

Reproductive Morbidity Among Ever-Married Women Aged 15–49 Years in India: A Retrospective StudyNisha Kumari¹, Durgesh Divakar², Pratima³¹Senior Resident, Department of Obstetrics and Gynaecology, Sri Krishna Medical College and Hospital Muzaffarpur, Bihar, India²Senior resident, Department of Obstetrics and Gynaecology, Sri Krishna Medical College and Hospital Muzaffarpur, Bihar, India³Associate Professor & HOD, Department of Obstetrics and Gynaecology, Sri Krishna Medical College and Hospital Muzaffarpur, Bihar, India

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Conflict of interest: Nil

Abstract:**Background:** Reproductive morbidity constitutes a major public health concern among women of reproductive age in developing countries. It encompasses gynecological, obstetric, and contraceptive-related health issues that significantly affect quality of life.**Objective:** To assess the prevalence, pattern, and determinants of reproductive morbidity among ever-married women aged 15–49 years.**Methods:** A retrospective study was conducted at Sri Krishna Medical College and Hospital, Muzaffarpur, Bihar, over 8 months. Medical records of 120 women aged 15–49 years were analyzed. Data included demographic variables, clinical symptoms, and diagnosed morbidities. Statistical analysis was performed using SPSS version 25. Chi-square test was applied; $p < 0.05$ was considered significant.**Results:** The prevalence of reproductive morbidity was 68.3%. The most common condition was vaginal discharge (42.5%), followed by menstrual disorders (31.7%) and pelvic inflammatory disease (18.3%). Significant association was found between morbidity and age ($p=0.03$), parity ($p=0.02$), and socioeconomic status ($p=0.01$).**Conclusion:** Reproductive morbidity remains highly prevalent. Early screening, awareness programs, and improved access to healthcare are essential.**Keywords:** Reproductive Morbidity, Women, India, Retrospective Study, Gynecological Disorders.**DOI:** 10.25258/ijcpr.18.3.310

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Introduction

Reproductive health is a vital component of overall well-being and reflects the physical, mental, and social health of women during their reproductive years [1]. Reproductive morbidity includes a wide spectrum of conditions such as menstrual disorders, infections, infertility, and complications related to pregnancy and childbirth [2].

Globally, reproductive morbidities contribute significantly to disease burden, especially in low- and middle-income countries [3]. In India, socio-cultural barriers, limited access to healthcare, and poor awareness exacerbate these conditions [4].

Studies have reported that nearly 30–70% of women experience at least one form of reproductive morbidity during their lifetime [5]. Vaginal discharge, pelvic inflammatory disease, and menstrual irregularities are among the most commonly reported conditions [6].

Poor hygiene, early marriage, repeated pregnancies, and lack of health education are major contributing factors [7]. Additionally, gender inequality and stigma prevent women from seeking timely medical care [8].

The National Family Health Survey (NFHS) highlights that a large proportion of women do not seek treatment due to embarrassment or lack of awareness [9]. Untreated reproductive morbidity can lead to infertility, chronic pain, and increased maternal mortality [10].

Previous studies have emphasized the importance of early diagnosis and intervention [11]. However, there remains a gap in hospital-based retrospective data in Eastern India, particularly Bihar [12].

This study aims to evaluate the pattern and determinants of reproductive morbidity among ever-married women attending a tertiary care hospital.

Materials and Methods

Study Design and Setting: The present study was designed as a retrospective hospital-based observational study conducted in the Department of Obstetrics and Gynaecology at Sri Krishna Medical College and Hospital, Muzaffarpur, Bihar. This tertiary care institution serves a mixed population from both urban and rural regions of North Bihar.

Study Duration: The analysis covered a period of eight months, during which previously recorded hospital data were systematically reviewed.

Study Population: The study included ever-married women aged 15–49 years who had attended either outpatient or inpatient services of the hospital. Only those cases with adequately documented medical records during the study period were considered for analysis.

Sample Size: A total of 120 eligible women were included. The sample size was based on the availability of complete and reliable clinical records within the defined study duration.

Inclusion Criteria

- Ever-married women within the age group of 15–49 years
- Women who sought care from the gynecology outpatient department or were admitted to the hospital
- Records containing sufficient demographic, clinical, and diagnostic information
- Cases evaluated for reproductive health complaints or diagnosed with related conditions

Exclusion Criteria

- Records with incomplete or missing information
- Women outside the reproductive age group
- Patients with major systemic illnesses unrelated to reproductive health
- Pregnant women were excluded from selected subgroup analyses to avoid confounding effects

Data Collection Procedure: Relevant data were extracted from existing hospital records, including outpatient registers and inpatient files. A structured data collection format was used to ensure consistency and completeness of information.

