TAMPERE UNIVERSITY
OF APPLIED SCIENCES

PREOPERATIVE ASSESSMENT AND PATIENT TEACHING

Preoperative forms and guidelines for a

LEIKO unit

Erja Ijäs

Alina Suni

Bachelor's thesis
October 2015
Degree Programme in Nursing
Medical-Surgical Nursing

ABSTRACT

Tampereen ammattikorkeakoulu
Tampere University of Applied Sciences
Degree Programme in Nursing
Option of Medical-Surgical Nursing

IJÄS, ERJA & SUNI, ALINA:
Preoperative assessment and patient teaching
Preoperative forms and guidelines for a LEIKO unit

Bachelor's thesis 37 pages, appendices 6 pages
October 2015

The preoperative phase begins when the decision of the procedure is made and ends when the patient enters the operation room. The purpose of good preoperative care aims to decrease risks during and after the procedure, to speed up the healing process of the patient, to enhance time management and to minimize costs. It is important for the patient to receive the preoperative guidance both orally and in written form. When guiding the patient it is essential to take into consideration the patient's ability to understand and receive the given guidance. In our thesis we also explained the meaning of the LEIKO model since our product was produced for a LEIKO unit. The meaning of LEIKO comes from the words "from home to surgery", which basically means that the patient arrives to the hospital on the morning of the procedure and is usually transported after the procedure to a ward in the hospital for postoperative care.

The purpose of our thesis was to create guidelines for patient care in English for a LEIKO unit. We produced a product which includes a preoperative assessment form, alcohol consumption questionnaire and three different types of preparation forms depending on the type of the procedure. In order to gather needed information for our concepts, we conducted a literature review and interviewed a specialist. The aim of our thesis is to help the co-operation and communication between the English speaking patients and the health care staff, and to arise possible obstacles that the cultural and lingual differences may set. We also aimed to clarify the preoperative patient guidance process and emphasize the meaning of adhering the guidelines.

In the future it would be beneficial to conduct a qualitative research where both, the health care staff and the patients, would be interviewed and the obstacles risen by cultural and lingual differences would be studied.

Key words: leiko, preoperative phase, preoperative guidelines, patient teaching

TIIVISTELMÄ

Tampereen ammattikorkeakoulu
Hoitotyön koulutusohjelma
Sisätauti-kirurginen hoitotyö

IJÄS, ERJA & SUNI, ALINA:
Leikkausta edeltävä arviointi ja potilasohjaus
Potilasohjeet ja -kaavakkeet LEIKO -yksikköön

Opinnäytetyö 37 sivua, liitteet 6 sivua
Lokakuu 2015

Preoperatiivinen vaihe alkaa kun päätös toimenpiteestä tehdään ja päättyy kun potilas astuu sisään leikkaussaliin. Hyvän preoperatiivisen hoidon tarkoitus on vähentää riskejä toimenpiteen aikana ja sen jälkeen, nopeuttaa potilaan toimenpiteestä paranemista, tehostaa ajankäyttöä ja minimoida kustannuksia. Preoperatiivinen ohjeistus on tärkeää antaa potilaalle sekä suullisesti että kirjallisesti. Potilasta ohjatessa tulee ottaa huomioon potilaan kyky ymmärtää ja ottaa vastaan annettava ohjeistus. Opinnäytetyössämme kerromme myös mitä LEIKO-malli tarkoittaa, sillä teimme tuotoksemme LEIKO-osastolle. LEIKO on lyhenne sanoista leikkaukseen kotoa, joka käytännössä tarkoittaa sitä että potilas saapuu sairaalaan leikkauspäivän aamuna ja useimmiten siirtyy vielä jatkohoitoon sairaalan osastolle.

Opinnäytetyömme tarkoitus oli luoda englanninkieliset potilasohjeet LEIKO-osastolle. Tuote jonka teimme, sisältää preoperatiivisen esitietolomakkeen, alkoholinkäyttökyselylomakkeen sekä kolme erityyppistä toimenpiteeseen valmistautumisohjetta, riippuen toimenpiteen tyypistä. Tarvittavan tiedon hankkimiseksi opinnäytetyömme käsitteitä varten, toteutimme kirjallisuuskatsauksen sekä haastattelimme asiantuntijaa. Opinnäytetyömme päämäärä oli auttaa englanninkielisten potilaiden sekä hoitohenkilökunnan välistä yhteistyötä ja kommunikointia, sekä tuoda ilmi mahdollisia esteitä joita kulttuurilliset ja kielelliset eroavaisuudet voivat aiheuttaa. Tavoitteenamme oli myös selventää preoperatiivista potilasohjeistusta sekä painottaa niiden noudattamisen merkitystä.

Tulevaisuudessa olisi hyödyllistä toteuttaa laadullinen tutkimus, jossa sekä hoitohenkilökuntaa että potilaita haastateltaisiin sekä tutkittaisiin esteitä joita kieli- tai kulttuurierot nostavat esiin.

Asiasanat: leiko, preoperatiivinen vaihe, preoperatiiviset ohjeet, potilasohjaus

CONTENTS

1 INTRODUCTION

Nowadays the amount of responsibility given to a patient concerning the preparations before an operation has grown. Also the workload of the health professionals grows when patients come to stay in the hospital days before the actual operation. (Laisi 2013, 62.) Because of the growing infection risk and the hospital stay expenses, the hospital days of a patient are tried to minimize (Keränen 2006, 1412-1413.) In the LEIKO model, the patient comes from home to the hospital in the morning of the operation. It is the patient's responsibility to implement the preoperative preparations for the procedure at home. (Laisi 2013, 62).

When teaching the patient about the preoperative guidelines it is crucial to assess the patient's ability to receive the given information (Monachos 2007, 373-376). Misinterpretations concerning the preoperative guidelines can lead to life-threatening complications during the procedure (Smeltzer, Bare, Hinkle & Cheever 2010, 434-436). A language barrier is one of the factors that can complicate the communication between the health care worker and the patient (Monachos 2007, 376). Since in the 21st century migration has grown considerably in Finland, the immigrants as a patient group need to be taken into account in the health care system (Valtioneuvoston periaatepäätös maahanmuuton tulevaisuus 2020 –strategiasta 2013, 5).

This Bachelor's thesis discusses the patient teaching in the preoperative phase. It explains what is included from the patients point of view, what preoperative guidelines are given and why. It focuses on foreigners as a patient group. The working life connection during the process was ward LEIKO24 in Hatanpää Hospital. They asked for a booklet about the preoperative preparation guidelines and forms in English. This material consists of an assessment form, an alcohol consumption questionnaire and a separate information leaflet containing preoperative phase instructions.

The value of this thesis is to benefit not only the patients, but also the health care professionals hoping to result in a better relationship between these two parties to avoid malpractice.

2 PURPOSE, TASKS/PROBLEMS AND OBJECTIVE

The purpose of this thesis was to prepare a booklet for English speaking patients at LEIKO 24 ward. The booklet is about the forms they are supposed to fill before the operation and the guidelines they need to follow. The booklet will be handed to the ward in an electronic form.

The task of this thesis was to answer the following questions:

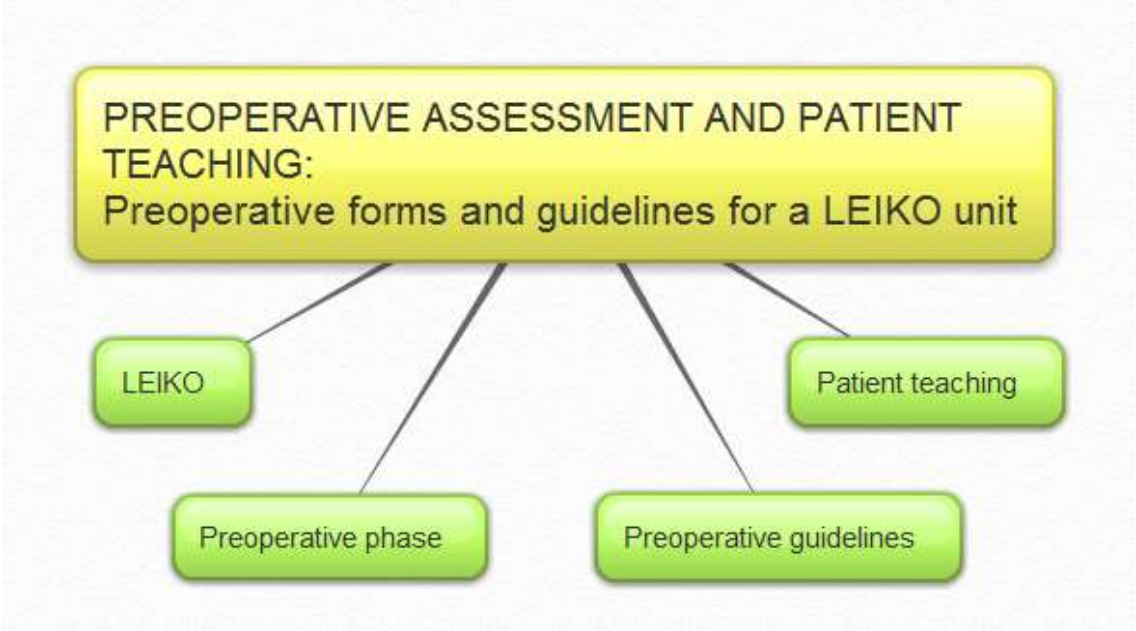
- What happens in preoperative phase from the patient's point of view?
- What is asked in the preoperative forms and why are they relevant for the patient?
- What guidelines are given from LEIKO to the patient before an operation?

