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RESEARCH ARTICLE

INVESTIGATION OF THE EFFECT OF PREOPERATIVE FASTING PERIOD ON COMFORT ACCORDING TO KOLCABA'S COMFORT THEORY

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ABSTRACT

Purpose: This study was aimed at investigating the effect of preoperative fasting periods on the preoperative comfort levels of patients according to Kolcaba's Comfort Theory.
Material and Methods: This descriptive and correlational study included 267 patients. The study data were collected using the General Comfort Questionnaire. In the data analysis, the independent sample t test, one-way analysis of variance, Pearson correlation analysis and linear regression analysis were used.
Results: While the increase in the duration of preoperative fluid fasting caused a decrease in their mean scores for the relief and transcendence sub-dimensions of the sense dimension, and the physical, environmental and sociocultural comfort sub-dimensions of the context dimension; the increase in the duration of preoperative solid fasting caused a decrease in their mean scores for the relief and transcendence sub-dimensions of the sense dimension, and the physical, environmental and sociocultural comfort sub-dimensions of the context dimension and the overall questionnaire ($p<0.05$).
Conclusion: The increase in the patients' durations of both preoperative fluid and solid fasting decreased their mean scores for the most of sub-dimensions; the increase in the patients' durations of preoperative solid fasting also decreased their mean score for the overall questionnaire.

Keywords: Preoperative care, preoperative period, patient comfort, perioperative nursing

INTRODUCTION

Fasting of patients scheduled for elective surgery has been accepted as one of the cornerstones of safe preoperative care (1-4). Due to fear of aspiration, the negative effects of preoperative fasting are ignored, which leads to excessive fluid and solid food restriction (2,5,6). Theoretically, preoperative fasting may reduce the risk of aspiration, but the evidence does not support prolonged fasting (7). According to guidelines, clear fluids up to 2 hours and a light meal up to 6 hours before elective procedures requiring general anesthesia, regional anesthesia or procedural sedation (8-11). Despite the evidence, current recommendations for prolonged fasting are a significant problem (5,11,12). Medical and nursing staff concerned with the safety and comfort of patients strive to establish safe and comfortable preoperative fasting levels, which prevents patients from starving unnecessarily (7,13).

The nurse confirms that the patient is fasting before going to the operating room by following the steps stated in the Surgical Safety Checklist (4). The nurse plays an important role in establishing a safe fasting level before surgery. Although the length of preoperative fasting period is determined by the physician, the nurse has essential responsibilities

such as informing patients about fasting before surgery and monitoring them for compliance and adverse effects (13,14). A longer preoperative fasting period causes a decrease in preoperative comfort (2,7,15). The best preoperative fasting regimen minimizes not only the risk of aspiration or regurgitation but also possible adverse effects on comfort (7). Several systematic reviews have determined that the comfort level increases when the preoperative fasting period is shortened (12,16).

Comfort is a desired outcome of nursing care during perianesthesia. It is also an umbrella term for surgery- or procedure-related discomfort experienced by patients (17). Comfort interventions are implemented at each period of perianesthesia. One of the aims of the pre-anesthesia period is to assess risk factors affecting anesthesia one of which is the restriction of fluid and solid food intake. Nurses should advocate implementing recommendations stated in current guidelines for preoperative fluid and solid food management (18). Guidelines innate features of each nursing conceptual model or theory, guide nursing practices and research (19). In a research context, theory brings results into meaningful form and summarizes existing knowledge in coherent systems (20). Since Kolcaba's Comfort Theory includes a measurable, holistic, and nurse-sensitive result, it guides nursing practices and research (21). Comfort theory formed the conceptual framework of the study. Patient comfort, defined as the immediate state of being strengthened by having needs met in four contexts of human experience (physical, psychospiritual, environmental, and sociocultural). This theory describes traditional nursing practice as humanistic, needs-related, and holistic (22). This theory guides nurses to detect comfort needs of patients that are not being addressed and to develop interventions to meet those needs (23).

The study's main aim is to investigate the effect of preoperative fasting periods on the preoperative comfort levels of patients according to Kolcaba's Comfort Theory. Among the other aims are to investigate whether there are significant differences in preoperative comfort levels according to the sociodemographic and clinical characteristics of the patients, whether sociodemographic and clinical characteristics of the patients affect their preoperative comfort levels, and what the relationship between the durations of preoperative fluid and solid fasting in the patients and their preoperative comfort levels is like.

