



“Knowledge And Self-Care Practice Regarding Surgical Site Infection Among Post-Operative Patients In Selected Hospitals, Kamrup (M), Assam: A Descriptive Study.”

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ABSTRACT

BACKGROUND:

Healthcare-associated infections (HAIs) are one of the most serious threats to patient health and remain a major challenge for healthcare providers worldwide. Among HAIs, surgical site infections (SSIs) are one of the most commonly reported HAIs, and wound infections remain an important cause of morbidity and mortality, accounting for approximately one-fifth of all HAIs. With increasing in rate of SSIs that can be fatal for patient which can be prevented with proper guidance before and after surgery need to be emphasized as nurses plays an integral part. By assessing patient awareness and knowledge about the surgical site infection, deeper insights into existing patient perception and practices can be gained, thereby helping to identify attributes that influence the patients in adopting healthy practices and responsive behaviour.

OBJECTIVES OF THE STUDY

1. To assess the level of Knowledge regarding Surgical Site Infection among Post-operative Patients in selected hospitals, Kamrup(M), Assam.
2. To assess the level of Self-care Practice regarding Surgical Site Infection among Post-operative Patients in selected hospitals, Kamrup(M), Assam.
3. To find out correlation between Knowledge and Self-care Practice regarding Surgical Site Infection among Post-operative Patients in selected hospitals, Kamrup (M), Assam.
4. To find out association between Knowledge regarding Surgical Site Infection among Post-operative patients in selected hospitals with selected demographic variables, Kamrup (M), Assam.
5. To find out association between Self-care Practice regarding Surgical Site Infection among Post-operative patients in selected hospitals with selected demographic variables, Kamrup (M), Assam.

METHODS AND MATERIAL

A descriptive research design was used in the study to accomplish the objectives. Non- probability purposive sampling technique was used for obtaining sample for the study. Study was undertaken on 70 samples in setting of selected hospitals of Kamrup (M), Assam. Respondents were selected on the basis of inclusive and exclusive criteria. Self-structured Knowledge questionnaire and inventory checklist on SSI was used as a tool to assess the level of knowledge and self-care practice.

RESULT

Out of 70 participants, majority i.e, 25(35.7%) belongs to the age group of 29-39 years, 21(30%) belongs to the age group 40-50 years, 14(20%) belongs to the age group of 51-60 years and only 10(14.3%) belongs to the age group 18-28 years among which 38(54.3%) were female and 32(45.7%) were male. 37(52.9%) were graduate and above, 18(25.7%) were higher secondary education, 10(14.3%) have secondary education, 5(7.1%) have primary education. Majority i.e, 24(34.3%) were govt. employee, 19(27.1%) were homemaker, 9(12.9%) were self-employed/business, 7(10%) were private employee, 4(5.7%) were daily wager, 3(4.3%) were students, 2(2.9%) were unemployed and retired, respectively among which 19(27.1%) were earning between Rs 53,361- Rs 80,109, 16(22.9%) were earning between Rs 80,110– Rs 1,06,849, 12(17.1%) were earning between Rs 1,06,850 –Rs 2,13,813, 9(12.9%) were earning between Rs 2,13,814 and above, 8(11.4%) were earning between Rs 31,978 – Rs 53,360, 6(8.6%) were earning between Rs 10,703 – Rs 31,977. The participants underwent surgery i.e, 30 (42.9%) cholecystectomy, 13(18.6%) appendectomy, 11(15.7%) LSCS, 8(11.4%) exploratory laparotomy, 5(7.1%) hernia repair whereas 1 (1.4%) liver transplant, renal transplant and hysterectomy, respectively among which 32(45.7%) followed up between 11-20 days, 23(32.9%) followed up ≤ 10 days, 10(14.3%) followed up between 21-30 days and 5(7.1%) followed up after >30 days. The study shows that 39(55.7%) had moderately adequate knowledge and 31(44.3%) had adequate knowledge regarding surgical site infection among post operative patients. 55(78.6%) had adequate practice and 15(21.5%) had moderately adequate practice regarding surgical site infection among post operative patients.

CONCLUSION

The study concludes that when the knowledge regarding surgical site infection among post operative patients increases then their practice towards it also increases. There is a need to improvise more participation by health care workers in providing knowledge regarding Surgical Site Infection and Self-care Practice in order to prevent from SSI among post-operative patients.

