Presentation of the 3 Best Free Papers from ESGENA Conference 2014

1st Place

Improving Experience and Satisfaction of Children & Parents Undergoing Endoscopy Procedures

Rachel Leshem Namedar, RN, MPA, The Edmond and Lily Safra Children's Hospital, Tel-Hashomer, Israel

Endoscopy and anaesthesiology can be frightening for a child. High levels of anxiety have been identified as predictors of post procedure problems that can persist for up to 6 months after the procedure. It is normal for a mother or a father to feel a bit anxious and worry about their child undergoing endoscopy and anaesthesia. Sometimes the parents cannot handle their fear. Children and teens read body language pretty well, especially that of their parents.

Several studies show that parental anxiety is directly correlated with their child's preoperative anxiety. Anxiety has a trickle-down effect: parent to child.

Objective: Our aim is to reduce concern by creating an environment that is as anxiety-free as possible for children and their parents. We hypothesize that improving the parents' and child’s experience will facilitate a feeling of control while experiencing a potentially stressful event. As endoscopy nurses, for most procedures, our focus is on technical aspects and the safety of the patient. Less attention is dedicated to the traumatic experience of the parent and his or her child.

Methods: Steps were taken in order to reduce the stress of children and their parents. These steps are evidence based. Anxiety over a medical procedure can be significantly reduced by improving patient information before the procedure. Our first step was to improve our written information. Before writing our leaflet, we asked parents what they wanted to know. The questions we answered in our leaflet were directly based on this information. We presented the information as a series of questions and answers.

- Level - In the literature, it is suggested that all patient education materials should be readable at the 6th to 8th grade levels; the concept is that everyone can understand it.
- Style – We wrote our leaflet in a conversational tone as if the parents were there in person, in active and direct voice, and as simple and as doable as possible. For example “bring along your child's favourite toy”.
- Context - behaviour and facts are presented with context first, for example – “your child’s intestine will be clean and visible if you give your child a laxative the day before” - the reason for the laxative is given.
- Word Use – you can help to eliminate fear by avoiding negative words. For example, instead of writing “the child should not eat for 6 hours before the procedure”, we say “the child may eat or drink until 6 hours before the procedure”.

It is also helpful to quantify an explanation if possible, for example: instead of writing “if you see blood in your child’s stool”, it may be quantified as "if you see more than two spoonfuls of blood in your child's stool, call your doctor".

The British medical journal, The Lancet, published research that compared a group that read written information before colonoscopy with a group that watched an educational video before colonoscopy. The video group was significantly
less anxious before the procedure. We decided to add a link to an animation film that explains endoscopy to children to our written information.

Children undergoing endoscopy procedures are already prepared by their parents at home. Before the procedure, we, the nurses, assess what they know, correct misconceptions, and supply new information. We tell the child and his or her parents why the procedure is necessary and what he or she can expect. The explanation is short, simple, and appropriate for the child’s level of comprehension. We answer the child’s questions honestly and openly. Children often want to know whether the procedure will hurt and whether they will receive an injection.

Parents are given a description of what to expect and their role during the procedure. For example, “you will accompany your child to the endoscopy room, and you may stay with him during the induction of the anaesthesia until he falls asleep.”

Studies find that the waiting time is considered to be a predictor of an elevated level of anxiety. In order to facilitate a relaxed environment, for children and their parents, we use a medical clown. The clown entertains the children and their parents upon arrival to the waiting area by various techniques, such as performing magic tricks, improvisation and accompanying each child and his parents to the “dreaming room,” which is what we call the endoscopy room.

As we know, the endoscopy room with all its equipment can be quite frightening. We chose sheep as a decoration wherever we could, and we placed sheep dolls around the room.

Results: Forty nine written satisfaction questionnaires were filled out by the parents before their children were discharged from the unit from March to May this year. The age of the children ranged from one year to seventeen. There are five categories on the questionnaire: written information, animation film, face to face information, clown and decoration. The degree of satisfaction ranged from 1 = worst, to 5 = best, the 0 = not relevant.

Our questionnaires show that the majority (85.9%) of the parents were satisfied. The most unexpected result was from the animation film; for 69.6% it was not relevant.

Conclusion: We, the nurses, can reduce the anxiety of children before endoscopy procedures and thereby increase parent satisfaction.

