

# Care of a patient who underwent salpingo-oophorectomy due to ovarian tumour according to kolcaba comfort theory: a case report

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Received: 23/05/2024

Accepted: 14/06/2024

Published: 26/06/2024

**Cite this article:** Esenkaya D, Arıcı Parlak E, İyigün E. Care of a patient who underwent salpingo-oophorectomy due to ovarian tumour according to kolcaba comfort theory: a case report. *Surg Child.* 2024;1(2):31-35.

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## ABSTRACT

Nursing theories and models provide a framework for professionally organised nursing practice. One of the nursing theories that has an important place in nursing is ‘comfort theory’. Developed by Katharine Kolcaba, comfort theory offers a broad perspective on nursing. In this study, the problems experienced by a 15-year-old patient who was diagnosed with a right ovarian tumour and underwent salpingo-oophorectomy were assessed from the perspective of comfort. Our study aims to provide an example of the application of comfort theory in paediatric surgical clinics.

**Keywords:** Kolcaba, comfort theory, surgery, nursing care

## INTRODUCTION

The French word “comfort” is derived from the Latin word “forting”. It is used synonymously with the word “comfort” in Turkish. According to the Turkish Language Association (TDK), the word “comfort” is defined as “It is a living situation or environment in which a person feels comfortable and peaceful, does not feel any physical and mental discomfort, and provides convenience”.<sup>1</sup> The North American Nursing Diagnostic Association (NANDA) defines comfort as a feeling of psychological, physical or social well-being or comfort.<sup>2</sup>

The concept of “comfort” in nursing science has been discussed by many nurse theorists. Florence Nightingale was the first to mention comfort in nursing written sources.<sup>3</sup> In Peplau’s theory, comfort is considered a basic need, while in Orlando’s theory, it is physical and mental comfort and the evaluation of situations that increase comfort. In Roy’s adjustment model, comfort is evaluated within the framework of psychological comfort. In Watson’s model, comfort is generally seen as a variable of interest.<sup>4</sup>

A theory is a system that provides meaning to concepts, renders them multidimensional, and establishes relationships

between them. A theory is a set of concepts that are validated through the application of scientific methods to test observations and propositions.<sup>5</sup> The “Comfort Theory,” developed by Katharine Kolcaba in 2003, enables a more systematic examination of the problems faced by care recipients and the development of The theory offers professional and user-friendly plans for nursing practice. According to the theory, comfort is defined as a response to problems arising from physical, socio-cultural, psycho-spiritual and environmental aspects at three levels: relaxation, refreshment and problem solving. Kolcaba examined the categorical structure of the two-stage theory, namely comfort level and comfort dimension.<sup>6,7</sup> According to the comfort theory, comfort levels consist of three stages: relief, relaxation and superiority. Relief is the feeling of satisfaction when an individual is relieved from a state of distress. It is experienced as a result of the fulfillment of any need.<sup>2</sup> Relaxation is a state of calm and peaceful existence. Transcendence is the state of being able to overcome problems by increasing one’s own power. This is possible when comfort needs are fully satisfied.<sup>1</sup> In theory, comfort elements are defined in four stages: physical, socio-cultural, psychospiritual and environmental.<sup>3</sup>

### 1-In The Physical Dimension

Comfort requirements are related to bodily sensations. This encompasses physiological factors such as immune function, responses to illness, rest, nutrition, relaxation, nausea and vomiting.<sup>4</sup>

### 2-Sociocultural Comfort Requirements

It includes the individual's social relationships, rituals, family traditions and beliefs. The sociocultural dimension of comfort encompasses interpersonal relationships and interactions with social institutions. The scope of this category also encompasses traditions, rules and legal regulations that regulate social and interpersonal relations.<sup>3</sup>

### 3-Comfort Needs In The Psycho-Spiritual Dimension

The psychospiritual dimension encompasses the cognitive, emotional and psychological components of comfort needs. This encompasses the individual's mental, psychological and spiritual state (self-confidence, self-esteem, sexuality, meaning of life).<sup>6,8</sup>

### 4-Environmental Comfort Requirements

Environmental comfort needs are related to the external environment of the individual. This encompasses the impact of physical factors, such as light, temperature, smell, sound, colour and landscape, on individuals.<sup>2</sup>

