

Perception of Structural Empowerment Among Polish Nurses Employed in Healthcare Facilities During the COVID-19 Pandemic



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Submission: March 28, 2022; Published: April 26, 2022

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Abstract

Background: At the end of 2019, there was an outbreak of previously unknown SARS-CoV-2 virus in the city of Wuhan, which rapidly spread throughout the world. The first cases occurred in Poland in March 2020. All healthcare forces were redirected to COVID-19 patients. Nurses, who are required to work in various specific conditions, are a large professional group in direct contact with infected patients. Employment is one of the most important spheres of human life. Working conditions have a significant impact on the health of employees and their fulfilment of professional duties.

Aims: The aim of the study was to assess the level of structural empowerment among nurses employed in healthcare facilities during the COVID-19 pandemic and investigate factors likely to be related to working conditions and work efficiency.

Methodology: A total of 384 nurses participated in the study. We used the Polish adaptation of the Conditions for Work Effectiveness Questionnaire II (CWEQ II), and an original questionnaire for study group identification.

Results: The lowest scores were obtained for access to information (M = 2.72; SD = 1.07) and access to support (M = 2.71; SD = 1.21). The highest values were recorded for the domain of access to opportunities (M = 3.76; SD = 0.96). Low scores were obtained for formal empowerment (M = 2.10; SD = 1.01) compared to significantly higher scores for informal empowerment (M = 3.02; SD = 0.92), while the total empowerment index was M = 17.38; SD = 2.94.

Conclusions: The rating of empowerment, working conditions and work efficiency increased with decreasing length of service. Higher scores for empowerment were reported for larger places of residence.

Keywords: Structural empowerment; Nurses; Hospital; COVID-19

Introduction

A hospital is an organisational unit with a hierarchical structure [1]. The concept of power, which is distributed over various positions in the organisation, does not need to have a negative overtone [2]. Changes in the organisational structure [1] also require changes in the management of the medical community. The term "empowerment" is used to refer to a set of organisational actions which are part of a wider management practice. Here, in place of dominance and coercion, power means effectiveness and purposefulness [3], and, in particular, a positive attitude to change [4]. The aim of empowerment is to look for ways to engage employees, make use of their knowledge

and skills and to increase their influence on decision making as much as possible. The concept of empowerment assumes that an organisation transfers more power and autonomy in decision making to employees, and their superiors respond to it by promoting employee development [3]. When considered in the context of healthcare and the professional group of nurses, this concept is referred to as structural empowerment.

In structural empowerment, the management of an organisation wants the employees to achieve the most of their skills and abilities [5]. To this end, the employees are provided with appropriate tools for professional improvement and for

learning and development and ensured access to professional information and technical knowledge. The management also offers support and guidance, gives feedback and provides not only financial resources, but also work equipment and materials, and the necessary time for the fulfilment of a predefined goal [3]. This problem is best explained by a theory by Kanter [6] whereby an employee who has good working conditions enjoys a high level of commitment, satisfaction and work effectiveness. Chandler was the first to explore Kanter's theory in the nursing community. The results of her work demonstrated a positive correlation between structural empowerment and trust, satisfaction and work effectiveness and a negative one with occupational burnout among nurses [7]. Another interesting report regarding the positive impact of empowerment on the work of nurses was a study by Laschinger et al. which included Canadian nurses. The results of that study also revealed a positive impact of empowerment on trust and job satisfaction [5].