Abstract: Improving experience and satisfaction of children and parents undergoing endoscopy procedures
Rachel Leshem Namedar, The Edmond and Lily Safra Children’s Hospital, Tel-Hashomer, Israel

Introduction: Endoscopy procedures including the sedation process are stressful experiences for patients and children. The endoscopy nurses’ challenges are caring for the child’s safety and psychological distress. These procedures are performed in paediatric or adult units and most of the focus is on technology and on the safety of the child. Less attention is dedicated to the experience of the parents and their child.

Objectives: Improving parent and child experience, promoting their co-operation, supporting their coping skills and facilitating a feeling of control while experiencing a potentially stressful event.

Methods:
• Psychological preparation of the child and his family using appropriate knowledge and implementation by written data, animation film and frontal explanation.
• Facilities for children: creating a “dream room” by special decoration and music in the endoscopy unit.
• Child approach techniques, age appropriate attitude and consideration of the child’s developmental needs and cognitive abilities by the staff.
• Using professionally trained hospital clown to help reduce parent and child stress.
• Program evaluation by parent’s satisfaction questionnaire regarding the above-mentioned steps, was distributed after the procedure before leaving the endoscopy unit.

Results: Forty nine parents filled in the questionnaire during March and April 2014. The degree of satisfaction in the different items asked ranged from 1 –worst to 5 –best or not relevant (NR). Written and frontal information before and after the procedure scored 5 in 85% of the questionnaires, the animation film scored 5 in 92.5% of the questionnaires from the 30% of parents that reported it was relevant to their child, the hospital clown scored 5 in 87% of the questionnaires from the 66% of parents that reported it was relevant to their child, endoscopy unit decoration scored 5 in 66% of the questionnaires from the 66% of parents that reported it was relevant to their child.

Conclusion: Parents of children undergoing endoscopy procedures are satisfied with the steps taken to improve child and parent experiences.
Learning outcome to audience: Children and the parents of children undergoing endoscopy can benefit from the steps that are mentioned above. GI nurses can improve their experience and satisfaction.

References:
- Harefuah, 147(1):30-2. 95, 94.

Abstract: Oral health status of patients with liver Cirrhosis
Lea Ladegaard Grønkjær. Department of Hepatology and Gastroenterology V, Aarhus University Hospital, Denmark

Introduction: Liver cirrhosis can be associated with lifestyle and behaviours that contribute to oral neglect and untreated oral diseases, which can affect general well-being and oral health-related quality of life (OHRQOL) (1). In addition, the co-morbid existence of periodontal disease and oral infections in cirrhotic patients may compromise their immune deficiency, which can result in systemic infections such as respiratory infections, bacteraemia and spontaneous bacterial peritonitis (2).

Aim: The aim of this study was to describe the oral care habits and self-perceived oral health in patients with liver cirrhosis, as well as to evaluate the OHRQOL.

Material and Methods: This was a prospective study conducted in a hepatology and gastroenterology department of Aarhus University Hospital, Denmark, on adult patients with liver cirrhosis. In this study, OHRQOL was measured using the 14-item Oral Health Impact Profile questionnaire (OHIP-14). Participants reported their demographic data, and answered structured questions about their oral care habits and perceived oral health. Findings were compared with the Danish Institute for Health Services Research survey on the Danish population's dental status and oral health from 2012.

Results: A total of 107 participated in the study; 69 (64.5%) were males. Mean age of participants was 58 years (age range 19-82 years). The most common cause for cirrhosis was alcohol (68.2%), and 85 patients (79.4%) had advanced cirrhosis in Child Pugh B or C stage. The oral care habits and self-perceived oral health of the liver cirrhosis patients was poorer than the Danish population on average; cirrhosis patients had fewer teeth (p=0.0001), more problems with oral dryness (p=0.0001), visited the dentist less frequently (p=0.001), and brushed their teeth less frequently (p=0.001). The mean OHIP-score was 5.21±7.2 and the most commonly reported oral health impacts were related to problems with taste and nutrition. A positive association was seen between the total OHIP-score and the nutritional risk score (p=0.01).