In order to implement the comfort theory, it is first necessary to determine the comfort needs of the individual by utilising the categorical structure of the theory. The nurse should ascertain the comfort level of the individual prior to providing care. Subsequently, they should assess the patient's physical, psycho-spiritual, environmental and sociocultural comfort needs with a holistic approach and apply nursing approaches to meet unmet needs. It is then necessary to re-measure the comfort level, evaluate the results of the expected increase in comfort and design a new plan appropriate to the situation.<sup>5,6</sup> In this case report, the nursing care plan of a patient who presented to the emergency department with severe abdominal pain, vomiting and constipation was planned and evaluated according to the comfort theory.

### Ethical Dimension

Before obtaining information from our patient, information about the research was given. Written and verbal consent was obtained.

### Diagnostic Tool

In this study, patient-related data were collected using Kolcaba Comfort Theory and summarised below.

## CASE

A 15-year-old girl presented to the emergency department with nonspecific symptoms including nausea, abdominal pain, weakness and restlessness which started two days ago. She additionally reported that her symptoms were accompanied by malaise and vomiting. Two days ago,

she reported constipation and underwent an enema. Following the enema, she defecated, yet her complaint of pain intensified. In his past medical history, he reported experiencing intermittent abdominal discomfort and stated that he was taking analgesics. The patient's height was 158 cm, weight was 70 kg, general condition was moderate, and colour was pale. No chronic disease was identified in the patient's past medical history.

A physical examination revealed marked distension, tension, and diffuse tenderness in the lower abdomen on auscultation. The patient exhibited severe abdominal pain, and palpation of the right lower quadrant of the abdomen revealed an orange-sized mass with regular borders. Laboratory tests revealed the following results: hemoglobin: 11.2 g/dl, hematocrit: 34.0%, white blood cells (WBC): 14.12 mg/dl, sodium (Na): 130 mEq/L C-reactive protein (CRP): 5.2 mg/L, lactate dehydrogenase (LDH): 325 units/L, and electrolyte values were within optimal limits. Liver and renal function tests were within the normal range, as were cardiac enzymes and the electrocardiogram (ECG). In the radiological examinations, the bladder contours were regular, the uterus was in a normal size and configuration in abdominal ultrasonography. The left ovary exhibited a normal nuclear structure, while a limited mass was identified in the right ovary. Oxygen was administered via a mask, and fluid resuscitation was initiated with an isotonic infusion at a rate of 200 cc/h. A blood group study was conducted to determine the necessity for transfusion, and two units of erythrocyte suspension were prepared (Table 1).

Table 1. Vital signs of the patient in the emergency department

Heat	Pulse	Respiratory rate	SPO2	Blood pressure
37,0 C	110/ mins	27/ mins	87 mmHg	110/85 mmHg

All preoperative preparations were completed on time, and the patient was subsequently taken into surgery. During the surgical procedure, an incision is made between the lower and upper quadrants of the abdomen. The mass was excised from the surrounding tissues (Figure 1).



Figure 1. Mass of tumour already separated from surrounding tissue

During surgery, the ovary was found to be 5.5 torsion and the ovary was detorsioned. After the ovarian torsion was corrected by detorsion, the ovarian blood supply was insufficient (presence of ischaemic tissues). Necrotic tissues were also present around the tuba. There was haemoperitoneum, and

the salpinx and ovary were resected (Figure 2). The other ovary was in natural appearance. Following the excision of the mass, the incisions were properly closed, and there was no intraoperative bleeding or complications (Figure 3).



Figure-2. Excision of tumor view



Figure-3. The mass was dissected from the tissues in the area

The intraoperative rapid pathology examination revealed no evidence of malignancy, and the operation was completed. In the postoperative interview with the patient, she reported experiencing postoperative pain and expressed concerns about the risk of tumour recurrence.

The comfort level of the preoperative clinical presentation was measured as low as 1.58 on the General Comfort Scale (GCS). It was recognised that the patient's comfort was low before the operation and that she had adjustment problems.

