CARE – A SCOPING REVIEW

Aim. The aim is to describe and analyse the available studies describing the assigned nursing care and work environment of nurses. Design: Scoping review.

Methods. The search was conducted in four scientific databases Ovid Nursing, ProQuest, PubMed, and Scopus. Eleven studies published between years 2000 and 2020 were included in the review.

Results. Eleven cross-sectional and correlational studies were analysed to document the prevalence of rationed nursing care in the acute hospital care setting. Studies evaluating rationed nursing care confirm a strong relationship with the workplace nursing environment. Thus, the work environment is among the significant determinants of rationed nursing care. The most commonly used tools include the PIRNCA tool for assessing hidden rationing of care and the PES-NWI tool for monitoring the work environment of nurses. When the work environment is rated as unfavourable, there is a higher rate of rationed nursing care.

Conclusions. Rationed nursing care is a phenomenon that is monitored globally, and its assessment is essential in health care delivery. The main reasons for the development of hidden rationing of care include inadequate staffing and facilities. Factors that contribute significantly to the rationed nursing care are based on the work environment - mainly interpersonal relationships and communication, multidisciplinary collaboration.

Key words: rationed-uncompleted nursing care, nurses' work environment, scoping review

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INTRODUCTION

Incomplete nursing care is an umbrella term that describes situations where nursing care may be incomplete, delayed, or assigned. The terms - missed or neglected care [1], unfinished care [2,3] and rationed care [4] can be found in the available resources. Rationed nursing care is closely related to the quality of nursing care and the impact on nurses in clinical practice [5-7]. A conceptual framework for rationed nursing care has been proposed on the basis of validated evidence and published for the first time in Europe [4]. The definition of the concept is based on the assertion that nurses cannot perform the necessary nursing measures-interventions due to inadequate staffing, including appropriate competencies and nurses' time capacities [8]. To assess hidden rationing of care, the BERNCA assessment tool has been constructed – the Basel Extent of Rationing Nursing Care. This tool was revised by the same authors in 2008 [8], subsequently translated and used in other studies [5,6,9]. A more recent tool for assessing rationing of care is the PIRNCA – Perceived Implicit Rationing of Nursing, developed in the USA [10]. By looking at the implicit rationing of care, the reasons that influence rationed nursing care have been uncovered in terms of increased incidence and frequency. These reasons are workplace staffing and material resources in the workplace [11-13]. The impact on nurses [7,9,12,14] in terms of the demands of the profession, and in particular the satisfaction of nurses in clinical practice or their possible intention to leave the workplace, has been studied in relation to the hidden rationing of care [7]. The fundamental relationship of rationed care is studied in relation to the working environment of nurses. The nursing work environment, defined by Lake (2002), is expressed by organizational characteristics that can negatively or positively affect nurses' autonomy [5,7,15,16]. Monitoring and evaluating the relationship between rationed nursing care and nurses' work environment is important to maintain the quality of nursing care, patient safety, and nurses' satisfaction in clinical practice.

AIM

The aim of this review study is to complement the existing resources with current knowledge related to rationed nursing care from the perspective of nurses' perceptions of this phenomenon in the acute care. To summarise the reasons and the evidence for rationed nursing care and the work environment of nurses.

METHOD

The recommendations MAStARI of the Joanna Briggs Institute [17] and the PRISMA-Sco protocol [18] were followed. Three questions were established to better define and specify the search objective. Relevant primary studies were retrieved using the keywords. Then, after reviewing the abstracts, the selection of studies that met the condition of full text availability followed. The selected studies were analysed, and the results were summarized and then synthesized.

Defined questions:

1. What is known about the rationed nursing care in the acute care environment?
2. What is the relationship between the nurses' work environment and the rationed nursing care?
3. What are the current tools used to measure the rationed nursing care and nurses' work environment?

Criteria of qualification

The specification of criteria included for the study was performed. Studies that were applicable for including: a) reviewed full texts; b) qualitative cross-sectional and correlational studies related to empirical outcomes of rationed nursing care and nurses' work environment; c) published in Czech, Slovak, and English.

Exclusion criteria

Studies that were excluded were those where the respondent sample consisted of paediatric nurses, midwives or other healthcare staff, the nursing care setting was not appropriate for direct acute care. Papers such as systematic reviews, discussion papers, evaluation reports and studies with a qualitative design were excluded.

