Original Article
https://doi.org/10.1590/1983-1447.2024.20240029.en

Analysis of structural empowerment of nurses in the context of an emergency hospital

Análise do empoderamento estrutural de enfermeiros no contexto de um hospital de emergências

Análisis del empoderamiento estructural del enfermeros en el contexto de un hospital de emergência

André Almeida de Moura[a]
Amanda Alves Carlos Faria de Souza[b]
Pablo Klayver Alves da Silva[b]
Natasha Preis Ferreira[c]

How to cite this article:
Moura AA, Souza AACF, Silva PKA, Ferreira NP. Analysis of structural empowerment of nurses in the context of an emergency hospital. Rev Gaúcha Enferm. 2024;45:e20240029. https://doi.org/10.1590/1983-1447.2024.20240029.en

ABSTRACT

Objective: To analyze the relationship between structural empowerment and sociodemographic and professional factors of nurses at a reference hospital providing emergency care.

Method: Analytical, cross-sectional study, with 124 nurses from an emergency hospital, applying the questionnaires: sociodemographic and professional data and the Conditions of Effectiveness at Work II (CET-II) questionnaire. The Spearman or Kruskal Wallis statistical tests were used and the significance level was updated to 5% for the study's statistical analyses.

Results: Structural empowerment was moderate among nurses and "opportunity" presented greater mean among the dimensions. Although the correlations were weak, support was the dimension that showed the greatest results with the other variables. It is more noticeable when: shorter training time; greater age and; longer time at the institution. There was no difference between the dimensions of the instrument and the qualitative variables of the study, except between Opportunity and the surgical hospitalization unit and the total score of the instrument and the burns unit, compared with the other units of the hospital.

Conclusion: The structural empowerment of nurses in the hospital was moderate and influenced by variables such as: age, time since graduation, time at the institution and with differences between sectors.

Descriptors: Empowerment. Nurses. Emergency Nursing. Emergency Hospitals.

RESUMO

Objetivo: Analisar a relação entre o empoderamento estrutural e os fatores sociodemográficos e profissionais de enfermeiros de um hospital referência em atendimento às urgências.

Método: Estudo analítico, transversal, com 124 enfermeiros de um hospital de emergências de Minas Gerais, Brasil. Foram extraídos dados sociodemográficos e profissionais e aplicado o questionário de Condições de Eficácia no Trabalho II (CET-II). Foram empregados os testes estatísticos Spearman ou Kruskal Wallis e adotou-se o nível de significância de 5%.

Resultados: O empoderamento estrutural foi moderado entre os enfermeiros e a "oportunidade" apresentou a maior média entre os domínios. Embora as correlações tenham sido fracas, o "suporte" foi a dimensão que apresentou maior correlação com as demais variáveis. Ela é mais percebida, quanto: menor tempo de formação, maior a idade e maior tempo na instituição. Não houve diferença entre as dimensões do instrumento e a maioria das variáveis qualitativas do estudo, exceto, entre a "oportunidade" e a unidade de internação cirúrgica e o escore total do instrumento e a unidade de queimados, comparando-se com as demais unidades do hospital.

Conclusão: O empoderamento estrutural dos enfermeiros no hospital foi moderado e influenciado por variáveis como: idade, tempo de formação, tempo na instituição e com diferença entre os setores.

Descritores: Empoderamento. Enfermeiras e Enfermeiros. Enfermagem em Emergência. Hospitais de Emergência.

RESUMEN

Objetivo: Analizar la relación entre el empoderamiento estructural y los factores sociodemográficos y profesionales del enfermero de un hospital de referencia que brinda atención de emergencia.

Método: Estudio analítico, transversal, con 124 enfermeros de un hospital de emergencia, aplicando los cuestionarios: datos sociodemográficos y profesionales y el cuestionario Condiciones de Efectividad en el Trabajo II (CET-II). Se utilizaron las pruebas estadísticas de Spearman o Kruskal Wallis y el nivel de significancia se actualizó al 5% para los análisis estadísticos del estudio.

Resultados: El empoderamiento estructural fue moderado entre los enfermeros y la "oportunidad" presentó mayor media entre los dominios. Aunque las correlaciones fueron débiles, el apoyo fue la dimensión que mostró mayores resultados con las demás variables. Es más notorio cuando: menor tiempo de entrenamiento; mayor edad y; mayor tiempo en la institución. No hubo diferencia entre las dimensiones del instrumento y las variables cualitativas del estudio, excepto entre Oportunidad y la unidad de internación quirúrgica y la puntuación total del instrumento y la unidad de quemados, en comparación con las otras unidades del hospital.

