FAMILY MEMBER'S KNOWLEDGE REGARDING HOME CARE OF PATIENT UNDERGONE ABDOMINAL SURGERY

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Abstract
Introduction: Patients underwent abdominal surgery need good care at home by the family members after being discharged from the hospital. Care at home is aimed to provide better care in familiar surroundings. Methodology: Quantitative research approach and descriptive research design was used in this study. Purposive sampling technique was used to select forty family members of patients underwent abdominal surgery. Data was collected by structured interview technique using demographic proforma and structured knowledge questionnaire. Result: The results showed that 60% of family members were males, 42.5% were spouse of patients and 60% of family members had never heard about post-operative care at home. Majority of family members had good knowledge about home care after surgery.
Keywords: Knowledge, Abdomen, Post-Surgical, Pre-surgical.

INTRODUCTION

Abdominal surgery is an operative procedure in which incision is made in the abdomen for management of mainly gastrointestinal and obstetrical conditions. After discharge from the hospital patients receive care by their family members in their homes. Family members have to ambulate the patients, give medicines, diet and also do wound care.

Postoperative care starts directly after surgery and it lasts for several days' while patient stays in the hospital and may continue after patient has been discharged. It's important that family members understand and follow the instructions given by doctors and nurses regarding various aspects of care at home such as giving medicines, diet, physical activity, surgical wound care, observing for warning signs related to complications of surgery and bring patient for follow up visits.

In the area of surgery, family caregivers' involvement in the basic care of post-operative patient can contribute to prevention of complications and improvement in outcomes related to health.[1]

Study done by Pramila P & Chandni M (2017) to measure mother's knowledge about care of children at home who underwent heart surgery at a tertiary care cardiac center, revealed that just more than fifty five percent mothers had moderate, forty percentage had inadequate and only five percentage of mothers had adequate knowledge. [2]

In another study done by Mohamed AO et.al. (2021) Revealed that maximum 84% of patient caregivers had poor knowledge about leprosy disease**, maximum 77**% of them were having negative attitude and 87.9% of them were having poor practices. Caregivers who were having formal education had mean knowledge score (2.58±1.35) which was higher than those had no formal education (2.35±0.98). They also had lower negative attitude (20.09±6.01) than caregivers who were non-educated (21.24±5.13). [3]

In another study by Carrillo GM et.al. (2020) to evaluate the effect of educating family members regarding care of adult patients diagnosed with cancer and underwent surgery for removal of cancer. Two hundred and ninety family caregivers were given education from admission to six weeks after discharge from hospital. Assessment was done before and after competence for home care and care burden. Results showed that family caregivers in intervention group had a significant positive effect on the competence for home care and burden was decreased.[4]

In another study by Kadam A & Shinde MB. (2014), on evaluation of effect of instruction on knowledge and attitude of caregivers regarding colostomy care of their patient, revealed that the pre- test mean knowledge score of caregivers was 7.43 and posttest was 13.7. The attitude score before intervention was in the range of 61-80, a positive attitude and after intervention attitude score was 81& above, a strongly positive attitude. [5]

In a study by Abhilash, & Diana. (2022) on evaluation of effect of structured teaching programme on the knowledge and practice of care giversregarding care of patients undergoing surgery for cataract. Results showed that, majority 48(80%) of care givers were having knowledge which was inadequate, 12(20%) moderate and no one had adequate knowledge before administration of intervention. The post test data showed that, majority 40(66.67%) of care givers had average 20(33.33%) moderate and no one had inadequate knowledge.[6]

Study by Chai-Eng Tan et. al. (2020) among the caregivers of stroke patients revealed that 87.3% caregivers were having poor knowledge about changing the position of patient with mean score 14.9 ± 4.32.[7]

The aim of this study was to measure the awareness of family member regarding home care of patient underwent abdominal surgery in order to identify the areas in which nurses can give more emphasis during discharge teaching to family members who would give care to patients at home.

