

## Original Article

# Morbidity Pattern of Patients Admitted in Surgical Ward at a District Hospital in Northern Rajasthan: A Record Review

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### ABSTRACT:

**Background:** Mortality and morbidity are two basic aspects generally used to measure the health status of a population. Normally, mortality indicators like infant mortality, life expectancy etc., which are more comprehensively correlated to the definition of health are used to measure health status. Unlike mortality, morbidity is a subjective phenomenon that is expected to describe the suffering due to various disabilities and illnesses in a population. Morbidity 'a state of ill health' has been increasingly considered as measurable with a potential for replacing mortality rates as indices of social and personal well-being.

**Methods:** A record review for a period of six months was conducted in Govt D. B. Hospital, Churu from January 2018 to June 2018.

**Results:** Maximum patients admitted in the surgical ward were between the age 19 and 30 years followed by between 31 and 40 years of age. The mean age was 38.9±19.30 years. Surgical admission was more for males and less for the females. Maximum patients were from Churu district and only 15% were from the nearby districts. **Conclusion:** Abdominal pain was the most common illness found in the study. But this is a symptom and not a diagnosis per se. Further studies to reveal the environmental condition favorable for urinary system stone is necessary to confirm the said finding.

**Keywords:** Morbidity, Abdominal Pain, Surgical wards, DALY

### Introduction:

Morbidity pattern helps to understand the prevalence of certain diseases in a particular area. It further can provide a clue regarding any specific diseases pattern or seasonality. Sometimes it is possible to find a local public health problem that can be prevented by very simple measures. Surgical care is an integral part of health care throughout the world, with 234.2 million operations performed every year. (1) Surgery is performed everywhere among wealthy and poor, rural and urban and in all regions. The World Bank reported in 2002 that 164 Disability Adjusted Life Years (DALY) representing 11% of entire disease burden, were attributable to surgically treatable conditions. (2) Timely surgical care can prevent death or loss of any body organ but complications are also very common before or after a surgical procedure. These perioperative complications are more prevalent among developing countries and represent a substantial burden of disease worthy of attention from the public health community worldwide. (3) Very few studies are available on surgical burden of diseases in the community so that only little information is available about the prevention of surgical illnesses.

**Objectives:** The present study was done to find out most common surgical illness for that patients were admitted in surgical wards.

**Material and methods:** A record review for a period of six months was conducted in Govt D. B. Hospital, Churu from January 2018 to June 2018. Govt D.B. Hospital Churu is a 300 bedded hospital and attached to Govt. Medical College, Churu. First time data entry was made as per the MCI guidelines and we used this opportunity to find out most common surgical illness in the catering area of the medical college. Official permission was taken from the appropriate authority to use the data. Only the data of patients admitted in the general surgical wards were included in the study and data of other surgical fields were excluded. Diagnoses were categorized in to different categories as per the anatomical regions.

**Results:**

Table1 Demographic profile of patients admitted in surgical wards

Age groups	Frequency	Percentage
≤18	142	15.50%
19-30	239	26.09%
31-40	163	17.79%
41-50	118	12.88%
51-60	103	11.24%
61-70	113	12.24%
>70	38	4.15%
<b>Sex</b>		
Male	510	55.67%
Female	406	44.32%
<b>Residence</b>		
Churu	781	85.26%
Outside Churu	135	14.73%

Table 1 shows that maximum patients admitted in the surgical ward were between the age 19 and 30 years followed by between 31 and 40 years of age. The mean age was 38.9±19.30 years and the minimum age of admission was 3 years and maximum was 92 years. Surgical admission was more for males and less for the females. Maximum patients were from Churu district and only 15% were from the nearby districts.

Table2. Distribution of diagnosis as per the anatomical regions:

Sn	Anatomical regions	Male	Female	Total	P value	Percentage
1	Head and Neck (Goitre, Parotid, Infected Lymph node, Cyst)	16	12	28		3.05%
2	Chest and Breast (Breast swelling, Pleural effusion, pulmonary metastasis)	50	37	87		9.5%
3	Abdomen (Acute abdomen, Obstruction, perforation, gallbladder calculus, chronic constipation)	212	170	382		41.7%
4	Urinary System (Kidney and Ureter stones, Bladder stone, urinary obstruction, BPH, Hydrocele)	96	64	160		17.5%
5	Extremities (Ganglion, Chronic non-healing ulcers, Diabetic ulcer, Varicose veins)	27	21	48		5.2%
6	Soft Tissues (Lipomas, Intra-dermal lesions, Cysts, Abscess)	65	72	137		15%
7	Others (Hernias and other tumors)	44	30	74		8.05%
	Total	510	406	916		100%

Table 2 shows that maximum patients were having surgical illness in the abdomen followed by urinary system.

**Discussion:**

In present study maximum patients were young and similar results were obtained by O Afuwape et al in his study (4) This could be due to the fact that young patients tend to report early to the hospital as compared to old patients as older patients need someone else to take them to the health care facilities. In present study males are more as compared to females and this is in contrary to a study done by O Afuwape et al. (4) This may be attributed to the fact that Gynecological surgical conditions were not included in the study. In present study maximum patients were having surgical illness related to abdomen. Maximum patients were of Pain abdomen (202) which is not a diagnosis but a symptom. Diagnosis may not have been made in the surgical ward as the patients would have left the hospital

due to relief in pain and may not have completed the investigations to reach a proper diagnosis. No significant difference was found between male and female regarding abdomen related surgical illness. In urinary system related surgical illness maximum patients were of stones (kidney, ureter and bladder). Drinking water in Churu district is deficient in alkalinity. (5) A study by Caudarella R, Vescini F found that alkali treatment is preventive for nephrolithiasis. (6) It might be possible that alkali deficiency in drinking water is one of the causes for kidney and ureteric stones at churu district.

**Conclusion:**

Abdominal pain was the most common illness found in the study. But this is a symptom and not a diagnosis per se. Kidney and Ureteric stone along with other abdominal conditions would have caused this symptom. Further studies to reveal the environmental condition favorable for urinary system stone is necessary to confirm the said finding.

**Relevance of the study:**

Knowledge of locally prevalent diseases is required in planning manpower training, Planning Curriculum for undergraduate level and maximum utilization of available resources.

**Limitations:**

We have not included OPD data in the analysis. It would have given us a better position to identify most prevalent surgical illness.

**References:**

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