

NURSES' PERCEPTION OF PATIENTS' KNOWLEDGE IN RELATION TO THE PERIOPERATIVE PERIOD

Perceção dos enfermeiros sobre o conhecimento dos clientes sobre o período perioperatório

Percepción de los enfermeros sobre el conocimiento de los pacientes sobre el período perioperatorio

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ABSTRACT

Background: patients' knowledge about perioperative care is an important need, which is related to better postoperative outcomes. Nurses should promote the improvement of this knowledge in the care delivery process.

Objective: describe the nurses' perception of the knowledge demonstrated by patients about perioperative care.

Methodology: this is a quantitative, cross-sectional, descriptive-exploratory study. An online questionnaire was applied to nurses between June and August 2022, obtaining a sample of 41 participants. Non-probabilistic convenience sampling. For data treatment, the statistical program SPSS, ® version 20, was used and analyzed through descriptive statistics. **Results:** the average age is 35 years and it can be seen that in the perception of the nurses, the patients demonstrate insufficient knowledge. The items whose knowledge was described as more deficient are the need for bathing, the evaluation of capillary glucose and temperature, the size of the incision and the presence of devices after surgery. **Conclusion:** patients' knowledge is perceived by nurses as insufficient, which seems to reinforce the importance of teaching, especially in the preoperative period, which may contribute to improving the patients' surgical experience and reducing complications.

Keywords: knowledge; urologic surgical procedures; nursing

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RESUMO

Enquadramento: o conhecimento dos clientes sobre os cuidados perioperatórios é uma necessidade importante, que se relaciona com melhores resultados no pós-operatório. Os enfermeiros devem promover a melhoria deste conhecimento no processo de prestação de cuidados. **Objetivos:** descrever a perceção dos enfermeiros em relação ao conhecimento demonstrado pelos clientes sobre os cuidados perioperatórios. **Metodologia:** estudo quantitativo, transversal, descritivo-exploratório. Aplicou-se um questionário on-line aos enfermeiros entre junho e agosto de 2022, obtendo-se uma amostra de 41 participantes. Amostragem não probabilística por conveniência. Para tratamento de dados, foi utilizado o programa estatístico SPSS®, versão 20, e respetiva análise através de estatística descritiva. **Resultados:** a idade média é de 35 anos, verificando-se que, na perceção dos enfermeiros, os clientes demonstram conhecimento insuficiente. Os itens cujo conhecimento foi descrito como mais deficitário foram a necessidade de banho, a avaliação da glicemia capilar e da temperatura, o tamanho da incisão e a presença de dispositivos após a cirurgia. **Conclusão:** o conhecimento dos clientes é percebido pelos enfermeiros como sendo insuficiente, o que parece reforçar a importância da realização de ensinos, em especial no período pré-operatório, que poderá contribuir para a melhoria da experiência cirúrgica do cliente e redução de complicações.

Palavras-chave: conhecimento; procedimentos cirúrgicos urológicos; enfermagem

RESUMEN

Marco contextual: el conocimiento de los pacientes sobre el cuidado perioperatorio es una necesidad importante, que se relaciona con mejores resultados postoperatorios. Los enfermeros deben promover la mejora de este conocimiento en el proceso de prestación del cuidado. **Objetivos:** describir la percepción de los enfermeros sobre el conocimiento demostrado por los clientes sobre los cuidados perioperatorios. **Metodología:** se trata de un estudio cuantitativo, transversal, descriptivo-exploratorio. Se aplicó un cuestionario online a enfermeras entre junio y agosto de 2022, obteniéndose una muestra de 41 participantes. Muestreo no probabilístico por conveniencia. Para el tratamiento de los datos se utilizó el programa estadístico SPSS, versión 20, ® el cual fue analizado a través de la estadística descriptiva. **Resultados:** La edad promedio es de 35 años, y se puede observar que, en la percepción de los enfermeros, los clientes demuestran conocimientos insuficientes. Los ítems cuyo conocimiento fue descrito como más deficiente son la necesidad de baño, la evaluación de la glucosa capilar y la temperatura, el tamaño de la incisión y la presencia de dispositivos después de la cirugía. **Conclusión:** el conocimiento de los pacientes es percibido por los enfermeros como insuficiente, lo que parece reforzar la importancia de la enseñanza, especialmente en el período preoperatorio, lo que puede contribuir para mejorar la experiencia quirúrgica del cliente y reducir las complicaciones.

Palabras clave: conocimiento; procedimientos quirúrgicos urológicos; enfermería

INTRODUCTION

Perioperative nursing focuses on protecting the integrity of the person in a vulnerable situation and identifying the main needs in nursing care (Pelarigo, 2019), being perceived as an autonomous nursing intervention, but whose results have a direct impact on the care delivery process, integrating a multidisciplinary care plan (Mendes & Ferrito, 2021). In fact, nurses have a fundamental role in holistic care for the person and function as facilitators in the health-illness transition process (Rodrigues et al., 2021).