The objective of this thesis is to benefit English speaking patients and the staff of LEIKO. This thesis will benefit the health care workers in a way that they can communicate more easily with their patients who do not speak Finnish and take into consideration the challenges cultural differences may set.

The ultimate goal is to benefit all the patients in a way of offering them information on why some things are forbidden or recommended before a procedure. It will also help the staff to explain their patients more clearly these instructions.

3 THEORETICAL BACKGROUND

In our theoretical starting points we have explained and looked more into the following concepts: LEIKO, preoperative phase, preoperative guidelines and patient teaching (PICTURE 1.). In the beginning we have explained the meaning of LEIKO and how it differs from day surgery, because the product of this thesis is prepared for a LEIKO unit. Under this topic we have introduced LEIKO24 unit in Hatanpää Hospital, which was our working life connection. After this we concentrated on the preoperative phase and guidelines associated with it as well as patient teaching. When covering these topics, we looked into them from the day surgery's point of view since it has the same preoperative patient care principles as in LEIKO model. (Keränen 2006, 1412-1414.)



PICTURE 1. Theoretical starting points.

3.1 LEIKO

LEIKO is an abbreviation from the Finnish words from home to operation (Leikkaukseen kotoa) which means that the patients come to the hospital in the morning of the operation. It was developed and started in the Hospital of Hyvinkää. (Laisi 2013, 62.) In 2000, the development process started and in September 2006 the new reception rooms were opened for public (Keränen, Karjalainen, Pitkänen & Tohmo 2008, 3887-3892). LEIKO patients are electively chosen which means that their coming to the hospital is planned

beforehand (Laisi 2013, 62). Most of the patients come to operation without a preoperative visit. In some cases, the patient needs to have an assessment done by an anesthesiologist before the operation. (Keränen, Keränen & Wäänänen 2006, 310.) LEIKO patients are usually discharged the day after the operation (Laisi 2013, 62). In the LEIKO –model, patient is in the center of the system (Laisi 2012, 16).

LEIKO patients receive the written information material three weeks prior the operation. The day before the operation the patient receives a call from the LEIKO unit about the information concerning the operation day. The time when to arrive to the hospital and the guidelines about medication care and fasting are being told to the patient. (Nummi & Järvi 2012, 14-16.)

In the morning of the operation, the patient comes from home to the hospital (Tohmo 2010, 310). LEIKO patients perform the preparations needed for the operation at home, such as showering and taking agreed medications (Satola 2011, 8-9). The patient waits for the beginning of the operation in a specific LEIKO waiting room until the anaesthesia nurse comes to pick up the patient in to the operation room (Tohmo 2010, 310). In the waiting room, the patient changes into hospital clothes and is able to meet doctors and nurses if necessary. Premedication is also given before the operation in the waiting room. (Keränen et al. 2008, 3887-3892.) From the waiting room, the patient walks or is transferred with a wheelchair to the operation room (Satola 2011, 8-9).

3.1.1 Advantages from the patient's point of view

The benefits of the LEIKO model affect both the patient's health and quality of life. It is studied, that each day spent in a hospital increases the risk of obtaining an infection. (Keränen et al. 2008, 3887-3892.) According to different satisfaction questionnaires and researches carried out in the 21st century, most of the patients claimed to be satisfied with LEIKO model. The patients have been especially satisfied with the fact that they were able to sleep the previous night of the operation at home instead of a hospital ward. (Hommy 2013, 11-12.) For demented elderly and mental health patients, it is better to spend the preoperative night at home, in a place that is familiar to them. In a place that is not familiar to them, they have a tendency to become restless. (Mäenpää 2009, 3352-3353.) According to a survey done in Hyvinkää Hospital in 2004, patients' satisfaction

level increased in the LEIKO model and the patients thought the structure of the process was clearer (Keränen et al. 2006, 3603-3607). The patients were also satisfied with the decreased waiting time and with the nursing care that was provided to them. They felt they got enough care and the care provided was professional. (Hommy 2013, 9-12.) In the LEIKO model there is no need for sick leave for the preoperative day in the hospital, which can also be counted as one of the advantages from the patient's point of view (Mäenpää 2009, 3352-3353).

3.1.2 Advantages from the hospital's point of view

LEIKO model saves both time and resources of the hospital. Because of the absence of the one preoperative day, the costs of the care decrease. (Keränen et al 2008, 3887-3892.) There are more beds available for the patients in the postoperative care wards since there are no preoperative patients filling the resources. Besides the ward resources, also the transportation costs are saved. (Mäenpää 2009, 3352-3353.) The workload of the staff decreases because the absence of one preoperative day and they are able to focus on the postoperative care. (Keränen et al. 2008, 3887-3892). According to a survey done in Hyvinkää Hospital in 2004, the LEIKO model was superior compared to the previous models. LEIKO used 73% less of the time resources of the staff compared to a surgical ward. The estimated time a patient spends in a hospital preoperatively was 24 hours and 28minutes. Out of the total, the staff spent 2 hours and 35 minutes with the patient, which means that the patient spent 21 hours and 52 minutes in the hospital without any care provided to them. (Keränen et al. 2006, 3603-3607.)

3.1.3 LEIKO model and how it differs from day surgery

When a procedure has been planned ahead and the period in the hospital lasts no more than 12 hours, it is considered a day surgical procedure. Small procedures and examinations that can be done under local anaesthesia do not count as day surgery procedures. In a day surgery setting the patient arrives to the hospital in the morning of the operation and is discharged on the same day. The risks for postoperative bleeding, infections, overpowering pain and endangering of vital functions are minimal. Usually the operation does

not exceed a two hour time frame. (Hautakangas, Horn, Pyhälä-Liljeström, Raappana & Söderström 2003, 23.)

The main difference in comparing a LEIKO model to a day surgery model is that the patient is not in any contact with the postoperative staff until the operation is completed and the patient is transported to the postoperative care ward (Keränen et al. 2006, 3603-3607). Day surgical patients go home on the same day of the operation, whereas the LEIKO patients are mostly discharged the next day. This is because the LEIKO operations are larger and more complicated procedures that require the overnight monitoring of the patient. (Lisma Susanna 2015.)

3.1.4 LEIKO24

LEIKO24 ward is located in Hatanpää Hospital in Tampere, Finland. The number 24 in the name indicates the fact that a patient spends a total of 24 hours in the hospital. This ward was established in 2012 as a result of closing down of a surgical ward in the same hospital. (Lisma 2015.) With LEIKO24, the hospital was able to increase the productivity of the operations and improve the chances of offering their services for clients out-of-town (Rautiainen & Tienaho 2014, 12). In LEIKO24 the preoperative assessment, planning of the treatment and the pre-visit units are combined. LEIKO24 has tightened the co-operation of different professionals when planning the patient treatment policy in the hospital. These specialists include for example anesthesiologists, surgeons and other staff. This multi-professional teamwork has been shown to increase effectiveness in the process. When all the knowledge is centred to one unit, the expertise and professional know-how increases. (Lisma 2015.)

Feedback has been collected from the patients while they have been discharged. The average satisfaction rate on a scale from one to ten was 9,52 in 2014. The patients have been satisfied with the fast access to the surgery, the smoothness of the process and the easiness of having to visit only one unit. They have also been satisfied with the postoperative care and the professional staff, which has given them the feeling of security. In order to improve the functioning of the ward, the staff of LEIKO24 has a ward meeting once a week and developing discussions twice a year. A total of four training days are offered to the

workers each year to update and develop their skills. Also the multi-professional team develops and plans the functioning of the unit twice a year. (Lisma 2015.)

3.2 Preoperative phase

The perioperative phase consists of three phases: a preoperative phase, an intraoperative phase and a postoperative phase. The preoperative phase begins when the decision of the operation is made and ends when the patient steps inside the operation room. Intraoperative phase follows immediately after the preoperative phase and ends when the patient is transported to the postanaesthesia care unit (PACU). The third one, the postoperative phase, begins after the patient is taken into the PACU and ends when the patient comes to a follow-up evaluation to a clinic. (Smeltzer et al. 2010, 434-436.) Preoperative policlinics have been established in Finland for preoperative assessment, especially when the patient undergoes a LEIKO procedure (Leikkausta edeltävä arviointi: Käypähoito -suositus 2014).

Preoperative care is the care given to a patient before an operation. This includes physical, mental and psychosocial care. The information that is given to the patient before the procedure is presented as verbal, written, audio/video or as an educational class e.g. in a group. The aim of providing good preoperative care is to decrease the risk of complications during and after the operation, to speed up the healing process of a patient, to enhance time management and to minimize costs. (Walker 2007, 27.) The following matters have to be included in the preoperative assessment: patient's health and medical history, type of the anaesthesia and factors related to it, assessment of the patient's nutritional status, oral health investigation and the usage of alcohol and drugs. The patient also receives preoperative and postoperative guidelines. (Smeltzer et al. 2010, 428-432.)