The GCS is a 48-item Likert-type scale developed by theorist Kolcaba in 1992. Its Turkish validity and reliability were determined by Kuşuoğlu and Karabacak. The scale comprises 16 items pertaining to relief, 17 items pertaining to relaxation, and 15 items pertaining to coping. In the scale where positive and negative sentences are mixed, the score indicating a high degree of comfort in a positive sentence is 4, while the score indicating a high degree of comfort in a negative sentence is 1.3. The score that can be obtained from the scale can vary between 48 and 192. The obtained score is divided by the number of items on the scale, namely 48, in order to determine the comfort level, which ranges from a maximum score of 4 to a minimum score of 1.1

The general comfort scale is created using a classification structure consisting of three levels and four dimensions that form the theoretical components of comfort as a guide. This structure is used to define comfort-related requirements and to assess the situation in order to achieve the expected level of comfort with nursing.<sup>6</sup> Interventions are planned to provide the desired comfort. The nursing diagnoses and interventions for the problems encountered by the patient are defined according to the classification structure of the comfort theory.<sup>2</sup>

### 1-Physical Dimension

A patient who had experienced postoperative pain in the incision area was administered analgesics in accordance with the physician's orders. Additionally, distraction techniques, such as watching movies and listening to music, were employed. It was observed that the patient exhibited a painful facial expression and a painful posture during walking. The patient's pain was evaluated using the Visual Pain Scale. Prior to treatment, the patient's pain score was recorded as 8, and following treatment, this decreased to 2. Furthermore, the patient indicated that her pain had been reduced in verbal communication.

Following surgery, the patient with constipation was informed of the potential for changes in excretory function, received comprehensive education in collaboration with the hospital nutritionist, and an appropriate diet list was created.

The patient was mobilised five hours after surgery and required assistance to transfer from the bed to a chair. A programme of passive range of motion exercises, slow and short activities, and rest periods was arranged in bed. The patient was encouraged to participate in their own care and rehabilitation, with the assistance of their parents. The patient's daily activities were gradually increased, and he was included in daily self-care activities and was allowed to pass independently.

The patient was found to have respiratory dysfunction due to prolonged anaesthesia and immobility. The patient was supported to use deep breathing exercises and spirometry to breathe comfortably. The patient was supported to use the deep breathing exercises taught before the operation and to use spirometry. With these applications, the patient's lung vital capacity was increased and optimal respiratory function was achieved.

### 2-Psychological Dimension

The patient presents with a psychological issue pertaining to the deterioration of their individual identity, which is believed to be related to the postoperative changes that have occurred. It is observed that the patient exhibits behaviours such as hiding the surgical incision site, shaming, and avoiding discussion of the subject. The patient was informed that it was acceptable to accept her body image and was reassured. An appropriate setting was established, and the patient was afforded the chance to articulate her emotions and concerns.

The patient exhibits a fear of the future as a consequence of the surgical procedure she has undergone. The patient



expressed concern about the possibility of the tumour recurring. It was determined that the patient exhibited a negative self-perception regarding her condition. The patient was encouraged to maintain eye contact and to express her feelings. It was emphasised that patients should be at peace with their body image and that their fears were, in fact, manageable. They were supported in seeking professional help.

The patient feels insecure because she thinks that her ovary was damaged during the removal of the tumour. She thinks that this situation will cause people to judge her in the future. She has general adjustment problems and ineffective coping. Both the patient and her family lack knowledge about basic health practices and health behaviour development. In order to deal with this situation, it is necessary to identify their concerns. The patient and her family were supported to ask for information. Information was given about the structure of the ovary and the post-operative status. (Table 2).