KEYWORDS: Knowledge, Self-care ,Practice, Surgical Site Infection (SSI) , Post-operative patients.

1. INTRODUCTION

Healthcare-associated infections (HAIs) are one of the most serious threats to patient health and remain a major challenge for healthcare providers worldwide. These infections are primarily caused by antibiotic-resistant microorganisms. HAIs are a major cause of morbidity and mortality and are associated with clinical, diagnostic and therapeutic procedures.¹

Due to a lack of reliable data, the global burden of HAIs is unknown, but it is estimated that hundreds of millions of patients are affected by HAIs every year. This not only leads to a significant increase in mortality, but also to losses in the performance and finances of healthcare systems. Currently, no country is free from the burden of hospital-acquired infections and antimicrobial resistance. Furthermore, approximately 3 million healthcare workers worldwide suffer from HAIs every year. Among HAIs, surgical site infections (SSIs) are one of the most commonly reported HAIs, and wound infections remain an important cause of morbidity and mortality, accounting for approximately one-fifth of all HAIs.¹

According to Centers for Disease Control and Prevention (CDC), a surgical site infection is an infection that occurs after surgery in the part of the body where the surgery took place.² Surgical site infection (SSI) is defined by the center for disease control and prevention as a wound infection that occurs within 30 days of an operative procedure or within a year if an implant is left in place and the infection is thought to be secondary to surgery.³

Surgical interventions are a major challenge in both developing and developed countries due to the adverse events associated with them. Early treatment of SSIs is an essential step, which can otherwise be fatal for the patient. The main cause of this situation is that the hospital environment in different departments of our country does not meet the necessary requirements to curb the spread of bacterial strains. Multiple visitors to different hospitals are not prohibited, which increases the infection rate in the surgical field.⁴

Considering that the skin is commonly colonized by a variety of microorganisms that can cause infection, the description of SSIs includes consideration of the telltale signs and symptoms of infection as well as microbial facts. SSIs often affect external tissues; however, some serious infections spread to deeper tissues and other affected areas of the body during the procedure. Most SSIs occur within 30 days of surgery, and often occur between 5 and 10 days after surgery. However, when prosthetic implants are used, SSI effects on deep tissues can occur several months after the procedure. To avoid postoperative infections, antibiotics are primarily prescribed prophylactically, but increasing patterns of antibiotic resistance pose a major therapeutic challenge for physicians.⁴ Multifactorial risk associated with SSI. Patient-related factors include diabetes, obesity, anemia, immunosuppressants, corticosteroid use, and malnutrition. Other factors include duration of

surgery, poor postoperative glycemic control, extended postoperative hospital stay, duration of surgery, different types of surgery, preoperative hospital stay, and surgical technique used. Distant site infection, preoperative temperature, and presence of drains are also important factors in the course of SSI.⁴

However, SSIs can be avoided or reduced by several cost-effective strategies, such as: through skin preparation of the surgical site, surgical cleaning, feeding, preoperative bathing, antibiotics, hair removal, and mechanical preparation of the bowel. Basic safety measures and good hand hygiene during invasive surgery are simple and inexpensive, but staff training and monitoring systems are still necessary. As is well known, avoiding SSIs is key to implementing the ideas of patient safety and best care.⁵

Wound infections are a common cause of morbidity and mortality after major abdominal surgery. Infections can occur during emergency or elective surgery, range from superficial and subcutaneous to deep infections, and occur very early in the postoperative period or very late after the patient is discharged from the hospital. The incidence of SSIs in abdominal surgery is much higher than in other types of surgery. Several prospective studies have shown incidence rates of 15-25%, depending on the level of contamination.³

With increasing in rate of SSIs that can be fatal for patient which can be prevented with proper guidance before and after surgery need to be emphasized as nurses plays an integral part in hospital caring and guiding the patients in hospital. As it is one of the most common complications after surgery, most of it are reliant on nurses to help address the problem and resolve it. By assessing patient awareness and knowledge about the surgical site infection, deeper insights into existing patient perception and practices can be gained, thereby helping to identify attributes that influence the patients in adopting healthy practices and responsive behavior. Assessing patient's knowledge is also important in identifying gaps and strengthening the prevention efforts. Therefore, the present study was designed and conducted to evaluate the patient level of Knowledge and Self-care Practice regarding Surgical Site Infection in selected hospitals of Kamrup (M), Assam.