Conclusion: Awareness of potential associations between liver cirrhosis, oral health and general quality of life needs to be increased in cirrhotic patients and clinicians. The use of indicators of OHRQOL is necessary since they are based on self-perception and oral health impact, which is essential for planning of actions for health promotion considering biological and psychosocial.

---

2nd Place

Oral Health Status of Patients with Liver Cirrhosis

Lea Ladegaard Grønkjær. Department of Hepatology and Gastroenterology V, Aarhus University Hospital, Denmark. E-mail: lealad@rm.dk.

I preformed a study to describe the oral care habits, self-perceived oral health, and the oral health related quality of life in patients with liver cirrhosis, using the Oral Health Impact Profile questionnaire (OHIP-14).

The study showed that the oral care habits and self-perceived oral health of the patients with liver cirrhosis was poorer than the Danish population on average; cirrhosis patients had fewer teeth, more problems with oral dryness, visited the dentist less frequently, and brushed their teeth less frequently.

Despite the poor attitude towards oral health, the OHIP-score indicated a low impact on quality of life. A correlation was seen between the total OHIP-score and the nutritional risk score.

This study suggests that dental status and adverse effects on oral health may result in an insufficient intake of nutrition and thus influence the severity of liver disease and the quality of life.

Awareness of oral health is needed. To help patients gain proper oral health could potentially lead to greater quality of life, lower morbidity and mortality and improve nutritional status for patients.

There is a need for continuing education in oral health and assessment for nurses, and nurses must be aware of the multiple systems that can be affected by poor oral health.
aspects. Use of oral health assessment tools to determine individual treatment and approaches to promote the oral health of patient with liver cirrhosis may be beneficial.

**Learning outcomes**
- Raising oral awareness among hepatology nurses could potentially lead to greater quality of life, lower morbidity and mortality and improved nutritional status for patients.
- There is a need for continuing education in oral health and assessment for nursing students and for nurses; having a dentist as an instructor could be beneficial.

**References**

---

**3rd Place**

**Master-care belt as a helping hand in colonoscopy?**

Benedicte Korsøe Brint, RN, Surgical Department, Endoscopic unit, Nordjællands Hospital, Hillerød, Denmark. Email: benedicte.korsoe.brint@regionh.dk

**BACKGROUND:** Over the years, our patients have been getting larger and larger. This is making the work of the nurses who assist during colonoscopies harder on their musculoskeletal systems. Furthermore, some patients are sedated with Propofol, which means that they cannot be turned during the colonoscopy, due to the risk of reducing their airways.

Patients are therefore often lying on their left side, making it difficult for nurses to reach from the back side of the patient, over the patient’s abdomen and to the left flexure if the endoscopist needs help to reach the cecum.

There are many factors which influence whether or not a colonoscopy can be completed, but often, nurses find themselves in inappropriate working positions. This led me to consider whether it might help improve our working positions if we had an aid which could help us reach over the patient’s abdomen and thereby reduce the need to bend over the patient.

**Aim** My aim was therefore to find out if a belt for colonoscopies could prevent bad working postures for nurses.

**Methods** I contacted a Danish company that works with helping devices for sliding and turning patients and asked if they wanted to be a part of my project. They made a belt after my instructions and we had a prototype of the belt to try.

I designed a questionnaire for the nurses who tried out the belt. Half of the unit’s nurses tried it, and we found that we needed to make some changes to the fabric so the cleaning of the belt would be easier. We also found that we needed more handles and the handles required different placements.

A second belt with adaptations was made and we tested it in the unit. The nurses were again asked to complete the same questionnaire to see if the adaptations changed anything for the nurses, whether the belt improved the nurses’ working positions, whether or not the nurse would use the aid again and an overall assessment of the aid.

**Results** The belt was tested on patients weighing between 68 and 145 kg. The first belt was used during procedures on 7 patients and the 2nd version on 9 patients. Prototype vs. the 2nd version of the belt.