Conclusión: El empoderamiento estructural del enfermero en el hospital fue moderado e influenciado por variables como: edad, tiempo de formación, tiempo de permanencia en la institución y con diferencias entre sectores.

Descriptores: Empoderamiento. Enfermeras y Enfermeros. Enfermería de Emergencia. Hospitales de Emergencia.

[a] Universidade de São Paulo, Escola de Enfermagem, Departamento de Orientação Profissional, São Paulo, São Paulo, Brasil.

[b] Universidade Federal de Minas Gerais, Escola de Enfermagem, Curso de Graduação em Enfermagem, Belo Horizonte, Minas Gerais, Brasil.

[c] Fundação Hospitalar do Estado de Minas Gerais, Hospital João XXIII, Belo Horizonte, Minas Gerais, Brasil

INTRODUCTION

Empowerment comprises a comprehensive concept to characterize elements of professional growth and development within institutions, aiming at the process of autonomy. Thus, when thinking about nursing, it is essential that health organizations are guided by management models and policies, intensifying the empowerment of nurses, in order to aim for good performance in their actions, as well as in their decision-making process[1,2].

In this sense, it is worth highlighting that empowerment is essential for the management of nursing teams and corresponds to a component of the nurse's work process, as it implies freedom of choice, the ability to act, the decision-making process and positively affects the quality of patient care[3]. This management practice aims to identify hindering factors and remove them, with a view to individual self-efficacy and better organizational performance. Therefore, changes in the structure and culture of the organization can affect nurses' behaviors and decisions[4].

The empowerment of nurses is a relevant area for researchers in this area, since the results of the studies can support health organizations in improving nursing teams and, consequently, influence both the results related to the practice environment and those related to service users[5,6].

Among the theoretical concepts used on the subject, Kanter's structural empowerment stands out. This theoretical framework has been used in nursing studies[7]. Kanter's theory on structural empowerment, widely disseminated in nursing by a group of Canadian researchers, defines power as the ability to take actions, mobilize and employ resources necessary to achieve organizational goals[8,9]. This theoretical framework assumes two sources of power in organizations: "formal power" and "informal power". Both powers should be used to provide employees with access to organizational structures that empower them: support, information, resources and opportunities. These enabling structures include: "support" (feedback from colleagues and managers), "information" (data needed to work efficiently), "resources" (money, time, materials needed to perform tasks) and "opportunity" (chances to grow and develop)[7,8].

Recent studies in nursing on the topic of empowerment reveal that access to information, support, resources and opportunities facilitate the experience of intrinsic motivation for the success of management and care practices[1,10]. A study carried out in Finland indicates that, in a challenging and stressful environment, when they receive the necessary enabling structures and access to formal and informal powers to exercise their practice, nurses feel more empowered[11].

Among the many challenging, arduous, and exhausting contexts of nursing practice, emergency care is one of them. In this context, four studies conducted in recent years have shown that: structural empowerment increases the provision of patient-centered care[12]; there is a positive correlation with clinical leadership, given that the lack of structural empowerment is a limiting factor in this nursing leadership model[4,13]. In a quantitative analysis, there was a moderate level of structural empowerment, the element that favored it was "opportunity," while, qualitatively, informal power was the dimension perceived most positively by nurses; on the other hand, the other dimensions were perceived as insufficient[14].

The present study is justified because, according to the results of the studies presented, they show the importance of analyzing empowerment in emergency care units; at the same time, the four studies are unanimous in stating that the work developed in this context is still incipient[4,12–14]. Furthermore, in addition to the lack of studies on the subject in these scenarios, two reviews and two other studies on the structural empowerment of nurses in general hospital units converge in the assertion that there is little research investigating this variable with sociodemographic and professional predictors. In this sense, evaluating the contributions of sociodemographic and professional factors can provide information to nursing managers to implement strategic actions and formulate improvement activities to qualify nurses and the care provided[5,6,15]. Therefore, the results of this study can assist in the nursing management process in emergency and urgency units, since good levels of empowerment can also qualify the care process and bring benefits to workers.

In view of the above, this article aims to analyze the relationship between structural empowerment and the sociodemographic and professional factors of nurses in a referral hospital for emergency care.

METHOD

Study Design

This research comprises a quantitative approach study, with an analytical and cross-sectional observational design, guided by the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) recommendations guide to support the communication of the results demonstrated[16].

Study Setting

The study setting was a hospital considered a reference and excellence center for the care of patients suffering from multiple traumas, major burns, poisoning and life-threatening clinical and/or surgical situations in the metropolitan region of Belo Horizonte, Minas Gerais. This hospital is considered one of the fundamental components of the Emergency and Urgency Network (RUE) of this city.

