

A quasi-experimental study to assess the effectiveness of the application of Orem's theory by nursing students on the satisfaction of patients admitted in ortho ward in SGT hospital of Gurugram

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Abstract- The research conducted in SGT Hospital, Gurugram, Haryana aimed to assess the effectiveness of the application of Orem's theory by nursing students on satisfaction of patients. The study used a quantitative approach and involved 50 participants, all above the age of 18 years. The patients were chosen via a randomized probability sampling technique to assess the effectiveness of applying Orem's theory by checking patient satisfaction, the self-made checklist was used. The finding of the study showed that out of 50 respondents, the majority of patients were between 31 to 54 years old female, and from rural areas and most were graduates who were active in their work and had a complete support system from their family. The findings for the satisfaction level of the patients were highly satisfied with a mean of 26.38 at the standard deviation of 1.67. There is a significant association between the areas of residence with satisfaction level. Application of Orem's theory by Nursing students on patients was effective, improving patient satisfaction.

The report of the study found that there is an improvement in patient satisfaction levels after the application of Orem's theory by nursing students to patients. In order to close the gap between theory and practice, this nursing model can be employed in the instruction of nursing students.

Keywords: Assess, Application, Orem's theory, Patients, Hospital

INTRODUCTION

Between 1959 and 2001, Dorothea Orem formulated the Self-care deficit theory with the aim of enhancing the quality of nursing. This theory is recognized as a venerable nursing framework, encompassing comprehensive and universal concepts applicable to all nursing scenarios. It delineates nursing as the act of aiding others in self-care provision and management, aimed at preserving or enhancing human functioning at the household level of efficiency. This theory underscores the individual's capacity to engage in self-care. Orem characterizes self-care as the execution of actions that individuals initiate and undertake to sustain life, health, and overall well-being. This care is therapeutic, promoting the maintenance of health and life, recovery from illness or injury, and coping with their consequences (Queirós et. al. 2014). She asserts that individuals possess the capability to take responsibility for their own health. In cases where an individual cannot fulfil their self-care requirements, deficits emerge. In such instances, healthcare professionals must select an appropriate compensatory system from the options of the partially compensatory system, wholly compensatory system, and supportive-educative system, contingent upon the patient's ability to take care of themselves (Zhu et. al. 2021). The goal of this research is to evaluate the impact of Orem's theory on patient satisfaction with the care provided by healthcare providers (Deng et. al. 2021).

