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Effectiveness of Informational Package on Knowledge Regarding Early Post Operative Recovery Among Patient Undergoing Major Abdominal Surgery At Selected Hospital, Villupuram.

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Abstract:

Aim: To assess the level of knowledge and Effectiveness of informational package on knowledge regarding early post operative recovery among patient undergoing major abdominal surgery. **Objective:(i)** To assess the pre and post test level of knowledge regarding early post operative recovery among patients undergoing abdominal surgery.**(ii)**To identify the effectiveness of informational package on knowledge regarding early post operative recovery. **(iii)**To associate the pretest level of knowledge among patients undergoing abdominal surgery with their selected socio demographic variables. **Methodology:** A Pre-experimental one group pre-test and post-test design was adopted for this research study. 50 sample were selected by using purposive sampling technique. The pre and post level of knowledge were assessed by self structure knowledge questionnaire. **Results:** The finding of the study shows that there is a significant difference between pre and post-test levels of knowledge with a t value of 34.15. Hence the study concluded that the informational package was improving the knowledge of the patient undergoing major abdominal surgery. **Conclusion:** The study concluded that the Early post operative recovery practice effective in improving the patient recovery among patients undergoing major abdominal surgery.

Key words :Early post operative recovery, Major Abdominal surgery

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1. INTRODUCTION

The safe surgery safe life program was established by WHO Patient Safety as part of the World Health Organization's efforts to reduce the number of surgical deaths across the globe. The aim of the program is to harness political commitment and clinical will to address important safety issues, including inadequate anesthetic safety practices, avoidable surgical infection and poor communication among team members. These have proved to be common, deadly and preventable problems in all countries. (WHO)

Abdominal surgery refers to the surgical procedures done in patients abdominal region to diagnose or treat a medical condition. Abdominal surgery can solve the symptoms of several abdominal problems like pain caused by medical problems, injuries and trauma. Abdominal surgery can include the dissimilar techniques depending on the organ that requires operations such as the stomach, liver and kidneys. The abdominal surgeries are classified into two types laparatomies and laparoscopic surgeries. Laparatomies are the major surgery that needs a long open on the patient's abdomen and it takes long recovery

period and the laparoscopic procedures are the small opening of the patient's abdominal region and therefore, they produce less scarring, minimal blood loss, less pain and faster recovery.

Some of the major abdominal surgeries are:

- Lower segment Cesarean section (LSCS)
- Abdominal hysterectomy
- Bariatric surgery
- Larger bowel resection
- Cholecystectomy
- Small bowel resection
- Salphingectomy
- Percutaneous nephrolithotomy
- Pancretico duodenectomy (whipple surgery)
- Splenectomy

Personal hygiene means those implementation performed by an individual to care for persons bodily health and wellbeing through cleanliness. Stimulation for personal hygiene habits include cutting of personal illness, healing from personal illness, relieve from personal illness, optimal health and sense of wellbeing, community acceptance and anticipation of spread of illness to others. Practices that are normally thought about are proper hygiene that

includes bathing routinely, washing hands, washing hair and scalp, brushing teeth and cut short the nails. some practices are gender-particular, such as by a women during her menstruation and the women need to change her sanitary pad every 3-4 hours. Personal grooming includes personal hygiene as it concerns to the maintenance of a good personal hygiene. Oral hygiene suggests that all healthy adults brush twice a day, quietly with exact technique, replacing their toothbrush every few months or after a session of illness.

2. STATEMENT OF THE PROBLEM

A study to assess the effectiveness of informational package on knowledge regarding Early Post Operative Recovery Among Patient Undergoing Major Abdominal Surgery At Selected Hospital, Villupuram.

3. OBJECTIVES

- To assess the pre and post test level of knowledge regarding early post operative recovery among patients undergoing abdominal surgery.
- To identify the effectiveness of informational package on knowledge regarding early post operative recovery.

- To associate the pretest level of knowledge among patients undergoing abdominal surgery with their selected socio demographic variables.

4. HYPOTHESIS

H1– There is a significant difference in pre and post test level of knowledge regarding early post operative recovery among patients undergoing major abdominal surgery.

H2 – There is a significant association between pretest level of knowledge among patients undergoing major abdominal surgery with their selected socio demographic variables.

5. METHODOLOGY

A Pre-experimental one group pre-test and post-test design was adopted for this research study. 50 sample were selected by using purposive sampling technique. The pre and post level of knowledge were assessed by self structure knowledge questionnaire.

