ARTICLE ORIGINAL

Évaluation de l'effet de l'interaction infirmière-patient en sur l'anxiété préopératoire

Assessment of the nurse-patient interaction in preoperative anxiety context.

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Mots-clés
Relation de soins, Anxiété préopératoire, satisfaction, interaction, dialogue

Résumé

Objectif. Notre étude vise à évaluer les perceptions du patient sur les comportements de soins, par l'évaluation de sa satisfaction vis-à-vis la qualité des soins prodigués en période préopératoire dans les établissements tunisiens.
Méthodes. Il s'agit d'une étude descriptive prospective réalisée dans des services de chirurgie, impliquant 40 patients durant 3 mois. Nous avons utilisé le Caring Nurse-Patient Interaction Scale (CNPI-23P) comme entretien. Le score des quatre dimensions a été calculé ainsi qu'une évaluation de ses 23 items.).
Résultats. Le score moyen pour les quatre dimensions étudiées était de 3,04. Les patients de notre étude étaient moyennement satisfaits du comportement des soignants. Le score moyen était de 3,09 pour la dimension N°1 « soins cliniques » et de 2,48 pour la dimension N°2 « soins relationnels ». Le score le plus bas a été attribué à la dimension N°3 « soins humanitaires» (3,26). La dimension N°4 « soins de confort » enregistre le score le plus élevé (3,36).
Conclusion. Une meilleure qualité de la relation infirmière-patient peut améliorer les conditions de travail, améliorer la sécurité des patients et garantir un niveau de satisfaction plus élevé tant pour les infirmières que pour les patients, ce qui se traduit par des soins de santé nettement meilleurs.

Keywords
Caring relationship, Preoperative anxiety, satisfaction, interaction, dialogue

Abstract

Purpose. Our study aims to assess the patient's perceptions of caring behaviour, based on his satisfaction from the quality of health care provided in the preoperative phase in Tunisian institutions.
Methods. This is a prospective descriptive study carried out in surgical departments, involving 40 patients over 3 months. We used the Caring Nurse-Patient Interaction Scale (CNPI-23P) as an interview. The score of the four dimensions was calculated as well as an evaluation of his 23 items.
Results. The mean score for the four dimensions studied was 3.04. Patients in our study had an average degree of satisfaction with the behaviour of caregivers. The average score was 3.09 for dimension N°1 "clinical care" and 2.48 for dimension N°2 "relational care". The lowest score was attributed to dimension N°3"humanistic care " (3.26). The dimension N°4 "comfort care" recorded the highest score (3.36).
Conclusion. Better quality of the nurse-patient relationship can enhance working conditions, improve patient safety and guarantee a higher level of satisfaction for both nurses and patients, resulting in significantly better health care.

Introduction

Anxiety among patients undergoing various surgical interventions has been a concern for many health professionals as well as patients. The outcomes of this widespread problem can be observed in terms of psychological and physiological effects, with consequences for recovery after surgery procedures [1]. At present, two avenues of intervention for preoperative anxiety may be identified: pharmacological interventions, such as administering hypnotic medications before surgery and using of non-pharmacological tools such as effective communication strategies. The quality of interaction between nurses and patients is an interesting researching field in the process that can enhance patient's emotional well-being, symptom management, and response to treatment [2,3]. Nurse-patient interaction competence is assessed by several internationally validated tools, such as the Caring Nurse-Patient Interactions scale, based on Jean Watson's model. Our study aims to assess the patient's perceptions of the caring behaviour, based on his degree of satisfaction from the quality of health care, provided in the preoperative phase in Tunisian institutions.