2. NEED OF THE STUDY

Surgical Site Infections (SSIs) pose a significant health burden for patients and medical staff, being the most common postoperative complication and causing pain and distress to patients. SSIs are preventable HAIs and can double hospital length of stay and increase healthcare costs. In addition, they incur indirect costs through lost productivity, patient dissatisfaction and litigation, and reduced quality of life.³

Despite recent technological advances in surgery and wound care, wound infections remain the most commonly recognized hospital-acquired infection, especially in patients undergoing surgery. SSIs are estimated to account for approximately 31% of all hospital-acquired infections and contribute to 20% of postoperative readmissions. SSI rates are widely reported to range from 2.5% to 41.9%. Patients with SSIs have a 2-11 times higher risk of mortality than those without SSIs.⁴

WORLD

According to Centers for Disease Control and Prevention (CDC) study on the prevalence of healthcare acquired infections (HAIs), there were an estimated 110,800 surgical site infections (SSIs) associated with inpatient surgery in 2015. Based on the 2022 HAI data results published in the NHSN's (National Health

Safety Network) HAI Progress Report, the SSI standardized infection rate (SIR) across all NHSN surgical procedure categories increased by approximately 4% compared to the previous year. Additionally, the 2022 HAI data showed a significant increase in SIR of 3% compared to the previous year compared to the NHSN Surgical Care Improvement Project (SCIP) surgical procedure category.⁶

A multi-center cross-sectional study was conducted, “To assess the awareness and knowledge of Postoperative Surgical Site Infections in Patients” on 2022 across the five regions of Saudi Arabia. A total of 375 patients were included. A 36-item questionnaire was used to obtain data regarding demographics, patient's health status, procedures, and hospitalization history and awareness and knowledge about SSIs. The study shows that 19%, 45.8% and 35.2% of the participants had good, fair and poor knowledge, respectively. The study concluded that a significant proportion of the patients included in this study had poor awareness and knowledge of SSIs.⁷

INDIA

A cross-sectional study was conducted, “To study the prevalence and risk factors of surgical site infections of patients at a tertiary care centre, Uttar Pradesh, India” on 2023 among 170 patients who underwent different types of surgeries. All surgically treated adult patients were older than 16 years old were included. Patients who received a second surgery at the same location for any reason, patients receiving immunosuppressant medication, people with immunodeficiency diseases, people currently taking antibiotics, and people with infections elsewhere were all disqualified from participating. The study reveals that the prevalence of SSIs during the study period was 8.2%. The study concludes that the abdominal surgeries were more likely to result in SSIs. After any type of surgery, patients who were male, with the age group of 30 years or above, had emergency surgery, had diabetes, and/or have had a lengthy hospital stay are more likely to develop SSIs.⁸

A cross-sectional study was conducted, “To assess the incidence and predictors of surgical site infection in major abdominal surgeries at a tertiary care center in Delhi” on 2023 among 626 patients who went under all major gastrointestinal surgeries. The study reveals that 42 (6.7%) patients developed SSIs. The study concluded that SSIs seem to be a common source of perioperative morbidity and mortality, leading to increased hospital stay and treatment cost. Proper planning and accordingly managing such case scenarios can lead to decreased incidence of SSIs and help reducing burden to the health system.⁹

A cross-sectional study was conducted, “To assess the surgical site infections and associated risk factors in general surgeries at a tertiary care hospital in Rajarajeswari Medical College and Hospital, Bangalore, India” on 2023 among 143 patients who underwent surgery in a single tertiary care centre. The study reveals that out of 25 different surgical procedures in 143 cases, four cases developed SSI due to *Escherichia coli* and *Staphylococcus aureus*. Diabetes, obesity, and smoking were the associated risk factors in these cases. The study concluded that prevention of SSI is complex and requires the integration of a range of preventive measures before, during, and after surgery.¹⁰

NORTH-EAST

A cross- sectional observational study was conducted, “To assess the incidence of surgical site infection in abdominal surgery in a tertiary care center, Jorhat Medical College and Hospital, Assam” on 2022 among a total of 150 patients. The study reveals that the overall incidence was 13.33% with increased incidence of SSI in male gender and showed increased incidence of SSI in 40-60 years age group. The study concluded that there is considerable potential for the reduction of morbidity and hospitalization cost, through introduction of well implemented infection control policies.¹¹