MATERIAL AND METHODS

Study Design/Setting

The study is a descriptive and correlational study.

The study was conducted in the cardiovascular surgery, general surgery, neurosurgery, ophthalmology, orthopedics and traumatology, otolaryngology, otolaryngology, and urology clinics of a state hospital. Patients are admitted to the clinic one or a few days before the surgery. After the surgery, they stay in the hospital for at least one day, depending on their general condition and the extent of their surgery. During the pre-surgery preparation, patients are informed by the physician or, upon the physician's request, by nurses that they should not drink or eat anything after midnight. The preoperative fasting requirement does not vary by clinic, procedure or anesthesia.

The study was conducted between April 2023 and November 2023.

Sample

The population of the study comprised patients who were hospitalized in the clinics of the aforementioned hospital between the dates of the study and who met the sampling criteria. No type of procedure was selected. All patients under general anesthesia and regional anesthesia were included. Inclusion criteria were volunteering to participate in the study, being ≥18 years old, being conscious and cooperative, fasting for at least 2 hours for fluid foods and 6 hours for solid foods, being to go into surgery very soon, and undergoing elective surgery. Patients undergoing day surgery were excluded from the sample.

The minimum sample size was calculated 242 people using the "G. Power-3.1.9.2" program (effect size=0.179, alpha value=0.05, power=80%). However, considering the possibility of withdrawals or losses during the study, it was decided to include 10% more people. Thus, the study was completed with 267 people.

Data Collection Tools

Patient information form: The form prepared by the researchers based on the relevant literature includes 17 items questioning patients' sociodemographic and clinical characteristics such as body mass index (BMI), presence of a chronic disease, having undergone surgery previously, diagnosis, clinic where the respondent is hospitalized, American Society of Anesthesiology (ASA) score, time of

surgery, duration of preoperative fluid and solid fasting (24-26).

General comfort questionnaire (GCQ): The GCQ developed by Kolcaba in 1992 contains 48 items (27). Of the items, 24 are positively keyed, and 24 are negatively keyed. According to the taxonomic structure of comfort, there are three senses (relief, ease and transcendence) and four contexts (physical comfort, psychospiritual comfort, environmental comfort and sociocultural comfort) (28). Responses given to the items are rated on a 4-point Likert type scale. Negatively keyed items are reverse coded. A higher score means a greater degree of met comfort needs. The Cronbach's alpha coefficient for the context sub-dimensions ranged between 0.66 and 0.80. It increased to 0.90 for 35 items (27). The questionnaire was adapted into Turkish by Kuğuoğlu and Karabacak in 2008 and its psychometric properties were tested. The Cronbach's alpha coefficient ranged between 0.55 and 0.70 for the sense sub-dimensions and 0.85 for the overall questionnaire (29). In the study, it ranged between 0.630 and 0.716 for the sense sub-dimensions, between 0.610 and 0.789 for the context sub-dimensions and 0.885 for the overall questionnaire.

Data Collection

Data were collected by the researcher in surgical clinics through face-to-face interviews, just before the patients went to the operating room. During the data collection process, the patients were not insisted on filling out the data collection tools. Whether their emotional states were suitable for filling out the data collection tools was taken into consideration. Data were collected during working hours.

Data Analysis

Data analyzed using the Statistical Package for Social Science (SPSS) 22.0 were presented as arithmetic mean, standard deviation, number and percentage. Whether the data were normally distributed was checked with kurtosis and skewness values, and it was determined that the data were normally distributed. The independent samples t-test and one-way analysis of variance were used in the analysis of the data. Pearson correlation analysis was used to determine the relationship between continuous data whereas the linear regression analysis was used to determine how much of the dependent variable was explained by the independent variables. The statistical significance level in the study was accepted as $\alpha=0.05$.

Ethical Issues: Before the study was conducted, ethical approval was obtained from Non-Interventional Clinical Research Ethics Committee of Izmir Katip Celebi University (Decision Date: 18.05.2023, Decision No: 0216). The Informed Consent Form was obtained from the patients participating in the study.

RESULTS

The distribution of the sociodemographic and clinical characteristics of the participants was presented in Table 1.

