

ORIGINAL RESEARCH**Analysis of Surgical Disease Prevalence and Impact on Outpatient Services at a Tertiary Hospital in Eastern UP**¹Dr. Azhar Ahsan Jafri, ²Dr. Rajesh Kumar, ³Dr. Nancy Parul¹Associate Professor, ^{2,3}Assistant Professor, Department of General Surgery, UNS Autonomos State Medical College, Jaunpur, Uttar Pradesh, India**Corresponding Author**

Dr. Nancy Parul

Assistant Professor, Department of General Surgery, UNS Autonomos State Medical College, Jaunpur, Uttar Pradesh, India

Email: parul.n11@gmail.com

Received: 13 February, 2023

Accepted: 16 March, 2023

ABSTRACT

This paper analyses the prevalence of surgical diseases and their impact on outpatient services at a tertiary care hospital in Eastern Uttar Pradesh, India. Data was collected from the hospital's electronic medical records of all patients who visited the outpatient department with surgical diseases between January 2020 and December 2020. The study found that appendicitis, hernia, and gallbladder stones were the most common surgical diseases, and that the majority of patients were male and between the ages of 30 and 50 years. The high prevalence of surgical diseases led to long waiting times and high patient volumes, creating challenges for the hospital's staff and resources. The paper highlights the need for increased awareness and access to healthcare services in the region, including initiatives to improve hygiene and sanitation, outreach programs to educate the public about surgical disease prevention, and efforts to increase the availability of surgical services.

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

INTRODUCTION

Surgical diseases are a major concern as public health conditions worldwide. In developing countries like India, the burden of surgical diseases is particularly high. Surgical diseases can range from minor conditions like abscesses, soft tissue swellings, appendicitis to complex conditions like cancer and they can have a significant impact on patient health and quality of life. Inadequate access to healthcare services, poor hygiene, and a lack of awareness are some of the major factors contributing to the high prevalence of surgical diseases in developing countries. This study aims to analyse the prevalence of surgical diseases and their impact on outpatient services at a tertiary care hospital in Eastern Uttar Pradesh, India.

METHODS

This study was conducted at UNS Autonomos Medical College Hospital Jaunpur a populous district

of Eastern Uttar Pradesh, India. Data was collected from January 2022 to December 2022. We collected data from the hospital's medical records of all patients who visited the outpatient department with surgical conditions during the study period. We analysed the data to determine the prevalence of surgical diseases and their impact on outpatient services. We also analysed the data to identify demographic trends among patients with surgical diseases, including age, gender and economic status.

RESULTS

During the study period, a total of 23,400 patients visited the hospital's outpatient department with surgical diseases. The most common surgical diseases were hernia (25%), hydrocele (20%), gallbladder stones (15%) and appendicitis (12%). Other common surgical conditions included haemorrhoids, varicose veins, breast lumps, lipoma and other soft tissue swellings.

Name of Disease	No. of Patients (Percentage)
Hernias (Inguinal, Incisional and others)	5850 (25%)
Hydrocele	4680 (20%)

Cholelithiasis	3510 (15%)
Lipoma and other Soft Tissue Swelling	3042 (13%)
Appendicitis	2808 (12%)
Haemorrhoid and Anal Fissure and Fistula	1638 (7%)
Misc. (Peripheral Arterial Diseases, Diabetic Foot, Varicose vein etc)	1872 (8%)

The majority of patients were male (60%) and between the ages of 30 and 50 years (40%). Remaining patients 39.5% were females and 0.5% were transgender.

Gender of Patient	No. of Patints
Male	14040 (60%)
Female	9243 (39.5%)
Transgender	117 (0.5%)

Age of Patients	No. of Patients
Less than 30 yrs	6552 (28%)
30-50 yrs	9360 (40%)
More than 50 yrs	7488 (32%)

The majority of patients belonged to middle- or lower-income group (68%). High income group included 24% patients. 8% patients didn't want to show their socioeconomic group.

Socioeconomic Group	No. of Patients
High Income Group	5616 (24%)
Middle- or Low-Income Group	15912 (68%)
Anonymous	1872 (8%)

The average waiting time for consultation was 1/2 hours and the average consultation time was 12 minutes.

In terms of impact on outpatient services, surgical diseases accounted for a significant proportion of the hospital's outpatient workload. The high prevalence of surgical diseases led to long waiting times and high patient volumes, which created challenges for the hospital's staff and resources. Additionally, surgical diseases often required follow-up consultations, which further increased the hospital's outpatient workload.

DISCUSSION

The high prevalence of surgical diseases in districts like Jaunpur, in Eastern Uttar Pradesh, India, is likely due to a combination of factors, including poor hygiene, inadequate access to healthcare services, and a lack of awareness about preventive measures. Surgical diseases can have a significant impact on patient health and quality of life, and they often require costly and complex treatments. In developing countries like India, where healthcare resources are limited, the burden of surgical diseases can have a significant impact on healthcare systems.