The COVID-19 pandemic has had an extraordinary impact on healthcare, an area of vital importance. In the early days of the pandemic there was chaos, misinformation and pervasive fear [8]. The risk associated with working directly with an infected patient lead to work overload for healthcare professionals. In order to manage the situation in healthcare, certain hospitals were designated exclusively for SARS-CoV-2 patients [9]. During the pandemic, nurses were forced to adopt a flexible attitude and change the way they worked before. Both the employer and individual nurses had to introduce new working conditions in order to provide the best possible care to patients. Statistics from various countries show that there is a worldwide shortage of nurses [10]. This is considered an international crisis and a significant threat to health around the world [11]. According to the World Health Organization (WHO), nurses, who account for 59% of the global healthcare workforce, are one of the key professions that prevent healthcare systems from breaking down due to the crisis associated with the pandemic [12]. In 2016, the United Nations (UN) argued for the importance of societies investing sufficient resources in their nurses and promoting and supporting public health. Providing high-quality care is not possible without good physical and mental health of nurses. Creating and maintaining friendly workplaces must be based on the cooperation of governments, trade unions and hospitals [13]. A review of both Polish and international literature on the subject showed how poorly explored this problem is. For this reason, the authors of this study attempted to assess the level of structural empowerment among nurses employed in healthcare facilities during the COVID-19 pandemic and investigate the factors that may be associated with work conditions and effectiveness.

Material & Methods

This research project was a cross-sectional observational study that was conducted from November 2020 to April 2021. A total of 384 nurses employed in healthcare facilities took part

in the study. A study questionnaire was developed using Google Forms and was administered online. A link to the questionnaire was posted on a social media service in groups devoted to nursing. The participants were informed of the purpose of the study and of the fact that the study was voluntary and anonymous and that it was possible to withdraw from it at any point. The study inclusion criterion was active employment as a nurse during the SARS-CoV-2 pandemic. The sample size for this study was 394, which was calculated with a 95% confidence interval and a fraction of 0.5, with a maximum estimation error of 5%. In the first part of the study, sociodemographic data were collected (sex, age, place of residence, education, number of years in the profession, workplace).

In the second part of the study, the Conditions for Work Effectiveness Questionnaire II (CWEQ II) developed by Laschinger et al. [14] was used, which was adapted to Polish conditions by Orłowska & Łaguna [3]. The survey includes 19 statements to measure 6 dimensions of structural empowerment, which constitute 6 scales/domains (access to opportunities, access to information, access to support, access to resources, formal empowerment, informal empowerment), and 2 last questions for global rating of empowerment. Answers were provided on a 5-grade scale in which (depending on the phrasing of the question) 1 means: not at all / I know nothing about it / none / I definitely do not agree; 3 means: a bit / I know a bit about it / limited, and 5 means: very much / I know a lot about it / high / a very high amount / I definitely agree.

The sum of the answers represents the score for each domain. The questionnaire is interpreted based on the general score (total empowerment index), which is the sum of all answers provided by the participants (regarding questions from 6 domains with the exception of 2 questions related to global rating of empowerment). The total score for the questionnaire ranges from 6 to 30 points. The score of 6-13 means a low level of empowerment, 14-22 a medium level of empowerment and 23-30 a high level of empowerment [14]. The global rating of empowerment is determined by adding the scores for the last 2 questions from the questionnaire: "In general, my current working environment allows me to fulfil my responsibilities in an effective way" and "In general, I consider my workplace to be stimulating/empowering". High scores reflect a strong conviction of an employee that their work environment is empowering [3]. The level of the questionnaire's reliability in the study by Orłowska & Łaguna was 0.73-0.92 (Cronbach's alpha) [3]. The internal consistency of the test for this study was 0.75-0.92 (Cronbach's alpha).

Statistical analysis was performed on the results. Descriptive statistics were calculated. The distribution of the studied variables and the assumptions of statistical tests were checked. The Shapiro-Wilk test was used to assess the normality of data distributions. The Student's t-test for independent samples was used to compare two means. Analysis of variance (ANOVA) was applied for the

comparison of higher numbers of variables. Multiple regression analysis was performed on the variables. A p level of < 0.05 was considered statistically significant. Calculations were performed using STATISTICA 13 software by StatSoft.

The study was granted approval no. AKBE/183/2021 by the Medical University of Warsaw.

Results

The study population included 364 women (94.8%) and 20 men (5.2%). Most of them were aged 20-30 years (43.5%) and 41-

50 years (28.6%). The majority of the subjects (174; 45.3%) came from cities of more than 100,000 inhabitants. The majority of the nurses participating in the study (225; 58.6%) had a bachelor's degree in nursing. Most individuals worked over 5 years in the profession (174; 45.3%). A non-infectious diseases hospital was the most predominant type of workplace among the participants 232 (60.4%). Other subjects worked at an infectious disease's hospital (51; 13.3%) and at a hospital department transformed into an infectious diseases ward (79; 20.6%) (Table 1).