It is expected that patients will present various doubts and it is up to the nurse to develop effective communication, adapting interventions and ensuring client satisfaction and quality of care.

Research has demonstrated that the teachings carried out in the pre-operative period, with regard to the entire perioperative period, are of great importance for the surgical patient in terms of reducing complications (Breda & Cerejo, 2021; Gonçalves et al., 2017; Gröndahl et al., 2019; Scarpine Malheiros et al., 2021; Villa et al., 2022).

In this sense, the pre-operative nursing consultation can be understood as a privileged moment for transmitting information to the patient, aiming to better prepare them for surgery and promoting their collaboration in care (Mendes et al., 2020), and should the customer's informational needs must be identified and adjusted measures implemented to replace them (Breda & Cerejo, 2021).

Order No. 306-A/2011 (Ministérios das Finanças e Saúde, 2011, p. 5348-(2)), in article 2, paragraph g), defines the nursing consultation as “an intervention aimed at carrying out of an assessment, or

establishment of a nursing care plan, in order to help the individual achieve maximum self-care capacity.”

The Association of Portuguese Operating Room Nurses [AESOP] (2012) adds other objectives of the pre-operative consultation, such as: reducing patients' anguish and anxiety related to surgical intervention with the aim of achieving greater well-being and collaboration throughout the perioperative period, and recall and clarify information regarding preoperative preparation.

Thus, the preoperative nursing consultation provides a first contact with the patients, as well as a privileged moment of interaction with the nurse and its implementation aims to contribute to improving the patients' surgical experience (Breda & Cerejo, 2021; Gonçalves et al., 2017; Medina-Garzón, 2019; Pelarigo, 2019). This consultation is the way to get to know the patient better and provide them with information so that they can play a more active role in their recovery (Mendes & Ferrito, 2021).

Therefore, given the importance of nursing's contribution to improving patients' knowledge regarding the perioperative period and due to the lack of characterization of this subject in this hospital, the need to carry out this work emerges.

The main objective for this study was defined as: describing nurses' perception of patients' knowledge regarding perioperative care. A more specific objective was also defined regarding which knowledge items were most deficient demonstrated by patients', these being: which surgery is the reason for hospitalization, the type of surgical approach (open or endoscopic approach), bathing the day before surgery and on the same day with chlorhexidine, trichotomy (when indicated), the need for blood glucose

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monitoring, the need for temperature assessment, the size of the incision (when applicable), the days of hospitalization, the recovery time to return to active life, the type of anesthesia (whether the client is awake or not), the presence of devices (urinary catheter, peripheral venous catheter, epidural catheter, surgical drain).

FRAMEWORK / THEORETICAL FOUNDATION

The implementation of educational programs based on scientific evidence that aim to empower patients and allow them to better deal with surgery and illness are important for the overall improvement of health status, according to a scoping review carried out by Villa et al. (2022).

On the other hand, according to a systematic review conducted by Nascimento & Nascimento (2023), educating patients about the perioperative period, particularly in the postoperative period, contributes to reducing complications.

In the study by Gonçalves et al. (2017) regarding the type of information transmitted, it was found that patients are more aware of the importance of being better informed regarding administrative aspects than regarding nursing care. They concluded that autonomous nursing interventions are often relegated to the background, with greater concern being observed with interdependent interventions, which ends up complicating the health/illness transition process generated by surgery.

Also, in the investigation by Breda & Cerejo (2021), the results obtained made it possible to identify the level of customer satisfaction with the information received in the pre-operative period, having been demonstrated that the pre-operative nursing

consultation favors proximity and the construction of a relationship fundamental therapy in satisfying the patients' informational needs.

On the other hand, Mendes et al. (2020) found that more informed patients have better understanding of their responsibility for recovery and collaborate more in post-operative care, which favors the surgical process and improved outcomes.

Regarding the importance of the information transmitted, it was inferred that 59% of customers considered the information transmitted to be very important and 34% as important. 74% of customers reported being very satisfied with the consultation and 19% satisfied. 100% of clients reported that they would like to have a pre-operative nursing consultation if they underwent surgery again (Mendes & Ferrito, 2021).

In the same light, in the work of Gröndahl et al. (2019), patients' were satisfied with the information they received from nurses pre-operatively, revealing an association between the quality of nursing care and the knowledge that patients considered they had acquired through the nurses' educational intervention.

Similarly, in the investigation by Soares (2021), there was unanimity in the nurses' responses in concluding about the importance of the patients' pre-operative preparation, both in terms of autonomy and in the acquisition of competence such as gait, mobilization or positioning and, even, in preparing the family, making them more functional.