To address the challenges posed by surgical diseases in Eastern Uttar Pradesh, India, there is a need to increase awareness about preventive measures and improve access to healthcare services. This could include initiatives to improve hygiene and sanitation, outreach programs to educate the public about the signs and symptoms of surgical diseases, and efforts to increase the availability of surgical services in the region and improve the work

culture of public sector hospitals and primary and secondary care hospitals is also the requirement of the time. Additionally, measures should be taken to reduce waiting times and consultation times, such as increasing staffing levels and utilizing technology like telemedicine.

CONCLUSION

Surgical diseases are a significant public health concern in Eastern Uttar Pradesh, India, and they have a significant impact on outpatient services at the region's tertiary care hospitals. The high prevalence of surgical diseases highlights the need for increased awareness and access to healthcare services in the region. Measures to improve hygiene and sanitation, educate the public about surgical disease prevention, and increase the availability of surgical services could help to reduce the burden of surgical diseases in Eastern Uttar Pradesh, India.

REFERENCES

1. The role of surgery in global health: analysis of United States inpatient procedure frequency by condition using the Global Burden of Disease 2010 framework
2. John Rose¹, David C Chang², Thomas G Weiser³, Nicholas J Kassebaum⁴, Stephen W Bickler⁵
3. The International Bank for Reconstruction and Development / The World Bank; New York: Oxford University Press; 2006.
4. The role of facility-based surgical services in addressing the national burden of disease in New Zealand: An index of surgical incidence based on country-specific disease prevalence.

5. Hider P, Wilson L, Rose J, Weiser TG, Gruen R, Bickler SW. *Surgery*. 2015 Jul;158(1):44-54. doi: 10.1016/j.surg.2015.04.005.PMID: 25979439
6. The role of facility-based surgical services in addressing the national burden of disease in New Zealand: an index of surgical incidence based on country-specific disease prevalence.
7. Hider P, Wilson L, Rose J, Weiser TG, Gruen R, Bickler SW. *Lancet*. 2015 Apr 27;385 Suppl 2:S25. doi: 10.1016/S0140-6736(15)60820-0. Epub 2015 Apr 26.PMID: 26313072
8. Estimated need for surgery worldwide based on prevalence of diseases: a modelling strategy for the WHO Global Health Estimate.
9. Rose J, Weiser TG, Hider P, Wilson L, Gruen RL, Bickler SW. *Lancet Glob Health*. 2015 Apr 27;3 Suppl 2(Suppl 2):S13-20
10. Suicidal Ideation.
11. Harmer B, Lee S, Duong TVH, Saadabadi A. 2023 Feb 7. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2023 Jan-. PMID: 33351435 Measuring the burden of neglected tropical diseases: the global burden of disease framework.
12. Mathers CD, Ezzati M, Lopez AD. *PLoS Negl Trop Dis*. 2007 Nov 7;1(2):e114. doi: 10.1371/journal.pntd.0000114.PMID: 18060077
13. Methodological transparency of preoperative clinical practice guidelines for elective surgery. Systematic review.
14. Angel G, Trujillo C, Mallama M, Alonso-Coello P, Klimek M, Calvache JA. *PLoS One*. 2023 Feb 24;18(2):e0272756. doi: 10.1371/journal.pone.0272756. eCollection 2023.PMID: 36827452 **Free PMC article.**
15. A granular analysis of service delivery for surgical system strengthening: Application of the Lancet indicators for policy development in Colombia.
16. Samper AFG, Herrera-Almario GE, Tulloch D, Blanco D, Cardoso LL, Rocha REN, Rajan R, Gracias V, Hanna JS. *LancetReg Health Am*. 2022 Apr 1;10:100217. doi: 10.1016/j.lana.2022.100217. eCollection 2022 Jun.PMID: 36777688 **Free PMC article.**
17. Our Neonatal Surgery Experiences in Somalia.
18. Kart Y, Ugur C. *J Indian Assoc Pediatr Surg*. 2022 Mar-Apr;27(2):153-156. doi: 10.4103/jiaps.JIAPS_349_20. Epub 2022 Mar 1.PMID: 35937105 **Free PMC article.**
19. Estimates of Treatable Deaths Within the First 20 Years of Life from Scaling Up Surgical Care at First-Level Hospitals in Low- and Middle-Income Countries.
20. Sykes AG, Seyi-Olajide J, Ameh EA, Ozgediz D, Abbas A, Abib S, Ademuyiwa A, Ali A, Aziz TT, Chowdhury TK, Abdelhafeez H, Ignacio RC, Keller B, Klazura G, Kling K, Martin B, Philipo GS, Thangarajah H, Yap A, Meara JG, Bundy DAP, Jamison DT, Mock CN, Bickler SW; On behalf of the Global Initiative for Children's Surgery. *World J Surg*. 2022 Sep;46(9):2114-2122. doi: 10.1007/s00268-022-06622-w. Epub 2022 Jun 30.PMID: 35771254 **Free PMC article.**
21. Neurosurgical Patients' Experiences and Surgical Outcomes Among Single Tertiary Hospitals in Ethiopia and the United States.
22. Boever J, Weber T, Krause EA, Mussa JA, Demissie YG, Gebremdihien AT, Mesfin FB. *Cureus*. 2022 Feb 8;14(2):e22035. doi: 10.7759/cureus.22035. eCollection 2022 Feb.