6. RESULTS

Table - 1 Frequency and Percentage Distribution of Pre-Test level of Knowledge regarding early post operative recovery

among patients undergoing major abdominal surgery. N=50

PRETEST LEVEL OF KNOWLEDGE	Frequency	Percentage
	(N)	(N%)
Adequate knowledge	0	0%
Moderate knowledge	12	24%
Inadequate knowledge	38	76%

Table - 1 shows that in Pre-Test level of Knowledge among patients undergoing major abdominal surgery 38 (76%) of them in inadequate knowledge, 12(24%) of them in moderate knowledge and None of them in adequate knowledge.

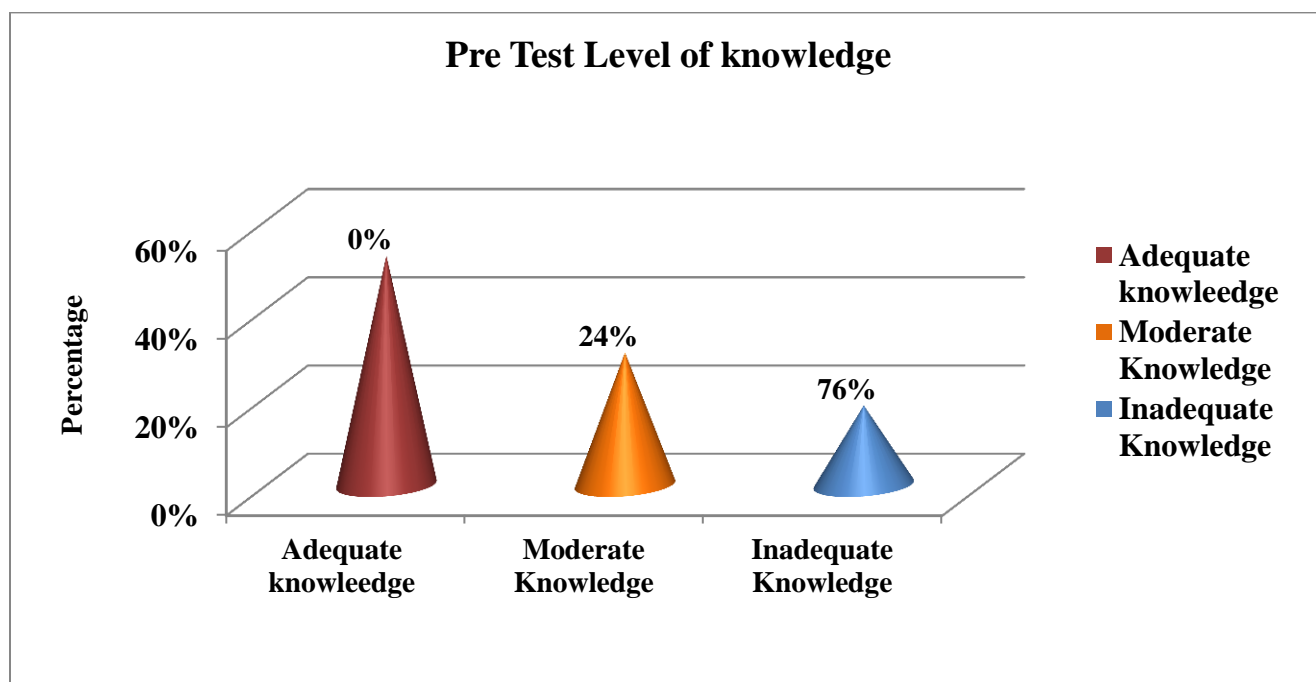


Figure : 1 shows the Percentage Distribution of Pre-Test Knowledge regarding patient undergoing major abdominal surgery

Table - 2 Frequency and Percentage Distribution of Post –Test level of Knowledge regarding early post operative recovery among patient undergoing major abdominalsurgery

POST TEST LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE
	N	N%
Adequate knowledge	46	92%
Moderate knowledge	4	8%
Inadequate knowledge	0	0%

Table - 2 shows that in Post –Test level of Knowledge among patients undergoing major abdominal surgery.46 (92%) of them in adequate knowledge, 4 (8%) of them in moderate knowledge and none of them in Inadequate Knowledge.

