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Anxiety and Well Being among Women Undergoing Caesarean Section and General Surgery.

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ABSTRACT

Preoperative Anxiety is an important problem involving patients who are about to undergo surgery. Patients may perceive the day of surgery as the biggest and the most threatening day in their lives. The degree to which each patient manifests anxiety related to future experiences depends on many factors. Apart from other surgeries caesarean section is associated with a positive outcome. The current study aims to find out whether there is any significant difference in hospital anxiety, depression and psychological well being among women undergoing caesarean section and general surgical procedures. The study was conducted among 30 women posted for caesarean section and 30 women posted for general surgeries. It was found out that hospital anxiety and depression was significantly higher in patients who underwent general surgical procedure than caesarean. General psychological well being was significantly higher in patients who underwent caesarean, compared to the other group.

Keywords: Anxiety, Depression, Well Being, Caesarean Section, General Surgery

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INTRODUCTION

Preoperative anxiety is a challenging concept in preoperative care of patients. Anxiety is described as an unpleasant state of uneasiness or tension, which may be associated with abnormal hemodynamics as a consequence of sympathetic, parasympathetic, and endocrine stimulation. It begins as soon as the surgical procedure is planned and increases to maximal intensity at the moment of entering the hospital. Patients may perceive the day of surgery as the biggest and the most threatening day in their lives. The degree to which each patient manifests anxiety related to future experiences depends on many factors. These include age, gender, type and extent of the proposed surgery, previous surgical experience, and personal susceptibility to stressful situations. Some degree of anxiety is a natural reaction to the unpredictable and potentially threatening circumstances typical of the preoperative period, especially for the patient's first few surgical experiences. Studies have shown that high preoperative anxiety levels can lead to increased postoperative analgesic requirement, prolonged hospital stay, significant contribution to adverse perioperative outcome and poor patient satisfaction. Interventions to reduce preoperative anxiety include pharmacological therapy, provision of information, distraction, attention focusing, and relaxation procedures.

Previous studies also report a wide range of prevalence rates of depressive illness among general hospital inpatients, all higher than in a non-patient population. Several factors may have influenced on these results. Mixed study population, depression-prone subgroups and continuous shift in what is a surgical inpatient population due to day surgery treatment are examples. In a study conducted by Vaeroy H(2003) found that that in a community hospital group of adult surgical patients between 18 and 65 years of age, the prevalence of depression is still somewhat higher than in the general population. In an another study conducted by CR Chapman (1977) found that when patients were divided into general surgery, renal recipient, and renal donor groups, quadratic patterns differed significantly among the three groups for anxiety and pain but not for depression.

In the field of modern psychology, the predominant concept stemming from hedonic psychology is subjective wellbeing. The subjective well being include two elements: affective balance, which is obtained by subtracting frequency of negative emotions from frequency of positive emotions, and secondly perceived self satisfaction which is more stable and has more cognitive component (Diener and Suh, 1996). The last two decades have started to reveal that positive psychological states are not only integral part of health, but also that they can actually influence the onset of illnesses and physical problems as well as recovery processes. Positive psychological factors have a strong relation with health. For example, negative expectations is associated closely with quicker progression towards death in patients diagnosed with AIDS.(Taylor et.al 2000)

MATERIALS AND METHOD

Objectives

The present study is carried out with the following main objectives

- To find out whether there is any significant difference in anxiety , depression and psychological well being among women undergoing caesarean section and general surgical procedures.
- To find out the relation between psychological well being and anxiety , depression among women undergoing surgical procedures.

Method

Sample

The samples for the present study consisted of 30 women posted for caesarean section and 30 women posted for general surgeries within the age range of 20 to 50 years, selected randomly from various hospitals of Kottayam and Thrissure district.

Tools

Socio demographic data

This data sheet was used to collect the basic background of the sample like name, age, gender, previous surgeries details and educational characteristics.

Hospital anxiety depression scale

The hospital anxiety and depression scale (HADS) was originally designed to assess psychological distress of patients in medical and surgical settings. The HADS contains 14 items and consists of two subscales: anxiety and depression. Each item is rated on a four-point scale of 0-3, giving maximum scores of 21 for anxiety and depression respectively. Scores of 11 or more on either subscales are considered to be a significant 'case' of psychological morbidity (clinical caseness), while scores of 8-10 represent 'mood disorder'. A score of 7 or below is considered as normal. The same cut-offs for HADS in Indian population were found to be nearly 85 per cent sensitive and 88 per cent specific.