The preoperative phase includes elements such as proper staffing, preadmission assessment and testing, anaesthesia evaluation, preoperative teaching and guidance, preoperative assessment and postoperative care. There are certain policies that are followed at the care unit such as proper data assessment and documentation of care, adequate supplies and devices for monitoring patients. The care unit ensures also availability for proper pain control and emergency medication for the operation. Each staff member is responsible

for carrying out and making sure that these policies are followed at the unit. (Guidance Statement: preoperative Patient Care in the Ambulatory Surgery Setting 2005, 871-872.)

In the preoperative phase, the type of the anaesthesia used in the operation is chosen. Anaesthesia is a state of narcosis where the patient is relaxed without the sense of pain or reflex. The types of anaesthesia include general anaesthesia, regional anaesthesia and local anaesthesia. (Smeltzer et al. 2010, 448-455.) Factors influencing on the decision of which type of anaesthesia to use include the size, duration and urgency of the operation and available resources. Other factors contributing are patient's medical history, age and wishes concerning the type of the anaesthesia. (Tunturi 2013.) When general anaesthesia is used the patient is not able to wake up during the operation, not even to pain stimuli. In general anaesthesia the patient inhales the anaesthetic agent or it is administered by i.v. (intra venous) which means into the vein. (Smeltzer et al. 2010, 448-450.)

"In regional anaesthesia, an anaesthetic agent is injected around nerves so that the region supplied by these nerves is anesthetized." (Smeltzer et al. 2010, 450.) Epidural anaesthesia and spinal anaesthesia are the two types of regional anaesthesia. When using epidural anaesthesia, the anaesthetic agent is injected into the epidural space. In spinal anaesthesia the anaesthetic agent is injected into the subarachnoid space. The difference between these two methods is, that injecting the agent into the epidural space is much more difficult than into the subarachnoid space. The positive side in epidural anaesthesia is that it does not cause a headache which can be a result from spinal anaesthesia. (Smeltzer et al. 2010, 451-453.)

Local anaesthesia means the injection of the anesthetic agent into the tissues of the incision site. It is used when the planned operation is short or minor. It is simple, economical, minimal equipment is needed and recovery time is fast. (Smeltzer et al. 2010, 454.) The benefits of local anaesthesia include that it makes the postoperative pain management easier, it does not have the undesirable effects of general anaesthesia, it decreases postoperative vomiting and nausea and it decreases the risk of deep vein thrombosis (DVT). There are some disadvantages too, which include possible nerve damage, the anaesthesia might be insufficient or slow on onset or the patient may not be pleased to be awake during the procedure. (Franklin & Dawson 2008, 43.)

Because the anaesthesia can cause difficulties in intubation, the intubation channel must be examined. This includes examination of the larynx, how the mouth opens and is the mandible able to push forward. Besides these the circumference and extension of the neck are examined. (Leikkausta edeltävä arviointi: Käypähoito -suositus 2014.)

In the preoperative phase, proper staffing for the operation is also determined. Usually the team consists of the anaesthesiologist, the surgeon and nurses. The anaesthesiologist together with anaesthetist, who is usually a specially trained nurse, administers the anaesthetic agent and monitors the patient throughout the operation. The surgeon implements the surgical procedure and leads other members that belong to the team. Besides the nurse who is specialized in the anaesthesia, there are two other nurses too who are a part of the operation team. One of these two is a scrub nurse who assists the surgeon, sets up the sterile tables and equipment and also makes sure the needed areas stay sterile throughout the operation. The other nurse is a circulating nurse who is responsible for booking the needed equipment for the operation, documenting carefully all necessary information and helping other members of the team. There can be also other team members involved and the necessary crew for each operation is carefully planned beforehand. (Smeltzer et al. 2010, 443-446.)

3.2.1 Preoperative assessment

Preoperative assessment is done 2-4 weeks before the operation as it allows time for any additional examinations or preparations the patient might need to undergo before the operation (Hodge 2003, 28). The preoperative assessment, or risk assessment as it is also called, aims to prevent and minimize any kinds of perioperative risks caused to the patient as well as determining whether the patient is eligible for the procedure (Böhmer, Wappler & Zwissler 2014, 437). It provides information about the procedure, anxiety and pain management to the patient and increase patient satisfaction (Hodge 2003, 13).

Preoperative assessment includes information about the patient's health history, medications and medical concerns. It is important to include an assessment of a health literacy in the preoperative assessment phase to avoid difficulties afterwards. (Monachos 2007, 373-374.) With this assessment it is determined what course of action will be taken related to the operation based on the information of the patient's medical problems and the level

of risk undergoing to a procedure. Preoperative assessment lowers the possibility of cancellation or delay of the operation and it increases the utilization of the day surgery settings. (Fraczyk & Godfrey 2010, 2850.)

One study about patient satisfaction in the preoperative assessment showed, that most of the patients who participated in it were reasonably or very satisfied. The opportunity to discuss with a doctor at the assessment had little effect on the satisfaction levels of these patients. However, even amongst the patients who stated adequate satisfaction levels reported that they did not receive proper information concerning the preparations before the operation as well as health promotion advice on smoking, exercising or dieting. It can be pointed out, that with a proper nurse-led interaction including good communication skills and empathy along with providing high-quality nursing care, the patients are well satisfied and do not require doctors to accomplish high satisfaction levels. (Fraczyk & Godfrey 2010, 2852-2856.)

There are three elements the health personnel assess in order to make sure that complications after surgery do not occur and to ensure patient safety. These elements are making a proper preoperative assessment for the patient, choosing eligible patient for the operation and providing extensive preoperative and postoperative guidelines for the patient. Also information received from the caregiver is important. (Allison & George 2014, 366.)

There are certain standards that the patient needs to fill in, in order to become selected as a day surgery patient. The decision for day surgery is made when the operation is being planned. Day surgery operations should not last longer than 60 minutes. They should not cause postoperative bleeding or postoperative pain that requires injected pain medication after the discharge of the patient or the care of any specialized nursing care methods such as drains. After the decision is made that the patient's operation is suitable for day surgery, patient assessment begins. The main goal of the assessment is to ensure that the procedure is safe for the patient. (Hodge 2003, 6.) Risk factors for an operation are listed on the following table (TABLE 1.).

TABLE 1. Risk factors for an operation (Hodge 2003, 6)

Risk factors for an operation:
• Age over 85 years • Some sort of heart disease • General anaesthesia as the form of anaesthesia • Operation time is over one hour • Patient is HIV positive • Malignant cancer • Peripheral vascular disease

Factors that may increase complications during the operation include obstructive sleep apnea (OSA), obesity, cardiovascular diseases and reactive airway disease. These are all operators that can be controlled with proper measures by the health team. (Allison & George 2014, 366.)

Diagnosed or suspected obstructive sleep apnea (OSA) is looked into in the preoperative assessment. OSA can cause complications in the operation such as airway obstruction, cardiac incidents, difficulties in intubation and postoperative respiratory depression. The complications are a risk for an undiagnosed patient who is admitted home with opioids for pain relief medication. (Allison & George 2014, 366.) OSA together with obesity or circulatory diseases increases the risk of complications in or after the operation. If the patient has OSA, it is recommended that operation is carried out under regional or local anaesthesia. (Leikkausta edeltävä arviointi: Käypähoito -suositus 2014.)

Cardiovascular disease is usually an obstacle for day surgery, especially if the patient has unstable coronary syndrome or decompensated heart failure. In the preoperative assessment the health personnel looks for any previous or present arrhythmias, myocardial infarction, angina, heart failure, inserted pacemaker or history of orthostatic tolerance. Indications for related diseases can be diabetes mellitus, a peripheral vascular disease, renal impairment, cerebrovascular disease or chronic pulmonary disease. A health professional assesses if there has been any changes in the condition of the patient who has been diagnosed with a cardiovascular disease. With patients who have been diagnosed with previous diseases or symptoms, it is especially important to document their medication, both prescribed and non-prescribed. The functional capacity of the patient and their alcohol

consumption habits have to be assessed as well. If the patient has a pacemaker, the health care personnel has to find out the type of the pacemaker, the underlying rhythm and the current medication for it. (Allison & George 2014, 366.)

Diseases that create bronchial spasms such as asthma and chronic pulmonary bronchial disease are types of reactive airway diseases. Patients who smoke are also included in this definition. Smokers are advised to quit smoking before the operation and in some cases smoking is the reason for postponing it. (Allison & George 2014, 366.)

Obesity is one of the risk factors in the operation. A patient whose bodyweight is 20 percent above the normal body weight is considered as obese. Obesity increases the risk of intraoperative respiratory complications, such as difficulties in intubation and respiratory insufficiency. It can also create problems in the patient positioning. (Allison & George 2014, 366.)

3.2.2 Assessment form

Preoperative assessment form consists of questions related to the patient's medical history, previous procedures and complications within them, current diseases and medication, allergies, alcohol consumption, smoking and the usage of narcotics, exercise and diet and the possibility on having an adult to pick up the patient from hospital after the surgery and accompany them until the following morning. At this point the patient is given an information sheet explaining what will happen in the procedure, what to bring with them to the hospital, possible indicators for cancellation and a pre-printed instruction sheet of the care that should continue at home after discharge, such as pain, side-effects, medication, diet, activity restrictions and symptoms of possible complications. (Allison & George 2014, 366-373.) The patient is asked to fill in an alcohol consumption questionnaire. The results can be an indicator for alcoholism. Alcoholism increases the risk for perioperative or postoperative problems such as inflammations, bleeding, heart problems and death. (Tønnesen, Faurschou, Ralov, Mølgaard-Nielsen, Thomas & Backer 2010, 1.)