Searching strategies

The research was conducted from September to December 2020. The search was conducted in Ovid Nursing, ProQuest, PubMed, and Scopus databases. The search was limited to studies and publications in English (no studies were found in Czech or Slovak). An abstract, and studies from years between 2000 and 2020 were searched. A manual search for studies was performed, too. The same criteria were used for all the databases. The search used a wildcard* and Boolean operators to determine the relationships between the AND/NOT terms and the OR connection. Keywords were translated into English. Duplications were excluded. Study titles and abstracts were assessed, and full-text studies were retrieved. A total of 418 studies and papers were retrieved; studies of the following types were included for the analysis: validation, comparative, or cross-sectional studies. Systematic reviews, qualitative studies and evaluation reports were excluded. 61 full-text studies were selected for the analysis, of which 50 were subsequently excluded. Eleven full-text studies were included for the final analysis (Fig. 1).

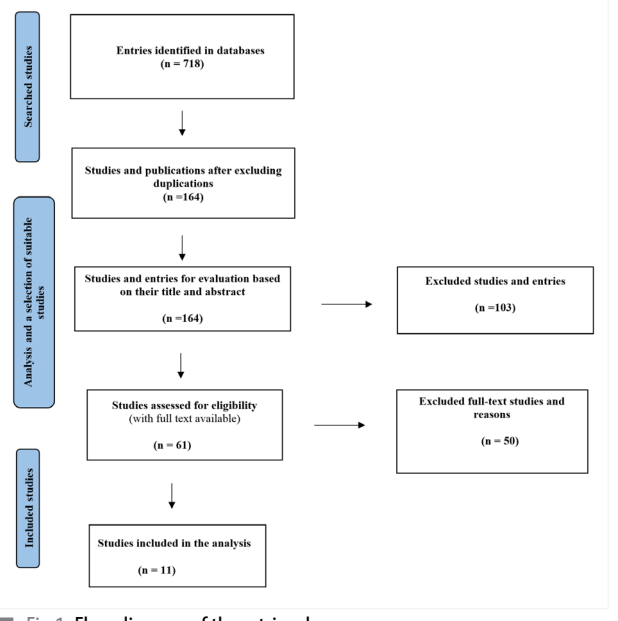


Fig 1. Flow diagram of the retrieval process

Tab. 1. Characteristics of the analysed studies

Author (year) country	Design	Unfinished/ rationed care – tool	Nurses' work environment – tool	Monitored sample	Main results and conclusions
BACASKSIZ F. et al. 2020 Turkey	Cross-sectional and correlation tudy	MISSCARE	ProQOL a WAS	897 nurses	The study shows that most frequently missed intervention was walking with a patient, and least frequently missed one was patient assessment. The results varied in terms of nurse gender, working hours, overtime, staffing and hospital accreditation. Determinants of missed care that were identified include: long working hours, high workload, and overtime. Nurses were most likely to lack comprehensiveness of the care and they reported high professional workload. Inadequate staffing increases the level of missed care.
BACHNICK S. et al. 2018 Switzerland	Cross-sectional study	BERNCA	PES NWI	1810 nurses	The findings of the study mention a negative relationship of the work environment, particularly some factors that increase the rationing of nursing care. It emphasizes communication and transferring of information about a patient, but it also points to the need for patient involvement in the care. The work environment is essential, and it should include a consistency in staffing and an availability of resources, which nurses mention as very strong reasons for influencing higher levels of rationed nursing care.
BLIZZARD Linda; WOODS Stefanie L. 2020 USA	Cross-sectional study	PIRNCA	NWI-R	35 039 nurses	The study supports the findings of previous research which mentioned that a supportive work environment for nurses significantly reduces rationed nursing care. Nurses working beyond their competencies report more unfinished or rationed nursing care. Leadership style is an important factor influencing the quality of care. Nurse managers can reduce this risk by monitoring the work environment and being empathetic to their staff.
DUFFY J. R. et al. 2018 USA	Cross-sectional study	MISSCARE	PES NWI	138 nurses	The study confirms the occurrence of missed nursing care, the extent is then influenced by aspects (staffing and resources) that influence the rate of missed or rationed care to decrease or increase. Most commonly missed aspects of the care were motion, oral care, assessment of medication effect, intake and discharge, and positioning. To avoid missing the nursing care, which could become the norm. Clear roles need to be set, teamwork and nurse support and good team relations between nurses and doctors.
ELBEJJANI M. et al. 2020 Lebanon	Cross-sectional study	BERNCA	PES NWI	289 nurses	The study revealed a high prevalence of health problems among Lebanese nurses. It was proved that there was a combination of several work-related factors (work environment, climate, teamwork). Higher physical workload brings higher allocation of nursing activities. The research has confirmed the impact on nurses' health, and it has confirmed that personnel resources are directly related to rationed nursing care. By identifying the mechanisms that positively influence the work environment, motivation to improve the working conditions, patient safety and nurse health can be more protected.