The participants' mean durations of preoperative fluid fasting were 12.12±2.43 (minimum=7, maximum=19) hours. The participants' mean durations of preoperative solid fasting were 14.57±2.74 (minimum=8, maximum=21) hours. The mean scores the participants obtained from the sense sub-dimensions of the GCQ were as follows: 2.64±0.36 for the relief, 2.67±0.37 for the ease and 2.59±0.46 for the transcendence. The mean scores they obtained from the context sub-dimensions of the GCQ were as follows: 2.33±0.42 for the physical comfort, 2.62±0.50 for the psychospiritual comfort, 2.93±0.37 for the environmental comfort, and 2.63±0.42 for the sociocultural comfort. The mean score they obtained from the overall questionnaire was 2.63±0.36.

There were statistically significant differences between the participants' mean scores for the overall questionnaire and its sense and context sub-dimensions except for psychospiritual and environmental sub-dimensions in terms of variables such as age, employment status, presence of a chronic disease, and having undergone surgery previously. There were statistically significant differences between the participants' mean scores for the overall questionnaire and all the sense and context sub-dimensions in terms of the variables such as sex, educational status, marital status, the clinic where the respondent is hospitalized, and ASA score ($p<0.05$). There was no statistically significant difference in any mean score according to the participants' BMI ($p>0.05$).

Three models were created to investigate the effects of the participants' sociodemographic and clinical characteristics on their mean scores for the overall

Table 1. Distribution of the sociodemographic and clinical characteristics of the participants

Characteristics		N	%
Age (years) (X̄±SD=52.43±18.84)	≤44	94	35.2
	45-54	40	15.0
	55-64	49	18.4
	≥65	84	31.5
Sex	Women	127	47.6
	Men	140	52.4
Educational status	Illiterate	28	10.5
	Elementary school and junior high school	146	54.7
	Senior high school	63	23.6
	University	30	11.2
Employment status	Employed	88	33.0
	Not employed	179	67.0
Marital status	Married	188	70.4
	Single	79	29.6
BMI (X̄±SD=26.98±4.19)	Normal (18.50-24.99)	87	32.6
	Overweight (25.00-29.99)	114	42.7
	Obese (≥30.00)	66	24.7
Presence of a chronic disease	Yes	115	43.1
	No	152	56.9
Having undergone surgery previously	Yes	169	63.3
	No	98	36.7
Clinic where the respondent is hospitalized	General surgery	91	34.1
	Otolaryngology	45	16.9
	Orthopedics and traumatology	93	34.8
	Urology	26	9.7
	Others	12	4.5
ASA score	ASA I	49	18.4
	ASA II	195	73.0
	ASA III	23	8.6

N=267, BMI=Body Mass Index, ASA=American Society of Anesthesiology

Table 2. Effects of the participants' sociodemographic and clinical characteristics on their mean scores for the overall GCQ

	β	SE	t	p	VIF	F	p	Adj.R^2	DW
Constant	2.744	0.088	31.063	0.000		12.682	**0.000**	0.235	1.927
Sex reference category=Women									
Sex=Men	0.102	0.039	2.575	**0.011**	1.044				
Educational status reference category=Illiterate									
Educational status=Elementary school and junior high school	0.052	0.070	0.751	0.453	3.646				
Educational status=Senior high school	0.185	0.077	2.402	**0.017**	4.094				
Educational status=University	0.282	0.085	3.337	**0.001**	2.893				
Marital status reference category=Married									
Marital status=Single	-0.225	0.047	-4.830	**0.000**	1.219				
ASA score reference category=ASA I									
ASA score=ASA II	-0.229	0.053	-4.313	**0.000**	1.731				
ASA score=ASA III	-0.407	0.083	-4.935	**0.000**	1.561				

Dependent variable=mean score for the overall GCQ, ASA=American Society of Anesthesiology, GCQ=General Comfort Questionnaire

Table 3. Relationship between the participants' durations of preoperative fluid and solid fasting, and their mean scores for the overall GCQ and its sub-dimensions

Sub-dimensions		Duration of preoperative fluid fasting	Duration of preoperative solid fasting
Relief	r	-0.127*	-0.158**
	p	**0.038**	**0.010**
Ease	r	-0.060	-0.049
	p	0.327	0.421
Transcendence	r	-0.132*	-0.135*
	p	**0.031**	**0.027**
Physical comfort	r	-0.180**	-0.198**
	p	**0.003**	**0.001**
Psychospiritual comfort	r	0.041	0.010
	p	0.500	0.869
Environmental comfort	r	-0.140*	-0.171**
	p	**0.022**	**0.005**
Sociocultural comfort	r	-0.175**	-0.106
	p	**0.004**	0.084
Overall GCQ	r	-0.120	-0.129*
	p	0.050	**0.036**

**p<0.05, **p<0.01, GCQ=General Comfort Questionnaire*

value of the model and were insignificant were removed from the model. The model was re-evaluated. The p values of the variables were checked, and it was decided whether they would remain in the model or not. While evaluating the model, first statistical significance and then theoretical significance were considered (Table 2).

