Hysterectomy operation is one of the major kinds of surgical treatments in gynaecology and is helpful to save lives of women who may have chances of critical diseases associated with uterus. Having an abdominal hysterectomy can be traumatic because for most women, the uterus is an important symbolic organ at the core of their womanhood. Women who have an abdominal hysterectomy typically experience significant psychological and physical stress, like fear and anxiety of the surgical outcomes, post-operative pain, effect on their daily living activities and sexual relationships. Interventions like providing pre-operative information regarding surgery and selected post-operative activities are effective measures to reduce stress and anxiety of the women.

Hypotheses
H1: The mean post-test anxiety scores of women in the experimental group will be significantly lesser than the mean post-test anxiety scores of women in the control group.

H2: There will be a significant association between anxiety scores and selected baseline characteristics.

Review of literature
Pre-operative interventions such as information, skills teaching are effective measures to promote positive post-operative outcomes since a woman who is undergoing hysterectomy wants more explanation related to all areas of surgery (Devine, 1992).

A study conducted in Guru Nanak Mission Medical and Educational Trust (Punjab) to assess the effectiveness of pre-operative instructions and therapeutic touch on post-operative recovery measures among 40 patients undergoing abdominal surgery reported that patients who were being admitted for elective abdominal surgery have great amount of stress and restlessness. There was significant improvement (p<0.001) in post-operative recovery measures after introduction of pre-operative instruction and therapeutic touch. The study concluded that pre-operative instruction and therapeutic touch is an extremely effective modality to enhance the early recovery of subjects undergoing...
abdominal surgery (Kaur M, 2006).

An experimental study was conducted in Kent State University College of Nursing, Ohio, USA, among 108 patients to determine effectiveness of pre-operative teaching and hysterectomy outcomes. State Anxiety Inventory and pain rating scale were used to measure the post-operative outcomes. The results showed that patients in the experimental group had significantly less (p<0.001) anxiety and pain score than patients in the control group. Moreover, knowledge about surgery and selected post-operative behaviours are cost effective and an efficient regimen of prophylaxis against respiratory complications after abdominal surgery (Oetker-Black et al, 2003).

Methodology

The conceptual framework of the study was based on the self efficacy theory by Albert Bandura. The study adopted the evaluative approach with a quasi experimental pre-test post-test control group design with non-random assignment. The study was conducted in gynaecological ward of multispeciality hospital in Bangalore. Thirty women each in experimental and control group were selected through purposive sampling techniques. Based on reviewed literature sample size adequacy was determined. The study was delimited to women diagnosed to have non-malignant gynaecological disorders and posted for abdominal hysterectomy.

The tools used for the data collection were (i) Baseline data characteristics consisting of demographic proforma (age, marital status, religion, domicile, education, occupation, type of family and family income) and clinical proforma (number of child birth, history of abortion, previous hospitalisation, previous surgery, co-morbil illness and diagnosis), and (ii) State Anxiety Inventory (SAI), which is a standardised rating scale; the scale was adapted and reproduced by special permission of the publisher. The SAI consisted of 20 statements rated on a 4-point scale of increasing intensity from Not at all, Somewhat, Moderately and Very much so, scored from 1-4 accordingly. The content and language validity were established. The test-retest reliability of SAI was computed using Pearson’s method (r=0.94).

The pilot study conducted on 10 women in each group revealed it to be feasible. For main study, formal permission and ethical clearance was obtained. The details of the study were explained to the women under study after which signature was taken on the written informed consent. Experimental group was given a 45 minutes instructional session on abdominal hysterectomy in combination with demonstration on turning over on the side, sitting at the side of the bed, mobility, deep breathing and muscle relaxation exercises. The control group did not receive any pre-operative instruction by the investigator. However the control group received instruction and routine care based on the ward policy. SPSS (11.5 version) was used for statistical analysis of the data.