Existing research also seems to suggest a relationship between teaching in the perioperative period (especially in the preoperative period) and the anxiety expressed by patients, with the transmission of

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information and quality teaching impacting the improvement of anxiety and, consequently, the reduction of complications in the perioperative period (Neiva et al., 2020; Pettersson et al., 2018; Turksal et al., 2020).

METHODOLOGY

The study presents a quantitative, cross-sectional, descriptive and exploratory design. The defined research questions are: what is the nurses' perception of the level of knowledge in patients proposed for scheduled urology surgery and what are the most insufficient knowledge items?

The sample is non-probabilistic for convenience. The target population is made up of nurses who work in the urology inpatient ward of the hospital where the study takes place.

The inclusion criteria are: nurses from the urology ward (inpatient) and the exclusion criteria are: nurses with less than three months of experience in ward, regardless of total professional experience. The data was collected between June and August 2022.

The attribute variables (age, gender, academic training, total professional experience and experience in the urology ward) and the research variable (nurses' perception of patients' knowledge regarding perioperative care) were defined. The data collection instrument was created by the author to respond to the variables and to complete them the questionnaires were distributed by nurses from the urology ward, by email, using the Google Forms platform.

The construction of the data collection instrument was carried out based on bibliographical research and

the bundle of interventions to prevent surgical site infection (Direção Geral da Saúde, 2021).

The data collection instrument consisted of two parts: the first relating to sociodemographic and professional characterization issues; the second part integrating closed questions about: 1) which surgery led to hospitalization; 2) the type of surgical approach (open or endoscopic approach); 3) bathing the day before surgery and on the same day with chlorhexidine; 4) performing trichotomy (when indicated); 5) the need for temperature assessment; 6) the need to assess capillary blood glucose; 7) the size of the incision (when applicable); 8) days of hospitalization; 9) recovery time to return to active life; 10) the type of anesthesia (whether the client is awake or not); 11) the presence of devices (urinary catheter, peripheral venous catheter, epidural catheter, surgical drain).

The same quote was assigned to each of the items. The possible answers and the quotation were: always (3 points), almost always (2 points), rarely (1 point) and never (0 points). The maximum score was 33 points and the minimum was 0 (zero) points. The "rarely" response option assumes a maximum possible rating of 11 points, while the "almost always" option assumes a maximum possible rating of 22 points and, therefore, it was decided to define a score of 22 points to cut off the scale considering sufficient knowledge for scores above 22 points. With 22 points or more, sufficient knowledge was considered and below 22 points, insufficient knowledge was considered.

For data processing, the SPSS® statistical program, version 20, was used and respective analysis using descriptive statistics.

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The investigation was submitted to the Ethics Committee of the Hospital and was approved under number 14/2022. The data were anonymized in alphanumeric form and informed consent was requested from the participants.

RESULTS

The final sample consisted of 41 participants.

Of the final sample (n=41), 35 (85.4%) were women and 6 (14.6%) were men. The mean age is 35 (± 7.1 years old) ranging from 23 years to 52 years of age. The majority of nurses hold a bachelor's degree (63.4%), and 34.1% have post-graduate training.

Regarding the professional experience of nurses, on average, they have 12 years of total professional experience and 9 years of experience in the urology service.

Table 1

Characterization of the sample

Variables	N (41)	%
Gender		
Male	6	14,6%
Female	35	85,4%
Education		
Bachelor's degree	1	2,5%
Degree	26	63,4%
Master's/Postgraduate/Specialization	14	34,1 %
Total Professional Experience		
Up to 5 years	9	21,6%
From 6 to 10 years	9	21,6%
More than 10 years	23	56,8%
Experience in the Urology Ward		
Up to 5 years	15	36,6%
From 6 to 10 years	12	29,3%
More than 10 years	14	34,1%

In the nurses' perception, the results show that all patients (n=41) revealed insufficient knowledge about perioperative care, according to the defined scale cutoff.

The mean score of the questions was 14,9 points, with a maximum of 21 points (n=1) and a minimum of 10 points (n=2). The value of the standard deviation in relation to the mean was 2,45.

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Table 2

Frequency of the research variable: nurses' perception of patients' knowledge of perioperative care

Sufficient Knowledge	N (41)	%
Yes	0	0%
No	41	100%

According to the nurses' perception, the knowledge items identified by numbers 1, 9 and 10 present, respectively, 85.4%, 95.1% and 70.8% of responses, adding the options "almost always" and "always", which seems to demonstrate sufficient knowledge in these items.

The most deficient knowledge items (adding the options "rarely" and "never") are items 3 (83.0%),

items 5 and 6 (80.4%), item 7 (100%) and item 11 (75.6%).