The relationship between the participants' durations of preoperative fluid and solid fasting, and their mean scores for the GCQ were presented in Table 3.

The effects of the participants' durations of preoperative fluid fasting on their mean scores for the GCQ were analyzed. The effects of the duration of preoperative fluid fasting on the mean scores obtained from the relief and transcendence sub-dimensions of the sense dimension, and physical comfort, environmental comfort, and sociocultural comfort sub-dimensions of the context dimension were statistically significant for all the models created ($p<0.05$) (Table 4).

The effects of the duration of preoperative solid fasting on the mean scores obtained from the overall questionnaire were statistically significant for the model created ($F=4.459$, $p=0.036$). A 1-unit increase in the duration of preoperative solid fasting caused a decrease of 0.017 units in the mean score obtained from the overall questionnaire ($\beta=-0.017$). In the model, the duration of preoperative solid fasting explained 1.3% of the change in the mean score obtained from the overall questionnaire (Adj. $R^2=0.013$) (Table 5).

DISCUSSION

In good research, a link is established between existing knowledge and the new study by reviewing previous research conducted on the topic and by identifying an appropriate theory (20). Theory provides concrete structures for interpreting situations and events (19,30), and it is sometimes used as an organizing framework (20). Kolcaba's Comfort Theory provided a structure for the interpretation of the concepts of preoperative fasting and comfort and explained the relationship between these concepts and thus contributed to the formation of the conceptual framework of the study. The study's mean durations of preoperative fluid and solid fasting were 12.12 and 14.57 hours, respectively. In several international studies, these durations ranged between 5.80 and 15.30 hours and between 12.10 and 16.10 hours, respectively (31-39). In studies conducted in our country, these durations ranged between 10.57 and 13.54 hours and between 11.40 and 14.80 hours, respectively (24,26,40-45). The guidelines endorse a 2-hour preoperative fasting period for clear fluids and a 6 hours period for solid foods (8-11). The results of the study, which were consistent with the results of all other studies, demonstrated that the durations of preoperative fluid and solid fasting were longer than the durations recommended in the guidelines. These results suggest that evidence-based knowledge has not yet been transferred to practice and that traditional preoperative fasting practices continue.

Table 4. Effects of the participants' durations of preoperative fluid fasting on their mean scores for the overall GCQ and its sub-dimensions

	β	SE	t	p	F	p	Adj.R^2	DW
Relief								
Constant	2.867	0.112	25.641	**0.000**	4.336	**0.038**	0.012	1.702
Duration of preoperative fluid fasting	-0.019	0.009	-2.082	**0.038**				
Ease								
Constant	2.782	0.116	23.912	0.000	0.966	0.327	0.000	1.633
Duration of preoperative fluid fasting	-0.009	0.009	-0.983	0.327				
Transcendence								
Constant	2.895	0.144	25.641	0.000	4.683	**0.031**	0.014	1.577
Duration of preoperative fluid fasting	-0.025	0.012	-2.082	**0.031**				
Physical comfort								
Constant	2.713	0.130	20.858	0.000	8.849	**0.003**	0.012	1.51
Duration of preoperative fluid fasting	-0.031	0.011	-2.975	**0.003**				
Psychospiritual comfort								
Constant	2.517	0.155	16.288	0.000	0.457	0.500	0.000	1.796
Duration of preoperative fluid fasting	0.008	0.012	0.676	0.500				
Environmental comfort								
Constant	3.190	0.116	27.580	0.000	5.319	**0.022**	0.016	1.680
Duration of preoperative fluid fasting	-0.022	0.009	-2.306	**0.022**				
Sociocultural comfort								
Constant	2.993	0.131	27.881	0.000	5.319	**0.022**	0.016	1.680
Duration of preoperative fluid fasting	-0.031	0.011	-2.891	**0.004**				
Overall GCQ								
Constant	2.847	0.112	25.512	0.000	3.867	0.050	0.011	1.568
Duration of preoperative fluid fasting	-0.018	0.009	-1.966	0.050				

GCQ=General Comfort Questionnaire

Empirical indicators also include the processes used for data collection and analysis, and can be used to calculate quantitative scores (19). The GCQ used to measure the comfort level in the study is an empirical indicator representing the comfort theory. According to comfort theory adapted to outcome research, the level of patient comfort should be assessed with a questionnaire developed based on the taxonomic structure (22). When Kolcaba developed the GCQ, she took this taxonomic structure as a guide (27). The GCQ was also used in the study to assess the participants' comfort levels.