The Cronbach's alpha was found to be 0.81 for the HADS anxiety subscale, 0.71 for the HADS depression subscale, and 0.85 for HADS tool. Confirmatory factor analysis (CFA) indicated two depression items (i.e., enjoyment and anhedonia) loading onto the anxiety subscale. (Thomas BC & devi N, 2005).

The HADS showed high concurrent validity; the correlations of the scale and its subscales with the BDI and the STAI were high (0.722 – 0.749). (Michopoulos, I et al 2008).

General psychological well being

In 1970, Dr. H Dubey developed a general wellbeing schedule, which was a 25-item, 6-point scale with 33 scores. It was adapted to Malayalam by Sareena and Anita(2004). This version consists of 20 items, which are statements pertaining to the emotional state of the individual assessed as it was in the period of 1 month's time.

Reliability and validity

Verma and Verma (1989) have cited that the reliability estimated by the Kuder and Richardson formula-20 was 0.98 and the coefficient for the test-retest reliability was 0.91. Sociodemographic data like religion, duration of marriage, chronicity of the illness, age, socioeconomic status and employment were collected through sampling method was used for selecth a personal information schedule.

Procedure

Permission from the concerned author is obtained for collecting data for the study. Convenient Sampling was used to select the sample. From the selected hospitals co-operative women before surgery were included under study. A brief introduction was given to them about the purpose of study and testing. Rapport was established with clients. Details about the surgical procedures and history of past surgery were obtained from the records. Malayalam version of general psychological well being and hospital anxiety depression scale was given to the patients and asked them to mark the option most suited for them. To emphasize the assurance of confidentiality, the respondents were not required to reveal their names anywhere in the questionnaires or personal data blank. The respondents were allowed to complete the questionnaires at leisure. In cases where the respondents expressed difficulty in comprehending the questions, the investigator clarified their doubts.

Apart from other surgeries caesarean section is associated with a positive outcome. Motherhood is the dream of every women. In this present day scenario women prefer caesarean section compared to normal delivery though it is not allowed by medical ethics. Still very few researches have focused on psychological issues associated with caesarean section and comparing them with general surgical procedures.

So the present study, focusing on hospital anxiety depression and subjective well-being of women undergoing caesarean section and general surgeries, is expected to contribute to the existing knowledge which may enrich psychologists, doctors, nurses and other health care providers who are working with women undergoing surgical procedures

RESULTS AND DISCUSSION

Surgery is often a traumatic experience. It intimidates people. The present study focuses on hospital anxiety depression and subjective wellbeing of women who have undergone caesarean and other general surgeries. Table 1 shows the mean, standard deviation scores and the corresponding t values in hospital anxiety and depression, obtained by the women undergoing caesarean section and women undergoing other surgical procedures. From the table, we can see that there exists a significant difference between the two groups of female patients in the total anxiety and depression score (t 6.24). With a mean score of 24.6, the women undergoing general surgical procedures show greater anxiety and depression than those undergoing a caesarean (mean 11.43)

Table 1: Means, Standard deviation, and ‘t’ values of different dimensions of hospital anxiety depression scores

variables	general surgery patients		LSCS patients		t
	mean	SD	mean	SD	
HAD (anxiety)	12.80	5.047	6.57	4.368	5.115*
HAD (depression)	11.8	4.795	4.63	2.580	7.209**
HAD (total scores)	24.6	9.496	11.43	6.585	6.241*

*significant at .05 level, **significant at .01 level

When the scores of depression and anxiety are separately analyzed for the two groups, it was seen that significance of difference was higher in the depression dimension of HADS (t 7.21) when compared to that of anxiety scale (t 5.12). This shows that the females undergoing general surgical procedure reported more depression than anxiety compared to those who underwent a caesarean.