Population, selection criteria and sample size

This was a convenience sample, in which it was estimated that the questionnaires would be given to all nurses working in all sectors of the hospital, both those working in the healthcare field and those dedicated to management activities. However, the sample size calculation was performed to establish the number of professionals who would represent the population. The total number of nurses in this hospital unit, at the time of the survey, was 213 professionals.

The inclusion criteria adopted consisted of nurses who had been working in the position for at least six months, in order to ensure that the professional had already adapted and, therefore, was able to analyze empowerment at work. The exclusion criteria were professionals in the category in question who were on vacation, leave or sick leave during the data collection period.

Based on an initial population of 213 nurses working at the institution, it is worth noting that 25 of them were on sick leave, maternity leave or vacation. Another six professionals did not agree to participate in the research, which totaled 182 participants eligible to answer the questionnaires. It is worth noting that of this number of professionals, with 46 nurses, attempts were made twice to locate them on their shifts, but without success and 12 questionnaires were not returned within the agreed deadlines.

Based on these criteria and considering that six professionals did not agree to participate in the research, in the end, there were 182 participants eligible to answer the questionnaires. Given this number of participants, the sample calculation was established, adopting a sampling error of 5% and a confidence index of 95%, obtaining a sample of 124 professionals.

Data Collection

Three researchers – the main researcher and two undergraduate students – participated in the data collection process. The two students were properly trained and qualified to collect data by the main researcher and were responsible for delivering the questionnaires (in an unmarked envelope) to the subjects who agreed to participate in the research, in November and December 2022.

The nursing coordinators of the hospital units in question were contacted to deliver the instruments to them and to the other nurses in the sector, as well as to schedule the collection of the questionnaires, in the sealed envelope, within a period of three days.

At that time, the group of researchers provided guidance on the objectives and clarified any doubts about the research. In addition, the group of researchers emphasized to the participants the importance of completing the items in the instruments completely. After two attempts to find the nurses on their respective shifts, the professionals were no longer approached and we considered this as a loss of the population.

To obtain the variables analyzed in the research, the questionnaire Characterization of the research participants with sociodemographic and professional data and the Questionnaire of Conditions of Effectiveness at Work II (CET-II) that analyzes structural empowerment were applied. Thus, the sociodemographic and professional information collected through the Subject Characterization Questionnaire were: age; gender; time since graduation; additional training; postgraduate studies (*Strictu* and *Latu Sensu*); type of employment relationship (statutory, CLT, fixed-term contract and other); time working in the unit; having another employment relationship; and having already assumed a nursing coordination/leadership position.

Data related to structural empowerment in the nurses' work environment were collected by the instrument developed by Canadian researchers[9], whose cross-cultural adaptation and validation, in Brazil, was developed to analyze the work of nurses in different scenarios, in relation to structural empowerment conditions. Thus, this questionnaire sought to fill the gaps related to this theme, and was nationally called the Work Efficacy Conditions Questionnaire II (CET-II)[17].

The CET-II aims to measure elements of Structural Empowerment existing in the nurse's work environment. It is structured in 20 items, divided into six dimensions: Opportunity; Information; Support; Resources; Formal Power; and Informal Power. This instrument also has a construct about global empowerment, containing two items, from a broader perspective of empowerment[9,17], however, which were not used in this research.

The CET-II questionnaire is measured using a Likert-type scale, with scores ranging from 1 (none/none) to 5 (very/very much), while values between 2 and 4 represent intermediate values. The items of each of the components are added together and, then, an average is calculated, with a view to

providing a score ranging from 1-5 for each dimension. The sum of the dimensions can vary from 6 to 30, with values between: 6-13 meaning low levels of empowerment; 14-22 meaning moderate levels of empowerment and; 23-30 meaning high levels of empowerment[17].

Data analysis and processing

The collected data were double-entered into Excel® spreadsheets and compared, thus ensuring that there were no typing errors. For descriptive statistical analysis and correlation between variables, the statistical program Statistical Analysis System (SAS), version 9.4, was used to process the data. Qualitative variables were summarized in simple and relative frequencies using percentages. Quantitative variables were demonstrated by means, medians, standard deviations, minimum values and maximum values. Initially, the Shapiro-Wilk normality test was used to enable the evaluation of the distribution of variables, in addition to those related to the Structural Empowerment instrument. In addition, an analysis between the dimensions of Structural Empowerment and the sociodemographic and professional variables was performed using Spearman's correlation coefficient or the nonparametric Kruskal-Wallis test. All statistical tests performed had a significance level of 5% (α=0.05).

