



MORBIDITY PATTERNS AMONG ELDERLY PATIENTS VERSUS ADULT PATIENTS UNDERGOING ABDOMINAL SURGERY AT MKCGMCH, BERHAMPUR, ODISHA

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ABSTRACT

Increased morbidity pattern due to post-operative complications contributes significantly to increase in health care costs in terms of prolonged hospital stay and lost working days. It is cited that efficient Nursing care can reduce the incidence of complications following abdominal surgery. The management of post-operative complications after abdominal surgery is associated with high morbidity and mortality. Improving surgical quality of care requires reporting of post operative complications. Post operative complications represent a vital concern for surgeons and nurses. In order to accomplish the objectives non-experimental descriptive approach, and non-experimental comparative survey design and non-probability convenience sampling techniques were adopted in this study. Observation schedule, interview schedule and documents schedules were the tools for collection of data. After analysis, the present piece of study reveals that elderly patients (50-89 years of age) have more surgical complications than adult (20-49 years of age) patients. Factors like addiction to smoking, alcohol, tobacco and co-morbid conditions have significant effect on the morbidity pattern of patients.

Keywords: Morbidity pattern, Adult, Elderly, Abdominal surgery, Health concern, Patients.

AUTHOR'S PROFILE:



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INTRODUCTION

Immediate post-operative period is the crucial period when numerous physiological and pharmacologic changes occur due to surgical trauma and anaesthesia. There are a number of issues which must be addressed in the post operative period to optimise recovery.¹ The Nurse maintains the key position for caring the post-operative patients. They should have proper knowledge regarding the complications that occur after abdominal surgery which enhances the morbidity patterns of the patients.²

The changes in aging are genetically programmed.³The progressive functional inadequacy of physiological systems vary from individual to individual. Many retrospective and prospective studies have shown that age alone is not a contra indication to most surgical procedures when adequate attention is paid to perioperative care.⁴ In some studies it is cited that good perioperative care significantly improves the outcome. The specific designed peri-operative care can minimise the incidence and severity of complications.⁵

Studies on the result of surgical treatment for gastric cancer in elderly patients reported that prolonged operation times and excessive blood loss has close relationships with post-operative complications in elderly patients.⁸

A study conducted among a purposive sample of 100 post-operative cases at different surgery wards of MKCG MCH reported that the incidence of post operative wound infections was 21%. Factors like higher age, pre-existing comorbidity of patients and length of hospital stay were found to have a positive association with post-operative wound infection.¹³

Lewis et al cited that myths and stereotypes about aging provide the basis of commonly held misconceptions that may lead to errors in assessment and unnecessary limitations to interventions. When doing the assessment, it is important to consider the diversities that accumulated in different ages.⁶Age is important but may not be the only relevant factor for higher morbidity. Rather meticulous surgical techniques, proper sterilisation, judicious use of antibiotics and control of underlying conditions like diabetes and under nutrition help in reducing the incidence of post-operative wound infection.¹³

METHODOLOGY

The present study adopted a quantitative, non-experimental comparative research design to assess and compare morbidity patterns among adult and elderly patients undergoing abdominal surgery. The study was conducted in the General Surgery and Obstetrics & Gynaecology departments of MKCG Medical College and Hospital (MCH), Berhampur, Odisha.

A total sample of 100 post-operative patients was selected using a purposive sampling technique, comprising 50 adult patients aged 20–49 years and 50 elderly patients aged 50–89 years. Patients who had undergone abdominal surgery, were willing to participate, were available during the data collection period, and were able to read and understand Odia or English were included in the study.

Data collection tools consisted of a demographic profile proforma and a patient observation checklist, developed after an extensive review of literature and consultation with subject experts. Ethical clearance was obtained from the Research Committee of the College of Nursing, Berhampur, prior to data collection. The collected data were analysed using descriptive and inferential statistics, and findings were interpreted to identify differences in morbidity patterns between the two groups.

Table 1: Distribution of Patients According to Age Group

Age Group (Years)	Adult (n=50)	Elderly (n=50)	Total (n=100)
20–29	Included	–	–
30–39	Included	–	–
40–49	Included	–	–
50–59	–	Included	–
60–69	–	Included	–
70–79	–	Included	–
80–89	–	Included	–



RESULTS AND DISCUSSION

Analysis of socio-demographic data revealed that the majority of patients in both adult and elderly groups were male and belonged to the General Surgery department. Among female patients, representation was nearly equal between adult and elderly groups, with a proportion coming from the Obstetrics & Gynaecology department.