Table 1: Sociodemographic characteristics of the study group.

Parameter	N	%
Sex		
Female	364	94.8
Male	20	5.2
Age		
20-30 years	167	43.5
31-40 years	65	16.9
41-50 years	110	28.6
51-60 years	28	7.3
Over 61 years	14	3.6
Place of residence		
Rural area	89	23.2
City or town of up to 100,000 inhabitants	121	35.1
City of over 100,000 inhabitants	174	45.3
Education		
Medical secondary/post-secondary school	21	5.5
Bachelor's degree in nursing	225	58.6
Master's degree in nursing	138	35.9
Years in the profession		
Under 5 years	174	45.3
5-10 years	35	9.1
11-20 years	54	14.1
21-30 years	90	23.4
Over 30 years	31	8.1
Workplace		
Hospital, non-infectious diseases department	232	60.4
Hospital, a department transformed into an infectious diseases ward	79	20.6
Infectious diseases hospital	51	13.3
Other workplaces	32	5.7

The domains which were rated the lowest by the subjects were access to information (M = 2.72; SD = 1.07) and access to support (M = 2.71; SD = 1.21). Access to opportunities was rated the highest (M = 3.76; SD = 0.96). Low scores were observed for

formal empowerment (M = 2.10; SD = 1.01), while the rating of informal empowerment was significantly higher (M = 3.02; SD = 0.92); the total empowerment index was M = 17.38 (SD = 2.94). Detailed results are presented in Table 2. Multiple regression

analysis was performed in order to determine which of the investigated variables predicted structural empowerment. Among the investigated variables, place of residence, education and the

number of working years were significant predictors of the level of structural empowerment, whereas workplace and age did not have any influence on that area (Table 3).

Table 2: CWEQ II general score and domain scores: descriptive statistics.

CWEQ II domains and items	M	SD	Min	Max	Me
Access to opportunities	3.76	0.96	1	5	4
Access to information	2.72	1.07	1	5	3
Access to support	2.71	1.21	1	5	3
Access to resources	3.07	0.83	1	5	3
Formal empowerment	2.1	1.01	1	5	2
Informal empowerment	3.02	0.92	1	5	3
Global rating of empowerment	2.59	0.96	1	5	3
Total empowerment index	17.38	2.89	6	30	17

Table 3: Results of multiple regression analysis for CWEQ II variables.

Variable	Multiple Regression Results				
	Adjusted R ² = 0.083; F (5.378) = 6.827; p < 0.001				
	b	Error	β	t	p
Workplace	1.52	3.09	0.25	0.491	0.646
Age	2.25	1.48	0.189	1.521	0.129
Place of residence	2.86	0.89	0.166	3.210	0.001
Education	-3.42	1.21	-0.149	-2.826	0.005
Working years	-2.40	1.17	-0.253	-2.059	0.040

Explanation: R² – coefficient of determination, F – value of Fisher’s test, b – non-standardised regression coefficient, Error – standard error, β – standardised regression coefficient, t – value of Student’s t-test, p – significance level.

Table 4: CWEQ II scores with regard to place of residence.

Parameter	Rural area		City or town < 100,000		City > 100,000		F	p	η^2
	M	SD	M	SD	M	SD			
Access to opportunities	3.57	0.91	3.61	1.06	3.98	0.89	7.619	0.001	0.038
Access to information	2.72	1.18	2.55	1.13	2.84	0.96	2.617	0.074	0.014
Access to support	2.54	1.19	2.83	1.19	3.02	1.01	4.694	0.01	0.024
Access to resources	2.99	0.82	2.78	0.93	3.26	0.84	6.4	0.002	0.033
Formal empowerment	2.01	0.98	2.04	1.09	2.34	0.88	4.639	0.01	0.024
Informal empowerment	2.79	1.13	2.88	0.93	3.26	0.9	10.394	0	0.052
Total empowerment index	16.62	2.76	16.69	2.94	18.7	1.38	10.368	0	0.052
Global rating of empowerment	2.52	1.12	2.51	1.1	2.96	0.92	6.716	0.001	0.034

Explanation: F – result of analysis of variance (Fisher’s test); p – significance level, η^2 – effect size.