**Table 2: Nursing Care of the Individual with Salpingo-Oophorectomy Surgery According to the Taxonomic Structure of Comfort Theory**

Comfort dimensions	Comfort levels		
	Relief	Relaxation	Finding meaning
<b>Physical</b>			
Pain due to impaired physical integrity after surgery	To alleviate the patient's discomfort, a combination of pharmacological and non-pharmacological treatment modalities should be employed	The administration of analgesic agents to relieve the patient of discomfort resulting from pain-oriented applications.	The development of coping strategies for pain is a key aspect of the therapeutic process.
The changes in intestinal emptying that have been observed have been associated with an increased prevalence of constipation	It is important to be aware of the physical processes involved in intestinal emptying, as this can help to overcome the lack of knowledge about the changes that occur. In order to ensure a balanced diet for the patient, it is necessary to ensure that adequate fluid is removed on a daily basis. When switching to a solid diet, it is important to ensure that the pulp is included in the diet, as this helps to ensure the inclusion of nutrients.	The implementation of planned anti-constipation interventions to relieve the patient.	It is important to adhere to the prescribed diet list in order to maintain the effectiveness of anti-constipation interventions.
Pain related; activity intolerance	The application of in-bed active-passive range of motion exercises The planning of slow and short activities by adjusting rest periods The application of in-bed active-passive range of motion exercises The planning of slow and short activities by adjusting rest periods In order to encourage the semi-dependent to engage in self-care, it is necessary to provide incentives.	It is recommended that patients engage in regular exercise, relaxation techniques and increased mobility.	The objective is to enhance the activities of daily living by gradually increasing activity and promoting the ability to pass independently.
Prolonged anaesthesia, resulting from immobility, has been shown to impair respiratory function	In the preoperative period, the patient is taught breathing exercises. The purpose of this article is to provide information about the use and importance of spirometry.	It is recommended that adequate ventilation be provided in order to facilitate relaxation	The patient is instructed to engage in the breathing exercise previously demonstrated to them prior to the surgical procedure.
<b>Psychospiritual</b>			
Following the surgical intervention, there was a deterioration in the patient's self-concept	Regarding the postoperative changes, the objective is to provide information that will enable the patient to participate in self-care	The objective is to facilitate relaxation in the patient by providing information that will assist them in accepting their body image	It is imperative that one does not love oneself or one's body. Instead, one must embrace self-acceptance
The extent to which he experiences fear in the future will depend on the nature of the surgical procedure he has undergone	Following discharge from the hospital, it is important to facilitate the individual's ability to adapt to the changes that will inevitably occur. This process should enable the individual to express their fears	Lifestyle modifications are employed to address the patient's concerns and alleviate their fears	The utilisation of coping strategies

**Table 2; Continue**

Currently residing in a situation that is the result of a surgical condition. This situation is characterised by general adjustment problems and ineffective coping strategies	In order to address the challenges encountered in the adaptation process, it is essential to provide training	The process of adaptation is facilitated by the provision of support to the patient, which in turn alleviates the discomfort associated with the procedure	In terms of coping strategies, it is advisable to cultivate self-belief and avoid placing undue trust in others
<b>Environmental</b>			
The hospital environment is a significant factor in determining sleep patterns	The identification of environmental factors that may precipitate insomnia is a crucial aspect of the treatment plan. Limiting the number of visitors to the patient is also an important consideration. The provision of a calm, dim, and quiet room is essential for the patient's well-being. It is also vital to ensure that the door to the room remains closed at all times	The patient is in bed and requires information that will enable them to return to a state of relaxation. This can be achieved by switching to the old sleep pattern	The maintenance of habitual sleep patterns
<b>Sociocultural</b>			
The phenomenon of social isolation can be attributed to a number of factors, including the separation from family, trusted and loved ones, and the presence of unfamiliar and unfamiliar individuals	The surgical procedure will fulfil its intended role and will not present an obstacle to the provision of information about the meeting with siblings and friends, as well as the provisioning	In order to facilitate the operation, it is essential to gain the support of the parents. This can be achieved by organising social activities and reassuring the patient by informing them that the situation is temporary and that it will not be an obstacle	The child's family and friends provide support and information, as well as recognition. The child's physical, cognitive, emotional and social development are also important considerations

### 3-Environmental Dimension

The patient was diagnosed with sleep disturbance due to the combined effects of postoperative pain, general hospitalisation, and frequent follow-up and treatment hours. Monitoring, treatment and care were provided in a manner that sought to minimise the impact on sleep patterns. The patient's treatment plan was revised. The patient was kept awake during the day and provided with a comfortable night's sleep.