The findings of the study indicated a marked difference in post-operative morbidity patterns between adult and elderly patients. Post-operative complications were observed in 14% of adult patients, whereas a significantly higher proportion, 50% of elderly patients, developed post-operative complications. This clearly demonstrates that morbidity increases with advancing age.

Age-wise analysis further showed that complications were most prevalent among patients aged 60–69 years, while the lowest incidence was observed in the 30–39 years age group. Although several previous studies have reported that age alone may not be an independent risk factor for post-operative complications, the present study highlights that elderly patients are more vulnerable, particularly when associated risk factors are present. Gender-wise comparison revealed that male patients experienced a higher incidence of post-operative complications compared to females. This finding may be attributed to higher exposure to risk factors such as smoking, alcohol consumption, and associated co-morbidities among males.

With regard to the type of complications, wound infection emerged as the most common post-operative complication, followed by pulmonary infection, post-operative pyrexia, septicaemia, urinary tract infection, paralytic ileus, shock, and peritonitis. A majority of patients, however, did not develop any complications, indicating the effectiveness of peri-operative care in many cases.

The study also established a significant association between addictive habits and post-operative morbidity. Patients with a history of smoking, alcohol consumption, or tobacco chewing exhibited a higher incidence of complications compared to non-addicted patients. Similarly, the presence of co-morbid conditions such as hypertension, diabetes mellitus, and malignancy significantly increased the risk of post-operative complications.

Other variables, including educational status, family type, type of anaesthesia, duration of surgery, and type of surgical procedure, did not show a significant relationship with post-operative morbidity. These findings support earlier studies emphasizing that co-morbid conditions and lifestyle factors, rather than age alone, play a crucial role in determining post-operative outcomes.

Table 2: Distribution of Patients by Gender

Gender	Adult (n=50)	Elderly (n=50)	Total (n=100)
Male	33 (66%)	32 (64%)	65 (65%)
Female	17 (34%)	18 (36%)	35 (35%)

Table 3: Comparison of Post-operative Complications Among Adult and Elderly Patients

Group	Patients with Complications	Patients without Complications
Adult (20–49 yrs)	7 (14%)	43 (86%)
Elderly (50–89 yrs)	25 (50%)	25 (50%)

Table 4: Types of Post-operative Complications (n = 32)

Type of Complication	Number	Percentage (%)
Wound infection	14	14%
Pulmonary infection	5	5%
Post-operative pyrexia	4	4%
Urinary tract infection	4	4%
Septicaemia	2	2%
Peritonitis	1	1%
Shock	1	1%
Paralytic ileus	1	1%
No complications	68	68%



Table 5: Association Between Addictive Habits and Post-operative Complications

Addiction Status	Total Patients	Patients with Complications	Percentage (%)
Smoking	–	–	30.88%
Alcohol	–	2	14.28%
Tobacco chewing	–	3	15.78%
No addiction	–	–	Lower

Table 6: Association Between Co-morbid Conditions and Post-operative Complications

Co-morbid Condition	Total Patients	Patients with Complications	Percentage (%)
Present	–	10	58.82%
Absent	–	–	30.12%

CONCLUSION

By comparing the morbidity pattern of adult patients with that of elderly patients, it is concluded that there is a significant difference between morbidity patterns of two groups. Elderly patients had high morbidity pattern. Practice of good preoperative care of surgical patients as well as post operative care of surgical Patients, can be designed by the nurses to minimise the incidence and severity of complications. Nurses can take extraordinary precautions to prevent any form of complications occurring in abdominal surgeries. Being in the key position of caring for post-operative patients, nurses should have proper knowledge regarding the post-operative complications. It has been recorded that advances in pre-operative and post-operative care have significantly improved the outcome. To provide high quality of care, we have to grow in our knowledge and skills and should be the agent of change. This study brings to light that although inevitable, age is not the only factor responsible for post-operative complications, rather there are various risk factors which are responsible for post-operative complications.

Conflict of Interest: The Author declares to have NO conflict of interest.

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