A cross-sectional study was conducted, “To assess the risk factors for surgical site infections after laparoscopic and open cholecystectomy in a tertiary care hospital in North East India” on 2022 among a total of 1507 patients. The study reveals that the overall rate of infection was 3.12% The study concluded that meticulous operative techniques avoiding bile spillage and blood loss during cholecystectomy may reduce the chances of developing SSI.¹²

3. OBJECTIVES OF THE STUDY

1. To assess the level of Knowledge regarding Surgical Site Infection among Post-operative patients in selected hospitals, Kamrup(M), Assam.
2. To assess the level of Self-care Practice regarding Surgical Site Infection among Post-operative patients in selected hospitals, Kamrup(M), Assam
3. To find out correlation between Knowledge and Self-care Practice regarding Surgical Site Infection among Post-operative patients in selected hospitals, Kamrup(M), Assam.
4. To find out association between Knowledge regarding Surgical Site Infection among Post-operative patients in selected hospitals with selected demographic variables.
5. To find out association between Self-care Practice regarding Surgical Site Infection among Post-operative patients in selected hospitals with selected demographic variables.

4. METHODS AND MATERIAL

A descriptive research design was used in the study to accomplish the objectives. Non- probability purposive sampling technique was used for obtaining sample for the study. Study was undertaken on 70 samples in setting of selected hospitals of Kamrup (M), Assam. Respondents were selected on the basis of inclusive and exclusive criteria. Self-structured Knowledge questionnaire and inventory checklist on SSI was used as a tool to assess the level of Knowledge and Self-care Practice.

5. DESCRIPTION OF TOOLS:

The tool used for the study consisted of three sections, it includes

Section-I: Demographic data:

Dealt with demographic variables which include age, gender, educational qualification, occupation, total family income per month, type of procedure performed and day of follow-up.

Section-II: Self-structured knowledge questionnaire on surgical site infection:

Dealt with the knowledge questionnaire was prepared and it consisted of 20 self-structure questions regarding surgical site infection. The question covered about basic knowledge, introduction, risk, sign and symptoms, preventive measures, complication, health care measures.

Section-III: Inventory Checklist:

Dealt with inventory checklist was used to assess the self-care practice of post-operative patients at home which the investigator couldn't observe directly. It comprised of 20 question and covered about basic practical knowledge and management to prevent from surgical site infection.

Scoring Key

Knowledge questionnaire: Each question had only one correct answer. For every correct response a score of one mark and for every incorrect response a score of zero was given, respectively. Hence, the maximum score was 20 and minimum score was zero. To interpret the level of knowledge, the scores were converted into percentage and were categorized as follows:

Adequate knowledge - >66% (>13 score)

Moderately adequate knowledge- 33-66% (13-6 score)

Inadequate knowledge - <33% (<6 score)

Inventory checklist for self-care practice: For every correct performance one mark and for incorrect performance zero mark was given, respectively. Hence, the maximum score on self-care practice was 20 and minimum score was zero, respectively. To interpret the level of self-care practice, the scores were converted into percentage and were categorized as follows:

Adequate practice- >66% (>13 score)

Moderately adequate practice- 33-66% (13-6 score)

Inadequate practice - <33% (<6 score)

6. DATA COLLECTION PROCEDURE

The data collection period was scheduled from 10th September to 3rd October. Prior to data collection, the ethical clearance was obtained from ethical committee INS trust, Dispur, Guwahati, Assam. A formal written permission was obtained from higher authority of Down Town Hospital, Cosmo Medical Hospital, GNRC and Health City Hospital to carry out the procedure. The investigator collected data from OPD as well as IPD patients and cover the four hospitals in each day based on the availability of participants who fulfilled the inclusion criteria. A brief self-introduction and the purpose of the study were explained to the sample prior to data collection and keeping in mind the ethical aspects of the research, the data was collected after obtaining informed written consent of the sample. The participants were assured anonymity and confidentiality of information provided by them. The participants were selected by using non-probability purposive sampling technique. The investigator distributed the self-structured knowledge questionnaire and inventory checklist for OPD patients for assessing their Knowledge and Self-care Practice regarding Surgical Site Infection which took 30-40 minutes in average. On the other hand, IPD patients were first distributed only self-structured knowledge questionnaire to assess their Knowledge and during their follow-up they were distributed inventory checklist for assessing their Self-care Practice regarding Surgical Site Infection and the follow-up of IPD patient was tracked by calling them in their phone number which was given by them through proper consent with the day of follow-up as advised by the physician. Around 5-6 samples were collected each day.