Materials and Methods

In the present study quantitative research approach with descriptive research design was used. The sample size was 40 family members of patients undergone abdominal surgeries admitted in male and female surgery and gynaecology wards of selected setting. Samples were selected by using purposive sampling technique. Tools used were sociodemographic proforma for family members and sociodemographic and clinical proforma for patients, structured knowledge questionnaire on home care of patient undergone abdominal surgery. Reliability of the tools was assessed by giving them to 20 family members of patient undergone abdominal surgery. Reliability was determined by Karl Pearson's correlation(r=0.967). The data was collected by conducting structured interview with one significant family member of patients underwent abdominal surgery for 30 minutes and using structured knowledge questionnaire which had questions related to home care of patient underwent abdominal surgery such as diet of post operative patient, medication, ambulation and physical exercise, wound care, warning signs to be reported to surgeon, follow up visits, meeting hygienic needs of patients. Ethical permission was obtained from Ethics committee of Swami Rama Himalayan University. Written informed consent was taken from family members of patients underwent abdominal surgery. The data was analyzed by using descriptive and inferential statistics.

RESULTS

Socio-demographic characteristics of study participants: The frequency and percentage distribution of study participants showed that out of 40 family members, 70% were in the age group of 22-35 years, 22.5% were 36-48 years and 7.5% were 49-62 years old. Majority of the family members were male 60%and the remaining were 40% female. With regards to their education, most 35%of the family members had both secondary and higher secondary education, 12.5% had education up to graduate and post graduate level, 10% had no education, 7.5% had primary education. Regarding occupation, 37.5% family members were having private job, 27.5% were self-employed and house wives, 7.5% were had no job. Regarding their relationship with patients 42.5% were spouse of patients, 17.5% were siblings, 25% were children of patients, 7.5% were parents and others. Regarding their annual income 57.5%had less than 2 lakh rupees whereas 42.5% had more than 2 lakh rupees. With regard knowledge about post-surgical care, 60% family members had not ever heard about post-surgical care at home, whereas 40% had heard about post-surgical care at home. 15% of patient family members had read about post-surgical care through internet and 22% got information through health care professionals which is depicted in Table 1.

Table 1: Frequency and percentage distribution of Socio-demographic characteristics of family members (n = 40)

S. No.	Sociodemographic characteristics	Frequency (f)	Percentage (%)
1	**Age**		
	● 22-35 years	28	70%
	● 36-48 years	09	22.5%
	● 49-62years	03	7.5%
2	**Gender**		
	● Male	24	60%
	● Female	16	40%
3	**Type of family**		
	● Nuclear family	21	52.5%
	● Joint family	17	42.5%
	● Extended family	02	5%
4	**Education**		
	● No formal education	04	10%
	● Primary	03	7.5%
	● Secondary	14	35%
	● Higher secondary	14	35%
	● Graduation / Post graduation	05	12.5%
5	**Occupation**		
	● Private job	15	37.5%
	● Housewife	11	27.5%
	● Self employed	11	27.5%
	● No job	03	7.5%
6	**Relationship with patient**		
	● Siblings	7	17.5%
	● Parents	03	7.5%
	● Spouse	17	42.5%
	● Children	10	25 %
	● Others	3	7.5%
7	**Annual income**		
	● Less than 2 lakh	23	57.5%
	● More than 2 lakh	17	42.5%
8	**Have you ever heard about post-surgical care at home?**	16	40%
	● Yes	24	60%
	● No		
9	**Source of information?**		
	● Through Internet	7	17.5%
	● Through health professional	9	22.5%

Sociodemographic and Clinical characteristics of patients undergone abdominal surgery. Out of 40 patients, 45% were in the age group of 22-35 years, 30% were 36-48 years and 25% were 49-62 years old. Majority 65% of the patients were females and 35% were males. Regarding clinical diagnosis most62.5% of the patients had gastro intestinal surgery and 37.5% patients had obstetrical and gynaecology surgery. With regards to their surgery 40% had laparotomy, 20% had caesarean section, 12.5% had hernioplasty and hysterectomy, 5% had undergone whipple surgery and cyto-reductive surgery, 2.5% had appendectomy and re-exploration. With regards to patients' post operative days in the hospital, 72.5 % patients were between 1-6 days of post operative days 25% between 7-10 days and 2.5% were between 11-15 of post operative days shown in Table 2.