Results

Majority of women in the experimental group (46.67%) and in the control group (60%) belonged to the age group of 45-54 years and all were married (100%). Majority of women in both the experimental group and in the control group (76.67% and 86.67% respectively) were housewife. In the experimental group 66.67 percent and in the control group 63.33 percent women hailed from rural area. With regards to education, in the experimental group 60 percent and in the control group 70 percent had primary education. In the both groups, all women (100%) had occupation of house wife. In experimental group 63.33 percent and in the control group 86.67 percent of women were living in the nuclear family with family income of Rs. 5001 and above (40%) in the experimental group and Rs. 3001 - 4000 (43.33%) in the control group.

With regards to clinical data it was found that 43.33 percent of women in the experimental group had two children whereas in the control group 43.33 percent of women had three or more children. In the experimental group minimum number of women i.e. 6 out of 30 (20%) had previous abortion whereas in the control group only 2 (6.67%) women had previous abortion. In the experimental group 1 out of 30 (3.33%) had previous hospitalisation whereas in control group 2 out of 30 (6.67%) had previous abortion. In the experimental group majority of women i.e. 13 out of 30 (43.33%) were diagnosed to have dysfunctional uterine bleeding, whereas in the control group 15 out of 30 (50%) had dysfunctional uterine bleeding.

Figure 1 shows frequency and percentage distribution of women according to the pre-test and post-test anxiety score in experimental and control group. Table 1 depicts that the experimental group mean post-test anxiety score (M=41.56, SD=3.56) was less than the control group mean post-test anxiety score (M=48.50, SD=1.59). There was a significant reduc-
tion in anxiety level \( t(58) = 9.718, p<0.001 \) among the experimental group, thus indicating reduction of anxiety within the experimental group.

**Discussion**

For most patients, admission to hospital for surgery can be very stressful. Patients should be informed regarding surgery in the pre-operative period itself. Lack of information about surgery can lead to increasing patient anxiety levels (Faroogi, 2005). Jawor et al (2001) found that women who had undergone hysterectomy experienced intense anxiety because of lack of information, reduction in self-respect, reduction in the quality of life and loss of social functions. In the study of Wade et al (2000), it was found that giving information before surgery could decrease anxiety, as well as post-operative complications. It was concluded in some studies that pre-operative instruction is effective in reducing the levels of anxiety (Beatrice et al, 2005; Oetker-Black et al, 2003).

In the present study it was found that pre-operative instruction was effective on reducing the anxiety level of women in experimental group. The difference was found to be significant \( p<0.05 \). Both experimental and control groups had significant reduction of anxiety after surgery. However, post-test mean anxiety score was lesser in the experimental group than in the control group. Callaghan et al (2003) conducted a study among 96 patients undergoing abdominal hysterectomy. It was found that programme consisting of pre-operative instruction and training regarding relaxation exercises and breathing techniques is effective in reducing anxiety levels and improving performance of daily activities during hospitalisation. Nordahl et al (2003) also suggested that patients who received pre-operative information had lower degree of pre-operative state anxiety and they were more satisfied with the post-operative pain management.

**Implications**

*Nursing practice:* Pre-operative instruction must be included as a part of routine care for all patients admitted for surgery, which helps better health practice and patient outcomes.

*Nursing education:* The students should be given an opportunity to follow these measures in a holistic manner which will enable them to provide comprehensive care to the patients undergoing surgery.

*Nursing research:* The study findings will be useful to provide evidence for patients who will be undergoing surgery, thus alleviating anxiety and better post-operative outcomes.

*Nursing administration:* Nurse administrators should take interest in dissemination of relevant information through instructional material such as pamphlet, poster, modules that can be a source of knowledge to the patient.

**Recommendations**

1. A similar study conducted on a large sample to draw conclusions that are more definite and generalisable to a large population.

2. A triangulation study can be conducted to determine the effectiveness of pre-operative instruction and to assess the quality of life of women undergoing abdominal hysterectomy.

**Conclusion**

The study findings revealed that the pre-operative instruction was far more effec-
tive than no instruction in terms of reduction of anxiety. Interventions like providing pre-operative information and skills teaching of selected post-operative behaviours are effective measures to reduce anxiety, promote positive post-operative outcomes thus minimising hospital stay and improving quality of life of women. Pre-operative information has significant clinical benefits on patients undergoing surgery. The pre-operative instruction utilised in this study can be made available to health professionals to educate patients and prepare them for surgery and thus improve their practice and patients outcomes.

References