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Knowledge Regarding Post-Operative Management among Pre-Operative Patients Undergoing Abdominal Surgery at Selected Hospitals at Puducherry.

Dr. Uma [1], Sevvandhi [2], Shreen Fathima [3], Shanthini [4], Sri Arulmozhi [5]

[1] Associate Professor, CON, Mother Theresa Post Graduate and Research Institute of Health Sciences, Puducherry
[2,3,4,5] B.Sc Nursing Students, Mother Theresa Post Graduate and Research Institute of Health Sciences, Puducherry
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ABSTRACT

Knowledge regarding post operative management among pre operative patients undergoing Abdominal surgery at selected Hospitals at Puducherry.

Background

Knowledge refers to educating preoperative patients about postoperative treatment and the circumstances that would arise during surgery. This includes OT procedures, postoperative setting orientation, and preparation for patients having abdominal surgery. Good Post operative management will have started before the procedure with appropriate counseling and preparation.

Aims

1. To assess the existing knowledge level on early ambulation among pre operative patients.

2. To associate the knowledge level on early ambulation with selected demographic variables.

Methods

The study was conducted among 30 Pre-operative patients undergoing abdominal surgery in selected Hospitals, Puducherry. The patients were selected by random sampling technique. After taking consent, the researchers conducted the study using closed ended questionnaire tool with 27 questions regarding benefits of early ambulation.

Results

Twenty-two (73%) of the thirty pre-operative patients had immoderate knowledge, four (13%) had enough knowledge, and the remaining one (4%) had inadequate knowledge, according to the study. The results demonstrate that there is no correlation between demographic factors and the degree of knowledge on early ambulation. As a result, it clarified that the majority of patients have a modest level of post-operative care knowledge and that this knowledge is unrelated to demographic factors. Hence it enlightened the fact that majority of the patient have moderate knowledge level about post-operative management & does not have any association with the demographic variables.

Keywords : Knowledge , post operative management , Abdominal surgery

Introduction :

Any surgical treatment that involves making an incision through the abdomen is generally referred to as abdominal surgery. The esophagus, liver, stomach, spleen, pancreas, gall bladder, and other organs may be repaired, removed, or resected during this surgery. Intra-abdominal procedures are 43.8% common among those aged 40 to 60, and the rate rises with age, with women having a far greater rate than men. The unit's staff nurse is typically primarily in charge of getting the patient ready for surgery. The nurse provides assistance and clarification, confirms that the client has comprehended the information from the other members of the health team, and gives special post-operative instructions. The patient may receive pre-operative instructions in a group setting, alone, or both.

According to WHO [2010], the number of abdominal procedures performed worldwide is predicted to rise from 74,36,000 in 2010 to 81,09,000 in 2020. In seven main nations, 1,66,400 procedures were performed on patients under the age of 15, 51,25,000 on those between the ages of 45 and 64, and 9,50,300 on those over 65.

The primary analysis comprised 474 hospitals worldwide, spread among 19 high-, 17 middle-, and 1 low-income countries. 44,814 individuals with a median hospital stay of 4 [range 2-4] days were included in the data. In all, 207 patients [0.5%] experienced diet-related complications while 7,508 patients [16.8%] experienced one or more postoperative complications. Among individuals who experienced complications, the total death rate was 2.8%. Appendicitis had a mortality rate of 43.9% after complications, while hernias had a mortality rate of 24%.

Following surgery, 4,360 patients [9.7%] were routinely admitted; 2,198 of these patients [50.4%] experienced complications, and 105 of them died [24%]. 119 [9.7%] of the 1,233 patients [16.4%] who were admitted to treat complications died. Results in low- and middle-income nations were comparable to those in high-income countries, despite decreased baseline risk. Inpatient surgery frequently results in poor patient outcomes. The necessity for safe perioperative care should be addressed in global efforts to improve assessment of surgical therapies (British journal of anesthesia, 2017).

The incidence of surgical site infections (SSI) and risk variables influencing SSI at a tertiary care hospital in Mumbai were ascertained by Francisco et al. 1000 patients who had various procedures were included, and the risk factors were examined.

Data collection and surgical site infection detection are accomplished by Southampton wound scoring. We processed swabs taken from wounds. The SSI rate is 9.6% overall. The following factors were linked to higher incidence of surgical site infections: age >50 years, low immunity, diabetes mellitus, emergency surgery, presence of a drain, surgical wound class, and prolonged surgery. It helps gather information and provide surgeons with feedback so they may take the necessary actions to lower surgical site infections.

Between 2001 and 2002, 100 people in Tamilnadu's tertiary care hospitals were diagnosed with acute appendicitis. Of the 100 patients, 45% were women and 55% were men. Approximately 71% of the patients were between the ages of 15 and 30. 75% reported vomiting, 81% reported fever, and 100% reported abdominal pain.

Three percent experienced a post-operative problem. T Abdominal surgery complications are rather common and have a favorable prognosis.
The effects of both structured and unstructured post-operative education on early ambulation during elective abdominal surgery were experimentally studied by Ramachandran (1972). In [Christian Medical College and Hospital, Vellore], the study was carried out. The tool included an interview guide on early ambulation as well as an observation checklist on the patients' capacity to do activities after surgery up to the seventh day. The study ultimately showed that the study group and the control group differed significantly in the structured and unstructured preoperative teaching on early ambulation.