There was a significant correlation between the place of residence and access to opportunities (p < 0.005), access to support (p = 0.010), access to resources (p = 0.002), formal and informal empowerment (p = 0.010, p < 0.000, respectively), global

rating of empowerment and total empowerment index (p < 0.001, p < 0.000, respectively). Subjects who lived in cities of over 100,000 inhabitants scored the highest on all investigated parameters except for access to information (Table 4). Education turned out

to be an important predictor of nurses' work effectiveness rating in terms of access to information ($p < 0.005$), access to support ($p < 0.000$), informal empowerment ($p = 0.033$), global rating of empowerment ($p = 0.036$) and total empowerment index ($p < 0.000$). Subjects with a bachelor's degree achieved the highest scores for the parameters mentioned above (Table 5). Among the

nurses participating in the study, individuals with the shortest work history scored the highest on access to opportunities ($p = 0.006$), access to support ($p = 0.007$), formal and informal empowerment ($p < 0.000$), global rating of empowerment ($p < 0.000$) and total empowerment index ($p = 0.010$) (Table 6).

Table 5: CWEQ II scores with regard to working years.

Parameter	Secondary School/ Post-Secondary School		Higher Education (Bachelor's Degree)		Higher Education (Master's Degree)		F	p	η^2
	M	SD	M	SD	M	SD			
Access to opportunities	3.52	1.03	3.83	0.96	3.7	0.98	1.351	0.26	0.007
Access to information	2.08	0.74	2.87	1.17	2.59	1.2	6.767	0.001	0.034
Access to support	2.2	0.78	3.08	1.15	2.57	1.28	11.327	0	0.056
Access to resources	2.81	0.81	3.17	0.8	3.03	0.9	2.331	0.099	0.012
Formal empowerment	1.93	0.77	2.27	1.01	2.05	1.04	2.602	0.075	0.013
Informal empowerment	2.53	0.86	3.08	0.89	3.01	0.97	3.436	0.033	0.018
Total empowerment index	15.07	3.18	18.3	1.78	16.95	1.96	7.785	0	0.039
Global rating of empowerment	2.38	0.62	2.84	1.02	2.55	0.98	3.343	0.036	0.017

Explanation: F – result of analysis of variance (Fisher's test); p – significance level, η^2 – effect size.

Table 6: CWEQ II scores with regard to working years.

Parameter	< 5 years		5-10 years		11-20 years		21-30 years		> 30 years		F	p	η^2
	M	SD	M	SD	M	SD	M	SD	M	SD			
Access to opportunities	3.91	0.82	3.78	0.91	3.36	1.03	3.71	1.13	3.77	1.01	3.705	0.006	0.038
Access to information	2.74	1.1	2.7	1.22	2.83	1.07	2.83	1.12	2.49	1.16	0.729	0.573	0.008
Access to support	3.09	0.97	2.77	1.24	2.59	1.16	2.49	1.22	2.48	1.11	3.559	0.007	0.036
Access to resources	3.13	0.81	3.18	0.76	3.1	0.97	3.05	0.85	2.85	0.98	1.194	0.313	0.012
Formal empowerment	2.3	0.98	2.23	1.07	2.12	1.04	2.1	0.98	1.66	1.04	2.944	0.02	0.03
Informal empowerment	3.31	0.81	3.18	1.06	2.85	1.02	2.9	0.93	2.54	1.2	5.377	0	0.054
Total empowerment index	18.48	2.34	17.84	3	16.85	2.94	17.08	2.82	15.79	3.02	3.353	0.01	0.034
Global rating of empowerment	2.99	0.96	2.83	1.12	2.62	1.02	2.47	1.1	1.94	1.24	6.849	0	0.067

Explanation: F – result of analysis of variance (Fisher's test); p – significance level, η^2 – effect size.