In case the patient has not been in the pre-visit, the patient assessment and assessment form is gone through and filled in with the patient on the day of admission (Guidance

Statement: preoperative Patient Care in the Ambulatory Surgery Setting 2005, 874). The assessment is done by the perioperative nurse. The perioperative nurse is in charge of documenting and communicating the findings of the patient's status to the rest of the team involved in the patient's care. The assessment form consists of information such as the patient's identity, medications, both prescribed and non-prescribed, allergies and sensitivities to any substances e.g. latex, prescribed surgical preparations such as showering, shaving, prosthetics e.g. dentures and the verification of a safe discharge plan. (Guidance Statement: preoperative Patient Care in the Ambulatory Surgery Setting 2005, 874-876.) Crucial information for the perioperative staff contain the patient's age and medical and surgical history. Based on this information the operating surgeon or anesthesiologist may prescribe extra tests for the patient to ensure that the patient can go under the procedure. (Allison & George 2014, 366, 368.) If the patient is taking medications that might modify laboratory test results, an organ failure is present or the operation requires the taking of extra laboratory tests, additional tests are taken. The additional tests can be for example ECG or chest x-ray. (Böhmer et al. 2014, 440-441.)

The upper limit concerning age for a day procedure patient is recommended to be between 65-70 years. This varies depending on the health status of the patient. Perioperative and postoperative complications may occur, such as hypertension. (Hodge 2003, 8.) The patient is asked to inform of any prescribed, over-the-counter or herbal medications they are taking, as they might interact with the medications used during the operations (Allison & George 2014, 368). Any allergies or sensitivities experienced by the patient should be informed as they may cause complications perioperatively and or postoperatively. A good example is latex, as it is the material mostly used by the health professionals to protect their hands. If a patient suffers from latex hypersensitivity and the staff members use latex gloves while working with the patient, a life threatening situation such as an anaphylactic shock may occur. (Rose 2005, 28.) In case a patient has prostheses, usually joint replacements, they need to be documented so the operating staff can plan beforehand how the patient is positioned during the operation. This way there will be minimum stress on the replaced joint. (Hodge 2003, 34.)

The patient's medical and surgical history should be well reviewed and obtained from the patient as this information will indicate in decreased complications during operation when the risks can be sorted out and prepared for beforehand. Such a risk indicator can be e.g.

a bleeding disorder. (Böhmer et al. 2014, 438.) The patient is also assessed by ASA (The American Society of anesthesiologists') classification scale (TABLE 2.).

TABLE 2. ASA-scale (modified from Hodge 2003, Böhmer et al. 2014)

ASA classification	**Definition**
ASA 1	Normal healthy patient
ASA 2	Patient with mild systemic disease
ASA 3	Patient with severe systemic disease
ASA 4	Patient with severe systemic disease which is a constant threat to his/her life
ASA 5	A dying patient who is not expected to survive without the operation
ASA 6	A declared brain dead patient who's organs are being removed for donor purposes

In order to be eligible for the operation, the classification has to be class one or two. In some cases class three is also a suitable candidate if the disease behind the high classification is well under control. (Hodge 2003, 6.) In ASA class one the patient has no disturbance physiologically, biochemically, organically or psychiatrically. In ASA class two there is a mild or moderate systemic disturbance present. ASA class three represents a severe systemic disturbance or a disease. Other obtrusive medical conditions are diabetes, cardiac disease, hypertension, respiratory disease, arthritis, pregnancy, Hepatitis B and HIV. (Hodge 2003, 7-8.)

3.2.3 Patient consent

Patient consent is needed before a procedure or an examination. In it, patient confirms that he or she understands the meaning of the care, its risks and the planned operation. It has to be voluntary and the information about it must be given to a patient in a way that the patient understands it. Written consent is needed in procedures where there exists a risk for the patient. (Jolley 2007, 36.) It is stated in the Act on the Status and Rights of Patients (17.8.1992/785) that each patient has the right to determine about their care. Patients can exercise this right only when they have the necessary information about the care and the choices they make and they understand the information given to them. (Jolley 2007, 35.)

3.3 Preoperative guidelines

Preoperative guidelines mean the guidelines given to the patient by the hospital before the surgery. The meaning of these guidelines is that the patient can prepare for the operation in a best possible way to avoid any unwanted complications in the operation and after it. These guidelines include instructions about fasting, the usage of medical stockings, information about medicines and medication, absence of alcohol consumption and guidelines how and when to arrive to the hospital, to mention a few. (Smeltzer et al 2010, 434-438.)

3.3.1 Guidelines for preoperative care

The patient is provided an information booklet beforehand the operation usually on the preadmission visit. The booklet consists of information the patient has to know and to follow before arriving to the ward. In addition it will present all the general information from the date, time and place of the procedure. This is also useful information to the person who will come to pick up and take care of the patient after the procedure. (Hodge 2003, 32.)

For patients who smoke every day and consume alcohol beverages in a level that can be harmful, it is proven that they are two to four times more prone to develop postoperative complications such as bleeding, infections, pulmonary complications and death compared to those who do not. This is why cessation of four to eight weeks preoperatively is recommended as it will result in reducing the postoperative risks substantially. It may in addition encourage the patient to adopt healthier lifestyles in the future. (Tønnesen et al 2010, 1-2.)

When talking about the fasting guidelines of a patient before a procedure, it is meant that the patient is supposed to abstain from eating and drinking for a certain amount of time. The time varies individually within the patients depending on factors such as what kind of a procedure is done. Also because there are no common rules for the fasting times, just

guidelines, the information received depends on the information giver. Fasting is an important factor in perioperative care, because if this is not followed accordingly, it may cause a life threatening situation for the patient during the operation. Stomach acids, which are a result from the foods and drinks a person consumes, may result as aspiration during general anaesthesia. (Anderson & Comrie 2009, 73-74.) There are two factors that increase the risk of aspiration during a surgery that is conducted through general anaesthesia. First is the position in which the patient is operated. It has been researched, that when the patient's head is not elevated at all, the risk for aspiration increases. The second reason is the fact that when the patient is sedated, cough and gag reflexes do not work as well as normally. This increases the possibility that the patient cannot handle the gastric contents. (Prevention of aspiration 2012, 11-12.) Because the information of proper and safe fasting times preoperatively is renewed every now and then, it is crucial for patient safety, that this information is updated regularly to prevent complications were they resulted from a too long or too short period of time the patient did fasting. In this issue it is also important that all health professionals communicate findings and opinions, as it is revealed that for example anaesthesia care providers have a very different opinion from those of nurses. (Anderson & Comrie 2009, 73-74.) Lately there has been a lot of conversation whether the usual fasting time, which is six to twelve hours before operation, is too long. In addition to this, some studies show that by restraining clear fluids only two hours prior to an operation has positive and beneficial outcomes for the patient. These can result as reduced anxiety levels, decreased discomfort, diminished chance for dehydration as well as postoperative nausea and vomiting. (Kyrtatos, Constandinou, Loizides & Mumtaz 2014, 228.)

The preoperative guidelines concerning medication aim to prevent possible disturbances in the patient's medication care, but at the same time ensure optimal outcomes for the planned procedure. Some medicines the patient may take as normal at home or bring along to the hospital. There are certain medications the patient should not take before the operation such as aspirin and blood thinners as these increase the risk of bleeding of the patient. Diuretics are withheld as the can cause dehydration. (Allison & George 2014, 370.)

If shaving has to be done before the operation, it is carried out as near to the operation date as possible to decrease the risk of bacterial growth (Hodge 2003, 37). According to the hospital hygiene and infection guidelines made by Pirkanmaan sairaanhoitopiiri

(2014) it is not necessary to remove body hair before the operation since the shaving can damage the skin and therefore increase the risk of infection. If shaving is required, it is done right before the beginning of the operation. (Sairaalahygienia- ja infektio –ohjeet. Leikkauspotilas 2014.) Makeup and nail varnish are not worn on the day of operation as the health professionals have to monitor visually for any signs of cyanosis during the operation and postoperatively. If there are any artificial colours on the skin or nails, the signs of cyanosis might not be visible. Jewelry has to be removed before going to the operation room. (Hodge 2003, 34.) Piercings must be removed before a surgery since they may cause damage to the patient. One way they may cause damage is, if they interact with an instrument called electrocautery. The interaction causes burns to the patient. (Muensterer 2004, 384.) It is preferable that the patient wears eyeglasses rather than contact lenses on the day of the operation. In case the patient has dentures, they are removed before the operation. The presence of bridges, crowns and loose teeth has to be documented on the patient's information. (Hodge 2003, 34.)

3.3.2 Guidelines for postoperative care

A part of the preoperative phase is patient teaching about postoperative care. The patient is taught instructions and techniques how to avoid complications after the operation. These include diaphragmatic breathing, correct way to cough and how to exercise the legs. (Smeltzer et al. 2010, 434-436.)

Breathing with diaphragm is practiced in the same position as the patient will be in the bed after the operation. Patient is advised to put hands on top of the chest to be able to feel the movement. In diaphragmatic breathing the patient is taught to take a deep breath and hold it while counting to five in mind. After this the patient has to exhale and let out all the air through the nose and the mouth. This exercise is repeated fifteen times in a row twice a day before the operation. (Smeltzer et al. 2010, 434-436.)