7. RESULT

SECTION-I

Frequency and percentage distribution of Post-operative patients according to their demographic characteristics.

Table 1: Frequency and percentage distribution of demographic variables of Post operative patients.

N = 70

Demographic Variables	Frequency (f)	Percentage (%)
Age (in years)		
18 – 28	10	14.3
29 – 39	25	35.7
40 – 50	21	30.0
51 – 60	14	20.0
Gender		
Male	32	45.7
Female	37	52.9
Transgender	1	1.4
Educational qualification		
No formal education	-	-

Demographic Variables	Frequency (f)	Percentage (%)
Primary education	5	7.1
Secondary education	10	14.3
Higher secondary education	18	25.7
Graduate and above	37	52.9
Occupation		
Student	3	4.3
Home maker/ housewife	19	27.1
Unemployed	2	2.9
Daily wager	4	5.7
Retired	2	2.9
Self- Employed/ business	9	12.9
Private employee	7	10.0
Govt. employee	24	34.3
Total family monthly income per month		
Rs 2,13,814 and above	9	12.9
Rs 1,06,850- Rs 2,13,813	12	17.1
Rs. 80,110- Rs 1,06,849	16	22.9
Rs 53,361 – Rs 80,109	19	27.1
Rs 31,978- Rs 53,360	8	11.4
Rs 10,703- Rs 31,977	6	8.6
≤ Rs 10,702	-	-
Days of following		
≤10 days	23	32.9
11 – 20 days	32	45.7
21 – 30 days	10	14.3
>30 days	5	7.1

The table 1 depicts that most of the Post-operative patients, 25(35.7%) were aged between 29 – 39 years, 37(52.9%) were female, 37(52.9%) were graduates and above, 24(34.3%) were govt. employees, 19(27.1%) had total family monthly income of Rs 53,361 – Rs 80,109 and 32(45.7%) were following for 11 – 20 days.

SECTION-II

Assessment of Knowledge of Post-operative patients regarding Surgical Site Infection.

Table 2: Frequency And percentage distribution of the level of Knowledge regarding Surgical Site Infection Among Post-operative patients.

N = 70

LEVEL OF KNOWLEDGE	FREQUENCY	PERCENTAGE (%)
Inadequate knowledge (<33%)	-	-
Moderately adequate knowledge (33– 66%)	39	55.7
Adequate knowledge (>66%)	31	44.3
Total	70	100%

The table 2 depicts the frequency and percentage distribution of the level of Knowledge regarding Surgical Site Infection among Post operative patients.

It shows that, 39(55.7%) had moderately adequate Knowledge and 31(44.3%) had adequate Knowledge regarding Surgical Site Infection among Post-operative patients.

SECTION III

Assessment of Self-care Practice of post operative patients regarding Surgical Site Infection.

Table 3: Frequency And percentage distribution of the level of Self-care Practice Regarding Surgical Site Infection Among Post-operative patients.

n = 70

Level Of Practice	Frequency	Percentage (%)
Inadequate practice (<33%)	-	-
Moderately adequate practice (33 – 66%)	15	21.4
Adequate practice (>66%)	55	78.6
Total	70	100%

The table 3 depicts that the frequency and percentage distribution of the level of Self-care Practice regarding Surgical Site Infection among Post-operative patients.

It shows that, 55(78.6%) had adequate practice and 15(21.5%) had moderately adequate Practice regarding Surgical Site Infection among Post-operative patients.

SECTION IV

Table 4: Correlation between Knowledge and Self-care Practice scores regarding surgical site infection among post operative patients.

N = 70

Variables	Mean	S.D	Karl Pearson's Correlation "r" and p- Value
Knowledge	12.68	2.55	r = 0.578 p=0.0001, S***
Self-care Practice	14.80	2.13	

***p<0.001, S – Significant

The table 4 depicts that the mean score of knowledge was 12.68±2.55 and the mean score of practice was 14.80±2.13. The calculated Karl Pearson's Correlation value of r=0.578 shows a fair positive correlation statistically significant at p<0.001 level. This clearly infers that the when the knowledge regarding surgical site infection among post operative patients increases or decreases then their practice towards it also increases or decreases, respectively.