According to the results of the study, the participants' preoperative comfort level was moderate to high in the relief, ease, and transcendence sub-dimensions of the sense dimension. It was low to moderate in the physical comfort sub-dimension of the context dimension and moderate to high in the psychospiritual comfort, environmental comfort and sociocultural comfort sub-dimensions of the context dimension. It was moderate to high for the overall

Table 5. effects of the participants' durations of preoperative solid fasting on their mean scores for the overall GCQ and its sub-dimensions

	β	SE	t	p	F	p	Adj. R^2	DW
Relief								
Constant	2.943	0.119	24.796	0.000	6.815	**0.010**	0.021	1.698
Duration of preoperative solid fasting	-0.021	0.008	-2.611	**0.010**				
Ease								
Constant	2.768	0.124	22.296	0.000	0.648	0.421	0.000	1.637
Duration of preoperative solid fasting	-0.007	0.008	-0.805	0.421				
Transcendence								
Constant	2.925	0.153	19.113	0.000	4.950	**0.027**	0.015	1.571
Duration of preoperative solid fasting	-0.023	0.010	-2.225	**0.027**				
Physical comfort								
Constant	2.780	0.138	20.108	0.000	10.770	**0.001**	0.035	1.50
Duration of preoperative solid fasting	-0.031	0.009	-3.282	**0.003**				
Psychospiritual comfort								
Constant	2.593	0.165	15.719	0.000	0.027	0.869	0.000	1.798
Duration of preoperative solid fasting	0.002	0.011	0.165	0.869				
Environmental comfort								
Constant	3.270	0.123	26.642	0.000	8.018	**0.005**	0.026	1.680
Duration of preoperative solid fasting	-0.023	0.008	-2.832	**0.005**				
Sociocultural comfort								
Constant	2.993	0.131	22.881	0.000	8.359	**0.004**	0.027	1.634
Duration of preoperative solid fasting	-0.031	0.011	-2.891	**0.004**				
Overall GCQ								
Constant	2.879	0.119	24.214	0.000	4.459	**0.036**	0.013	1.566
Duration of preoperative solid fasting	-0.017	0.008	-2.112	**0.036**				

GCQ=General Comfort Questionnaire

questionnaire. In a study, the comfort level was moderate in the physical comfort sub-dimension of the context dimension, and above moderate in all the other sub-dimensions of the context dimension, in all the sub-dimensions of the sense dimension, and in the overall questionnaire (24). It was low to moderate in all the sub-dimensions of the sense dimension in another study (46). In another study, comfort was moderate (26).

In the study, sex, educational status, marital status and ASA score explained 23.5% of the change in the mean score of the overall questionnaire. In a study, it was found that women had higher levels of fatigue and nausea than men, and those with university and higher education had higher levels of dizziness than those with primary and high school education. On the other hand, it was determined that there was no significant difference in thirst, hunger, dry mouth, nausea, headache, dizziness, fatigue and irritability levels according to age and BMI (26).

The "I am hungry." item of the GCQ is in the cell where the relief sub-dimension of the sense dimension and physical comfort sub-dimension of the context dimension emerge (28). In surgical patients, pain and nausea are located in the same cell in the taxonomic structure of comfort needs (17). Relief is the patient's experience of having his or her specific needs met (47), and indicates his or her urgent

comfort need that has just been met (27). In perianesthesia nursing, relief refers to a situation in which a specific discomfort is eliminated. Two of the common discomforts associated with this in the perianesthesia procedure are pain and nausea (17). The physical dimension is related to bodily sensations (47). Physical discomforts such as pain are included in this dimension (48). In terms of perianesthesia nursing, it covers the deficiencies in physiological mechanisms that are disrupted due to surgical procedures. Observation and treatment of physical needs such as pain and nausea are easier (18). Thus, according to the theory, preoperative fasting can be considered as pain and nausea.