In specialized hospitals, skilled surgeons may now execute lengthy and extremely demanding operations with acceptable mortality rates thanks to recent advancements in surgical methods and peri-operative management. However, depending on the definitions employed, the type of operation performed, and the patient's complications, overall post-operative morbidity stays between 24 and 44 percent. This significantly affects the patient's post-operative result, lengthening the length of time in critical care units and the hospital overall, and increasing mortality. Postoperative complications impact not only the patients but also the health care system due to the high number of procedures performed globally and the resulting cost increases. Therefore, preventing post-operative complications is crucial.

From the above studies and reports, it is found that knowledge related to post- operative teaching to pre-operative patients is inadequate . So the researcher is interested to create awareness and knowledge regarding postoperative care to preoperative patients undergoing abdominal surgeries.

Aims

1. To assess the existing knowledge level on post operative management among preoperative patients
2. To associate the knowledge level with selected demographic variable

Methods and materials

The study included a descriptive research design and a quantitative research approach to evaluate pre-operative patients' knowledge about post-operative treatment. Knowledge about post-operative management at certain hospitals in Puducherry is one of the study's variables. All individuals who have scheduled elective abdominal surgery are included in the study's population. Preoperative patients who were scheduled for elective abdominal surgery, met the inclusion criteria, were willing to participate in the study, and were present during the data collecting period made up the study's sample. For this investigation, a sample size of thirty pre-operative patients was chosen. A basic random sampling method was applied.

Results

Table 1: Distributions of the subjects based on Age

N=30

AGE GROUP	FREQUENCY	PERCENTAGE
20-29	**5**	**17%**
30-39	**4**	**13%**
40-49	**6**	**20%**
≥50	**15**	**50%**

The above table portrays, majority (50%)of the patients were between the age group of ≥50 years

Table 2 Frequency and percentage distribution of level of knowledge regarding postoperative management among preoperative patients undergoing abdominal surgery N=30

LEVELS	KNOWLEDGE LIMIT	TOTAL SCORE	PERCENTAGE
INADEQUATE	**1-9**	**1**	**4%**
MODERATE	**10-18**	**22**	**73%**
ADEQUATE	**19-27**	**4**	**13%**

The above table proves that many patient have moderate knowledge 73% ,some patients have adequate knowledge 13%,very less patients have inadequate knowledge 4% respectively.

Table 3: Association of knowledge level among preoperative patients undergoing abdominal surgery with selected demographic variables

N=30

DEMOGRAPHIC VARIABLE		KNOWLEDGE LEVEL								CHI-SQUARE	P- VALUE
		ADEQUATE		INADEQUATE		MODERATE		TOTAL			
		NO	%	NO	%	NO	%	NO	%		
AGE	20-29 Yrs	0	0.0%	1	20.0%	4	80.0%	5	100%	2.971	0.812 N.S
	30-39 Yrs	1	25.0%	0	0.0%	3	75.0%	4	100%		
	40-49 Yrs	1	16.7%	0	0.0%	5	83.3%	6	100%		
	>50 Yrs	3	20.0%	2	13.3%	10	66.7%	15	100%		
GENDER	MALE	4	23.5%	2	11.8%	11	64.7%	17	100%	1.629	0.443 N.S
	FEMALE	0	0.0%	7	31.8%	15	68.2%	22	100%		
MARITAL STATUS	MARRIED	4	16.0%	2	8.0%	19	76.0%	25	100%	3.964	0.411 N.S
	UNMARRIED	0	0.0%	1	33.3%	2	66.7%	3	100%		
	WIDOW	0	0.0%	0	0.0%	0	0.0%	0	0%		
	DIVORCED	1	50.0%	0	0.0%	1	50.0%	2	100%		
EDUCATION	SCHOOLING	3	17.6%	1	5.9%	13	76.5%	17	100%	5.025	0.541 N.S
	DIPLOMA	1	25.0%	0	0.0%	3	75.0%	4	100%		
	UG	0	0.0%	1	16.7%	5	83.3%	6	100%		
	PG	1	33.3%	1	33.3%	1	33.3%	3	100%		
	Below 5000	1	25.0%	0	0.0%	3	75.0%	4	100%		

INCOME	5001 – 10000	2	15.4%	1	7.7%	10	76.9%	13	100%	4.043	0.671 N.S
	10001 – 15000	1	16.7%	0	0.0%	5	83.3%	6	100%		
	> 15001	1	14.3%	2	28.6%	4	57.1%	7	100%		

(P < 0.05 Significant, NS-Not significant)

The above table shows all the demographic variables are not significant

Table 4: Association of knowledge level among preoperative patients undergoing abdominal surgery with selected demographic variables