Table 2: Frequency and percentage distribution of Socio-demographic and clinical characteristics of patient undergone abdominal surgery (n = 40)

S. No.	Sample of characteristics	Frequency (f)	Percentage (%)
1	**Age**		
	• 22-35 years	18	45%
	• 36-48 years	12	30%
	• 49-62years	10	25%
2	**Gender**		
	• Male	14	35%
	• Female	26	65%
3	**Clinical diagnosis**		
	• Gastrointestinal surgery	25	62.5
	• Obstetrics & gynecological surgery	15	37.5%
4	**Surgery name**		
	• Caesarean section(LSCS)	08	20%
	• Laparotomy	16	40%
	• Hernioplasty	05	12.5%
	• Hysterectomy (TAH)	05	12.5%
	• Cytoreductive surgery (CRS)	02	5%
	• Re-exploration	01	2.5%
	• Whipple surgery	02	5%
	• Appendectomy	01	2.5%
5	**Number of Post operative days**		
	• 1 - 6 days	29	72.5%
	• 7-10 days	10	25%
	• 11-15 days	01	2.5%

Mean knowledge score of family members regarding home care of patient undergone abdominal surgery: The range of knowledge score was between 5-26, mean ± SD was 17.45 ± 4.44, mode and median were 17 which is clearly shown in Table 3.

Table 3: Mean knowledge score of family members regarding home care of patient undergone abdominal surgery

VARIABLE	RANGE OF SCORE	MEAN ± S.D	MEDIAN	MODE
KNOWLEDGESCORE	5-26	17.45 ± 4.44	17	17

Minimum Score = 0, Maximum Score = 26

Arbitrary grading of knowledge score of family members regarding home care of patients undergone abdominal surgery. Majority 62.5% of family members had good, 17.5% had very good, 17.5 % had average and 2.5% had poor knowledge about home care of patient undergone abdominal surgery can be depicted from Fig 1.

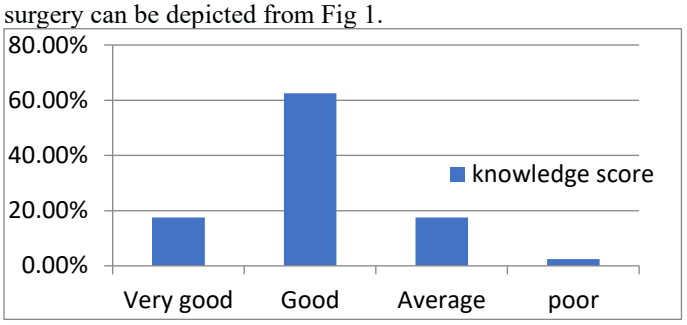

Fig 1. Arbitrary grading of knowledge score of family members regarding home care of patients undergone abdominal surgery

Mean, Mean percentage of knowledge score of family members regarding domain of home care of patients undergone abdominal surgery: The mean percentage of knowledge of family members was highest 88.12% regarding medication, followed by 81.25% regarding warning signs, 68.5% about diet after surgery, 63.12% about meeting hygiene needs of patients, 49% about ambulation and physical exercise, 47.5% regarding surgical wound care and least 45 % about follow up visit which is shown in Table 4.

Table 4: Mean, Mean percentage of knowledge score of family members regarding domain of home care of patients undergone abdominal surgery (n = 40)

S. NO	Domain	Maximum score	Mean ± SD	Mean %
1.	**Diet after surgery**	5	3.425±1.152	68.5%
2.	**Medication**	4	3.425±0.678	88.12%
3.	**Ambulation and Exercise**	10	4.9±2.097	49%
4.	**Surgical wound care**	2	0.95±0.714	47.5%
5.	**Warning sign**	2	1.625±0.585	81.25%
6.	**Follow up**	1	0.45±0.503	45%
7.	**Meeting Hygiene needs of patient**	4	2.525±0.9867	63.12%

Association between Sociodemographic variables and level of knowledge of family members: No significant association was found between sociodemographic variables of family members and level of knowledge score shown in Table 5.

Table 5. Association between knowledge score and Socio-demographic variables of family members (n = 40)

S.NO	Sample characteristics	Below median < 17	At and above median ≥17	X^2	P value
1	**Age**				
	• 22-41 years	14	20	0.131#	0.7177
	• 42-62 years	2	4		
2	**Gender**				
	• Male	7	17	0.304	0.5815
	• Female	6	10		

3	**Type of family** • Nuclear • Joint / Extended	 6 8	 15 11	0.803	0.3702
4	**Education** • No education / Primary / Secondary • Higher secondary/ Graduation / Post graduation	 9 5	 12 14	1.200	0.2734
5	**Occupation** • Private job/Self • Housewife / No job	 10 4	 16 10	0.077#	0.7810
6	**Relationship with patient** • Spouse/ Parents • Children / Siblings/ Others	 8 6	 12 14	0.440	0.5073
7	**Annual income** • Less than 2 lakh • More than 2 lakh	 9 5	 14 12	0.406	0.5241
8	**Have you ever heard about post-surgical care at home?** • Yes • No	 7 7	 9 17	0.897	0.3435
9	**Source of information** • Through Internet • Through health professional	 5 5	 2 4	0.017#	0.8965

df_1 = 3.84 at the level of P < 0.05 #- chi square (Yates correction) *- Significant