This study was assessed and approved by the Research Ethics Committees (REC) of the Federal University of Minas Gerais, under protocol number 5,715,833 (on October 22, 2022) and CAAE 63235922.3.0000.5149, as well as the REC of the Hospital Foundation of the State of Minas Gerais, under protocol number 5,743,150 (on November 7, 2022) and CAAE 63235922.3.3001.5119, in order to meet the determinations of Resolution No.466, of December 12, 2012, of the National Health Council. For data collection, it is reiterated that all participants signed the Free and Informed Consent Form before applying the questionnaires.

RESULTS

At the end of data collection, 68.13% (n=124) respondents to the research instruments were obtained. The age of the participants ranged from 24 to 63 years, with an average of 43.03 (SD 7.97) years. Of the 124 nurses, 99 (79.84%) were female, 43 (34.68%) worked in the emergency unit and outpatient clinic and the time of employment at the institution ranged from one to 35 years in the institution, with an average of 8.63 (SD 6.92) years. Regarding professional training, 111 (89.52%) had some postgraduate degree (*Strictu* and *Latu Sensu*), 70 (56.45%) reported having already taken some complementary course such as Advanced Cardiac Life Support and the average time since graduation was 13.37 (SD 6.27) years, with a variability of one and 39 years since graduation. Regarding the employment relationship, 84 (67.74%) were governed by the statutory regime, 38 (30.65%) by a fixed-term contract and two (1.61%) by the Consolidation of Labor Laws (CLT) regime. Furthermore, it is worth noting that 80 (64.52%) of the professionals reported that they did not have another employment relationship and 72 (58.06%) are or have been in a coordination position. Table 1 presents the responses regarding the dimensions of the total CET-II score, while Table 2 highlights the correlation between the CET-II dimensions and the quantitative variables: age, time since graduation and time in the unit.

A moderate level of structural empowerment was observed among nurses, with a mean total CET-II score of 21.27 (SD 4.04). Opportunity was the dimension with the highest mean, which indicated that feelings of challenge and the possibility of learning and growth were very present in the nurses' perception. Next, Informal Power was the second highest mean, which represents the importance of the network of alliances with colleagues and subordinates, inside and outside the organization. In contrast, the lowest mean was observed for formal power, which is related to issues of work definition, flexibility, recognition and visibility of their practices.

Table 2 shows that the dimension, Support, showed a weak correlation with the three quantitative variables of the study: Age, Time since graduation and Time in the institution, with Time since graduation showing an inverse correlation. In other words, professionals with less time since graduation, who were older or had more time working in the institution, had a greater perception of "Support".

There were other weak correlations between the variables: Age and Formal Power; Time since graduation and Informal Power (inverse) and; Time since graduation and total CET-II score. For these correlations, it was observed that: older nurses showed more evidence of formal power; recent graduates noticed more informal power, while those who had been graduated for a longer time perceived themselves as more empowered.

These findings demonstrate that, although the correlations are weak, in some way, Support through feedback and guidance received from superiors, peers and subordinates was influenced by the quantitative variables of the research. Furthermore, given the inverse relationship, the shorter the training time, the greater the level of empowerment perceived by nurses at the institution in question.

In Table 3 the results show that there was a statistically significant difference in the Opportunity dimension and in

Table 1 – Nurse empowerment according to the dimensions and total score of the CET-II. Belo Horizonte, MG, Brazil, 2022.

Dimensions	Mean	Standard deviation (SD)	Minimum	Maximum
Opportunity	4.43	0.64	2	5
Information	3.33	1.05	1	5
Support	3.32	0.98	1	5
Resources	3.17	0.83	1	5
Formal power	3.12	1.04	1	5
Informal power	3.90	0.90	1	5
Total Score	21.27	4.04	8	29

Table 2 – Correlation between the CET-II dimensions and the quantitative variables: age, time since graduation and time in the unit. Belo Horizonte, MG, Brazil, 2022

Dimensions		Variables		
		Age	Time since graduation	Time in the institution
Opportunity	r*	0.063	-0.031	0.089
	p**	0.484	0.731	0.321
Information	r	0.054	-0.136	0.099
	p	0.545	0.129	0.269
Support	r	**0.189**	**-0.203**	**0.212**
	p	**0.034**	**0.023**	**0.018**
Resources	r	0.091	-0.135	-0.014
	p	0.311	0.134	0.873
Formal power	r	**0.195**	-0.115	0.954
	p	**0.029**	0.202	0.291
Informal Power	r	-0.127	**-0.227**	0.093
	p	0.157	**0.011**	0.300
Total Score	r	0.111	**-0.198**	0.134
	p	0.219	**0.027**	0.136

* Spearman test **p-value

the total CET score, which makes it possible to assess that, in surgical inpatient units, Opportunity is more perceived compared to other sectors of the hospital. At the same time, nurses working in the Burns Sector feel more empowered when compared to other professionals from other sectors of the hospital institution.