CHO S.-H. et al. 2019 South Korea	Cross-sectional study	MISSCARE	IHOS	2114 nurses	The study confirms the occurrence of missed nursing care, there were five activities identified that had the highest prevalence. They were patient positioning, bathing, walking, oral care, and emotional support. Six activities had a prevalence of less than 20%. The prevalence of the missed care varied by nursing activity; poorer staffing was associated with higher numbers of missed activities. To improve the quality of the care and patient's outcomes and to reduce the extent of missed care, adequate staffing is necessary.
KIM K.-J. et al. 2018 South Korea	Cross-sectional study	MISSCARE	PES NWI	188 nurses	The results of the study confirm the occurrence of missed care and its correlation with clinical practice and nurses' work environment. The highest score is for the emotional support of a patient/ or his/her family. Causes of missed care were sudden onset of clinical emergencies, individual's factors, work competence, and insufficient supporting staff. Missed care can be influenced by sufficient staffing and resources, communication, and the culture of the organisation.
PAPASTAVROU E. et al. 2014 Cyprus	Correlation study	BERNCA	RPPE	393 nurses	The study confirms the occurrence of rationed nursing care and the association with the work environment, mainly through teamwork and other aspects based on the specific nursing environment especially related to communication. It highlights the need to discuss the phenomenon of re-assigned care and its impact on both patients and nurses. Identifying the type and reasons for re-assigned care will make it easier for the management and hospitals to provide such an environment where the quality of care and appropriate working environment for nurses is not compromised. It will afterwards affect their remaining in the profession.
SCHUBERT M. et al. 2013 Switzerland	Cross-sectional study	BERNCA	NWI-R	1633 nurses	The study showed a variability in the prevalence of the observed interventions, which are covertly rationed, when nurses face resource shortages, both in terms of personnel and material, nurses then prioritise nursing tasks in different ways. The identified predictors may influence the level of rationed nursing care. Educating is significant, nurses' experience in decision-making and the awareness of the professional community are essential. Proactive changes in personnel policy and quality management of patient care are suggestions.
ZELENÍKOVÁ R. et al. 2019 CR, Slovakia, Poland, Croatia	Correlation study	PIRNCA	PES NWI	1353 nurses	The study findings confirm the high occurrence of rationed nursing care in all selected countries, where a hospital type and the quality of care significantly predicted the prevalence of uncompleted care. The study highlights certain aspects of care that were more likely to be uncompleted. The importance of prioritizing care is clear, these findings need to be known especially by nurse managers in order to respond to them, improve personnel and material resources (use of technology). It should be an effective prevention of uncompleted - rationed care.
ZELENÍKOVÁ R. et al. 2020 Czech Republic	Correlation study	MISSCARE	RPPE	513 nurses	The study confirms the association of work environment and missed nursing care. Staff shortage is a consistently reported problem in Czech nursing practice. Nevertheless, the rate of missed or rationed care can be reduced if nurses are provided with a positive working environment, which in turn guarantees the quality of care and the satisfaction of nurses in their profession.

RESULTS

Eleven full-text studies were included in the review study for the final analysis, which dealt with rationed and unfinished nursing care and with nurses' work environment (Tab. 1). Two studies from the USA, 6 studies conducted in Europe, 1 study conducted in Lebanon, and 2 conducted in South Korea were included. All the selected studies met the selection criteria: they were cross-sectional and correlational studies. The respondents were nurses working in direct acute care hospital settings. The sample of nurses ranged from 138 to 35 039 registered nurses. Nine studies had a cross-sectional design, and three studies were correlational.

Rationed nursing care

All the studies used a conceptual framework developed to assess concealed rationing of care [4] and the MISSCARE Survey's conceptual missed care approach [1]. The most frequently identified areas or activities, where rationing of nursing care occurred, were walking with a patient [12,19,20], oral care [9,12,20], patients' and their families' emotional support [8,9,20,21], and documentation or its checking and update [8,9,13]. The rationed nursing care was assessed in four studies with the BERNCA tool [5,6,9,14], and in two studies the PIRNCA tool was used [16,20]. The MISSCARE Survey tool was used in five studies to assess missed care [7,12,19-21].