Discussion

A descriptive research study was conducted to measure family member's knowledge about care of patient undergone abdominal surgery at home after discharge from hospital. Results showed that 70% of the family members were in the age group of 22-35 years revealing that they were young. Majority 60%of the family members were male. Majority 90% of the family members were educatedand10% had no formal education. 60% family members had not ever heard about post-surgical care at home. The mean ± SD of knowledge score of family members was 17.45 ± 4. Majority 62.5% of family members had good knowledge, only 17.5% had very good knowledge, 17.5 % had average knowledge and 2.5% had poor knowledge about home care of patient undergone abdominal surgery. Results of the study are supported by study Pramila P & Chandni M (2017) in which majority fifty five percent mothers had moderate, forty percentage had inadequate and only five percentage of mothers had adequate knowledge regarding home care of children undergone cardiac surgery.[2]

However, in the research done by Abhilash, & Diana. (2022), 80 % care givers were having inadequate, 20% moderate and no one had adequate knowledge regarding care of clients undergoing cataract surgery before giving intervention.[6]

Further results showed that mean percentage of knowledge of family members was highest 88.12% regarding medication, followed by 81.25% regarding warning signs, 68.5% about diet after surgery, 63.12% about meeting hygiene needs of patients, 49% about ambulation and physical activity, 47.5% regarding surgical wound care and least 45 % about follow up visit. This reveals that family caregivers need more education regarding ambulation and physical activity, care of surgical wound and follow-up visits at the time of discharge from hospital especially the one having no formal education need to be taught in a simple language which they can understand and follow at home for their patients.

Results showed no statistically significant association between Sociodemographic variables of family members and their level of knowledge score. However, in a study by Pramila P & Chandni M (2017). Sociodemographic variables of mothers i.e. age, education, occupation and information source were associated ($p < 0.05$) with their level of knowledge significantly.[2]

CONCLUSION

It can be concluded that most of the family members had good level of knowledge regarding home care of patient undergone abdominal surgery. However, it is recommended that certain areas such as medication- name, schedule to taking drug, action, side effects should be given special consideration while giving discharge teaching to patients and their family members also regarding diet, physical activity and measures for prevention of complications of surgery.

References

1. Eskes AM, Schreuder AM, Vermeulen H, Nieveen van Dijkum EJM, Chaboyer W. Developing an evidence-based and theory informed intervention to involve families in patients care after surgery: A quality improvement project. Int J Nurs Sci. 2019 Sep 12;6(4):352-361. doi: 10.1016/j.ijnss.2019.09.006. PMID: 31728386; PMCID:

2. Pramila P& chandni M (2017) Knowledge of Mothers Regarding Home Care of Children undergone Cardiac Surgery with a View to Develop an Information Booklet.Journal of NMC, Birgunj, Nepal, Volume (2), Issue (1) July 2017, 38-43.

3. Mohamed AO, Ahmed ER, Mohamed MD.(2021) Knowledge, Attitude and Practices of caregivers for patients with leprosy. Minia Scientific Nursing Journal, 009 (1) , 17-25.
4. Carrillo GM, Laguna ML, Gómez OJ, Díaz LC, Carreño S P.Effect of an Educational Intervention for Family Caregivers of Individuals with Cancer in Surgery.Enfermería Global Nº 61 Enero 2021 406-417
5. Abhilash, & Diana. (2022). A Study to Assess the Effectiveness of Structured Teaching Programme (STP) to the Care Givers Regarding Pre and Post Operative Care on Knowledge and Practice of Clients, Undergoing Cataract Surgery at Selected Camps Conducted in Bidar. International Journal of Nursing Education, 14(2), 18–23. https://doi.org/10.37506/ijone.v14i2.17980
6. Tan C, Hi M, Azmi N, Ishak NK, Farid FM, Aziz AA. (March 24, 2020) Caregiving Self-efficacy and Knowledge Regarding Patient Positioning Among Malaysian Caregivers of Stroke Patients. Cureus 12(3): e7390. DOI 10.7759/cureus.7390