Discussion

Nursing is a very demanding profession. Nurses are tasked with a high burden of responsibilities and expected to be highly committed and effective in their work. During the pandemic, the healthcare situation and the whole work system and organisation had to change. Healthcare leaders have a very important task of creating an appropriate work environment for the whole healthcare system, including the nursing community. For this reason, as demonstrated by Cicolini [15], structural empowerment is a very important element in the everyday work of nurses. Structural empowerment brings positive results and improves

work satisfaction. Thus, it is important to implement and promote structural empowerment. The present study aimed to assess the level of structural empowerment of nurses employed in healthcare facilities during the COVID-19 pandemic and investigate the factors that may be associated with work conditions and effectiveness. In the study, moderate values were observed for the general structural empowerment score ($M = 17.38$; $SD = 2.94$). Among the different domains, the one which was rated the highest was access to opportunities ($M = 3.76$; $SD = 0.96$). Other domains such as access to information ($M = 2.72$; $SD = 1.07$), access to support ($M = 2.71$; $SD = 1.21$) and access to resources ($M = 3.07$; $SD = 0.83$) received average ratings. Formal empowerment was

rated low ($M = 2.10$; $SD = 1.01$), which indicates that the degree of flexibility in the workplace and innovativeness in rewarding work is unsatisfactory.

The subjects rated informal empowerment higher ($M = 3.02$; $SD = 0.92$), which is evidence for a better perception of cooperation between the staff and the superiors. Similar results to the present study were obtained by McDonald et al., [16] whose study, however, was conducted before the pandemic. They observed that nurses felt most empowered in terms of access to opportunities ($M = 3.78$; $SD = 0.87$) and informal empowerment ($M = 3.37$; $SD = 0.79$). The nurses scored lowest on formal empowerment ($M = 2.64$; $SD = 0.81$) and access to information ($M = 2.75$; $SD = 0.88$), while the total empowerment index was $M = 18.50$ ($SD = 2.89$) and was higher than that obtained in our study [16]. Stewart et al. and Hauck et al. [17] reported higher results for all investigated areas. In the former study, the total empowerment index was $M = 25.87$ ($SD = 1.70$), while the latter reported structural empowerment to be $M = 20.52$ ($SD = 3.04$). In both studies, access to opportunities was rated the highest ($M = 4.18$, $SD = 0.67$; $M = 4.17$, $SD = 0.78$, respectively) [17,18]. However, it needs to be noted that those studies were conducted at a different time (2010, 2011) when there was no SARS-CoV-2 pandemic. In addition, those studies were conducted in the USA, where working conditions for nurses may be different from those in Poland.

Gholami et al. [19] conducted a study to assess the level of structural empowerment among 160 Iranian nurses (2016). Those authors obtained lower scores on the majority of the domains compared to our study. The total empowerment index was also rated lower ($M = 16.11$; $SD = 0.93$). Iranian nurses scored higher than the nurses in our study only on formal and informal empowerment ($M = 2.43$; $SD = 0.95$; $M = 2.58$; $SD = 0.95$, respectively). In both studies, access to opportunities was rated the highest ($M = 3.11$, $SD = 0.95$), and formal empowerment was rated the lowest [19]. In a study conducted in Jordan in 2020, access to opportunities ($M = 3.57$; $SD = 0.87$), access to information ($M = 3.06$; $SD = 0.79$) and access to support ($M = 2.95$; $SD = 0.86$) were rated higher than in our study, while access to resources was rated lower than in our study ($M = 2.83$; $SD = 0.85$). We cannot compare the overall results for structural empowerment between that study and our study because those authors investigated only four domains and did not assess formal and informal empowerment [20].

