Research Note

## Patient perception about preoperative information to allay anxiety towards major surgery

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Abstract: Surgeries are seen as stressors that trigger preoperative anxiety. Preparing the patients for surgery through preoperative teaching becomes crucial to allay anxiety level. In a cross sectional descriptive study conducted on eighty patients (age: 18-65 yr) who had undergone open abdominal surgery, 78.8% (n=63) stated that they experienced anxiety prior to surgery. Among these anxious respondents, 47.5% (n=38) experienced high state anxiety. Three of the top information that patients perceived as important to allay anxiety towards major surgery were: details of surgery, details of nursing care to surgery and information on anaesthesia. Nurses working in the surgical wards need to proactively address patients' psychological concerns towards surgery and provide preoperative information based on patients' needs to allay anxiety.

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Preoperative anxiety is derived from stress responses towards perceived threat and danger related to the surgery and hospital environment. The incidence of preoperative anxiety accounts for 92% of patients in surgical wards. Patients with preoperative anxiety were reported to experience a variety of unpleasant symptoms such as greater postoperative pain and psychological distress. These discomforts affect their decision making ability and treatment compliance. High level of preoperative anxiety impedes healing process and it is associated with morbidity and mortality.<sup>2</sup> Preoperative teaching is a vital aspect during preoperative nursing. It advances patient knowledge and prepares them for surgery. Preoperative teaching facilitates coping by enhancing the sense of self-respect and psychological well-being of patients. Seventy-eight percent of surgical patients had reported the effectiveness of preoperative teaching in anxiety reduction.3

Despite its effectiveness, preoperative teaching has often not been carried out in an appropriate and

ideal manner. Not only did the nurses barely address patients' psychological concerns, they also overlooked the importance of preoperative teaching in allaying preoperative anxiety. The increasing number of surgeries and patients further narrows the nurse-patient contact time and distances the nurses from realising what patients perceive as important during preoperative care. More than 50% of surgical patients reported not receiving adequate preoperative information based on their needs.<sup>4</sup> Research showed that nurses do not always agree on the types of preoperative information that are of most interest to the patients<sup>5</sup>. Preconceived perceptions about patients and dominant-submissive nurse-patient relationships are accountable for the preoperative information gap<sup>4</sup>.

Based on the research question of "What are the types of preoperative information patients perceive as important to allay anxiety before undergoing major surgery?", a cross sectional descriptive study was conducted in the surgical wards in Hospital Kuala Lumpur (Jan 2012 to Mar 2012), where eighty patients were interviewed face-to-face on their third post-operative day following an open abdominal surgery to obtain pertinent information on their perception towards preoperative information which would allay their anxiety towards major surgery. Patients were selected according to the eligibility of these inclusion criteria: both female and male patients from surgical wards; aged between 18 and 65; had undergone major surgery (open abdominal surgery) under general anaesthesia and they must be able to comprehend and communicate either in English and Bahasa Malaysia. The theoretical framework adopted for this study was the Roy Adaptation Model.<sup>6</sup> The sample size for this study was calculated based on the power of alpha 0.05, power of 0.8 and the effect size of 0.5, which makes up 65.7 Taking possible outliers into account, 15 more respondents were added to create a total of 80 respondents so as to cater for the attritions, non-respondent and missing values. The reliability of the instrument for this study was tested by a pilot study conducted on 5 subjects in one of the tertiary hospitals in Klang Valley to rule

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out any ambiguity in the questionnaires and the content validity was ascertained by the expert panels comprising ward sisters and registered nurses of the surgical wards in Hospital Kuala Lumpur.

Analysis with PASW has shown that out of the 80 patients (45 males and 35 females) interviewed, 78.8 % (n=63) stated that they experienced anxiety prior to surgery; of which 47.5% had high-state anxiety while 52.5% had low-state anxiety. Merely 16.3% of studied patients reported that the nurses discussed about their concerns prior to surgery.

In this study, a total of 97.5% (n=78) of the patients agreed that they received preoperative information but only 10% (n=8) noted receiving the information from the nurses. From the 78 patients, 8 (10.3%) reported that the preoperative information did not cater to their needs and 1 (1.3%) claimed that details of operation theatre was insufficiently told while another 3 (3.8%) claimed that details of surgical procedure was inadequately provided (Figure 1).

**Figure 1:** Preoperative information providers of the subjects (n=78)

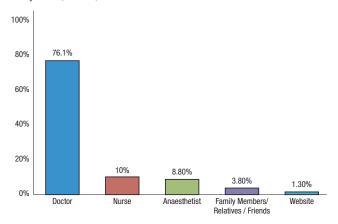
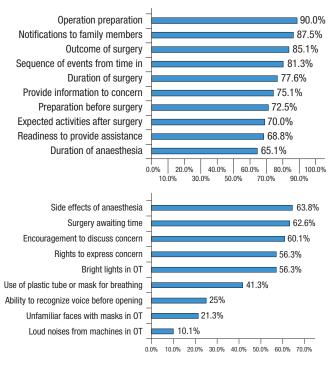