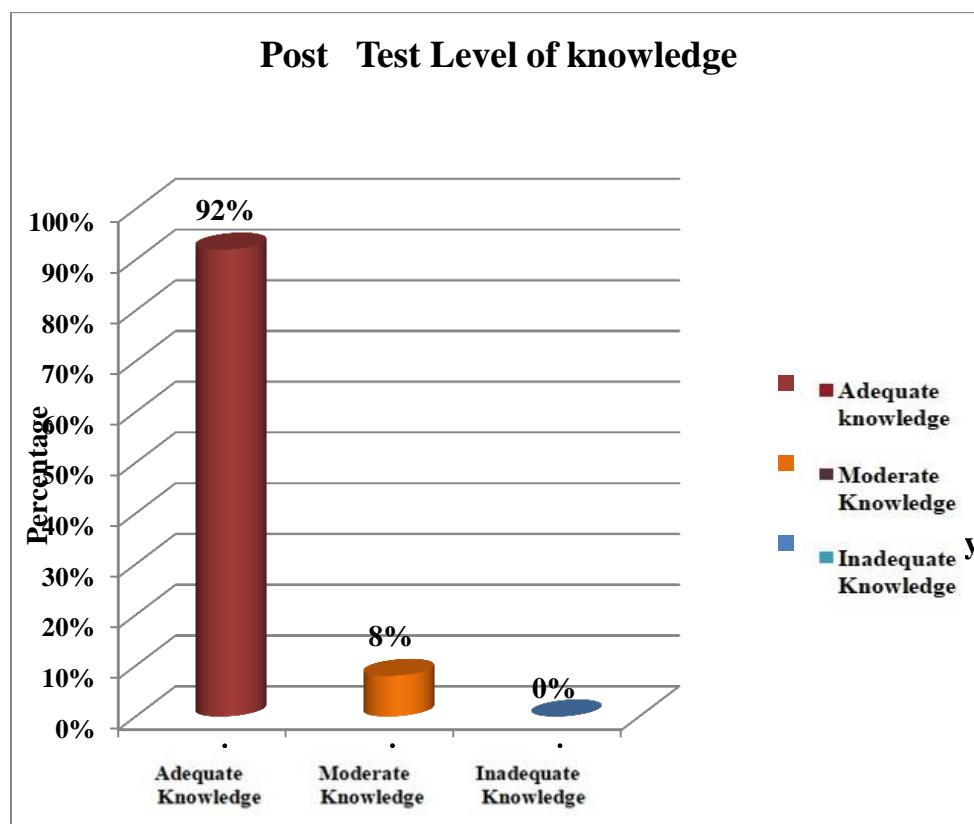


Figure - 2 shows the Percentage Distribution of Post -Test Knowledge regarding patient major abdominal surgery

Table - 3 Effectiveness of informational package on knowledge regarding early post operative recovery among patient undergoing major abdominal surgery.

N=50

LEVEL OF KNOWLEDGE	Pretest		Post-test		Mean difference	Standard error	T value
	Mean	Standard deviation	Mean	Standard deviation			
		10.52	4.02	27.94	2.35	17.42	0.51

*Significant at $p < 0.05$

Table-3 Shows that Pre-test Mean, the score was 10.52 with the standard deviation of 4.02 and the post-test mean score was 27.94 with the Standard Deviation of 2.35. The Mean difference is 17.42 with a standard error of 0.51. The t value was 34.15 shows highly significance.

Table – 4 Association of pre test level of knowledge among patient undergoing abdominal surgery with their selected socio demographic variables.

N=50

DEMOGRAPHIC	ADEQUATE KNOWLEDGE	MODERATE KNOWLEDGE	INADEQUATE KNOWLEDGE	CHI-SQUARE	p VALUE
1.Age					
(a)21–30 Years	0	1	10		0.791
(b)31–40 Years	0	2	9		NS
(c)41–50 Years	0	6	10		
(d)51–60 Years	0	3	9	3.14	

2.Gender					0.895
(a)Male	0	5	13	0.22	NS
(b)Female	0	7	25		
3.Religion					0.684
(a)Hindu	0	9	36	3.94	NS
(b)Christian	0	3	2		
(c)Muslim	0	0	0		
(d)others	0	0	0		
4.Residence					0.499
(a)Urban	0	9	17	3.36	NS
(b)Semi Urban	0	2	13		
(c)Rural	0	1	8		
5.Education					0.95
(a)No formal education	0	1	6	2.72	NS
(b)Primary education	0	2	7		
(c)Secondary education	0	2	8		