SECTION V

Association between Knowledge regarding Surgical Site Infection among Post-operative patients in selected hospitals with selected demographic variables.

Table 5: Association of level of Knowledge regarding Surgical Site Infection among Post-operative patients with their selected demographic variables.

N = 70

Demographic Variables	Inadequate		Moderately Adequate		Adequate		Chi-Square p-value & Fisher Exact test p-value
	f	%	f	%	f	%	
Age (in years)							$\chi^2=1.339$ d.f=3 p=0.746 (N.S)
18 – 28	-	-	6	8.6	4	5.7	
29 – 39	-	-	14	20.0	11	15.7	
40 – 50	-	-	13	18.6	8	11.4	
51 – 60	-	-	6	8.6	8	11.4	
Gender							p=0.895 (N.S)
Male	-	-	17	24.3	15	21.4	
Female	-	-	22	31.4	16	22.9	
Transgender	-	-	-	-	-	-	p=0.098 (N.S)
Educational qualification							
No formal education	-	-	-	-	-	-	
Primary education	-	-	2	2.9	3	4.3	
Secondary education	-	-	9	12.9	1	1.4	
Higher secondary education	-	-	10	14.3	8	11.4	

Graduate and above	-	-	18	25.7	19	27.1	p=0.959 (N.S)
Occupation							
Student	-	-	-	2.9	1	1.4	
Home maker/ housewife	-	-	-	17.1	7	10.0	
Unemployed	-	-	-	1.4	1	1.4	
Daily wager	-	-	-	1.4	3	4.3	
Retired	-	-	1	1.4	1	1.4	
Self- Employed/ business	-	-	5	7.1	4	5.7	
Private employee	-	-	4	5.7	3	4.3	
Govt. employee	-	-	13	18.6	11	15.7	
Total family monthly income per month							p=0.716 (N.S)
Rs 2,13,814 and above	-	-	4	5.7	5	7.1	
Rs 1,06,850- Rs 2,13,813	-	-	5	7.1	7	10.0	
Rs. 80,110- Rs 1,06,849	-	-	10	14.3	6	8.6	
Rs 53,361 – Rs 80,109	-	-	11	15.7	8	11.4	
Rs 31,978- Rs 53,360	-	-	6	8.6	2	2.9	
Rs 10,703- Rs 31,977	-	-	3	4.3	3	4.3	
≤ Rs 10,702	-	-	-	-	-	-	p=0.338 (N.S)
Type of procedure performed							
Appendectomy	-	-	6	8.6	7	10.0	
Cholecystectomy	-	-	17	24.3	13	18.6	
Hernia repair	-	-	2	2.9	3	4.3	
Exploratory Laparotomy	-	-	7	10.0	1	1.4	
LSCS	-	-	5	7.1	6	8.6	
Liver transplant	-	-	1	1.4	-	-	
Renal transplant	-	-	-	-	1	1.4	
Hysterectomy	-	-	1	1.4	-	-	p=0.854 (N.S)
Day of follow-up							
≤10 days	-	-	14	20.0	9	12.9	
11 – 20 days	-	-	15	21.4	17	24.3	
21 – 30 days	-	-	7	10.0	3	4.3	
>30 days	-	-	3	4.3	2	2.9	

N.S – Not Significant, $p > 0.05$

The table 5 depicts that the level of Knowledge regarding Surgical Site Infection among Post-operative patients with their selected demographic variables. It was observed that the demographic variables did not show statistically significant association with level of Knowledge regarding Surgical Site Infection among Post operative patients at $p < 0.05$ level.

SECTION VI

Association between Self-care Practice regarding Surgical Site Infection among Post-operative patients in selected hospitals with selected demographic variables.

Table 6: Association of level of Self-care practice regarding Surgical Site Infection among Post-operative patients with their selected demographic variables.