Another instruction concerning the postoperative care is the correct way to cough after the operation. It helps to vanish secretions from the chest. When coughing, the patient is in a sitting position slightly leaning forward while protecting the incision site by pressing it slightly with hands. After implementing the diaphragmatic breathing, the patient is advised to breathe in fully, hack out sharply for three short breaths and then take a deep

breath quickly and immediately after this make a strong cough. (Smeltzer et al. 2010, 434-436.)

A key element for minimizing postoperative complications is the mobilization of the patient as early and frequently as possible after the operation but in the limits of tolerance. This increases circulation, prevents venous stasis and promotes optimal respiratory function. (Smeltzer et al. 2010, 434-436.) According to a study about early mobilization, it was discovered that early mobilization decreased significantly the risk of deep vein thrombosis in a group of patients who had undergone a total knee replacement surgery. In this study mobilization meant that the patients were sitting out of bed or they were walking 15-30 minutes twice a day. (Chandrasekaran, Ariaretnam, Tsung & Dickison 2008, 526-527.) When teaching patient about early mobilization, the patient is taught to exercise legs in bed when walking is not possible yet and to bend knees and raise legs while lying on their back. The position is held for a few seconds and then the leg is lowered to the bed. This exercise is done five times and then repeated on the other leg. Another leg exercise is to make circles with legs by rotating the ankles. Both of the exercises are easy to implement when lying in the bed. The patient is also taught to turn to the side with the help of the side rail and to get out of bed by pushing oneself up by hand. These instructions able the patient to move safely as soon as possible and not to cause harm to the incision site. The meaning of the teaching is that patient is able to act as independently as possible after the surgery with the correct technique. (Smeltzer et al. 2010, 434-436.)

3.3.3 Discharge of the patient

When patient is discharged from the hospital the indication for it is that patient no longer needs as high level care as in a hospital. After the discharge patient is transported to a follow-up care facility such as rehabilitation institution or a nursing home or the patient is able to go home. (Ubbink, Tump, Koenders, Kleiterp, Goslings & Brölmann 2014, 1.) In order to discharge the patient, the following criteria must be filled in order to guarantee patient safety: stable blood pressure and pulse, ability to swallow and cough, ability to walk without dizziness, no vomiting and as minimal nausea as possible, normal skin color, ability to breathe normally, normal level of consciousness, ability to urinate, drink and eat, the operation site has been checked. Other criteria that has to be met are that the patient has received written and oral postoperative instructions and medication, possesses

the information letter from the surgeon or physician, the outpatient appointment is arranged and knows where and when it is and has someone to pick them up and stay with until the following morning. (Hodge 2003, 15.)

3.4 Patient teaching

When beginning to teach a patient, the first step is to assess the patient's level of knowledge and ability to learn. Health literacy means the patient's capacity to read and understand information in documents concerning their health in order to make decisions related to their health, ability to answer health related questions or the knowledge from whom to ask when not having the knowledge themselves. These documents may be such as surgical consents, pre- and postoperative guidelines or health insurance forms or other documents which are critical for their health care. Reasons for low health literacy can be caused by the lack of education, miscommunication, unprofessionally produced written material or medical jargon which can be too difficult for the patient to understand. (Monachos 2007, 373-376.) Poor health literacy can lead to poor health choices made by the patient, wrong use of health services which increase the costs of health care system and low quality medical care. When patients have adequate knowledge about their health care, it gives them a sense of empowerment and confidence. (Monachos 2007, 373-374.)

When giving health care information for a patient with a different cultural background, patient's values, traditions and cultural beliefs are taken into consideration. Besides these, patient's language skills need to be assessed too, especially when it is known that the patient does not understand the spoken language properly. (Monachos 2007, 376.) According to a study conducted by Lee& Lee (2013) the results revealed that 46,5% of the nurses who participated in the study felt that they did not give necessary information to the patient about the operation. In the study the major factors affecting the preoperative teaching were the lack of time, language barriers and the questions asked by the patients. The study also showed that the nurses favored giving the information orally, written or using written material with pictures. (Lee & Lee 2013, 2551-2558.)

Tips to enhance patient understanding include using simple sentences and every-day language. Jargon might be self-evident to professionals but difficult for patients to understand. Information has to be given in small pieces. It is repeated and summarized if needed

and especially when the information is crucial. It is important to encourage the patient to ask questions and to interact. Visual information is used to increase the patient's ability to understand the given information, this can mean for example using diagrams, pictures or videotapes. (Monachos 2007, 381.)

According to the Act on the Status and Rights of Patients (17.8.1992/785) the patient is entitled to have enough and adequate information about their operation. Health care professional should give information about the necessity of the operation, alternative options in treating the health problem, risks and the likelihood of the success or failure of the procedure. The patient is entitled to have this information in a way that they understand it and are able to make a decision based on knowledge. (Act on the Status and Rights of Patients. 17.8.1992/785.)

It is researched that the stress caused by anxiety felt by the patients hinders the healing process. Anxiety control on the preoperative phase is extremely important. Anxiety can be simply reduced by providing enough adequate information about the preparations and the procedure itself. Also listening about the patient's worries and feelings lessens anxiety. These all methods are adjusted to every situation, as patients experience and cope with them individually. (Grieve 2002, 1-3.) It is important to explain the patient what they might experience during their procedure, such as pain, nausea or any other symptoms considered normal, because when the patient is informed beforehand of such sensations and they know to expect it, they will not experience as much fear or anxiety (Hodge 2003, 36.)

According to a study, major factors on the responses of patient satisfaction in day surgery settings are language difficulties, differences between genders, time available to be used and the nurse's knowledge. Due to the shorter stay of the patient in the hospital, the nurses have less time to identify and treat accordingly patients who have anxiety. No remarkable differences between anxiety felt and preparedness for a procedure were found whether the patient was interviewed for a procedure by telephone or a face-to-face interview. The benefits in a face-to-face interaction are the possibilities of the nurse to read the body language of the patient and check that the patient properly understands the given instructions. In a face-to-face interaction a patient can more easily clarify possible problems they have about understanding the instructions. The benefits of a telephone interview are its

easy availability, cost effectiveness and time convenience. (Richardson-Tench & Brown 2013, 24-27.)

3.4.1 Written patient instructions

There exists a lot of different kind of patient instructions with different purposes. The length can vary from one page to several pages and the product may be as a single sheet or a whole booklet. The instructions should clearly state what is done and it should answer questions such as what, why, where, when and why. (Smolander & Tapanila 2011, 2.)

When a person is sick or anxious, it is difficult to absorb all the oral information that is given. The purpose of written patient instructions is to supplement oral guidance and to back up memory in a situation where the patient takes care of themselves at home. The patient is not able to comprehend all the given information since the amount of information can be enormous. (Torkkola, Heikkinen & Tiainen 2002, 28-29.) The benefits of the written instructions include each patient receiving the same information, the given information is more detailed and available for the relatives of the patient too. (Developing written information for patients, good practice guidelines 2003, 4.)

It is not enough that the content of the instructions is sufficient, but also the way it is represented is important. When creating written material it is important to recognize to whom the information is targeted to. The title has to be clear and state what is the information about and to who it is for. (Torkkola et al. 2002, 35-38.) Already from the beginning it needs to be clear for the reader which type of information the material provides. The most important information needs to be mentioned first, since some of the readers only read the first few lines. (Torkkola et al. 2002, 46.) Readers prefer information that is provided as shortly as possible. There has to be a distinct storyline to the instructions, an important factor here is the order in which the information is presented. The information can be presented chronically, by prioritizing it or dividing it into themes. (Hyvärinen 2005, 1769-1722.) Paragraphing is used to clarify the information. By using this method, the information is presented in a logical order. (Torkkola et al. 2002, 46.) The writer needs to pay attention to the length of the sentences as long sentences are difficult to understand and read (Hyvärinen 2005, 1769-1722). In a material provided to patients the contact information has to be stated in a visible place. When the grammar is correct it is easier to

understand the information. By using illustration the reader's interest to the topic is increased and it helps to understand the text. (Torkkola et al. 2002, 46.) When given instructions are explained, the possibility that the patient will follow them elevates (Hyvärinen 2005, 1769-1772). According to head physician Ulla Keränen (2008) a good tip for making understandable written instructions, is to ask someone who is not familiar with health care field to read it through. This improves the intelligibility of the material. (Nummi & Järvi 2012, 14-16.)

4 METHODOLOGY

Under this chapter we have gone through the methodology part of this thesis. In it we have covered factors such as the type of the thesis, what kind of sources it is based on and what databases were used to find the sources. In this chapter we have clarified how we have produced the text and what have been the inclusion and exclusion criteria for it.

The goal of a functional thesis is to guide or to reason action in a professional field. A functional thesis comes up with research results or a product. (Vilkka & Airaksinen 2003, 9-10.) In a functional thesis it is also recommended to have a working life connection for whom to produce these results or the product (Vilkka & Airaksinen 2003, 16). Our working life connection was LEIKO24 in Hatanpää Hospital and we have produced a product for them, which is the booklet. The goal for our thesis was to give guidance. Therefore our thesis is a functional thesis.