(d)Under Graduate	0	4	14		
(e)Post Graduate	0	3	3		
6.Occupation					
(a)HomeMaker	0	3	16		
(b)Coolie	0	4	12		
(c)Business	0	2	1		
(d)Govt.Employee	0	2	3		
(e)Private Employee	0	1	6		
(f)Others	0	0	0	4.76	
7. Monthly Income					
(a)Less than 5,000 month	0	1	0		
(b)5001–10,000 Month	0	2	8		0.9 NS
(c)10,000–20,000 Month	0	4	23		
(d)25,000 above	0	5	7	6.55	
8. Dietary Patten					0.722 NS
(a) Vegetarian	0	0	2		
(b) Non-Vegetarian	0	12	36	0.65	

9. Marital Status					
(a) Married	0	8	36		
(b) Un Married	0	4	2	6.8	0.03* S
10. Health information					
(a)Television	0	6	19		
(b)Friends	0	1	8		
(c)Family	0	2	7		
(d)Health care workers	0	3	4	2.19	0.914 NS
11. Habits					
(a)Smoking	0	0	1		
(b)Alcoholism	0	1	8		
(c)All the above	0	3	3		
(d)None of the above	0	8	26	3.36	0.762 NS

Table - 4 shows that there is a significant association between pretest level of knowledge with the demographic variable marital status at $p < 0.05$ and no significant association between pretest level of knowledge and age, gender, religion, residence, education, occupation, family income, dietary pattern, marital status, and habits.

7. DISCUSSION

The first objective of the study is “to assess the pre and post test level of knowledge regarding early post operative recovery among patients undergoing abdominal surgery”.

❖ In the pre-test 38(76%) of them had inadequate knowledge and 12(24%) had moderate knowledge and 4(8%) had adequate knowledge.

❖ In the post-test 46(92%) of them had adequate knowledge and 4(8%) had moderate knowledge and none of them 0(0%) had inadequate knowledge.

The second objective of the study “to Identify the effectiveness of informational package on knowledge regarding early post operative recovery”.

❖ The Pre-test mean score was 10.52 with the standard deviation of 4.02 and the Post-test mean score was 27.94 with the standard deviation of 2.35.

❖ The Mean difference was 17.42 with a standard error of 0.51.

The ‘t’ test value 34.15 shows high significance. Hence Hypothesis H1 is accepted.

The third objective of the study “to associate the pre test level of knowledge among patients undergoing abdominal surgery with their selected socio demographic variables”.

The finding of the study shows that there is a significant association pretest level of knowledge with marital status at $p < 0.05$ and no significant

associate between pretest level of knowledge and age, gender, religion, residence, education, occupation, family income, dietary pattern, marital status, and habits. Hence Hypothesis H2 is accepted.

CONCLUSION

The finding of the study shows that there is a significant difference between pre and post-test levels of knowledge with a t value of 34.15. Hence the study concluded that the informational package was improving the knowledge of the patient undergoing major abdominal surgery.

8. REFERENCE

BOOKS

1. Janice L. Hinkle (2014)..., Medical surgical nursing Volume II: Wolters kluwer publishers; 13 edition
2. Janice L. Hinkle (2014)..., Medical surgical nursing Volume I: Wolters kluwer publishers; 13 edition
3. Phipps. Monahan..., Medical surgical nursing; Sands. Marek neighbors; 7th edition

4. Joyce M Black..., Medical surgical nursing; Elsevier publications; 7th edition
5. . Joyce M Black et al., Clinical management for positive outcomes; Elsevier publications; 8th edition
6. Annamma Jacob et. al(2008)..., "Clinical Nursing Procedures: The Art of Nursing Practice," New Delhi Jaypee Brothers, Medical Publishers Pvt. Limited.
7. Agarwal. L P. (2006). Medical Surgical Nursing. (1st edition). New Delhi: Jaypee Brothers Medical Publishers
8. Basavanthappa BT. (2008). Medical Surgical Nursing. (15th edition). New Delhi Jaypee Brothers Medical Publishers.
9. Basvanthappa, B. T. (2007). Nursing Theories. (15th edition). New Delhi: Jaypee Brothers Medical Publishers. Mally Sam N Geetha (2004) A Text Book of Nutrition for Nurses. (5th edition). New Delhi: Jaypee brothers medical publishers.
10. Nancy Burns. (2000). Understanding nursing research (2nd edition). Philadelphia: W .B Saunder's company.