N = 70

Demographic Variables	Inadequate		Moderately adequate		Adequate		Fisher Exact test p-value
	f	%	f	%	f	%	
Age (in years)							p=0.333 (N.S)
18 – 28	-	-	1	1.4	9	12.9	
29 – 39	-	-	7	10.0	18	25.7	
40 – 50	-	-	6	8.6	15	21.4	
51 – 60	-	-	1	1.4	13	18.6	
Gender							p=0.820 (N.S)
Male	-	-	6	8.6	26	37.1	
Female	-	-	9	12.9	29	41.4	
Transgender	-	-	-	-	-	-	
Educational qualification							p=0.878 (N.S)
No formal education	-	-	-	-	-	-	
Primary education	-	-	1	1.4	4	5.7	
Secondary education	-	-	3	4.3	7	10.0	
Higher secondary education	-	-	4	5.7	14	20.0	
Graduate and above	-	-	7	10.0	30	42.9	
Occupation							p=0.844 (N.S)
Student	-	-	-	-	3	4.3	
Home maker/ housewife	-	-	4	5.7	15	21.4	
Unemployed	-	-	-	-	2	2.9	
Daily wager	-	-	-	-	4	5.7	
Retired	-	-	-	-	2	2.9	
Self- Employed/ business	-	-	2	2.9	7	10.0	
Private employee	-	-	3	4.3	4	5.7	
Govt. employee	-	-	6	8.6	18	25.7	
Total family monthly income per month							p=0.971 (N.S)
Rs 2,13,814 and above	-	-	2	2.9	7	10.0	
Rs 1,06,850- Rs 2,13,813	-	-	2	2.9	10	14.3	
Rs. 80,110- Rs 1,06,849	-	-	3	4.3	13	18.6	
Rs 53,361 – Rs 80,109	-	-	4	5.7	15	21.4	
Rs 31,978- Rs 53,360	-	-	2	2.9	6	8.6	
Rs 10,703- Rs 31,977	-	-	2	2.9	4	5.7	
≤ Rs 10,702	-	-	-	-	-	-	

Demographic Variables	Inadequate		Moderately adequate		Adequate		Fisher Exact test p-value
	f	%	f	%	f	%	
Type of procedure performed							p=0.381 (N.S)
Appendectomy	-	-	1	1.4	12	17.1	
Cholecystectomy	-	-	9	12.9	21	30.0	
Hernia repair	-	-	2	2.9	3	4.3	
Exploratory Laparotomy	-	-	-	-	8	11.4	
LSCS	-	-	3	4.3	8	11.4	
Liver transplant	-	-	-	-	1	1.4	
Renal transplant	-	-	-	-	1	1.4	
Hysterectomy	-	-	-	-	1	1.4	
Day of following							p=0.207 (N.S)
≤10 days	-	-	6	8.6	17	24.3	
11 – 20 days	-	-	7	10.0	25	35.7	
21 – 30 days	-	-	-	-	10	14.3	
>30 days	-	-	2	2.9	3	4.3	

N.S – Not Significant, $p>0.05$

The table 6 denoted the level of Self-care Practice regarding Surgical Site Infection among Post-operative patients with their selected demographic variables. It was observed that the demographic variables did not show statistically significant association with level of Self-care Practice regarding Surgical Site Infection among Post-operative patients at $p<0.05$ level.

CONCLUSION

Based on the analysis of the findings of the study, the following inferences were drawn:

Out of 70 respondents, majority of the Post-operative patients i.e, 25(35.7%) belongs to the age group of 29-39 years, 38(54.3%) were female, 37(52.9%) were graduate and above, 24(34.3%) were govt. employee, 19(27.1%) were earning between Rs 53,361- Rs 80,109, 30 (42.9%) had done cholecystectomy, 32(45.7%) followed up between 11-20 days. The study shows that, 39(55.7%) had moderately adequate Knowledge and 31(44.3%) had adequate Knowledge regarding Surgical Site Infection among Post operative patients. The study also shows that, 55(78.6%) had adequate Practice and 15(21.5%) had moderately adequate Practice regarding Surgical Site Infection among Post operative patients. The correlation analysis depicted that the mean score of Knowledge was 12.68 ± 2.55 and the mean score of Self-care practice was 14.80 ± 2.13 . The calculated Karl Pearson's Correlation value of $r=0.578$ shows a fair positive correlation statistically significant at $p<0.001$ level. In the association, it was observed that the none of the demographic variables show statistically significant association with the level of Knowledge and Self-care Practice regarding Surgical Site Infection among the Post-operative patients with their selected demographic variables at $p<0.05$ level.

RECOMMENDATIONS

The present study recommends the following:

1. A similar study can be replicated using larger sample for generalization.
2. A similar study can be replicated in different settings.
3. A study can be conducted on Knowledge and attitude regarding Surgical Site Infection among Post-operative patients.
4. A study can be done to evaluate the Knowledge and Practice regarding Surgical Site Infection among staff nurses.

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