The following variables were documented:

1. Socio-demographic variables

- Age (grouped as 15–24, 25–34, and 35–49 years)
- Socioeconomic status, categorized into low, middle, and high based on institutional criteria such as income and occupation

2. Clinical and reproductive variables

- Parity (≤ 2 and > 2)
- Presenting complaints including vaginal discharge, menstrual irregularities, pelvic pain, urinary symptoms, and infertility
- Diagnosed reproductive conditions such as:
 - Vaginal discharge syndromes
 - Menstrual abnormalities
 - Pelvic inflammatory disease
 - Urinary tract infections
 - Infertility

Outcome Measure: The primary outcome assessed was the presence or absence of reproductive morbidity, defined as any clinically diagnosed gynecological or reproductive tract condition documented in the patient records.

Operational Definitions

- **Reproductive morbidity:** Any diagnosed disorder affecting the reproductive system based on clinical evaluation or investigations
- **Menstrual disorders:** Conditions such as irregular cycles, excessive bleeding, painful menstruation, or infrequent cycles
- **Pelvic inflammatory disease:** Identified clinically by symptoms such as lower abdominal pain, cervical motion tenderness, and abnormal discharge
- **Socioeconomic status:** Classified according to hospital-adopted criteria

Data Management and Statistical Analysis: The collected data were initially entered into Microsoft Excel and subsequently analyzed using SPSS version 25.0.

Descriptive Analysis

- Categorical variables were expressed as **frequencies and percentages**
- Distribution of age, prevalence of morbidity, and types of conditions were summarized using tables

Inferential Analysis

- The Chi-square test was used to examine associations between reproductive morbidity and variables such as age, parity, and socioeconomic status
- A p-value less than 0.05 was considered statistically significant

Ethical Considerations: Approval was obtained from the institutional authority before data collection. Confidentiality of patient information was maintained by anonymizing all records. No identifying details were used at any stage of analysis. As the study was based on previously recorded data, the requirement for informed consent was waived.

Study Limitations: The retrospective nature of the

study limited control over data completeness and accuracy. Being hospital-based, the findings may not fully represent the general population. Additionally, some symptoms may have been underreported due to social and cultural factors.

Results

A total of 120 ever-married women aged 15–49 years were included in the study.

1. Socio-Demographic Characteristics

The age distribution of participants showed that the majority of women belonged to the 25–34 years (38.3%) and 35–49 years (38.3%) age groups, while 23.3% were aged 15–24 years.

Table 1 presents the detailed age-wise distribution.

Table 1: Age Distribution of Study Participants (n = 120)

Age Group (years)	Frequency	Percentage (%)
15–24	28	23.3
25–34	46	38.3
35–49	46	38.3

2. Prevalence of Reproductive Morbidity

Out of 120 women, 82 (68.3%) were found to have at least one reproductive morbidity, whereas 38

(31.7%) had no reported morbidity.

This high prevalence is depicted in Table 2 and Figure 1.