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Patients et méthodes

A total of 40 patients chosen by systematic random sampling were successfully interviewed while waiting for surgery. Our study was carried out over three months between 1 May and 30 July in the following surgical departments: the Institute of Ophthalmology of Tunis, the surgical department of the Charles Nicolle University Hospital, and the Rabta surgical department.
We included randomly patients in the pre-operative period who have spent at least 24 hours in the hospital department and who had interacted with the nursing staff.
We excluded from the study age range under 6 years and over 80 years as well as patients with a mental disorder, whether under treatment or not, as it may interfere with the evaluation of the pre-operative anxiety state and the credible mental capacity for the intervew.
The data collected included patients' socio-demographic information (gender, age, education, occupation, marital status, and geographical origin), as well as their medical and surgical history, number of hospitalisations, number of surgical operations, and nature of surgery.
We employed the Caring Nurse-Patient Interaction Scale (CNPI-23P) « short form » , developed by Sylvie Cossette (2005 and 2006) [4,5]. The CNPI-23P is a generic scale used to measure the nurse and patient interaction from a caring orientation. It is composed of 23 items measured on a 5-point Likert scale (1 = not at all to 5 = extremely), reflecting 4 main domains: humanistic care (4 items), relational care (7 items), clinical care (9 items), and comforting care (3 items). We have opted for the evaluation of the satisfaction of patients hospitalised in the surgical department, preoperatively. The EIIP-23 is assessed on a 5-point Likert-type scale (1= very dissatisfied, 2= dissatisfied, 3= no opinion, 4= satisfied and 5= very satisfied).The original scale was translated into Arabic and we have translated the scale into Tunisian dialect to make it easier to understand.
Data analysis was performed using Microsoft Office Excel version 2007. In order to facilitate the calculation and analysis of the data collected, we grouped the responses representing the negative perceptions (very dissatisfied and dissatisfied) under the same dissatisfied name, then for the responses representing the positive perceptions (satisfied and very satisfied) under the same satisfied name since there is no great difference between these two perceptions.
Ethical approval was granted from the research by ethics committees at each hospital. All of the subjects in the sample were informed of the purpose of the study and voluntarily signed the informed consent form.

Résultats

A total of 40 patients were included in our study. The average age was 40±20 years. There was no gender predominance (20 males and 20 females). Forty-two point five percent of the interviewed population (the majority) did not exceed primary school level, 25% of whom are illiterate, 35% have secondary education, while only 22.5% have a university degree. Among our patients, 14 (35%) have a surgical history. The majority of them have already undergone an average of two surgeries before their hospitalisation. The average score for the four dimensions of the CNPI-23P scale was 3.04 (**figure 1**). Dimension N°4 "comfort care" was the best rated (3.36), followed by dimension N°3 "humanist care" (3.26). Dimension N°1 "clinical care" came in 3rd position (3.09) before dimension N°2 "relational care" (2.48) with the lowest average score. The average score for dimension N°1 "clinical care" was 3.09 (detailed results in **table 1**). Item n°1 (Know how to give the treatments) and item n°7 (Show ability and skill in my way of intervening with them) were the two items with the highest scores (respectively 3.52 and 3.5) with respectively 22 and 24 patients have expressed their satisfaction. On the other hand, items 3, 4, 6, and 9 had combined dissatisfaction scores with the lowest degree of satisfaction attributed to item 6 (Help them with the care they cannot administer themselves) with 22 patients expressing dissatisfaction (dissatisfied and very dissatisfied).

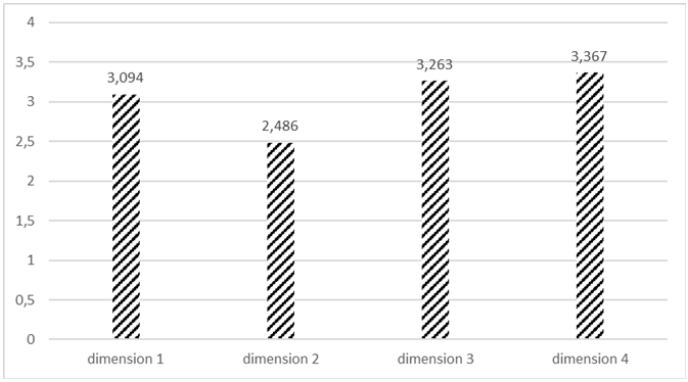

Figure 1. score averages of CNPI-23P dimensions : The averages of the scores for the 4 dimensions do not represent a wide range of differences (dimension n°4 being the best rated) except for dimension n°2 that represented the lowest level of satisfaction.

Dimension N°2 "relational care" had an average score of 2.48 (detailed in **Table 2**), which is the lowest average of the four dimensions. Item n°12 (Help them to clarify which things they would like significant persons to bring them) and item n°14 (Help them to recognize the means to efficiently resolve their problems) had the lowest average scores for the degree of satisfaction, with 27 patients responding very dissatisfied and dissatisfied equally for both items.
The average score for dimension N°3 "humanist care" is 3.26 (detailed in **Table 3**). Item n°20 (Do not have an attitude of disapproval) was the best rated with an average score of 3.87 and with 26 patients being either satisfied or very satisfied. Item n°17 (Consider them as complete individuals, show that I am interested in more than their health problem) was on the other hand the least rated with 27 patients being either dissatisfied or very dissatisfied. Dimension N°4 " Comforting Care" had an average score of 3.36 (detailed in **Table 4**). Item n°23 (Do treatments or give medications at the scheduled time) had the highest average score (3.62) and the number of most satisfied patients (27 patients), whereas item n°22 (Take their basic needs into account) was the least rated with 20 unsatisfied or very unsatisfied subjects.