Items 2, 4 and 8 present most of the answers in the options "rarely" and "never", so it is considered that also in these items the knowledge of the clients perceived by the nurses is insufficient.

Table 3

Percentage of responses in relation to knowledge items (n=41)

Knowledge Items	Always	Almost always	Rarely	Never
	%	%	%	%
You know what you're going to be operated on (1)	9,8	75,6	14,6	0
Open/Endoscopic Surgery (2)	0	43,9	53,7	2,4
Need for bathing (3)	2,4	14,6	70,8	12,2
Need for trichotomy (4)	0	39,0	58,6	2,4
Temperature Assessment (5)	0	19,6	68,2	12,2
Assessment of capillary blood glucose (6)	0	19,6	68,2	12,2
Incision size (7)	0	0	56,1	43,9
Days of hospitalization (8)	0	34,1	63,5	2,4
Recovery time to return to active life (9)	19,5	75,6	4,9	0
Type of anaesthesia (10)	4,9	65,9	29,3	0
Presence of medical devices (11)	0	24,4	68,3	7,3

DISCUSSION

The results found in this study are globally in line with the scientific evidence on the subject, although the studies found do not generally describe the type (or item) of patients' knowledge about perioperative

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care. From the research carried out, no work was found on the perception of nurses regarding the knowledge demonstrated by patients' about specific knowledge items.

In this investigation, it was found that the nurses' perception of the patients' knowledge regarding the perioperative period is insufficient (100%).

In the study by Gonçalves et al. (2017), it was concluded that patients reported receiving little information in the preoperative period about the perioperative period, a condition that is in line with this study.

The investigations by Breda & Cerejo (2021), Gröndahl et al. (2019), Mendes & Ferrito, (2021), Mendes et al. (2020), Neiva et al. (2020), Soares (2021) and Villa et al. (2022) globally evaluated the importance and effectiveness of preoperative teaching performed by nurses and the results showed that the level of knowledge demonstrated by patients improved and that satisfaction with the surgical experience was more satisfactory when the teachings were carried out.

In our study, this issue was not evaluated, but because the results obtained describe that knowledge is insufficient at the time of hospitalization and that there is no preoperative teaching performed by nurses, it can perhaps be inferred that the patients of this hospital would benefit from preoperative teaching.

In the study by Pelarigo (2019), there were several doubts on the part of patients, such as: the size of the surgical incision, the number of days of hospitalization and reestablishment, and the type of anesthesia. In the same vein, our study showed that the most

insufficient knowledge items were also similar, with the exception of the item "recovery time", which in our study was found to be sufficient. From the same perspective, Breda (2019) found that patients expressed information needs about medical devices (drains, probes), which is in line with the present study.

On the other hand, in the studies of Bandeira et al. (2017), Gonçalves & Cerejo (2020), Medina-Garzón (2019) and Turksal et al. (2020), the importance of customer knowledge in order to improve the surgical experience was demonstrated.

In summary, it can be mentioned that the studies found are unanimous regarding the importance of preoperative education as an essential tool to improve the satisfaction of the patients' information needs and enhance a better postoperative recovery.

These results have important implications for the awareness of the negative impact that insufficient knowledge of patients regarding the perioperative period can represent, and it is important to promote appropriate teaching to improve the experience during hospitalization.

CONCLUSION

According to the perception of the nurses of the urology ward, the knowledge of the patients admitted for scheduled urological surgery is generally insufficient. Knowledge regarding some items is particularly deficient, such as the need to bathe the day before and on the day of surgery with chlorhexidine, the need to evaluate capillary glucose and temperature, the size of the surgical incision and the presence of medical devices. Knowledge about

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the type of surgery (open or endoscopic), the need for trichotomy and the length of hospital stay is also insufficient.

These results are important because they reinforce the relevance of the existence of a preoperative nursing consultation performed by nurses, which can effectively contribute to the improvement of patients' knowledge about the care provided and the interventions performed in the perioperative period.

In relation to this topic, further studies are needed to categorize the knowledge of patients, with larger samples and eventually with different methodologies and approaches, preferably in other surgical wards in the country.

The small sample size is an obvious limitation to the research. Another important limitation is due to the fact that a data collection instrument created by the investigator was used and was not subject to a pre-test, although all the questions requested by the participants were answered. In addition, the sample size and non-probabilistic sampling in a single health institution limit the possibility of generalizing the results. Finally, the study design did not allow us to determine whether the values obtained remained constant over time.

Even so, the importance of teaching about several items of knowledge related to the perioperative period was clear. Contributing to the improvement of the patient experience emerges as a relevant factor for the intervention of nurses, as an active agent in health promotion and prevention of complications in different institutional contexts.

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