Original Article

Distribution of cases and outcome at surgery inpatient department of a tertiary care hospital

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Abstract

Introduction: Surgery is at the end of the spectrum of the classic curative medical model and, as such, has not been routinely considered as part of the traditional public health model. However, no matter how successful prevention strategies are, surgical conditions will always account for a significant portion of a population's disease burden, particularly in developing countries where conservative treatment is not readily available, where the incidence of trauma and obstetrical complications is high, and where there is a huge backlog of untreated surgical diseases. **Aims and Objectives:** To study Distribution of Cases and Outcome at Surgery Inpatient Department of a Tertiary Care Hospital **Methodology:** This was a Hospital Based, Cross-sectional study at Tertiary care hospital during the year Jan 2013 to Jan 2014, during one year period. All the patients admitted to Surgical ward irrespective of surgery or not during one year period was noted. Total 1095 were found admitted to ward during this year. All the necessary data was collected using, pretested, semi-structured questionnaire. **Result:** Most common age of the patients were 51-60 (34.70%) followed by 41-50 (26.48%); 31-40 (14.61%); 21-30(13.70%); 11-20 (6.39%);<10 (4.10%). Majority of the patients were Male (60.00%) and Female (40.00%). Most common surgical condition found was Hernia and Hydroceles (18.35%)Followed by Appendicitis (13.15%), Burn (9.58%), Head Injury (8.40%), Gangrene of Foot (7.67%) ,Intestinal Obstruction (6.39%), Diabetic Foot Ulcer (6.02%), Acute Cholecystitis (5.93%), Ureteric Calculus (5.38%), Thyroid Nodule (4.47%), Benign Breast Lump (4.20%), Blunt injury to Abdomen (3.47%),Perforating injury (2.37%), Ca –Breast (1.18%), Ca-Caecum (0.82%), Ca-Thyroid (0.73%) Ca-Rectum (0.63%), Ca-Penis (0.54%), Seminoma (0.45%).Overall the 71.96% Improved at The time of Discharge and 21.91% patients was completely recovered 5.29% patients has taken Discharge against Medical Advice and in 0.82% patient death has occurred. **Conclusion:** With increasing age the surgical conditions have become more prevalent, Overall mortality observed in our study in surgical patients to be 0.82% while; 71.96% patients Improved at The time of Discharge and 21.91% patients was completely recovered 5.29% patients has taken Discharge against Medical Advice.

Keywords: Surgery Inpatient Department, Outcome of Surgeries.

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INTRODUCTION

Surgery is at the end of the spectrum of the classic curative medical model and, as such, has not been routinely considered as part of the traditional public health model. However, no matter how successful prevention strategies are, surgical conditions will always account for a significant portion of a population's disease burden, particularly in developing countries where conservative treatment is not readily available, where the incidence of trauma and obstetrical complications is high, and where there is a huge backlog of untreated surgical diseases[1]. Surgery is performed in every community: wealthy and poor, rural and urban. Although surgical care can prevent loss of life orlimb, it is also associated with a considerable risk of complications and death.[1] Surgical care is an integral part of health care throughout the world, with an estimated 234 million operations performed annually.[2] Mortality is an inevitable complication of surgery. Among the sick, mortality could be due to medical or surgical reasons; medical or surgical errors; delay in treatment and error in judgment; limited hospital resources and poor infrastruc-tures on the ground. Audit of pattern of mortality entailsa systematic, critical analysis of the quality of care, including the procedures used for diagnosis and treatment, the use of resources, and the resulting outcome and quality of life for the patient. The quality of care could be improved through audit or surveillance. Studies from various parts

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of the world on surgical mortality[3,4] A head injury has been mentioned as the most common injury condition leading to death[1]. A significant proportion of the population has undergone one or the other forms of surgical procedures at one or moreoints in the life time of an individual. Surgery has becomean integral part of global health care, with an estimated 234 million operations performed yearly. The World Bank in2002 reported that an estimated 164 million disability-adjusted life years, representing 11% of the entire disease burden were attributable to surgically treatable conditions[6]. Lifetime prevalence of emergency surgeries following accidents was found to be 3.75%prevalence of cholecystectomy was found to be 6.6%. In a study done by Kennedy et al in London in2002, the prevalence was 5.4%,[7] Recognizing the importance of high prevalence of surgeries, W.H.O has recently launched efforts to initiate programmes for safe surgeries especially in developing countries[8]. It is estimated that the global volume of major surgery in 2004 was between 187·2 million and 281·2 million cases per year. This result translates into about one operation for every 25 human beings, which has substantial implications for public-health planning. It exceeds by nearly double the yearly volume of childbirth- an estimated 136 million births occurred in 2006[9] and is probably an order of magnitude more dangerous.[10,11]Although death and complication rates after surgery are difficult to compare since the range of cases is so diverse, major morbidity complicates 3–16% of all inpatient surgical procedures in developed countries, with permanent disability or death rates of about 0·4–0·8%.[10,12] Nearly half of the adverse events in these studies were identified as preventable. In developing countries, studies suggest a death rate of 5–10% for major surgery.[13,14].