Discussion

In order to meet the objective of our study, which was to assess patients' perceptions of the caring behaviour of carers in the surgical department in the preoperative phase, we carried out a descriptive, quantitative and cross-sectional study which included a sample of 40 patients. Through our work, we have taken as a reference the "caring" theory developed by Jean Watson who insists on the importance of a global care of the patient in his different dimensions. We used the "short form" Nurse-Patient Interaction scale, developed by Sylvie Cosette, Chantal Cara, Nicole Ricard, Jacinthe Pepin (2005), which includes 23 items divided into four dimensions, namely "clinical care", "relational care", "humanistic care" and "comfort care". According to our results, we have objectified an average score of 3.04 for the four dimensions;

Table 1. « Clinical care» dimension

Item N°	Measuring scale	Very unsatisfied =1	unsatisfied=2	Without opinion =3	Satisfied =4	Very Satisfied =5	Average Item Score
1	Know how to give the treatments (e.g. intravenous injections, bandages, etc..) Know how to operate	5	6	7	7	15	3.52
2	specialized equipment (e.g. pumps, monitors, etc.)	5	6	10	12	7	3.25
3	Check if their medications soothe their symptoms (e.g. nausea, pain, constipation, anxiety, etc.)	8	10	6	10	6	2.9
4	Give them indications and means to treat or prevent certain side-effects of their medications or treatments	14	6	4	13	3	2.62
5	Know what to do in situations where one must act quickly	5	6	7	14	8	3.35
6	Help them with the care they cannot administer themselves	13	9	4	10	4	2.57
7	Show ability and skill in my way of intervening with them	3	8	5	14	10	3.5
8	Closely monitor their health condition	6	5	5	14	9	3.3
9	Provide them with the opportunity to practice self-administered care	11	4	11	9	5	2.82

We believe that our preoperative patients are not satisfied with the behaviour of their carers. These results are respectively distributed as follows; (m1= 3.09) for dimension N°1 "clinical care", (m2= 2.48) the lowest score attributed to dimension N°2 "relational care", (m3= 3.26) for dimension N°3 "humanistic care". Dimension N°4 "comfort care" received the highest score (m4= 3.36). Surgery and anesthesia could be the most traumatic situation in a patient's life. Ramsay is attributed with the first definition of pre-operative anxiety as "an unpleasant state of discomfort or tension that is secondary to a patient's preoccupation with illness, hospitalisation, anesthesia, and surgery, or with the unknown" [6]. Kindler et al. have classified the causes of pre-operative anxiety in three dimensions: fear of the unknown, the idea of being ill, and the possibility that life will end [7]. The waiting period for surgery was identified by patients as the most disturbing [7].

Table 2 « Relational care» dimension

Item N°	Measuring scale	Very unsatisfied =1	unsatisfied=2	Without opinion =3	Satisfied =4	Very Satisfied =5	Average Item Score
10	Help them to look for a certain equilibrium/balance in their lives	10	14	4	6	6	2.6
11	Help them to explore what is important in their lives	11	10	9	5	5	2.57
12	Help them to clarify which things they would like significant persons to bring them	14	11	7	5	3	2.3
13	Help them to clarify which things they would like significant persons to bring them	11	14	4	7	4	2.47
14	Help them to explore the meaning that they give to their health condition	12	15	5	5	3	0.3
15	Help them to recognize the means to efficiently resolve their problems	11	13	3	4	9	2;67
16	Help them to see things from a different point of view	13	10	6	7	4	2.47

Table 3. « Humanistic care» dimension

Item N°	Measuring scale	Very unsatisfied =1	unsatisfied=2	Without opinion =3	Satisfied =4	Very Satisfied =5	Average Item Score
17	Consider them as complete individuals, show that I am interested in more than their health problem	13	11	5	7	4	2.45
18	Encourage them to be hopeful, when it is appropriate	8	4	8	11	9	3.42
19	Emphasize their efforts	8	5	5	11	11	3.3
20	Do not have an attitude of disapproval	6	5	3	10	16	3.87