In the present study, place of residence, education and the number of years in the profession were predictors of structural empowerment. It turned out that the level of structural empowerment is lower among individuals living in smaller areas and having a longer work history, while the highest level was observed among nurses with a bachelor's degree. Unfortunately, there are no reports in the literature on the subject. This may be due to the fact that access to training is easier in cities, which directly contributes to nurses acquiring higher competences and

enjoying more professional autonomy. It also cannot be excluded that with increasing job seniority, access to support in the form of feedback on the quality of one's work and help with problem solving becomes reduced, and organisational activity, quality of workplace relations and trust among coworkers decrease. This may be associated with the actual deterioration of work conditions and effectiveness among nurses. It can also be assumed that the nurses' perception of the work environment changes due to occupational burnout [21,22], which is an important risk for individuals working in this profession.

The present authors point to a strong association between effective leadership and team unity. If nurses perceive their employer or manager as an authentic, open and truthful person who engages them in decision making, they react in a positive way by showing greater commitment to work and more confidence in the management [23]. The elements which affect the level of employee motivation include work satisfaction, commitment to work, engagement in the life of the organisation, adequate communication processes and healthy interpersonal relations that improve mental well-being [24]. In addition, a high level of psychological empowerment reduces stress, occupational burnout and desire to quit one's job, and improves work satisfaction. Psychological empowerment is important for nurses as an internal motivational force [25] which increases employee engagement [11]. The results of the present study show that the management methods in place promote effective work of nurses only in part. The role of healthcare facility management is to apply tools and methods that protect employees in a rational way and contribute to the development of a healthy and safe work environment. This analysis may prove useful for designing healthcare management tools and systems. The data obtained in this study are an additional source of knowledge that can be used to improve the quality of working conditions and, consequently, the quality of healthcare.

Conclusions

i. In this study, nurses rated their structural empowerment as moderate. The following areas received average rating: access to opportunities, which includes opportunities to gain knowledge and skills and use them in practice, and access to resources, which refers to the time needed to complete documentation and fulfil one's responsibilities, and the possibility to receive assistance as needed. Teamwork and sharing of guidance and advice with one's co-workers also turned out to be neglected areas. However, the two domains were rated the highest.

ii. Access to information and access to support were rated lower, which means that little feedback is received concerning the correctness of one's work and little guidance or advice is provided to solve possible problems.

iii. Particular note should be taken of the fact that formal empowerment was rated the lowest. This indicates that innovativeness and flexibility are poorly rewarded and that the

assets of an employee and their contribution to work environment are not sufficiently recognised.

iv. It was demonstrated in this study that nurses with a longer work history who come from smaller areas rated their structural empowerment the lowest, while nurses with a bachelor's degree gave this aspect the highest rating.

v. In this study, data were obtained which can be used by employers to change working conditions in order to improve job satisfaction and work effectiveness among nurses.

Limitations

The present study has a number of limitations. One of them is the manner in which it was conducted, i.e. using an internet survey, which could have affected the number of submitted questionnaires. In addition, the study was cross-sectional, and we did not investigate the cause of the existing problems. Apart from that, the studies which we used for comparison were conducted at a different time when there was no pandemic yet and working conditions of nurses could have been different. However, the study may be helpful in developing strategies for the improvement of nurses' work conditions and effectiveness.