Figure 2 shows the percentages of the types of preoperative information that was rated as "very important" and "important" by the patients to allay anxiety towards major surgery. Operation preparation that was ranked first (90%) was related to the details

of operation theatre environment, following which were notifications to family members about surgery from time to time (87.5%), outcomes of surgery (85.1%), sequence of events from time patient enters operation theatre till the time patient leaves (81.3%), duration of surgery (77.6%), provision of information to concern (75.1%), preparation before surgery (72.5%), and expected activities after surgery (70%). These details that were on the top of the list were related to surgery and nursing care. The types of preoperative information that achieved lower percentages were: loud noises from the machines in the operation theatre (10.1%), unfamiliar faces with masks in the operation theatre (21.3%), ability to recognise voices before patient can open eyes (25%), coldness in the operation theatre (37.6%), use of plastic tube or mask for breathing (41.3%) and bright lights in the operation theatre (56.3%). These types of preoperative information were related to operation theatre environment and anaesthesia.

**Figure 2:** Types of preoperative information that were rated "important" and "very important" (n=80)



The types of preoperative information that was rated as "very important" and "important" by the patients to allay anxiety towards major surgery were further grouped into four levels, from important" to "less important" and the ranking obtained were: details of surgery was ranked as the highest (97.5%), details of nursing care (86.3%) was ranked second, details of anaesthesia (55%) was ranked third while details of operation theatre environment as the lowest (45%).

As indicated in the findings, there was a high incidence of preoperative anxiety in surgical patients that ought to be nurses' major concern. The statistics support the findings of previous research.1 Surgeries that are seen as a threat by the patients cause a loss in the sense of security and control towards present and future and thus result in anxiety.<sup>8</sup> Preoperative nursing should aim to allay preoperative anxiety and promote adaptation towards surgical process. It was also noted from this study that only 16.3% (n=13) of patients encountered nurses who cared to discuss about their concern prior to surgery. This could be due to the contemporary rise in the number of surgeries and patients which narrows the nurse-patient contact time. The Ministry of Health Malaysia stated that the percentage of increments in the total number of elective surgeries and surgical patients from 2006-2008 were 6.2% and 6.97%.9 The increments create an overwhelming workload for the nurses thereby making them increasingly taskoriented. Surgical nurses find it challenging to allocate sufficient time and care to address patient's psychological needs. 10 However these phenomena signify a need for change in the mind-set and attitude among surgical nurses. They must embrace their role as patient educator and carry out their responsibility. Not only must nurses take the initiative to offer preoperative teaching, they should adopt a transactional approach instead of a paternalistic approach while providing preoperative information. This will ascertain that the information provided will tailor to the patients' needs so that the patients may experience less anxiety and feel more prepared towards surgery.

Interestingly in this study, the majority of the patients did not focus much attention on the information of "discomfort" in the operation theatre. The importance of getting familiarised with the environment to relieve anxiety as perceived by surgical patients is now lowered compared to other preoperative information regarding surgery, nursing care and anaesthesia.

In conclusion, although this study has its limitation due to the method of convenience sampling where the finding cannot be generalised to the whole Malaysian population, nevertheless the results of the study provides a glimpse of the importance that in order to improve the quality of preoperative nursing care and good recovery outcome from major surgery, nurses working in the surgical wards should be more sensitive towards patients' psychological needs. Apart from carrying out procedures such as taking vital signs, administrating medications, the nurses should also spend more time discussing patient concerns and assessing patient's learning needs for those waiting to undergo major surgery. In-service training should be organised to motivate nurses in patient teaching and managing workload in a chaotic and overwhelming surgical ward today. A structured preoperative patient teaching is effective in allaying patient's anxiety towards major surgery.

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## REFERENCES

- Perks A, Chakravarthi S & Manninen P. Preoperative anxiety in neurosurgical patients. Neurosurg Anesthesiol 2009; 21: 127-30.
- Kain ZN, Mayes LC, Caldwell-Andrews AA, Karas DE & McClain BC. Preoperative anxiety, postoperative pain, and behavioural recovery in young children undergoing surgery. Pediatrics 2006; 118: 651-8.
- Chetty M & Ehlers VJ. Orthopaedic patients' perceptions about their preoperative information. Curationis 2009; 32: 55-60.
- Mordiffi SZ, Tan SP & Wong ML. Information provided to surgical patient versus information needed. American Operating Room Nurses' Journal 2003; 77: 546-62.

- Bernier JB, Sanares DC, Owen SV & Newhouse PL. Preoperative teaching received and valued in a day surgery setting. Association of Perioperative Registered Nurses (AORN) 2003; 77: 563-82.
- 6. Roy C & Andrew H. The Roy Adaptation Model second edition. Pearson Education Inc., New Jersey, 1999.
- Lipsey MW. Design sensitivity: Statistical power for experimental design. Sage Publications, Newbury Park, 1990.
- McIntosh S & Adams J. Anxiety and quality of recovery in day surgery:
   A questionnaire study using Hospital Anxiety and Depression Scale and Quality of Recovery Score. International Journal of Nursing Practice 2011; 17: 85-92.
- 9. Ministry of Health Malaysia. Annual Report 2008.
- 10. Mitchell MJ. Psychological care of patients undergoing elective surgery. Nursing Standard 2007; 21: 48-55.