Our thesis is based on a literature review and an expert interview. A literature review means the search of existing knowledge within a context (Polit & Beck 2012, 94.) For the writer it means decision making on what to read and which articles to include in the writing. There are two types of sources available, primary and secondary sources. A primary source is a study actually implemented by the writer. A secondary source is a document written by someone else than the researcher who implemented the study. (Polit & Beck 2012, 95.) In our literature review we have used both of these types of sources. In addition to the literature review, we interviewed the head nurse of LEIKO24 in Hatanpää Hospital to gather information about LEIKO operation and to attach personal experience of the usefulness of the model.

According to Hirsjärvi, Remes and Sajavaara (2009, 77-81) there are ten elements that the writer should consider when choosing the topic for the thesis. The writer has to consider if the chosen topic is interesting and suitable for the chosen field of expertise, if the topic has any social or scientific meaning or does it teach anything new for the writer. Writer also has to take into consideration whether there is a proper guide for the thesis making on the chosen field, is the work possible to accomplish in the timeframe and is there enough available information on the chosen topic. The research has to be possible to implement when taking into consideration financial margins and the needed equipment

and people for the research. The chosen topic has to be such kind that it brings out the writers knowledge and skills. It is also mentioned that the writer should avoid topics that are too broad, where information search is too narrow and topics that do not open to the writer. Topics that arouse too many emotions for the writer are suggested to be avoided since in such topics it is difficult to maintain objectivity and criticism in the writing. (Hirsjärvi et al. 2009, 77-81.) Our topic for the thesis was suggested to us by our working life connection, which we both found interesting. During the process the context changed slightly but the main idea stayed the same. We feel that the topic has social value and raises awareness how to encounter a foreigner as a patient. We narrowed down the context of the thesis to fit our timetable and edited it in a way that we were able to find enough trustworthy and suitable information. At first, we decided to focus mainly on LEIKO preparations but since it was difficult to find information on the topic outside of Finland, we outlined the topic to preoperative guidelines and teaching. Before the beginning of this process, we both felt that we have gained knowledge and expertise of this specific field and topic, and along the process deepened it.

It is a good idea to do a search plan before starting to search for the information, from where to search and how. Bibliographic databases are good places to retrieve information since they contain thousands of journals, can be accessed by a computer and search results can be narrowed down to specific topic by coding. (Polit & Beck 2012, 98-99.) We searched research articles for our sources from electronic databases such as CINAHL, EBSCOhost and Oxford Journals. Besides the research articles, we also used Bachelor's thesis' which were related to our topic.

A good research plan includes some criteria to limit the search. This criteria can be such as setting up a time frame within what the studies have been conducted, what kind of articles to include and the language of the articles.(Polit & Beck 2012, 98.) In our thesis, we chose to use only peer-reviewed articles as our sources. A peer-reviewed article means that the study has been critiqued and feed-back has been given for the researchers. The peer-reviewers are as experienced concerning the topic as the researchers are. (Polit & Beck 2012, 48.) Peer-reviewing increases the trustworthiness of the article (Polit & Beck 2012, 111). We decided to focus mainly on articles that had been published within the past 10 years which means articles that were published between the years 2005-2015. We chose this time frame in order to use the most up to date information. Some of the publications that we ended up using were older than 10 years, since they contained important

information for the thesis. Both of us study in English and our native language is Finnish, therefore we used articles written in both languages as the source material.

Polit and Beck (2012, 104) explain that screening the material according to its accessibility and relevancy is advised when gathering the source material. After doing the database search, we narrowed down the articles by their accessibility and relevance. The articles needed to be accessible in FullText Format and relevant for our topic. The relevancy was determined by reading through the abstract of the article. (Polit & Beck 2012, 104.)

5 DISCUSSION

In this chapter we have discussed about the trustworthiness, ethics and limitations of this thesis and reflection on the writing process. In the end we have given a recommendation for further studies.

5.1 Trustworthiness

Trustworthiness in a thesis is important as it evaluates the value and quality of it (Polit & Beck 2012, 174-175). In order to enhance the trustworthiness of our thesis, we focused on certain factors when searching the source material and while writing the thesis. These factors were credibility, transferability, dependability and confirmability of the information. There are two ways to enhance credibility: to use multiple referents to come up with a conclusion and to properly interpret the information under study to find possible misinformation or distortion in the data. Transferability determines if the findings of the information can be transferred to other settings or groups. According to Hirsjärvi et al. (2009) the transferability also increases the reliability of the results or the study. The reliability of the research means its ability to come up with systematic results. (Hirsjärvi et al. 2009, 231.) Dependability assesses the stability of the data over time and conditions. Confirmability points out if the information is objective or neutral. (Polit & Beck 2012, 174-180.) Triangulation was used to enhance the trustworthiness of the data. Triangulation means the use of several sources or references in order to come up with most accurate resolution for truth. (Polit & Beck 2012, 175.) For triangulation in our thesis we have used two sources which are the literature review and an expert interview. For the expert interview, we interviewed the head nurse of LEIKO24 ward in Hatanpää Hospital.

In order to avoid misconduct we did not make up our own research data and results as it leads to fabrication. We tried to avoid plagiarism. Plagiarism means presenting ideas and information produced by others as your own work without referring and giving credit to the source properly. (Polit & Beck 2012, 169.)

5.2 Ethics

Ethics is used to evaluate the quality, objectivity, trustworthiness and openness of a study. The aim of it is to avoid misinterpretation and to increase integrity and transparency. (Gajjar 2003, 8-10.) During this process we have openly shared our work with our mentor teacher, opponent and working life connection. Feedback given by them has guided our writing.

The Ministry of Education and Culture has authored Finnish Advisory Board on Research Integrity in Finland to supervise the ethics in research. The board gives information about the research ethics and takes part in improving the research integrity both in Finland and internationally. (Finnish Advisory Board on Research Integrity 2015.) Before starting our research towards this thesis a permit was applied from the board.

We pursued to use researches that were ethically conducted. The aspects we paid attention to were that the researches fulfilled ethical principles such as beneficence, respect for human dignity and justice. The participants needed to be protected from physical and physiological harm, they had the right and freedom of controlling their own actions, they had voluntary participation, they were treated fairly and they had the right to privacy. (Polit & Beck 2012, 152-156.)

5.3 Limitations

During this process, there were a few limitations that we came across while writing the thesis. One of the major limitations for us was that we were able to use articles published only in Finnish or English language for our literature review. Another issue related to the language was that there were no articles found in English that explained LEIKO model. These articles included the model in day surgery setting as there is no direct translation in English even though the model exists also outside Finland.

The fact that this was our first thesis is another limitation. Since we are novices in the research and writing field, we feel that a professional would have covered the topic more precisely and accurately. On the other hand this can be a benefit too since this process was new to us and we feel that we have covered more options on how to move forward

on this process than a professional ,that already knows what to do in every step, would have.

Concerning the product of our thesis, we were given accurate guidelines regarding the length of the forms so we were not able to influence on the length.

5.4 Reflection

The thesis process started in the end of 2014 and continued until the autumn of 2015. In the beginning of the process, we both shared a mutual interest towards this topic, so we agreed to conduct this work together. Along the process we worked individually and together and met regularly. The co-operation between us was fluent and we are pleased to have shared this process with one another.

Throughout this process we kept contact and had meetings with our working life connection as well as our tutoring teacher, who was provided for us by the school. We constantly received feedback from these two parties which helped us move forward with the process. Once a month we attended a seminar where we presented the work we had done so far to our fellow students. There was also a named opponent who gave individual feedback for us in each seminar. This peer support that we received was very important towards our work, because after working on the contents for so long we at times became “blind” to our own work, and could not always point out the mistakes or obscurity it had. To increase the intelligibility of the thesis, we used a third party to go through the text.

This thesis deepened our knowledge in this field. It opened our eyes about patient teaching and the difficulties there can arise in communication, if the patient and health care worker speak a different language or have a different cultural background. We feel that our scientific reporting skills improved.

With this thesis, we aim to help the co-operation between a health care worker and a patient who does not speak Finnish before a procedure. We hope to bring up awareness towards the importance of following the given guidelines and to remind the health care worker to take the patient’s background into consideration when planning and implementing the care.

5.5 Suggestions for further studies

In the future it would be beneficial to conduct a qualitative study about the obstacles and difficulties the health care professionals and foreigners come across in the preoperative phase. Both health care workers and foreigners as patients could be interviewed about their feelings, misunderstandings and difficulties concerning this phase.

6 CONCLUSION

Our aim was to produce clear and informative patient guidance material concerning the preoperative phase in a LEIKO unit, for patients who do not speak Finnish. Our work includes information about the LEIKO model, the preoperative phase in general, the patient guidance and the importance of following the given guidelines. It is studied, that by adhering the guidelines possible complications during and after the procedure are decreased (Leikkasuta edeltävä arviointi 2014). Our material is beneficial, because the information is available for the patients who do not speak Finnish. Since in the 21st century migration has increased rapidly, this patient group needs to be reckoned (Valtioneuvoston periaatepäätös maahanmuuton tulevaisuus 2020 –strategiasta 2013, 5).

REFERENCES

AACN Bold Voices. 2012. Prevention of aspiration. 4/2012, 11-4.

Act on the Status and Rights of Patients 17.8.1992/785.

Allison, J. & George, M. 2014. Using Preoperative Assessment and Patient Instruction to Improve Patient Safety. Association of periOperative Registered Nurses Journal 99 (3), 364-375.

Anderson, M. & Comrie, R. 2009. Adopting preoperative fasting guidelines. AORN Journal 90 (1), 73-80.