11. Smeltzer, S. C. & Baer, B. G. (2008). Textbook of Medical Surgical Nursing. (10th edition). Philadelphia. Lippincott Publication.
12. Swaminathan. M. (2008). Hand Book of Food and Nutrition. (1st edition). Bangalore: The Bangalore Printing Publication. Co. LTD.
13. Varma, B.L & Sukla, GD. (2004). Biostatistics Perspective in Health Care Research and Practice. (5th edition). New Delhi: CBS Publication.
14. Black, J. M and Jacobs, EM. (2006). Medical Surgical Nursing. (5th edition). Philadelphia: W.B. Saunders Company.
15. Burns, N & Grove, SK. (2006). Understanding Nursing Research. (2th edition). Philadelphia: W.B. Saunders Company.
16. Carrill, A.Lutz. (2008). Nutrition and Diet Therapy .' Evidence Based Application. (4th edition). Delhi: Jaypee Brothers, Medical Publication.
17. Polit. B.F & Ilungler. B. (2009). Nursing Research. (7th edition). Philadelphia: Lippincott Publications.
18. Pillai & Bagavalhi. (2003). Practical Statistics. (1st edition). New Delhi: S Chand and Sons Company.
19. Samir Malhotra (2006). All that you wanted to know about Clinical Research. (6th edition). Chandigarh : Mansa Print And Publishers Limited.
20. Shafer's. (2004). Medical Surgical Nursing. (7th edition). New Delhi: B.L Publication.
21. Helen. J .S. & Dona, R. (2006). Qualitative Research in Nursing. (4th edition) New York: Lippincott Williams and Wilkins.
22. Holloway N.M. (1999). Medical Surgical Nursing Care Planning. (3rd edition). Pennsylvania: Spring house publishers.
23. Ignastsvicius, D.D. & Linda, W. (2004). Text Book of Medical Surgical Nursing. (4th edition) Philadelphia: W.B. Saunders Company.
24. Janice M Morse. (2004). Nursing Research the Application Quantitative Approaches. (2nd edition). United Kingdom: Nelson Thomas Publications.
25. John W Best and James V Khan. (2003). Research in Education. (17th edition). New Delhi: Asoka Publications.

JOURNALS

1. Kapoor KK, Hassan MMN. A clinical study of abdominal wound dehiscence with emphasis on surgical management in Bangalore medical college and research institute, Karnataka, India. *Int Surg J* 2017;4: 134-40.
2. Rajalakshmi. B. (2012). A study to assess the effectiveness of preoperative teaching on postoperative exercise. Unpublished Master's Thesis. Dr.M.G.R. Medical University. Chennai
3. Luo D, Wan X, Liu J, Tong T. Optimally estimating the sample mean from the sample size, median, mid-range, and/ or mid-quartile range. *Stat Methods Med Res.* 2018;27: 1785-1805.
4. Yang H, Song T. Effect of abdominal binder after laparoscopic treatment on postoperative recovery (BELT): A randomized controlled trial. *J Minim Invasive Gynecol.* 2020;27(4):854-859. 19. Gustafson JL, Dong F, Duong J, Kuhlmann ZC. Elastic abdominal binders reduce cesarean pain postoperatively: A randomized controlled pilot trial. *Kan JMed.* 2018;11:1-19.
5. Myles PS, Myles DB, Gallagher W, et al. Measuring acute postoperative pain using the visual analog scale: The minimal clinically important difference and patient acceptable symptom state. *Br J Anaesth.* 2017;118:424-429.
6. Czyż-Szypenbejl, K. (2019). The occurrence of postoperative cognitive dysfunction (POCD) – Systematic review. *Psychiatria Polska Open Access,* **53**(1), 145– 160.
7. Gan, T. J. (2017). Poorly controlled postoperative pain: Prevalence, consequences, and prevention. *Journal of Pain Research,* **10**, 2287– 2298.
8. Kapoor, S., Sharma, R., Srivastava, A., Kumar, A., Singh, A., & Singh, H. (2017). Study of surgical complication of explorative laparotomy and their management: A study of 100 cases. *Journal of Dental and Medical Sciences,* **16**(12), 36 41. <https://doi.org/10.9790/0853-1612143641>
9. Sritharn, S. (2017). Effect of pre-operative preparing program on recovery in post abdominal surgery patients. *HCU Journal,* **20**(40), 101– 113.