With more than 312.9 million surgeries carried out each year worldwide [8], patients' perception of surgery and its results needs to be better evaluated. It is estimated that between 25% and 80% of patients who enter the hospital for operation suffer from preoperative anxiety [9–11] and that anxiety can have a potentially negative influence on the patient's recovery [1,12]. It is commonly associated with poor postoperative outcomes that can often lead to an extended hospital stay and patient disappointment [13]. Two studies of presurgical education and verbal reassurance by a medical psychologist or a nurse facilitator [14] showed that the intervention group had significantly lower levels of preoperative anxiety than the control group ($p<0.05$). The concept of caring has been defined in previous studies as knowledge, skills, affect, human traits, interpersonal interaction, and intimate relationships [15,16]. These behaviours can lead to reduced stress and anxiety, empowerment of patients with the disease, improving patient satisfaction and, ultimately his quality of life.[15,17]. Nurse-patient interaction competence is assessed by several internationally validated tools, such as the Caring Nurse-Patient Interactions scale (CNPI-23P) that was developed by Cossette et al based on Watson's theory. The scale is reliable, easy to implement, and takes a short time to complete.In our study, comforting care was the dimension with the highest rating (dimension N°4). Item n°23 (Do treatments or give medications at the scheduled time), having a practical and technical aspect, had the highest level of satisfaction among the items in this dimension. Item n°21 related to respect for privacy was also satisfying. Respect for privacy during hospitalisation met with patient satisfaction in the Yambayamba series also, conducted in Kinshasa where more than half of the patients declared themselves satisfied [18]. These observations are in line with an earlier report from Tunisia by Bougmiza et al (72.6%), but also with those of Soufi et al in Morocco (75%) [19,20]. In general, there is a difference in nursing care between the human model of care and the biomedical model, which focuses on task performance and maintaining the reality of institutional care requirements. Unfortunately, our results suggest that nurses focus less on their relationship with patients and more on other aspects of care with a clear focus on the clinical skills of nursing. Relevant literature shows that they rather prefer the use of psychomotor skills to accomplish their tasks in a technically more efficient way [21]. Many authors describe difficult working conditions and ineffective organisations as common external factors that have a deleterious impact on the application of caring behaviour, thus contributing to the lack of individual and humane approaches [21–23]. We also estimate that constant exposure to trauma can reduce feelings of empathy for the patients they deal with. Besides, administrative tasks, communication with a patient's family, and dealing with a patient's psychological needs put additional pressure on nurses, resulting in further loss of compassion, social burnout, and ineffective communication. [22,24]. Some authors believe that highly sophisticated technology makes healthcare more impersonal and less humane [25]. Ideally, care should be able to meet both medical and psychosocial needs. Such tendency could lead to patient disappointment with nursing care, which would pose a real challenge to the quality of the overall health care system. Nursing care should therefore take a holistic perspective since it is expected to meet not only the physical needs of the patient but also the psychosocial, social, and spiritual needs [26]. In our series, the humanistic care aspect (dimension N°3 including values of respect and encouragement) was rated as satisfying for patients. This was in line with Aldana's conclusion that the behaviour of service providers, especially respect and politeness, was the most powerful indicator of client satisfaction with medical services. For patients, this aspect was much more important than the technical competence [27]. Nursing care should help patients to find meaning and hope in their health-related experiences; as well as providing an open dialogue to enable patients to learn and develop.

Table 4. « Comforting care» dimension

Item N°	Measuring scale	Very unsatisfied =1	unsatisfied=2	Without opinion =3	Satisfied =4	Very Satisfied =5	Average Item Score
21	Respect their privacy (e.g. do not expose them needlessly)	4	5	6	14	11	3.55
22	Take their basic needs into account (e.g. sleeping, hygiene, etc.)	7	13	4	8	8	2.92
23	Do treatments or give medications at the scheduled time	4	5	4	16	11	3.6

Conclusion

While focusing on achieving higher levels of patient satisfaction and providing better quality health care, nurses need to find and maintain the right balance between a humane approach to patients and the application of modern technologies.
Conflicts of interest: There is no conflict of interest regarding the publication of this article.

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Ethical approval

granted from the research by ethics committees at each hospital. All of the subjects in the sample were informed of the purpose of the study and voluntarily signed the informed consent form.
Availability of Data and Material: The data supporting the findings of this study are available from the corresponding author on request.

Authors' contribution

All authors contributed to the study conception, design, material preparation, data collection, and analysis. The first draft of the manuscript was written by Dr. Hsouna Zgolli, and all authors commented on previous versions of the manuscript. All authors read and Approved the final manuscript.

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