DEMOGRAPHIC VARIABLE		**KNOWLEDGE LEVEL**								**CHI-SQUARE**	**P- VALUE**
		ADEQUATE		**INADEQUATE**		**MODERATE**		**TOTAL**			
		N O	**%**	**N O**	**%**	**N O**	**%**	**NO**	**%**		
OCCUPATI ON	GOVERNMENT	0	0.0%	1	20.0%	4	80.0%	5	100%	4.204	0.649 N.S
	PRIVATE	2	14.3%	1	7.1%	11	78.6%	14	100%		
	SEMI GOVERNMENT	0	0.0%	0	0.0%	2	100.0%	2	100%		
	OTHERS	3	33.3%	1	11.1%	5	55.6%	9	100%		
DIET	VEG	2	20.0%	2	20.0%	6	60.0%	10	100%	1.96	0.375 N.S
	NON-VEG	3	15.0%	1	5.0%	16	80.0%	20	100%		
LIFE STYLE	MODERATE	5	20.8%	3	12.5%	16	66.7%	24	100%	2.73	0.256 N.S
	HEAVY	0	0.0%	0	0.0%	6	100.0%	6	100%		
PREVIOUS EXPERIENCE OF SURGERY	YES	2	11.8%	2	11.8%	13	76.5%	17	100%	0.74	0.691N.S
	NO	3	23.1%	1	7.7%	9	69.2%	13	100%		

(P < 0.05 Significant, * * Highly significant, NS – Non significant)

The above table shows all the demographic variables are not significant

Discussion

- Majority of preoperative patients falls under the age group of above 50 age of years [50%]
- Majority of preoperative patients were male patients [57%].
- Most [83%] of them were married.
- Majority [57%] of the preoperative patients underwent upto school education.
- Most of the preoperative patients [44%] income was between Rs. 5000 to 10,000 .
- Most of the preoperative patient's occupation were private job [46%]
- A large amount of the preoperative patient's was non-vegetarian[67%]
- Most [80%]of the patient's lead moderate lifestyle .
- Majority of the preoperative patient's [57%] had previous surgical experience
- Majority of the preoperative patient's [100%] stayed in hospital between 1 to 15 days .

The data was analysed as per objectives based stated;

1) The first objective of the study was to assess the level of knowledge regarding postoperative care among preoperative patients.

According to the study's findings, 73% of pre-operative patients had a moderate level of awareness of post-operative management, 13% had appropriate information, and 4% had poor knowledge. Supported by Jacqueline D. Fortin (2005), the study evaluated nurses' expertise of post-operative pain evaluation among 30 staff members. The majority of staff members (90%) acquire sufficient knowledge regarding post-operative pain assessment,

according to the study's findings. It concludes that a patient's psychological health is enhanced when their pain is reduced. The study, which was funded by Nakata Jan (2019), looked at the connection between surgical patients' oral/periodontal state (OPS) and their knowledge and attitude toward oral health (KAOH). Before surgery, 507 patients in total responded to the questionnaire.

According to the results, during the perioperative phase, the percentage of positive responses for KAOH rose dramatically from 68.6% to 92.2%. We discovered that patients with low KAOH also had low OPS; however, perioperative oral health care and education were able to improve KAOH, indicating that perioperative oral health management could enhance oral health attitudes and knowledge. The study's conclusions aligned with those of Awubemenlah et al. [2008], who used a descriptive survey to look at the postoperative management methods, attitudes, and knowledge of nurses at four Ghanaian hospitals. The respondents were selected through a multistage sampling process. The knowledge of nurses and midwives was assessed using a modified version of the nurses' knowledge assessment about pain. Eighty-one nurses, or 48% of the total, lacked sufficient postoperative management competence. The vast majority of nurses (97.6%) depended on postoperative care, with a small percentage using pharmaceutical interventions. Ghanaian district hospitals have nurses that manage postoperative care inefficiently. In order for postoperative management in Ghana to positively alter in a noticeable way, nurses and midwives must follow best practices by expanding their theoretical and practical knowledge.

The current study's findings indicated that in order to raise pre-operative patients' awareness of post-operative care, educational interventions were required.

The second objective of the study was to associate the knowledge level about postoperative management with selected demographic variable.

The study's findings revealed no discernible correlation between the chosen demographic characteristic and knowledge level about post-operative care. James R. provided assistance for the study, which examined the impact of early ambulation and postoperative care on surgical patients' functional activity. The findings show that neither the study group nor the control group's adequate knowledge level (23%) was significantly impacted by demographic factors. The acceptable knowledge level (23%) functional activity scores were unaffected by the demographic factors. The efficacy of modified early ambulation and postoperative care was unaffected by demographic factors.

Summary:

This study's main goal was to evaluate beforehand patients having abdominal surgery's level of postoperative management knowledge. According to the results, out of 30 samples, 13% of preoperative patients had adequate knowledge of postoperative management, 73% of postoperative patients had moderate knowledge, and 4% of preoperative patients had poor knowledge.

Conclusion

According to the study's findings, 73% of preoperative patients had a moderate level of awareness of postoperative treatment. The study's conclusions showed that in order to raise pre-operative patients' awareness of post-operative treatment, educational interventions were required. Therefore, raising awareness about post-operative care can help to lower complications and enhance the person's health.

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