Longer preoperative fasting reduces the patients' comfort. A long fasting period before surgery causes the patient to experience discomfort due to reasons such as thirst, hunger and anxiety (2,7,15). In the study, the increase in the duration of both preoperative fluid and solid fasting of the patients caused a decrease in the mean scores obtained from the relief and transcendence sub-dimensions of the sense dimension, and in the mean scores obtained from the physical comfort, environmental comfort and sociocultural comfort sub-dimensions of the context dimension. The increase in the duration of preoperative solid fasting also led to a decrease in the mean score obtained from the overall questionnaire. The review of systematic reviews in which the relationship between the duration of preoperative fasting and preoperative comfort was investigated revealed that the comfort level significantly increased in patients whose fasting duration was short (12,16). In a study, comfort levels were high in patients whose durations of preoperative fluid and solid fasting were short (25). According to another study, no relationship was determined between the duration of preoperative fluid fasting and the mean scores obtained from the overall questionnaire and its sub-dimensions, but there was a positive relationship between the duration of preoperative solid fasting and the ease sub-dimension of the sense dimension, and between the physical comfort and sociocultural comfort sub-dimensions of the context dimension (24). In another study, it was determined that duration of preoperative fluid or solid fasting did not lead to any difference in comfort levels (26).

According to comfort theory, a stimulating situation creates alpha press. Alpha press activates obstructing forces that reveal health care needs. Needs arise from a stimulating situation and cause negative tension, which decreases comfort levels (21,49). Within the framework of comfort theory, it can be concluded that in the study, preoperative fasting created negative tension and reduced comfort levels. Health care including physical needs refer to needs which arise in stressful health care situations (22). In the study, the participants' leading healthcare need was the reduction of preoperative fasting.

Comfort theory guides nurses in determining patients' comfort needs and initiating interventions. According to the comfort theory, there are three types of comfort interventions, one of which is technical interventions (23). Preoperative fasting practice is a technical intervention. All the needs of people, including physical ones, determine the nursing tasks to be performed (50). Conscious use of the theory strengthens improvement programs and facilitates assessment of their effectiveness (51). The study's results may guide future studies in which nurses plan comfort interventions to meet patients' comfort needs, such as arising from preoperative fasting.

The current practice according to enhanced recovery after surgery (ERAS) protocols is to allow the intake of fluid foods up to 2 hours before surgery and solid foods up to 6 hours before surgery. This practice has been shown to reduce metabolic stress and improve well-being during the perioperative period (52). Nurses play a role in identifying patient needs and initiating interventions to address them in case of discomfort that occurs when these protocols are not followed and the preoperative fasting period is prolonged.

Limitations

The study has some methodological limitations. Because it was conducted in a single hospital, it is impossible to make a general comment on the subject. The results of the study are applicable only to the participants hospitalized in the surgical clinics of the aforementioned hospital between the dates during which the study was conducted. Data on the durations of preoperative fluid and solid fasting and the comfort levels of the participants are based on their statements.

CONCLUSION

According to the results of this study, durations of preoperative fluid and solid fasting were longer in the participants of the study than were those recommended in the guidelines. The comfort was low

to moderate in the physical comfort sub-dimension of the context dimension, and medium to high in the overall questionnaire, all sub-dimensions of the sense dimension and the sub-dimensions of the context dimension other the physical comfort sub-dimension. The increase in the durations of both preoperative fluid and solid fasting of the patients caused a decrease in the mean scores obtained from the relief and transcendence sub-dimensions of the sense dimension and in the scores obtained from the physical comfort, environmental comfort, and sociocultural comfort sub-dimensions of the context dimension. The increase in the duration of preoperative solid fasting also led to a decrease in the mean score obtained from the overall questionnaire.

In line with these results, it is recommended to take precautions against situations that will delay the surgery time and prolong the preoperative fasting period, adopt a multidisciplinary approach to preoperative fasting, and updating preoperative fasting practices in institutions in line with evidence-based practices. In order to raise the awareness of nurses about the negative effects of prolonged preoperative fasting, they can be trained on this issue. It is also recommended that nurses should determine the patients' preoperative comfort needs, plan interventions to increase the patients' preoperative comfort levels and evaluate patient comfort as a whole with all its dimensions. Nurses should be aware that patient comfort will decrease especially when traditional fasting periods are applied before surgery, and should diagnose the patient needs that arise in this period, plan interventions for them and evaluate the patients' comfort level in line with Kolcaba's Comfort Theory. Researchers are advised to prepare studies in which the preoperative comfort levels of patients who undergo evidence-based preoperative fasting periods are compared with those of patients who undergo traditional preoperative fasting periods and to test the comfort theory in their studies.

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