Association of periOperative Registered Nurses. 2005. AORN Guidance Statement: pre-operative Patient Care in the Ambulatory Surgery Setting. AORN Journal 81 (4), 871-878.

Böhmer, A., Wappler, F. & Zwissler, B. 2014. Preoperative Risk Assessment--From Routine Tests to Individualized Investigation. Deutsches Aerzteblatt International 111 (25), 437-446.

Chandrasekaran, S., Ariaretnam, S., Tsung, J. & Dickison, T. 2008. Early mobilization after total knee replacement reduces the incidence of deep venous thrombosis. ANZ Journal of Surgery 79 (7/8), 526-529.

Finnish Advisory Board on Research Integrity. 2015. The Responsible Conduct of Research. Read. 01.09.2015. www.tenk.fi

Fraczyk, L. & Godfrey, H. 2010. Perceived levels of satisfaction with the preoperative assessment service experienced by patients undergoing general anaesthesia in a day surgery setting. Journal of Clinical Nursing 10/2010, 2849-2859.

Franklin, I. & Dawson, P. 2008. Pocket Essentials of Clinical Surgery. Philadelphia: Saunders Ltd.

Fort Valley primary care NHS Trust. 2003. Developing written information for patients, good practice guidelines. Tayside Primary Care NHS Trust 1-16.

Gajjar, N. B. 2013. Ethical Consideration in Research. International Journal for Research in Education 2(7), 8-15.

Grieve, RJ. 2002. Day surgery preoperative anxiety reduction and coping strategies. British Journal of Nursing 6/2002, 670-678.

Hautakangas, A., Horn, T., Pyhälä-Liljeström, P., Raappana, M. & Söderström, W. 2003. Hoitotyö päiväkirurgisella osastolla. WS Bookwell.

Hirsjärvi, S. & Remes, P., Sajavaara, P. 2009. 19th ed. Tutki ja kirjoita. Porvoo: Bookwell Oy.

Hodge, D. 2003. Day surgery - A Nursing Approach. Churchill Livingstone. Edinburgh: Elsevier Science Limited.

Hommy, F. 2013. Leiko-potilaan hoitoprosessi ja ohjaus. Satakunnan ammattikorkeakoulu. Projektityö.

Hyvärinen, R. 2005. Millainen on toimiva potilasohje? Lääketieteellinen Aikauskirja Duodecim 121, 1769-1773.

Jolley, S. 2007. An audit of patients' understanding of routine preoperative investigations. Nursing Standart 21(22), 35-39.

Keränen, U., Keränen, J. & Wäänänen, V. 2006. LEIKO-prosessi ja perinteinen preoperatiivinen prosessi vertailussa. Suomen Lääkärilehti 61(36), 3603-3607.

Keränen, U., Karjalainen, E., Pitkänen, P. & Tohmo, H. 2008. Leikkaukseen kotoa - malli soveltui valtaosalle leikkauspotilaista Hyvinkäällä. Suomen Lääkärilehti 63 (45), 3887-3892.

Keränen, U. 2006. Leikkaukseen kotoa – Potilaat ovat tyytyväisiä ja rahaa säästyy. Lääketieteellinen Aikakauskirja Duodecim 122(12), 1412-1414.

Kyrtatos, P., Constandinou, N., Loizides, S. & Mumtaz, T. 2014. Improved patient education facilitates adherence to preoperative fasting guidelines. Journal of Perioperative Practice 24(10), 228-231.

Laisi, J. 2012. From Home To Operation (FHTO) - a preoperative process. University of Helsinki. Helsinki. Academic Dissertation.

Laisi, J. 2013. Leikkaukseen kotoa (LEIKO) – preoperatiivinen prosessi. Suomen Lääkärilehti 68 (1-2), 62

Lisma, S. head nurse. 2015. Interview 18.5.2015. Interviewer Ijäs, E & Suni, A. Tampere. Hatanpää Hospital.

Lee, C-K. & Lee, I. 2013. Preoperative patient teaching: the practice and perceptions among surgical ward nurses. Journal of Clinical Nursing 22 (17/18), 2551-2561.

Leikkausta edeltävä arviointi. 2014. Käypähoito -suositus. Suomalaisen Lääkäriseuran Duodecimin ja Suomen Anestesiologiyhdistys ry:n asettama työryhmä. Helsinki: Suomalainen Lääkäriseura Duodecim. Read 21.9.2015. www.kaypahoito.fi

Monachos, C. 2007. Assessing and Adressing Low Health Literacy Among Surgical Outpatients. AORN Journal 86 (3), 373-383.

Muensterer OJ. 2004. Temporary removal of navel piercing jewelry for surgery and imaging studies. Pediatrics 114 (3), 384-386.

Mäenpää, H. 2009. Laatupalkittu Hyvinkää on näyttänyt tietä. Suomen Lääkärilehti 64(40), 3352-3353.

Nummi, V. & Järvi, U. 2012. Hyvä potilasohje on osa toipumista. Suomen Lääkärilehti 67 (1), 14-16.

Polit, D. & Beck, C. 2012. 9th ed. Nursing Research: Generating and Assessing Evidence for Nursing Practise. Lippincot Williams & Wilkins.

Rautiainen, M. & Tienaho, A. 2014. Internetsivut ja ohjauskansio Leiko24 yksikön asiakkaille. Tampereen ammattikorkeakoulu. Opinnäytetyö.

Richardson-Tench, M. & Brown, S. 2013. Before and after same day surgery: are we responding to anxious patients' needs? The Journal of Perioperative Nursing in Australia 26 (1), 24-28.

Rose, D. 2005. Latex sensitivity awareness in preoperative assessment. British Journal of Perioperative Nursing 15 (1), 27-33.

Sairaalahygienia- ja infektio –ohjee. Leikkauspotilas. 2014. Pirkanmaan sairaanhoitopiiri. Read 11.10.2015. www.pshp.fi

Satola, H. 2011. Leikkauspotilaan ohjaus, video ja kirjallinen ohje LEIKO-toiminnasta. Satakunnan ammattikorkeakoulu. Opinnäytetyö.

Smeltzer, S., Bare, B., Hinkle, J. & Cheever, K. 2010. 12th ed. Brunner & Suddarth's textbook of medical-surgical nursing. Lippincot Williams & Wilkins.

Smolander, A. & Tapanila, L. 2011. Kirjallisten potilasohjeiden merkitys päiväkirurgisen potilaan ohjauksessa. Metropolia Ammattikorkeakoulu. Opinnäytetyö.

Tohmo, H. 2010. Miten Leiko-toiminta muuttaa leikkaussalin toimintaa? Finnanest 43(4). 310-311

Tønnesen, H., Faurschou, P., Ralov, H., Mølgaard-Nielsen, D., Thomas, G. & Backer, V. 2010. Risk reduction before surgery. The role of the primary care provider in preoperative smoking and alcohol cessation. BMC Health Services Research 10/2010, 121.

Torkkola, S., Heikkinen, H. & Tiainen, S. 2002. Potilasohjeet ymmärrettäviksi. Helsinki: Kustannusosakeyhtiö Tammi.

Tunturi, P. 2013. Anestesiamuodon valinta. Anestesiahoitotyön käsikirja. Terveysportti. Read 24.9.2015. www.terveysportti.fi

Ubbink, D., Tump, E., Koenders, J., Kleiterp, S., Goslings, J. & Brölmann, F. 2014. Which Reasons Do Doctors, Nurses, and Patients Have for Hospital Discharge? A Mixed-Methods Study. PLoS ONE 9 (13), 9133.

Valtioneuvoston periaatepäätös maahanmuutontulevaisuus 2020 -strategiasta. 2013. Sisäministeriö. Kehittämishankkeet. Read 10.10.2015 www.intermin.fi

Vilkka, H. & Airaksinen, T. 2003. 1st ed. Toiminnallinen opinnäytetyö. Jyväskylä: Tammi.

Walker, J. 2007. What is the effect of preoperative information on patient satisfaction?. British Journal of Nursing 16(1), 27-32.

APPENDICES

Appendix 1. Assessment form

ESITIEDOT HOITOA VARTEN 1 (2)

Fill in both sides of this form carefully and bring it with you to your appointment. Also bring the alcohol questionnaire attached.

Name	Social Security No.	
Address	Phone	
Zip code/ City	Occupation	
Closest relative/ Name and phone	Height	Weight

1. Do you have or have you had

a)	hypertension?	☐ No	☐ Yes
b)	diabetes?	☐ No	☐ Yes
c)	asthma, chronic pulmonary diseases, sleep apnea? (mention if you have a CPAP machine in use)	☐ No	☐ Yes, what? _____
d)	cardiovascular diseases?	☐ No	☐ Yes, what? _____
e)	disturbances in blood clotting e.g. deep vein thrombosis (DVT)?	☐ No	☐ Yes, what? _____
f)	neurological disorders e.g. memory disorder?	☐ No	☐ Yes, what? _____
g)	cerebrovascular disorders e.g. transient ischaemic attacks (TIA), stroke?	☐ No	☐ Yes, what? _____
h)	chest pain or shortness of breath while climbing stairs or walking uphill?	☐ No	☐ Yes, what? _____
i)	functional disorders in the liver or kidneys?	☐ No	☐ Yes, what? _____
j)	other diseases e.g. depression?	☐ No	☐ Yes, what? _____
k)	do you require assistance in daily activities such as in dressing or movement?	☐ No	☐ Yes

2. List under all your previous procedures

Procedure	Where	When

Has there been complications in any of the procedures? ☐ No ☐ Yes, what?