Table 3 – Mean and standard deviation of the dimensions of the CET-II instrument according to the sectors of the emergency hospital (n=124), Belo Horizonte, MG, Brazil, 2022.

Sector	Dimensions of Conditions of Effectiveness at Work (CET-II)						Total Score
	Opportunity	Information	Support	Resources	Formal Power	Informal Power	
Materials Center and Surgical Center (n=13)	4.23*	3.05	3.44	3.43	3.23	3.77	21.15
	0.79**	0.96	0.77	0.74	1.10	0.98	3.75
Clinical inpatient units (n=14)	3.93	3,07	2.69	2.83	2.43	3.52	18.48
	0.73	1.10	1.00	0.91	0.73	1.09	4.61
Nursing directorate and support sectors (n=16)	4.43	3,92	3.38	3.39	3.27	3.85	22.25
	0.58	0.85	0.69	0.82	0.79	0.91	3.40
Intensive care units (n=23)	4.61	3,30	3.59	3.20	3.39	4.16	22.26
	0.46	1.09	0.98	0.80	1.09	0.81	4.08
Surgical inpatient units (n=11)	4.73	3.09	3.33	2.94	2.91	3.97	20.97
	0.44	1.12	1.11	0.66	1.22	0.57	3.21
Burns sector (n=4)	4.66	4.16	4.16	3.83	4.33	4.66	25.83
	0.27	0.63	0.58	0.96	0.72	0.27	2.86
Emergency and outpatient clinic (n=43)	4.45	3.27	3.24	3.09	3.04	3.85	20.96
	0.66	1.07	1.04	0.83	1.05	0.95	2.86
Kruskal Wallis test (p-value)	**0.035**	0.122	0.073	0.262	0.240	0.315	**0.047**

*Mean **Standard deviation

Furthermore, it is pertinent to highlight that the correlation between the dimensions and total score of the CET-II instrument and the variables: gender, function, postgraduate studies (*Strictu* and *Latu Sensu*), complementary course, type of employment relationship, having another relationship, holding a coordination position was tested using the Kruskal Wallis nonparametric statistical test. The results showed that there was no statistically significant difference between these qualitative variables.

DISCUSSION

Regarding the sociodemographic and professional variables of the participants: mean age 43.03 (SD 7.97); female gender 99 (79.84%); having completed a postgraduate course 111 (89.52%); having already taken some complementary course 70 (56.45%); the measurement of time since graduation 13.37 (SD 6.27) years; and the mean time of work in the same practice environment 8.63 (SD 6.92) years. These results are similar to the findings of studies developed with the same instrument and in the same context as the present research[12,14] or in different settings, such as a hospital in Portugal[10] and in Iran[18].

Differing from the data found, in the research developed in three large hospitals in Jordan, 60.1% of emergency nurses were male[4]. Studies in which researchers used the same instrument, but in different settings, such as hospitals other than emergency/urgent care, revealed that 93.4% of nurses had only a bachelor's degree and 41.1% of them had less than five years of work experience[2] and had, on average, eight years of training (SD ± 5.4), in addition to the average of 5.5 years in the same practice environment (SD ± 4.88)[19].

In relation to the employment relationship, in the present study it was observed that the majority of nurses were governed by the statutory regime 84 (67.74%), that is, professionals who had passed a public exam. Two studies carried out in the South of Brazil that used the CET-II as a data collection instrument obtained the following percentages of participants: 71.4% (14) and 59.1% (1) were governed by the CLT, that is, a non-statutory relationship. Based on the analysis of the means of the CET-II instrument, it can be inferred that the structural empowerment of nurses was moderate, with a mean of 21.27 (SD=4.04), with the "Opportunity" construct presenting the highest mean, 4.43 (SD=0.64). Both results are in line with two national studies that explored the same instrument as the present study[1,14] and with an international study conducted in Finland[11].

Similarly, moderate structural empowerment was evidenced in nurses from hospitals in Jordan; however, for professionals from these institutions, the "Opportunity" dimension did not correspond to the largest domain of the CET-II(3.4). In a qualitative perspective of a mixed study on structural empowerment, nurses working in an emergency unit perceived insufficient access to the opportunity structure. The participants reinforced that this insufficiency is related to training in the context of practice, such as training in new care protocols for patients with stroke and cardiopulmonary arrest[14].