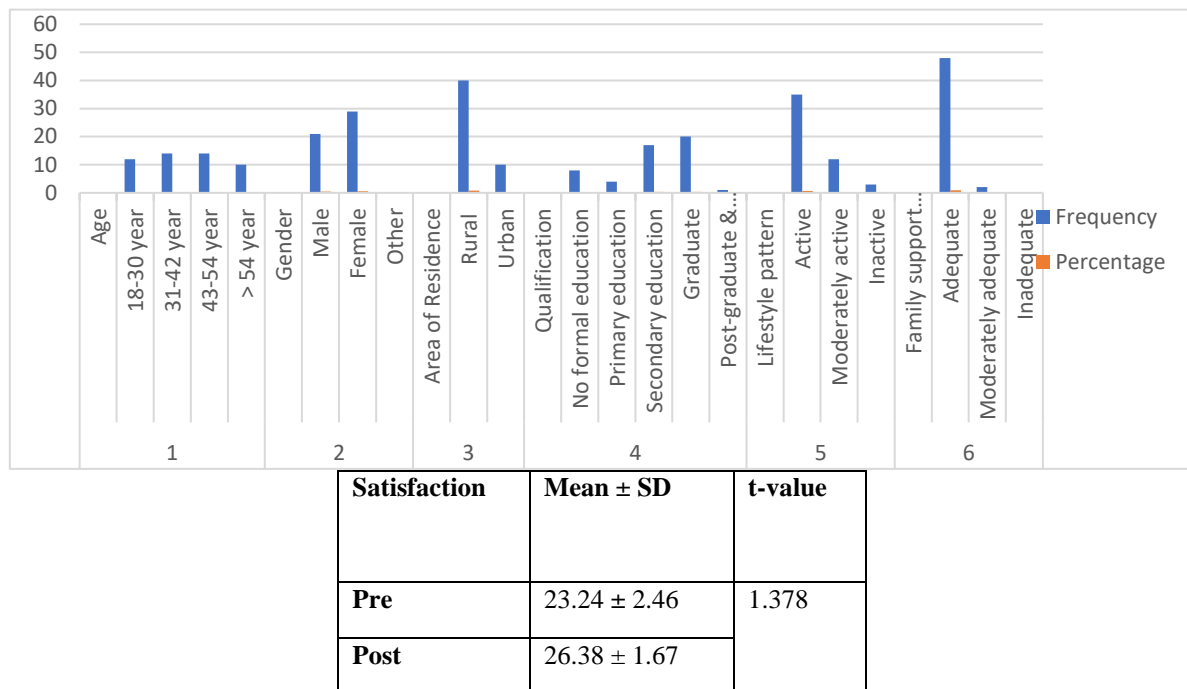
MATERIALS AND METHODS

Fifty patients, all aged 18 years and above, were admitted to the Orthopaedic ward at SGT Hospital in May 2023 and were selected. Caregivers provided care to these patients based on Orem's theory. This group comprised 21 men and 29 women, all of whom were above 18 years of age, with most falling within the 31 to 54 years age. Exclusion Criteria: Patients who are unconscious or have altered sensorium; and the Pediatric patients were excluded. The demographic details of the 50 enrolled patients, including information such as age, gender, day of hospitalization, and admission date, were documented. Informed consent documents were endorsed, and the patients willingly took part in this investigation. The research has undergone review and approval by the Institutional Ethical Committee at SGT University. Patients possessing complete self-care capabilities were motivated to independently engage in daily tasks and fundamental exercises, guided by the caregiver's directions and illustrations. Individuals with a certain degree of reliance on others were motivated to execute straightforward daily activities. More challenging tasks were facilitated with the assistance of both family members and nursing staff. Patient satisfaction level before and after intervention: Before and after intervention patient satisfaction level was checked by a self-made checklist i.e., the Patient satisfaction checklist. It is a checklist that consists of 10 items. Each item scores from 0 (very dissatisfied) to 3 (very satisfied). A higher score indicates a high satisfaction level. MS Excel was employed for statistical analysis. The measurement data were presented as the mean \pm the standard deviation, and the difference between before intervention and after intervention was calculated by t-test. $P < 0.05$ indicated a statistically significant difference.

RESULTS

Effectiveness of patient satisfaction after implementation of Orem's theory

Table 1: Pre-test and Post-test scores according to satisfaction score



In this present study, **Table 1** revealed that the mean score of the pretest was calculated as 23.24 ± 2.46 standard deviation. The post-test score was found to be a mean of 26.38 ± 1.67 standard deviation. Paired t-test was applied and the result was significant at $p < .05$. The t-value is 1.378. The p-value is $< .00001$.

Significant Association of Patient Satisfaction with Selected Demographic Variables

Table 2: Association of patient satisfaction with selected demographic variables.

S No.	Selected Demographic Variable	Satisfactory Level	Calculated Value	Yates Correction formula	p-value	
		Moderate Satisfactory	High satisfactory			
1.	Age 18-42 year 43 years & above	3	23	0.8022	0.2597	0.610 ^{NS}
		5	19			
2.	Gender male female	4	17	0.2502	0.012	0.912 ^{NS}
		4	25			
3.	Area of Residence rural urban	5	7	7.7394	5.4306	0.0197 ^S
		3	35			
4.	Qualification up to secondary education Graduate & above	5	24	0.0792	0.012	0.912 ^{NS}
		3	18			
5.	Family Support system adequate moderately adequate	7	41	1.7919	0.1256	0.723 ^{NS}
		1	1			

A chi-square test was employed to examine the connection between certain demographic factors, and the outcome indicated that there was no notable correlation between age, gender, group, qualification, or family support system with satisfaction level but there was some significant association between the areas of residence with satisfaction level. (**Table 2**)

Fig.1: Graph depicting Frequency and Percentage distribution of socio-demographic variables of patients in the Ortho ward.