_____

TURN

3. Are you oversensitive (allergic) to

a) medication ☐ No ☐ Yes, to what and what kind of reactions occur?

_____

b) food ingredients or other ingredients ☐ No ☐ Yes, to what and what kind of reactions occur?
e.g. rubber, peanuts, soy?

_____

c) do you have a special diet? ☐ No ☐ Yes, what? _____

4. List under <u>all</u> the medicines you use (also the ones without prescription, herbal products and the ones you do not use regularly)

Name of the medicine and strength	Dose	Time

5. In the past 6 months have you been hospitalized abroad?
or travelled to any of the following countries: India, Bangladesh or Pakistan? ☐ No ☐ Yes

6. Do you have dentures, bridges or implants with metal? ☐ No ☐ Yes, what? _____

7. Do you smoke? ☐ No ☐ Yes, how much? _____

8. Do you use narcotics? ☐ No ☐ Yes, what? _____

9. Do you have piercings or tattoos? ☐ No ☐ Yes, where? _____

10. If you are discharged on the day of the operation, you need to have an adult (18 years or older) to pick you up from the hospital and to stay with you until the following morning
a) I have an adult to pick me up from the hospital ☐ Yes ☐ No
b) I have an adult to stay with me until the following morning ☐ Yes ☐ No

11. Do you have any other considerations or wishes concerning your care?

Signature Date

Appendix 2. Alcohol consumption form

Hyvän Hoidon Hatanpää

1 (1)

KYSELY PÄIHTEIDEN KÄYTÖSTÄ

Please fill in this alcohol consumption questionnaire and **mail it with the attached envelope or bring it with you to your pre-visit**. It is important to know your alcohol consumption habits for safe operation planning.

Circle the option which is closest to your situation.

1. How often do you drink beer, wine or other alcohol beverages including the occasions when you used only small amounts? 0. Never 1. Once a month or less 2. 2-4 times a month 3. 2-3 times a week 4. 4 times a week or more	6. During the past year, how often has it occurred to you that you needed beer or other alcohol beverages to start your day after drinking alcohol heavily? 0. Never 1. Less than once a month 2. Once a month 3. Once a week 4. Daily or nearly daily
2. How many doses do you use when you drink alcohol? 0. 1-2 doses 1. 3-4 doses 2. 5-6 doses 3. 7-9 doses 4. 10 doses or more	7. During the past year, how often did you feel quilt or regret after drinking alcohol? 0. Never 1. Less than once a month 2. Once a month 3. Once a week 4. Daily or nearly daily
3. On how many occasions have you drank 6 or more doses of alcohol? 0. Never 1. Less than once a month 2. Once a month 3. Once a week 4. Daily or nearly daily	8. During the past year, how often has it occurred to you that you have not been able to remember what has happened because of drinking alcohol? 0. Never 1. Less than once a month 2. Once a month 3. Once a week 4. Daily or nearly daily
4. During the past year, how often has it occurred to you that you have not been able to stop drinking alcohol once you have started? 0. Never 1. Less than once a month 2. Once a month 3. Once a week 4. Daily or nearly daily	9. Have you been hurt or has someone gotten hurt because of your alcohol drinking? 0. Never 2. Yes, but not during the past year 4. Yes, during the past year
5. During the past year, how often has it occurred you that you have not been able to do your daily activities because of drinking alcohol? 0. Never 1. Less than once a month 2. Once a month 3. Once a week 4. Daily or nearly daily	10. Has someone (e.g. relative, friend, doctor or someone else) been worried about your alcohol consumption or suggested that you should reduce your alcohol drinking? 0. Never 2. Yes, but not during the past year 4. Yes, during the past year

Appendix 3. Preoperative guidelines 1

Hyvän Hoidon Hatanpää

1 (1)

TOIMENPITEESEEN VALMISTAUTUMINEN

In order to undergo the operation, read the instructions through carefully and follow the given guidelines.

Preparation guidelines for the operation

Take a shower on the previous night of the operation. **Skin needs to be healthy** on the operation site and near it. Do not remove any body hair from the operation site.

Eating and drinking is prohibited after 12 p.m on the previous night. **Eating and drinking on the morning of the operation causes a great threat to your health during the operation! Ignoring this guideline leads to cancellation of the operation.** Do not use **alcohol** on the previous or on the operation day. Also **smoking** is prohibited on the operation day.

Any **valuable items** should be left at home. The hospital is not responsible for missing items left at the ward during operation. Do no put on any **make-up** in the morning. **Nail polish/ artificial nails, piercings or jewelry** has to be removed before going to the operation room.

Medication on the morning of the operation

Take with you your regular medicines, including asthma sprays, to the hospital. If you use **Omega 3 products**, do not take them before the operation.

On the morning of the operation you are allowed to take only the following medicines **at 6.00 a.m with a small amount of water: medicines for allergy and/or asthma, corticosteroids, beta-blockers, long-acting nitrates, medicines for epilepsy and/or Parkinson´s disease. It is extremely important that you only take the medicines mentioned previously. In case you have taken other medication, your operation might be cancelled.** If needed, you can be in contact to the hospital about your medication.

In case of sickness

If you suffer from cough or fever before the operation, the operation needs to be postponed to guarantee your safety. In case of infection, you need to be infection free for two weeks before the operation. Please inform the hospital of any infection as soon as possible.

Before the operation you may be in contact with the hospital about your operation.

After the operation

If you are supposed to go home on the same day after the operation, you need to have an adult (18 years old or older) to pick you up from the hospital and to stay with you until the following morning. You are not allowed to drive any vehicle for 24 hours after the operation.

When you leave the hospital, you are given written instructions for home care.

Appendix 4. Preoperative guidelines 2

Hyvän Hoidon Hatanpää

TOIMENPITEESEEN VALMISTAUTUMINEN

In order to undergo the operation, read the instructions through carefully and follow the given guidelines.

Preparation guidelines for the operation

Take a shower on the previous night of the operation. **Skin needs to be healthy** on the operation site and near it. Do not remove any body hair from the operation site.

Do not use **alcohol** on the previous or on the operation day. Also **smoking** is prohibited on the operation day.

Your operation is done under local anesthesia. On the morning of the operation you are allowed to have light breakfast before 8.00 a.m but **after 8.00 a.m you are not allowed to eat or drink anything. Eating or drinking after 8.00 a.m on the morning of the operation causes a great threat to your health during the operation. Ignoring this guideline leads to cancellation of the operation.**

Any **valuable items** should be left at home. The hospital is not responsible for missing items left at the ward during operation. Do no put on any **make-up** in the morning. **Nail polish/ artificial nails, piercings or jewelry** needs to be removed before going to the operation room.

Medication on the morning of the operation

Take with you your regular medicines, including asthma sprays, to the hospital. If you use **Omega 3 products**, do not take them before the operation.

At 6.00 a.m take your normally used morning medicines with a small amount of water. Do not take any blood sugar medicines.

If you suffer from cough or fever before the operation, the operation needs to be postponed to guarantee your safety. In case of infection, you need to be infection free for two weeks before the operation. Please inform the hospital of any infection as soon as possible.

If needed, you may be in contact with the hospital about your operation.

After the operation

If you are supposed to go home on the same day after the operation, you need to have an adult (18 years old or older) to pick you up from the hospital and to stay with you until the following morning. You are not allowed to any vehicle yourself for 24 hours after the operation.

When you leave the hospital, you are given written instructions for home care.

Appendix 5. Preoperative guidelines 3

Hyvän Hoidon Hatanpää

1 (1)

TOIMENPITEESEEN VALMISTAUTUMINEN

Your operation day is on the _____. Arrive to the hospital at _____.

Please report to Hatanpää Hospital 2. floor LEIKO24 unit / day surgery unit.

Preparation guidelines for the operation

Eating and drinking is prohibited after 12 p.m on the previous night. **Eating and drinking on the morning of the operation causes a great threat to your health during the operation! Ignoring this guideline leads to cancellation of the operation.** Do not use **alcohol** on the previous or on the operation day. Also **smoking** is prohibited on the operation day.

Take a shower on the previous night of the operation. **Skin needs to be healthy** on the operation site and near it. Do not remove any body hair from the operation site. Any **valuable items** should be left at home. The hospital is not responsible for missing items left at the ward during operation. Do no put on any **make-up** in the morning. **Nail polish/ artificial nails, piercings or jewelry** has to be removed before going to the operation room.

Medicines

Bring with you your regular medicines to the hospital. If you use **Omega 3 products**, do not take them before the operation. **On the morning of the operation you are allowed to take the following medicines at 6.00 a.m with a small amount of water:**

_____

_____

Other instructions:

_____

_____

If you suffer from cough or fever before the operation, the operation needs to be postponed to guarantee your safety. In case of infection, you need to be infection free for two weeks before the operation. Please inform the hospital of any infection as soon as possible.

Before the operation you may be in contact with the hospital about your operation.

After the operation

If you are supposed to go home on the same day after the operation, you need to have an adult (18 years old or older) to pick you up from the hospital and to stay with you until the following morning. You are not allowed to drive any vehicle for 24 hours after the operation.

C1011c Loorasotelmk/ 1.15