In view of these findings, it is clear that the structural empowerment of nurses makes it possible to create an effective work environment culture, where nurses can be committed to developing their practices and, consequently, promotes job satisfaction, engagement, and organizational commitment, reducing professional turnover[6,7].

Furthermore, it is worth highlighting that opportunity is a key point in the empowerment of nurses in the context of emergency care, as there is a great possibility for professional growth and development of skills in the face of the constant challenges posed to nurses, both due to the clinical complexity of the patients who use this service and the dynamism of this practice environment[13].

In contrast, "Formal Power" was the construct of the instrument under analysis with the lowest average, 3.12 (SD=1.04). This finding corroborates the work developed in an emergency department in New Zealand[13], in a context similar to this work. Furthermore, the work that investigated nurses in general hospitals in Jordan also found "Formal power" as an element to be improved compared to the others[3].

In the same sense, a meta-analysis indicates that it is vital to create work environments and atmospheres necessary to improve the professional performance of nurses. To this end, it is necessary to provide these professionals with formal and informal power[20]. This item of structural empowerment was also observed by nurses at an emergency hospital, through the exercise of autonomy for decision-making, especially those more focused on shared care procedures, through dialogue and discussion of situations with peers and the multidisciplinary team[14].

Among the analyses of correlations between quantitative variables and those related to CET-II, it is worth mentioning that the Total CET-II Score and training time were significantly correlated, inversely (r = -0.19833), which demonstrates that, as training time increases, the perception of empowerment is lower. In contrast to this finding, three studies found that the longer the training time, the greater the empowerment of these nurses[5,15,21]. This contradiction reinforces how empowerment involves a social, cultural and political process within healthcare organizations and that, therefore, the time

professionals have been trained may have a greater or lesser influence on the autonomy of nurses, depending on the existing organizational culture[22].

The "Support" and "Informal Power" dimensions of the CET-II were inversely related to the time nurses have been trained. Contrary to this result, nursing managers in Cyprus who had been trained for a longer time had a greater perception of these same dimensions[21]. Nurses from a hospital in southern Chile who had been trained for a longer time had greater perceptions of the "Support" and "Opportunity" dimensions[23].

Given these findings regarding support, the role of nursing managers in adopting strategies to promote greater access to opportunities, information, support and resources is relevant, which enables a positive and empowering work environment for nurses, seeking to allow them to perform their duties efficiently and be more effective. Among the strategies, the Brazilian study in an emergency room unit reinforces the relevance of feedback and support from management in relation to solving problems that go beyond the power of nurses[14].

A study carried out in Cyprus showed the positive relationship between age and the dimensions "Support" and "Formal Power"[21] was similar to the findings of the present study. Corroborating this result, a study with nurses in Portugal showed that age correlated positively with "Informal Power", as well as the "Resources" domain.

In the present study, a positive relationship was observed between time in the institution and "Support", which differs from the study in Portugal, in which time in the institution positively influenced "Informal Power"[10]. The longer time spent at the institution allows nurses to have a greater understanding of the work processes, in addition to establishing which measures need to be planned and executed, considering the support network (support) and professional relationships (informal power), to articulate between the objectives of the service and those of the institution[24].

Regarding the results of the research, a statistically significant difference was observed in the Opportunity dimension ($p= 0.0354$) and in the total CET-II score ($p= 0.0476$), in some of the sectors of the emergency hospitals under analysis. In this sense, Opportunity was related to the Surgical Inpatient Unit, while the total score was associated with the hospital's Burns Unit.

Two studies presented statistically significant differences between the sectors of the hospitals analyzed: the first found that nurses who worked in specialized wards such as surgical wards, the Intensive Care Unit and the emergency room reported lower empowerment compared to professionals in clinical wards ($p < 0.05$)[5]. In the second study, a statistically significant difference was identified for Chilean nurses in the Medical-Surgical Block in the four empowerment factors: Opportunity, Information, Support and Resources[23]. The findings of this study did not demonstrate statistically significant differences between the qualitative variables and the dimensions and the total CET-II score. It is noteworthy that, in this way, organizations need to respond to the challenges of empowerment, and therefore, a diagnosis of the variables that can influence empowerment, such as training, management experiences, among other factors, is essential. With this, it is possible to provide conditions for support and institutional policy interventions[21].

Therefore, it is worth noting that although no correlation was found between experience in nursing coordination and the variables related to structural empowerment, the literature reiterates the influence of leadership on the empowerment of nurses[13,24]. Thus, empowerment is fundamental in the work of nurses, both in the care dimension of their work process and as an essential component in the profile of this worker, in their management practice[22].