References

- Kuokkanen L, Leino-Kilpi H (2000) Power and empowerment in nursing: Three theoretical approaches. *J Adv Nurs* 31(1): 235-241.
- Bradbury-Jones C, Sambrook S, Irvine F (2008) Power and Empowerment in Nursing: A Fourth Theoretical Approach. *J Adv Nurs* 62(2): 258-266.
- Orłowska A, Łaguna M (2018) Adaptation of the Conditions for Work Effectiveness Questionnaire II amongst Polish nurses and midwives. *Work Medicine* pp. 547-560.
- Szarfenberg R (2015) Empowerment - short introduction p. 1-12.
- Laschinger S, Finegan J, Shamian J (2001) The Impact of Workplace Empowerment, Organizational Trust on Staff Nurses' Work Satisfaction and Organizational Commitment. *Health Care Manage Rev* 26(3): 7-23.
- Kanter RM (1977) *Men and women of the corporation*. New York: Basic Book.
- Chandler GE (1986) *Relationship of Nursing Work Environment to Empowerment and Powerlessness* Dissertation Salt Lake City. Editor . UT: University of Utah, Utah.
- Gniadek A, Nawara W, Padykuła M, Malinowska-Lipień I (2020) A Polish nurse during SARS-CoV-2 pandemic – various aspects of following a nursing profession. *Public Health and Governance* 18(2): 149-154.
- Haleem A, Javaid M, Vaishya R (2020) Effects of COVID-19 pandemic in daily life. *Curr Med Res Pract* 10(2): 78-79.
- Buchelt I (2027) Aging Nurse Population as a Challenge for Human Resource Management in Hospitals. *Human Resource Management (3-4)*:87-103.
- Church CD, He Z, Yarbrough S (2018) Factors Influencing Organizational Commitment and Turnover in Nurse Residents. *J Contin Educ Nurs* 49(10): 482-488.
- Dos Santos JLG, Balsanelli AP, Freitas E de O, Menegon FHA, Carneiro IA, et al. (2021) Work environment of hospital nurses during the COVID-19 pandemic in Brazil. *Int Nurs Rev* 15: 10.
- Chen Yu F, Wan Ping Y (2010) Reflections on the Nursing Work Environment in Light of the Experience With COVID-19. *Hu Li Za Zhi* 67(6): 12-17.
- Laschinger HKS, Finegan J, Shamian J, Wilk P (2001) Impact of structural and psychological empowerment on job strain in nursing work settings: expanding Kanter's model. *J Nurs Adm* 31(5): 260-272.
- Cicolini G, Comparcini D, Simonetti V (2014) Workplace Empowerment and Nurses' Job Satisfaction: A Systematic Literature Review. *J Nurs Manag* 22(7): 855-871.
- McDonald SF, Tullai-McGuinness S, Madigan EA, Shively M (2010) Relationship Between Staff Nurse Involvement in Organizational Structures and Perception of Empowerment. *Crit Care Nurs Q* 33(2): 148-162.
- Stewart JG, McNulty R, Mary T. Quinn G, Joyce JF (2010) Psychological empowerment and structural empowerment among nurse practitioners. *J Am Acad Nurse Pract* 22(1): 27-34.
- Hauck A, Quinn G, Mary T, Fitzpatrick JJ (2011) Structural empowerment and anticipated turnover among critical care nurses. *J Nurs Manag* 19(2): 269-276.
- Gholami M, Saki M, Pour AHH (2019) Nurses' perception of empowerment and its relationship with organizational commitment and trust in teaching hospitals in Iran. *Journal of Nursing Management* 27(5): 1020-1029.
- Rababah JA, Al-Hammouri MM, Ta'an WF (2021) A study of the relationship between nurses' experience, structural empowerment, and attitudes toward computer use. *Int J Nurs Sci* 8(4): 439-443.
- Czeglédi E, Tandari-Kovács M (2019) Characteristics and prevention of burnout syndrome among nurses. *Orv Hetil* 160(1): 12-19.
- Chen R, Sun C, Chen JJ, Jen HJ, Kang XL, et al. (2021) A Large-Scale Survey on Trauma, Burnout, and Posttraumatic Growth among Nurses during the COVID-19 Pandemic. *Int J Ment Health Nurs* 30(1): 102-116.
- Wong CA, Laschinger HKS (2013) Authentic leadership, performance, and job satisfaction: the mediating role of empowerment. *J Adv Nurs* 69(4): 947-959.
- Bugdol M, Bugaj J, Stańczyk I (2012) *Human resource management processes in health care*. Publishing house. Continuo Wrocław.
- Li H, Shi Y, Li Y, Xing Z, Wang S, et al. (2018) Relationship between nurse psychological empowerment and job satisfaction: A systematic review and meta-analysis. *Journal of Advanced Nursing* 74(6): 1264-1277.



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DOI: [10.19080/JOJNHC.2022.12.555833](https://doi.org/10.19080/JOJNHC.2022.12.555833)

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