### 4-Socio-Cultural Dimension

It was observed that the patient exhibited social isolation problems as a consequence of the separation from her siblings and close friends and the unfamiliar environment in which she found herself. The patient was informed that the surgical site would heal and that it would not affect her social activities in the future. The patient's needs were identified with the input of the parents and the patient was enabled to participate in physical, cognitive, emotional and social activities.

## DISCUSSION

The score that can be obtained from the scale can vary between 48-192. The obtained score is divided by the number of items of the scale, i.e. 48, to determine the comfort level ranging between a maximum score of 4 and a minimum score of 1.1

According to Kolcaba's Comfort Theory, the evaluation of comfort levels after postoperative care is provided is important



to demonstrate the effectiveness of the theory.<sup>2</sup> During the patient's preoperative clinical presentation, the comfort level was measured as low as 1.58 on the General Comfort Scale (GCS). It was noticed that the patient's comfort level was low before the operation and she had adjustment problems. On the 1st postoperative day, the comfort level was 1.50 4 hours after waking up from anaesthesia and before applying care within the framework of the comfort theory, while it was determined as 2.7 after starting to apply care within the framework of the comfort theory on the same day (at the 8th hour). On the 3<sup>rd</sup> postoperative day; this assessment, which is made in the first acute recovery process, is used to observe the effectiveness of the interventions made on the first day and the changes in the patient's comfort, and the scale result was determined as 3.0. The 7<sup>th</sup> postoperative day is used to determine the progress in the patient's recovery process, the effectiveness of pain management and the general comfort level of the patient, and the scale result was 3.2. This time period is especially critical for discharge planning and home care requirements.

In the study of Hughes and Whittemore (2021), the effect of nursing interventions based on Kolcaba's Comfort Theory on the comfort levels of surgical patients was examined. The comfort levels of the patients were evaluated on the first and third postoperative days. The results of the study show that Kolcaba's Comfort Theory is effective in increasing the comfort levels of patients and improving postoperative recovery processes when used in surgical nursing practices.<sup>9</sup>

In a randomised controlled study in which Aslan and Ünal (2020) evaluated the preoperative and postoperative comfort levels of surgical patients with nursing care interventions based on Kolcaba's Comfort Theory, comfort levels were measured one day before surgery and on the first, third and seventh days after surgery. It shows that nursing interventions based on Kolcaba's Comfort Theory have positive effects on the comfort and anxiety levels of surgical patients.<sup>10</sup>

In Salem and Salem (2020) study, the effect of nursing care based on Kolcaba's Comfort Theory on the comfort levels of surgical patients in the postoperative period was evaluated. Measurements were made on the first, third and seventh days after surgery. It shows that Kolcaba's Comfort Theory can be used effectively in the postoperative care of surgical patients and can increase the comfort levels of patients.<sup>11</sup> Our study supports the results of the literature. In addition, the effectiveness of the theory was tested by looking at the comfort measurements before and after the theory-based nursing intervention on the 1st postoperative day. Comfort theory supports the physical and psychological well-being of patients and helps them recover faster and shorten their hospital stay.<sup>10</sup> In addition, increasing patient satisfaction and decreasing complication rates offer important results in terms of improving the quality of care.

## CONCLUSION

Consequently, the care plan for the patient who underwent salpingo-oophorectomy surgery due to an ovarian tumour was organised in accordance with Kolcaba's Comfort Theory, and it was demonstrated that it was applicable in the field. It was demonstrated that an increase in comfort was achieved by adopting behaviours to improve well-being with the

care provided according to the comfort theory.<sup>7,8</sup> Based on the comfort theory developed by Kolcaba, nursing care can be shaped according to individual needs after nursing interventions to increase the comfort of the patient who has undergone surgical procedure.<sup>9,10,11</sup> In this way, it is possible to contribute to the quality of life by providing the highest level of comfort to patients. It is thought that the use of comfort theory will be useful in seeing and responding to patient needs in a more systematic way.

## ETHICAL DECLARATIONS

### Informed Consent

The patient signed and free and informed consent form.

### Referee Evaluation Process

Externally peer-reviewed.

### Conflict of Interest Statement

The authors have no conflicts of interest to declare.

### Financial Disclosure

The authors declared that this study has received no financial support.

### Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version

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