The participation of all nurses from the reference hospital in the RUE was not possible due to the change of shifts of some of these professionals, an aspect that represented a limitation to the present study. In view of the evidence, this study has practical implications for the management and organization of emergency hospitals, especially in the management of the nursing team regarding the factors that influence the empowerment of these professionals in the context of emergency care. Thus, managers can promote a work environment with adequate conditions so that nurses can exercise power, with their skills duly recognized. Therefore, having access to opportunities, support, resources, information and powers (formal and informal) are crucial to providing quality care.

CONCLUSION

It was observed that structural empowerment is moderate among nurses working in an emergency hospital in the metropolitan region of Belo Horizonte. "Opportunity" was the dimension of the CET-II instrument that presented the highest average, on the other hand, "Formal power" corresponded to the lowest value of the averages.

The data indicate an inverse and statistically significant correlation between the variable Time since graduation and the "Support" domain, which demonstrated that in this group of nurses, the shorter the time since graduation, the greater the perception about this dimension. A positive correlation was also evidenced between the time since graduation and

the CET-II dimensions – "Informal power" and the "Total scale score". The "Support" domain also correlated positively with the variables "Age" and "Time in the institution". There was no statistically significant difference for most of the qualitative variables of the study and the CET-II dimensions, except between "Opportunity" and the Surgical Inpatient Unit and "Total scale score" with the Burn Unit. Thus, it is clear that this work allows us to expand knowledge about nursing management, especially in relation to the empowerment of nurses in the hospital emergency context. Finally, considering the domains present in the CET-II used in the research, it is noted that health organizations need to invest in improving access to resources, information and opportunities, with a view to empowering nurses.