- **Hygiene:** We had trouble cleaning the prototype so the material was changed.
- **Handles:** There were not enough handles on the prototype and they also needed to be placed lengthwise; these were changed accordingly.
- **Placing:** After testing the belt we found that placement of the belt was important in order to make the drawing easy and effective.
- **Slip resistance:** This was effective if placement of the belt was correct.
- **Length and Width:** The length and width of both belts were appropriate.
- **Durability:** Was found good in both belts.
- **Improvement of the working position:** A significant number of the nurses found that the aid decreased stress on their backs, shoulders and wrists during the procedure. After using the 2nd version of the belt, two nurses reported that they noted no improvement to their working positions. They also commented that they had trouble placing the aid.
- **If the nurses would use the belt again:** A significant number of the nurses would use the aid again for heavy patients to improve their working positions.
- **Overall assessment:** 78% of the nurses displayed a positive attitude for the 2nd version of the belt as a helping aid for colonoscopies.

**Conclusion** A belt for colonoscopies can be useful for heavy patients, as it allows nurses to assume better working positions, relieving stress
on their backs, shoulders and wrists. 78% found the aid useful and 88% would use the aid again. Proper placement of the aid needs to be demonstrated in the unit again so that more nurses can use it to improve their working positions.

**DISCUSSION** The focus of this project was on finding a way of sparing nurses stress on the musculoskeletal system and preventing bad working positions. We know that patients are becoming more and more obese and more patients are receiving colonoscopies. Nurses that work in endoscopic units for years can end up with upper extremity injuries in the musculoskeletal system due to the hard static work. If the Master-Care belt shall be a future helping aid in the unit, it will take time to change to new routines. The belt must be in place before the patient is lying on the operating table. The belt will only be useful for patients with a larger abdominal size.

In the future, it could be interesting to follow up on the long term benefits of using the Master-Care belt.

**Abstract:** The master care belt as a helping hand in colonoscopy?
Benedicte Korse Brint, H. Olsen, P. Waadegaard, J. Vilandt. Surgical Department, Endoscopic Unit 0624, Nordsjællands Hospital, Hillerød, Denmark.

**Introduction & background:** The population in the industrialized world is becoming more and more obese. This obesity is making it difficult for the nurse to apply adequate abdominal pressure on the patient during the colonoscopy, with the patient lying on the left side. Making an abdominal press from the left side toward the right side can be hard work for the nurse, especially if the abdominal reach is larger than the nurse’s arm length.

Nurses often end up with back pain due to the hard static work they perform while applying abdominal pressure. Many years working in an endoscopy unit can result in upper extremity injuries in the musculoskeletal system. We want to test the Master Care Belt for colonoscopies and find out if using the belt lessens the associated stress on nurses’ backs and upper extremities.

**Purpose:** To find a helping aid for nurses and prevent injuries to nurses’ musculoskeletal systems.

**Methods:** Patients with a larger abdominal size were included. Nurses completed a questionnaire about their view on working with the Master Care Belt.

**Results:** The aid (prototype) has been tested on 7 patients with a weight between 68 kg and 138 kg. The aid has been evaluated by 7 nurses. The nurses were asked the following questions:

- **Hygiene:** 71% found the materiel difficult to wipe off.
- **Utility of the handles:** 57.1% needed more handles and in other places.
- **The placing of the aid:** 85.7% found it easy to place.
- **Slip resistance:** 85.7% found it effective.
- **Length and width of the belt:** 100% appropriate.
- **Durability:** 100% good.

- Whether the aid allowed improved working position during the colonoscopy: 85.7% nurses felt that the aid decreased the stress on their backs, shoulders and wrists.
- Whether the nurses would use the aid again: 71.4% nurses would use the aid again because it prevented bad working postures and decreased stress on the musculoskeletal system. 28.6% did not know.
- **Overall assessment:** 57.1% positive, 42.9% neutral, 0% negative.

**Resume and discussion:** Find a helping aid for colonoscopy that could decrease the risk for injuries to the nurse. Test the aid on patients with a larger abdomen during a colonoscopy. The study was conducted on a small scale and needs to be tested by all nurses in the unit. The study says nothing about the patients’ or the endoscopist’s view of the aid. It could be interesting to follow up on the long term benefits of using the Master Care Belt and whether it makes a difference in regard to nurses’ complaints about back pain.

**Conclusion:** 85.7% of the nurses who have tried the Master Care Belt have found the aid useful, because it made it easier to properly position themselves during a colonoscopy. The aid is a prototype and therefore there will be a need for adaptations of the belt. The aid needs more handles and the materiel should be more hygienic.

**Learning outcome and relevance for nurse practice**
Relevant for nurses in endoscopy units

**References**