Out of 50 patients; (24%) was of age 18-30 year, (28%) were from the 31-42 and 43-54 age group each, and (20%) was between the age group of 54 years above. In relation to gender (42%) were males and (58%) were females. Regarding the area of residence (80%) were from rural areas and (20%) were from urban areas. In the area of qualification (16%) were having no formal education, (8%) and (34%) were having primary and secondary education respectively and (40%) were graduates and (2%) was postgraduate & above. Regarding lifestyle patterns; (70%) were active, (24%) were moderately active and (6%) were inactive. In relation to a

family support system; (96%) were having adequate family support system and (4%) were having moderately adequate support system (Fig.1).

DISCUSSION

In this research, an Orem-centred nursing intervention was administered to orthopaedic patients over a span of five days. The outcomes demonstrated that patient satisfaction levels significantly improved following the implementation of Orem's theory. The self-care theory proposed by Orem serves as a valuable tool for healthcare providers to identify and fulfil the self-care requirements of patients. This theory has demonstrated its immense potential and practicality in both theoretical and practical contexts. Self-help entails the individual's actions to maintain life of their own, promote health, facilitate growth and development, and enhance overall well-being by addressing their existing self-care needs (Ali et. al. 2015). The findings indicate that through self-care, patients have the capacity to manage their own well-being by recognizing and harnessing their self-potential and enhancing their motivation to live a high-quality life. Orem's self-care theory emphasizes an individual's autonomy, which is in line with the holistic nursing concept of "patient-centered care." Its aim is to support an individual's health and enhance their body's coping capacity and functionality (Mortimer et. al. 2017). In today's healthcare landscape, there is a growing emphasis on self-care as nursing services become more integrated into society. It is essential for healthcare professionals, including doctors and nurses, to focus on nurturing patients' self-reliance, igniting their personal initiative, and empowering them to take charge of their own care. The change in satisfaction scores after the implementation of Orem's theory was statistically significant at a significance level of $p < 0.05$. Nursing students provided care to all patients in accordance with Orem's theory, initially encouraging them to engage in self-care activities. This method encouraged patients to discover their capacity for self-care and enhance their self-reliance. Simultaneously, it promoted enhanced interaction and shared comprehension among caregivers and patients, fostering the cultivation of a more harmonious caregiver-patient rapport. The outcomes demonstrated that delivering care in accordance with Orem's theory in an effective manner met patients' needs and enhanced their overall quality of life. Depending on the patient's condition, a combination of partially compensatory nursing and supportive education strategies was employed (Xu et. al. 2020). Patients and their families within the Ortho ward actively engaged in this research and were motivated to partake in caregiving responsibilities. This initiative aimed to spark patients' enthusiasm and unlock their latent self-care capabilities. It underscores the patient's intrinsic values and allows them to fully harness their capacity for self-care. Simultaneously, this approach streamlined the caregiver-patient interaction, boosting job satisfaction levels, fostering improved communication, and deepening mutual comprehension between caregivers and patients. This, in turn, contributed to the nurturing of a more harmonious caregiver-patient relationship (Goreth et. al. 2017, Bi et. al. 2022, and Yang et. al. 2022).

CONCLUSION

Application of Orem's theory by Nursing students on patients was found to be effective, which improved patient satisfaction. The present study was intended to assess the effectiveness of the application of Orem's theory of nursing students on the satisfaction of patients admitted in the Ortho ward, SGT Hospital, Gurugram. The report of the study found that there is an improvement in patient.

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