REFERENCES

1. Moura LN, Camponogara S, Santos JLG, Gasparino RC, Silva RM, Freitas EDO. Structural empowerment of nurses in the hospital setting. Rev Latino-Am Enfermagem. 2020;28. https://doi.org/10.1590/1518-8345.3915.3373
2. Jafari F, Salari N, Hosseinian-Far A, Abdi A, Ezatizadeh N. Predicting positive organizational behavior based on structural and psychological empowerment among nurses. Cost Eff Resour Alloc. 2021;19(1):38. https://doi.org/10.1186/s12962-021-00289-1
3. Saleh MO, Eshah NF, Rayan AH. Empowerment Predicting Nurses'Work Motivation and Occupational Mental Health. SAGE Open Nurs. 2022;8:237796082210768. https://doi.org/10.1177/23779608221076811
4. Khrais H, Nashwan AJ. Leadership practices as perceived by emergency nurses during the covid-19 pandemic: the role of structural and psychological empowerment. J Emerg Nurs. 2023;49(1):140–7. https://doi.org/10.1016/j.jen.2022.10.003
5. Mansour M, Darawad M, Mattukoyya R, Al-Anati A, Al-Madani M, Jamama A. Socio-demographic predictors of structural empowerment among newly qualified nurses: findings from an international survey. J Taibah Univ Med Sci. 2022;17(3):345–52. https://doi.org/10.1016/j.jtumed.2021.10.010
6. Fragkos KC, Makrykosta P, Frangos CC. Structural empowerment is a strong predictor of organizational commitment in nurses: a systematic review and meta-analysis. J Adv Nurs. 2020;76(4):939–62. https://doi.org/10.1111/jan.14289
7. Woodward KF. Individual nurse empowerment: a concept analysis. Nurs Forum. 2020;55(2):136–43. https://doi.org/10.1111/nuf.12407
8. Kanter R. Men and women of the corporation. 2nd ed. New York: Basic Books; 1993.
9. Spence Laschinger HK, Finegan J, Shamian J, Wilk P. Impact of structural and psychological empowerment on job strain in nursing work settings. JONA J Nurs Adm. 2001;260–72. https://doi.org/10.1097/00005110-200105000-00006
10. Cardoso Teixeira A, Nogueira A, Nunes JR, Teixeira L, Céu Barbieri-Figueiredo M. Professional empowerment among Portuguese nursing staff: a correlational study. J Nurs Manag. 2021;29(5):1120–9. https://doi.org/10.1111/jonm.13250
11. Niinihuhta M, Terkamo-Moisio A, Kvist T, Häggman-Laitila A. Nurse leaders' work-related well-being—Relationships to a superior's transformational leadership style and structural empowerment. J Nurs Manag. 2022;30(7):2791–800. https://doi.org/10.1111/jonm.13806
12. Alhalal E, Alrashidi LM, Alanazi AN. Predictors of patient-centered care provision among nurses in acute care setting. J Nurs Manag. 2020;28(6):1400–9. https://doi.org/10.1111/jonm.13100
13. Connolly M, Jacobs S, Scott K. Clinical leadership, structural empowerment and psychological empowerment of registered nurses working in an emergency department. J Nurs Manag. 2018;26(7):881–7. https://doi.org/10.1111/jonm.12619
14. Torquetti AB, Camponogara S, Schneider FVM, Freitas EO, Moura LN, Miorin JD. Structural empowerment of nurses working in an emergency room: a mixed methods study. Rev Enferm Uerj. 2021;29. https://doi.org/10.12957/reuerj.2021.62928
15. Aljarameez F, Saha C, Sinan M, Rajan L, Ahmed GY, Mutair A Al. Sociodemographic determinants of structural empowerment and organisational commitment among critical care nurses in Saudi Arabia: a comparative cross-sectional study. Br J Healthc Manag. 2023;29(8):1–12. https://doi.org/10.12968/bjhc.2021.0167
16. Cuschieri S. The STROBE guidelines. Saudi J Anaesth. 2019;13(5):31. https://doi.org/10.4103/sja.SJA_543_18
17. Bernardino E, Dyniewicz AM, Carvalho KLB, Kalinowski LC, Bonat WH. Transcultural adaptation and validation of the Conditions of Work Effectiveness – Questionnaire-II instrument. Rev Latino-Am Enfermagem. 2013;21(5):1112–8. https://doi.org/10.1590/S0104-11692013000500014
18. Gholami M, Saki M, Hossein Pour AH. Nurses' perception of empowerment and its relationship with organizational commitment and trust in teaching hospitals in Iran. J Nurs Manag. 2019;27(5):1020–9. https://doi.org/doi/10.1111/jonm.12766
19. Albasal NA, Eshah N, Minyawi HE, Albashtawy M, Alkhawaldeh A. Structural and psychological empowerment and organizational commitment among staff nurses in Jordan. Nurs Forum. 2022;57(4):624–31. https://doi.org/10.1111/nuf.12721
20. Zhang X, Ye H, Li Y. Correlates of structural empowerment, psychological empowerment and emotional exhaustion among registered nurses: A meta-analysis. Appl Nurs Res. 2018;42:9–16. https://doi.org/10.1016/j.apnr.2018.04.006
21. Leontiou I, Papastavrou E, Middleton N, Merkouris A. Empowerment and turnover of nurse managers before and after a major health care reform in Cyprus: a cross sectional study. J Nurs Manag. 2022;30(5):1196–205. https://doi.org/10.1111/jonm.13606
22. Machado LM, Camponogara S, Moreira DYI. O empoderamento como componente do trabalho do enfermeiro: tendência de teses e dissertações. Braz J Develop. 2021;7(8):83103-117. https://doi.org/10.34117/bjdv7n8-493
23. Masias KAA, Santos JLG, Erdmann AL. Empowerment of nurses from a hospital in the south of Chile. Texto Contexto Enferm. 2020;29(spe). https://doi.org/10.1590/1980-265X-TCE-2019-0341
24. Santos LC, Silva FM, Domingos TS, Andrade J, Spiri WC. Liderança e comportamento empoderador: compreensões de enfermeiros-gerentes na Atenção Primária à Saúde. Acta Paul Enferm. 2023;36:eAPE00051. https://doi.org/10.37689/acta-ape/2023A000051

Authorship contribution:

Project administration: André Almeida de Moura, Amanda Alves Carlos Faria de Souza.
Formal analysis: André Almeida de Moura, Amanda Alves Carlos Faria de Souza, Pablo Klayver Alves da Silva, Natasha Preis Ferreira.
Conceptualization: André Almeida de Moura.
Data curation: André Almeida de Moura, Amanda Alves Carlos Faria de Souza.
Writing – original draft: André Almeida de Moura, Amanda Alves Carlos Faria de Souza, Pablo Klayver Alves da Silva.
Writing – review and editing: André Almeida de Moura, Natasha Preis Ferreira.
Investigation: André Almeida de Moura, Amanda Alves Carlos Faria de Souza.
Methodology: André Almeida de Moura, Natasha Preis Ferreira.
Supervision: André Almeida de Moura.
Validation: André Almeida de Moura, Amanda Alves Carlos Faria de Souza, Pablo Klayver Alves da Silva, Natasha Preis Ferreira.
Visualization: André Almeida de Moura, Amanda Alves Carlos Faria de Souza, Pablo Klayver Alves da Silva, Natasha Preis Ferreira.

The authors declare that there is no conflict of interest.

Corresponding author:

André Almeida de Moura
E-mail: andalmo@usp.br

Associate editor
Luccas Melo de Souza

Editor-in-chief:
João Lucas Campos de Oliveira

Received: 01.29.2024
Approved: 04.23.2024