10. Lohsiriwat V. Enhanced recovery after surgery for emergency colorectal surgery: Are there any differences between intra-abdominal infection and other indications? *J Visc Surg.* 2019;156(6):489-96.
11. Turchini, M., Naja, C. D., & Tancredi, A. (2018). Enhanced recovery after surgery: A patient centered process. *The Journal of Visualized Surgery*, 4(40), 1–4. <https://doi.org/10.21037/jovs.2018.01.20>
12. Trang, N. T. T., Thosingha, O., & Chanruangvanich, W. (2017). Factors associated with recovery among patients after abdominal surgery. *Journal of Nursing Science*, 35(1), 4–12.
13. Suzuki, S. Oxygen administration for postoperative surgical patients: a narrative review. *J intensive care* 8, 79 (2020) doi.org/10.1186/s40560-020-00498-5
14. Wong-Lun-Hing EM, van Woerden V, Lodewick TM, Bemelmans MHA, Olde Damink SWM, Dejong CHC, et al. Abandoning prophylactic abdominal drainage after hepatic surgery: 10 years of no-drain policy in an Eur. Chem. Bull. 2023,12(Special Issue 8), 1744–1759
- enhanced recovery after surgery environment. *Dig Surg.* 2017;34(5):411-20.
15. Myles PS, Weitkamp B, Jones K, Melick J, Hensen S. Validity and reliability of a postoperative quality of recovery score: the QoR-40. *Br J Anaesth.* 2019;84(1):11–5.
16. Wagner L, Carlslund AM, Sorensen M, Ottesen B. Women's experiences with short admission in abdominal hysterectomy and their patterns of behaviour. *Scand J Caring Sci.* 2018;19(4):330–6.
17. Henderson A, Zernike W. A study of the impact of discharge information for surgical patients. *J Adv Nurs.* 2017;35(3):435–41
18. Udomkhwamsuk W, Vuttanon N, Limpakan S. Situational analysis on the recovery of patients who have undergone major abdominal surgery. *Nurs Open* 2021;8:140–6.
19. Ni CY, Wang ZH, Huang ZP, et al.. Early enforced mobilization after liver resection: a prospective randomized controlled trial. *Int J Surg* 2018;54(Pt A):254–8.
20. Abeles A, Kwasnicki RM, Darzi A. Enhanced recovery after surgery: current research insights

and future direction. *World J Gastrointest Surg.* 2017;9:37–45.

21. Ida M, Tachiiri Y, Sato M, Kawaguchi M. Neutrophil-to-lymphocyte ratio as indicator to severe complication after pancreaticoduodenectomy or distal pancreatectomy. *Acta Anaesthesiol Scand.* 2019;63:739–44.

22. Ahn KY, Hur H, Kim DH, Min J, Jeong DH, Chu SH, Lee JW, Ligibel JA, Meyerhardt JA, Jones LW, Jeon JY, Kim NK. The effects of inpatient exercise therapy on the length of hospital stay in stages I-III colon cancer patients: randomized controlled trial. *Int J Colorectal Dis.* 2013;28:643–51.

23. Wang G, Jiang ZW, Zhao K, Gao Y, Liu FT, Pan HF, Li JS. Fast track rehabilitation programme enhances functional recovery after laparoscopic colonic resection. *Hepatogastroenterology.* 2012;59:2158–63.

24. Long TE, Helgason D, Helgadóttir S, Pálsson R, Gudbjartsson T, Sigurdsson GH, Indridason OS, Sigurdsson MI. Acute kidney injury after

abdominal surgery: incidence, risk factors, and outcome. *Anesth Analg.* 2016;122:1912–20.

25. Goh BK, Kam JH, Lee SY, Chan CY, Allen JC, Jeyaraj P, Cheow PC, Chow PK, Ooi LL, Chung AY. Significance of neutrophil-to-lymphocyte ratio, platelet-to-lymphocyte ratio and prognostic nutrition index as preoperative predictors of early mortality after liver resection for huge (≥ 10 cm) hepatocellular carcinoma. *J Surg Oncol.* 2016;113:621–7.

26. Majid A., Judha M. and Istianah U. 2019 *Perioperative Nursing* (Yogyakarta: Goshen Publishing

27. Kaur H., Kaur S. and Siska P. 2018 The effectiveness of early ambulation in postoperative recovery among post-cesarean mothers admitted in selected areas of Nehru Hospital, PGIMER, Chandigarh *Nursing and Midwifery Research Journal*

28. Holloway N.M. (1999). *Medical Surgical Nursing Care Planning.* (3rd edition). Pennsylvania: Spring house publishers.

29. Ignastsvicius, D.D. & Linda, W. (2004). Text Book of Medical Surgical Nursing. (4th edition) Philadelphia: W.B. Saunders Company.

30. Janice M Morse. (2004). Nursing Research the Application Quantitative Approaches. (2nd edition). United Kingdom: Nelson Thomas Publications.

31. John W Best and James V Khan. (2003). Research in Education. (17th edition). New Delhi: Asoka Publications.