AIMS AND OBJECTIVES

To study Distribution of Cases and Outcome at Surgery Inpatient Department of a Tertiary Care Hospital

MATERIAL AND METHODS

This was a Hospital Based, Cross-sectional study at Tertiary care hospital during the year Jan 2013 to Jan 2014, during one year period. All the patients admitted to surgical ward irrespective of surgery or not during one year period was noted. Total 1095 were found admitted to ward during this year. All the necessary data was collected using, pretested, semi-structured questionnaire**.**

RESULT

Table 1: Age wise Distribution of the Surgery patients

Age group	No. (%)
<10	45 (4.10%)
11-20	70(6.39%)
21-30	150(13.70%)
31-40	160(14.61%)
41-50	290 (26.48%)
51-60	380(34.70%)
Total	**1095(100%)**

Most common age of the patients were 51-60 (34.70%) followed by 41-50 (26.48%); 31-40 (14.61%); 21-30(13.70%); 11-20(6.39%);<10(4.10%).

Table 2: Sex Wise distribution of the Surgery patients

Sex	No (%)
Male	657 (60.00%)
Female	438(40.00%)
Total	**1095(100%)**

Majority of the patients were Male (60.00%) and Female (40.00%)

Table 3: Distribution of the Patients as per Surgical Condition

Sr. No	Surgical Condition	No	Percentage
1	Hernia and Hydroceles	201	18.35%
2	Appendicitis	144	13.15%
3	Burn	105	9.58%
4	Head Injury	92	8.40%
5	Gangrene of Foot	84	7.67%
6	Intestinal Obstruction	70	6.39%
7	Diabetic Foot Ulcer	66	6.02%
8	Acute Cholecystitis	65	5.93%
9	Ureteric Calculus	59	5.38%
10	Thyroid Nodule	49	4.47%
11	Benign Breast Lump	46	4.20%
12	Blunt injury to Abdomen	38	3.47%
13	Perforating injury	26	2.37%
14	Ca –Breast	13	1.18%
15	Ca-Caecum	9	0.82%
16	Ca-Thyroid	8	0.73%
17	Ca-Rectum	7	0.63%
18	Ca-Penis	6	0.54%
19	Seminoma	5	0.45%
20	Teratoma of Testis	2	0.27%
	Total	**1059**	**100%**

Most common surgical condition found was Hernia and Hydroceles (18.35%) Followed by Appendicitis (13.15%), Burn (9.58%), Head Injury (8.40%), Gangrene of Foot (7.67%), Intestinal Obstruction (6.39%), Diabetic Foot Ulcer (6.02%), Acute Cholecystitis (5.93%), Ureteric Calculus (5.38%),Thyroid Nodule (4.47%),Benign Breast Lump (4.20%),Blunt injury to Abdomen (3.47%),Perforating injury (2.37%),Ca –Breast (1.18%), Ca-Caecum(0.82%),Ca-Thyroid (0.73%)Ca-Rectum (0.63%),Ca-Penis (0.54%), Seminoma (0.45%).

Table 4: Distribution of the Patients as per the Outcome

Outcome	No	Percentage
Improved	788	71.96%
Recovered	240	21.91%
Discharge against Medical Advise	58	5.29%
Death	9	0.82%
Total	**1095**	**(100%)**

Overall the 71.96% Improved at The time of Discharge and21.91% patients was completely recovered 5.29% patients has taken Discharge against Medical Advice and in 0.82% patient death has occurred.

DISCUSSION

In our study we have found that Most common age of the patients were 51-60 (34.70%) followed by 41-50 (26.48%); 31-40 (14.61%); 21-30 (13.70%); 11-20 (6.39%);<10 (4.10%). Majority of the patients were Male (60.00%) and Female (40.00%). It is clear that as age increases the surgical problems are increasing it could because of the fact that as age increase the surgical condition like Hernia Hydrocele, gangrene of foot; which are the most prevalent surgical conditions so naturally the surgical problems are more common in old age also males were more than females this could be because of the fact that most of the female surgical conditions are referred to Gynecology department. These findings in Confirmative with Sanjay K et al[15]. Most common surgical condition found was Hernia and Hydroceles (18.35%) Followed by Appendicitis (13.15%), Burn (9.58%), Head Injury (8.40%), Gangrene of Foot (7.67%), Intestinal Obstruction (6.39%), Diabetic Foot Ulcer (6.02%), Acute Cholecystitis (5.93%), Ureteric Calculus (5.38%), Thyroid Nodule (4.47%), Benign Breast Lump (4.20%), Blunt injury to Abdomen (3.47%), Perforating injury (2.37%), Ca –Breast (1.18%), Ca-Caecum (0.82%), Ca-Thyroid (0.73%) Ca-Rectum (0.63%), Ca-Penis (0.54%), Seminoma (0.45%). These findings are in confirmative with Sanjay K et al[15], Thomas G Weiser[16]. Overall the 71.96% Improved at The time of Discharge and 21.91% patients was completely recovered 5.29% patients has taken Discharge against Medical Advice and in 0.82% patient death has occurred it is in confirmative with Thomas G Weiser[16] they observed In developing countries, studies suggest a death rate of 5–10% for major surgery.

CONCLUSION

With increasing age the surgical conditions have become more prevalent, Overall mortality observed in our study in surgical patients to be 0.82% while; 71.96% patients Improved at The time of Discharge and 21.91% patients was completely recovered 5.29% patients has taken Discharge against Medical Advice.

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