Nurses' work environment

The analysed studies confirm the influence of the work environment as a strong factor affecting the quality of nursing care, the performance and satisfaction of nurses in the clinical practice. Inadequate staffing in relation to the number of patients treated was confirmed in all studies. The emphasis on teamwork and communication, which positively influence the working environment of nurses, has been reported in several studies [5,9,12]. Well-functioning relationships in the workplaces between nurses and doctors and between nurses and nurse managers increase nurses' satisfaction – it was confirmed by several studies [12,13,16,21]. The work environment was assessed by The Environment Scale of the Nursing Work Index (PES-NWI) tool in five studies [5,6,12,13,21], and the Nursing Work Index – Revised (NWI R) tool was used in the following studies [8,16]. The Revised Professional Practice Environment (RPPE) tool was included in two studies [7,9]. The Professional Quality of Live (ProQol) tool was used in the Turkish study [19]. In the study by Cho et al. (2019), five specific questions designed for the RN4Cast study were used to assess the work climate.

Relationship between the rationed nursing care and the work environment

The studies [13,16,21] confirm the direct connection to the nurses' work environment in their findings. The Turkish [19] and the Lebanese [6] studies present the heavy workload placed on nurses as a major factor in the development of rationed care. Physical and mental health were addressed in these studies [5,6,9] and they confirm the connection with higher rate of missed care. Negative work environment factors and the lack of communication mentioned as a reason for the incidence of rationed care were confirmed in two studies [16,19]. A low association between rationed care and work environment was described only in the study conducted in Cyprus [9].

DISCUSSION

The analysed studies support the occurrence of rationed nursing care in the clinical nursing environment. The prevalence of rationed nursing care differs according to the demographic regions, where it is monitored, and it ranges from 40% to 98% [2,8,13]. The tools used to assess rationed nursing care, BERNCA and PIRNCA, map activities in the areas of physical, psychological, follow-up nursing care and administrative activities of a nurse. They can clearly identify areas where rationing of care occurs [2,4]. Nurses in the direct patient care can monitor the frequency and rate of rationed nursing care and identify the reasons when unfinishing or rationing of care occur. The results of the analysed researches corresponding with the main reason for the occurrence and higher level of the rationed care remain the lack of staff and the related time deficit to perform the nursing activities [7,8,19]. The following studies [8,9,16] emphasize that the decision-making of nurses who provide the care is important and it is based on their own experience, education, and competence. In the European countries, nurses' care and prioritization of activities may be influenced by an approach based on the biomedical model, where nurses prioritize primary care-related activities and interventions according to the doctor's order [5,8,13]. The area of emotional and psychological support for a patient and patient's family is the most frequently assigned care [5,9,13] – these studies support the assertion that nurses may have difficulties in nurse-patient communication and as a consequence, there may be insufficient education of the patient. Studies [6,7,12,16] agree that teamwork is also essential, which tends to be a weakness in teams providing care. Cultural differences in the analysed studies are evident. Nurses working in the European countries were 5 years older and their work experience was more than 10 years longer [13] compared to nurses from other than European countries, where the average length of experience ranged from 2 to 5.77 years [6,12,19]. In all the analysed studies, the number of female nurses highly outnumbered male nurses, which may be related to the impact on the physical health of nurses [6]. Nurses had to assign some activities according to their time and staffing resources. In such situations, communication problems may have arisen, leading to an unfavourable working environment for nurses and higher rates of incomplete or rationed nursing care [9,21] and dissatisfaction among nurses in the clinical practice [7]. The analysed researches highlight the influence of nurses' work environment on the rate of rationed care, which is of great importance for the management of healthcare facilities providing direct acute hospital care. The solution could be proactive changes in the personnel policy, and a precise definition of competencies for nurses according to their education and qualifications. Mainta-

ining a favourable working environment for nurses should then be key.

Limits of the study

The term unfinished care is described with slightly different meanings in various foreign studies, and it may not be accurately translated.

CONCLUSIONS

Rationing of nursing care is a phenomenon that has been observed in the clinical practice over the past decade, and its significance varies by demographic areas and local facility capacities. Evidence of reasons, occurrence, and frequency of the rationed care should be used within hospital management and health facility management in terms of developing preventive measures and staffing policies. Under the terms of raising awareness of the phenomenon of incomplete or rationed nursing care, future nurses should be taught to be able to detect and assess the level of assigned interventions and subsequently prevent a negative impact on patients in terms of the quality of nursing care. Regular and repeated assessment of unfinished care and hidden rationing of care should be the basis for further strategies to promote the quality improvement in nursing care.

Ethical aspects

All the listed bibliographic sources are cited and listed in the references. The authors are not aware of any conflict of interest.

Author's contribution

Conception and design of the study (IM), searching of studies (IM), interpretation and analysis of the studies (IM, DJ), manuscript preparation and design (IM), supervision and guidance (DJ), manuscript proofreading (IM, DJ).

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