

## Original Research

# Gender Distribution in Patients with Intestinal Obstruction: A Prospective Observational Study

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**Abstract**

**Background:** Intestinal obstruction is a common surgical condition, yet the role of gender in its distribution and clinical outcomes remains underexplored. **Objective:** To analyze the gender distribution in patients presenting with intestinal obstruction and to assess gender-specific patterns in subtypes and interventions. **Methods:** A prospective study was conducted at Shyam Shah Medical College and Sanjay Gandhi Memorial Hospital, Rewa, from September 2022 to March 2024. A total of 385 patients diagnosed with intestinal obstruction were included. Gender-based analysis was performed for demographic details, subtypes of obstruction (subacute and acute), and management approaches. **Results:** Of the 385 patients, 262 (68.05%) were males and 123 (31.94%) were females, with a male-to-female ratio of 2.13:1. Among patients with subacute intestinal obstruction (SAIO), 144 (65.94%) were males and 74 (34.05%) were females. In acute obstruction, 120 (71.92%) were males and 47 (28.07%) were females. Surgical intervention was more frequently required in males (42.37%) compared to females (28.45%), with a statistically significant difference ( $p < 0.0001$ ). **Conclusion:** Intestinal obstruction is significantly more prevalent in males, who also have a higher likelihood of requiring surgical intervention. Gender-based assessment is crucial for improving diagnosis and treatment protocols.

**Keywords:** Intestinal Obstruction, Gender Differences, SAIO, Acute Obstruction, Surgical Management

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**Introduction**

Intestinal obstruction (IO) is a frequent cause of emergency surgical admission. Despite its high prevalence, the influence of gender on the occurrence and clinical management of IO is not well characterized. Identifying gender-based trends may help optimize triage and treatment strategies.

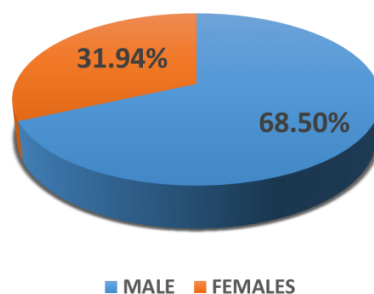
**Methods**

This prospective observational study enrolled 385 patients with radiologically and clinically confirmed intestinal obstruction over an 18-month period.

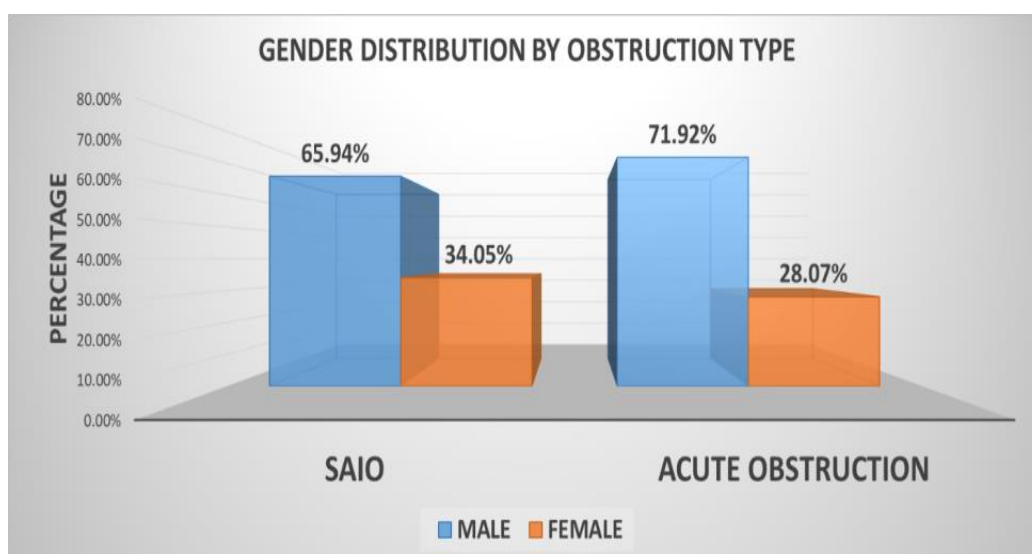
Inclusion criteria encompassed patients aged 6 months to 80 years, excluding cases due to malignancy, tuberculosis, or congenital anomalies. Patients were classified into subacute (SAIO) and acute obstruction groups. Demographics, clinical presentation, imaging, and outcomes were recorded and analyzed.

**Results**

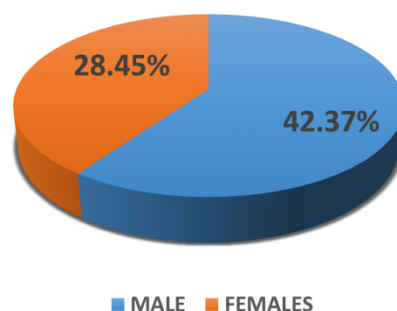
The cohort comprised 262 males (68.05%) and 123 females (31.94%).

**MALE and Female Distribution****Gender Distribution by Obstruction Type:**

- **SAIO (n=218):** Males: 144 (65.94%), Females: 74 (34.05%)
- **Acute Obstruction (n=167):** Males: 120 (71.92%), Females: 47 (28.07%)

**Gender-wise Surgical Intervention:**

- Males: 111/262 (42.37%)
- Females: 35/123 (28.45%)
- **p < 0.0001**, indicating statistical significance

**GENDERWISE SURGICAL INTERVENTION****Discussion**

This study demonstrates a consistent male predominance in both the incidence and the need for surgical treatment of intestinal obstruction. Older studies aligns with our findings, suggesting a

potential biological and social predisposition in males.

Older studies, especially from the developing world, report a male predominance of the order of 2:110, possibly because the main cause of obstruction,

hernia was more prevalent in males <sup>[1]</sup>. With adhesive obstruction now becoming more frequent, this gender difference has decreased.

An older study done in Nepal showed a male predominance (65%) in patients presenting with IO with a male to female ratio of 1.85:1 which is also comparable to this study.<sup>[2]</sup>

Another study shown a gross male predominance Acute intestinal obstruction was the diagnosis in all patients admitted with males (75.20%) grossly outnumbering females. <sup>[3]</sup>

### Conclusion

There is a marked male predominance in intestinal obstruction cases. Males are more likely to present with both SAIO and acute obstruction and to require surgical intervention. These findings underscore the importance of considering gender in diagnostic and treatment algorithms.

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