Table 2: Means, Standard deviation, and ‘t’ values of different dimensions of general psychological wellbeing.

variables	general surgery patients		LSCS patients		t values
	mean	SD	mean	SD	
GPW (anxiety)	11.23	3.980	16.4	2.860	5.77*
GPW (depression)	8.53	3.148	12.83	1.763	6.52*
GPW (positive well being)	7.77	3.081	12.73	1.982	7.42*
GPW (self control)	6.17	2.614	10.6	1.886	7.53*
GPW (general health)	6.47	3.441	10.53	2.145	5.49*
GPW (vitality)	8.63	2.9719	13.3	2.019	6.99*
GPW(total)	49.6	17.545	75.80	9.901	7.12*

*P< 0.001

When the general psychological well being is compared between the two groups (Table 2), the females who underwent caesarean (mean 75.80) shows higher general psychological wellbeing compared to those who underwent general surgical procedure (mean 49.6). With t value 7.12 this difference is significant at 0.001 level. It was also found that in all the dimensions of general psychological well being the females who underwent caesarean showed greater psychological well being than those who underwent general surgical procedures. With t 7.53 and 7.42, the difference is highest in self control and positive well being dimension respectively. This shows those females who underwent caesarean have greater self control and have positive well being than those who underwent general surgical procedure.

Table 3: Correlation between subscales of HADS and General Psychological Well being among patients who underwent general surgery (GS Pt) and those who underwent caesarean (LSCS Pt)

Variables	GPW (anxiety)		GPW (depression)		GPW (positive well being)		GPW (self control)		GPW (general health)		GPW (vitality)		GPW (total)	
	GS Pt.	LSCS Pt.	GS Pt.	LSCS Pt.	GS Pt.	LSCS Pt.	GS Pt.	LSCS Pt.	GS Pt.	LSCS Pt.	GS Pt.	LSCS Pt.	GS Pt.	LSCS Pt.
HAD (ANXIETY)	-.81**	-.54**	-.65**	-.47**	-.69**	-.46**	-.63**	-.71**	-.78**	-.26*	-.74**	-.61**	-.69**	-.68**
HAD (DEPRESSION)	-.75**	-.48**	-.55**	-.59**	-.72**	-.60**	-.63**	-.51**	-.69**	-.25*	-.70**	-.61**	-.67**	-.60**
HAD (TOTAL)	-.81**	-.58**	-.63**	-.56**	-.73**	-.57**	-.65**	-.69**	-.76**	-.30*	-.74**	-.66**	-.71**	-.70**

*P<0.01, **P<0.001

Table 3 shows the correlation between various subscales of HADS and General Psychological Well being among patients who underwent general surgery (GS Pt) and those who underwent caesarean (LSCS Pt). All dimensions of HADS have significant negative correlation with all the dimensions of general psychological well being in both the patient groups. Except for the general health dimension all the other dimension of general psychological well being have significant negative correlation with HADS dimension (at 0.001 level). Negative correlation between HADS dimension and General Psychological well being dimension was found to be higher in patients who underwent general surgical procedures than those who underwent caesarean. This means that the negative relation between general psychological well being and anxiety depression is much greater in patients who underwent general surgical procedure.

CONCLUSION

The present study focuses on hospital anxiety depression and subjective wellbeing of women who have undergone caesarean and other general surgeries. It was found out that hospital anxiety and depression was significantly higher in patients who underwent general surgical procedure than caesarean. The two groups had more significant difference in depression dimension compared to anxiety dimension. General psychological well being was significantly higher in patients who underwent caesarean, compared to the other group. The general health of patients who underwent caesarean have a comparatively weaker negative correlation with HADS. On the other hand self control in patients who underwent general surgical procedure have a comparatively weaker correlation with HADS.

The present result may be explained with the difference in social perception. Caesarean being more common now compared to earlier times, people have accepted it as an alternative way for child birth. As arrival of a child is almost always welcomed and celebrated in the family, the patient always receives great support. On the other hand other general surgical procedures may not be accompanied with such support and is almost always perceived as something not good. This may result in the lower psychological wellbeing and greater depression and anxiety in them compared to those who undergo caesarean. This path breaking study throws light to this issue, showing that there exist a significant difference in the well being as well as hospital anxiety and depression in these groups. This study can be further expanded by exploring the causal factors for such a phenomenon. The study can be further refined by controlling other factors such as other medical condition, pre morbid personality, general social support etc.

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