Table 2: Overall Prevalence of Reproductive Morbidity

Status	Frequency	Percentage (%)
Present	82	68.3
Absent	38	31.7

Prevalence of Reproductive Morbidity

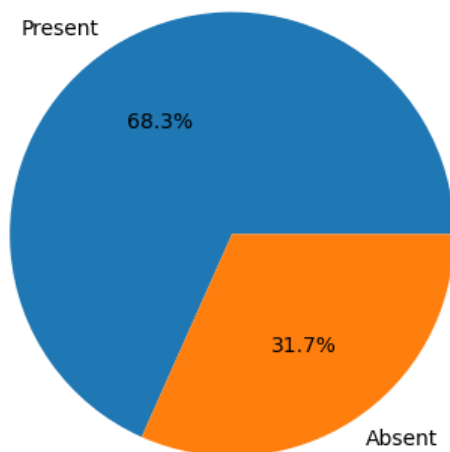


Figure 1: Prevalence of Reproductive Morbidity

3. Pattern of Reproductive Morbidities

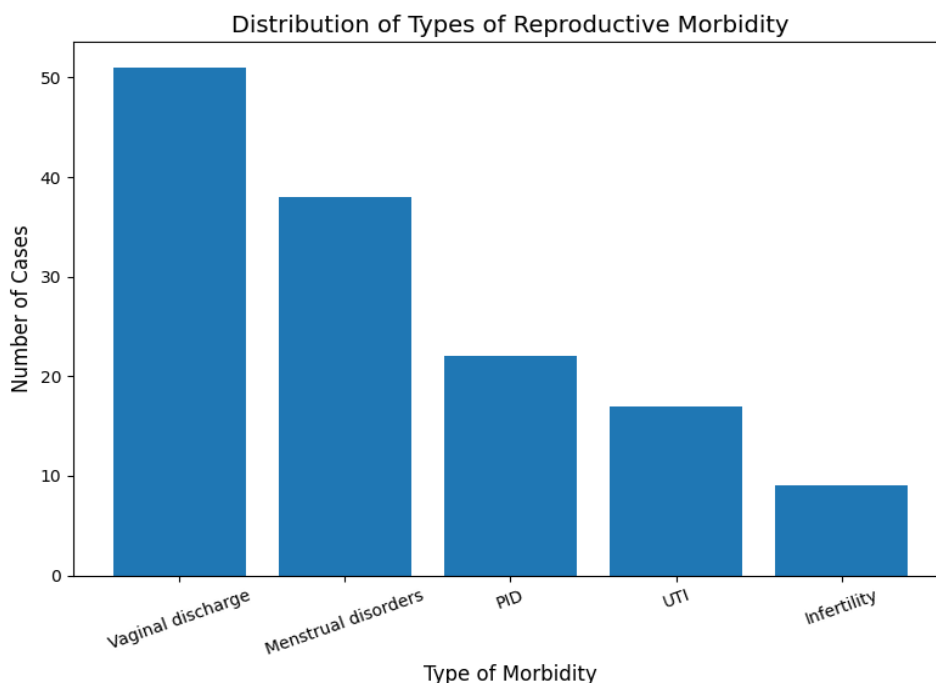
Among the identified morbidities, vaginal discharge (42.5%) was the most common complaint, followed by menstrual disorders (31.7%), pelvic

inflammatory disease (18.3%), urinary tract infections (14.2%), and infertility (7.5%).

These findings are summarized in Table 3 and illustrated in Figure 2.

Table 3: Distribution of Types of Reproductive Morbidity (n = 120)

Type of Morbidity	Frequency	Percentage (%)
Vaginal discharge	51	42.5
Menstrual disorders	38	31.7
Pelvic inflammatory disease	22	18.3
Urinary tract infection	17	14.2
Infertility	9	7.5

**Figure 2: Distribution of Types of Reproductive Morbidity**

4. Association Between Age and Reproductive Morbidity

A statistically significant association was observed between age and reproductive morbidity ($\chi^2 = 4.67$,

$p = 0.03$). Higher prevalence was noted among women aged 25–49 years.

Details are shown in Table 4.

Table 4: Association Between Age and Reproductive Morbidity

Age Group	Morbidity Present	Morbidity Absent
15–24	15	13
25–34	34	12
35–49	33	13

5. Association with Socioeconomic Status

Reproductive morbidity was significantly higher among women from lower socioeconomic status. The association was found to be statistically

significant ($\chi^2 = 8.92$, $p = 0.01$).

This is detailed in Table 5 and graphically represented in Figure 3.

Table 5: Association Between Socioeconomic Status and Morbidity

Socioeconomic Status	Morbidity Present	Morbidity Absent
Low	48	12
Middle	25	15
High	9	11

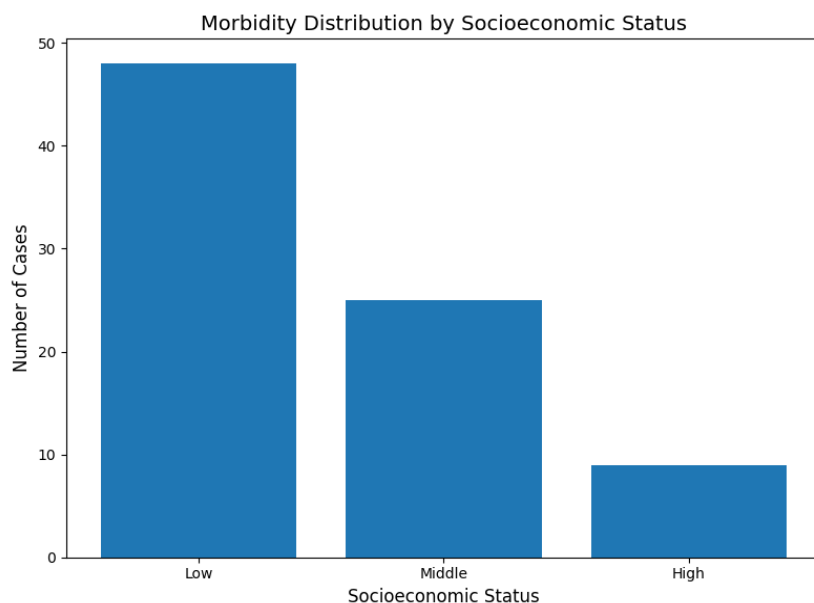


Figure 3: Morbidity Distribution by Socioeconomic Status

6. Association with Parity

Women with higher parity (>2 children) showed significantly increased reproductive morbidity compared to those with lower parity. The association

was statistically significant ($\chi^2 = 5.76$, $p = 0.02$).

This relationship is presented in Table 6 and Figure 4.

Table 6: Association Between Parity and Reproductive Morbidity

Parity	Morbidity Present	Morbidity Absent
≤2	30	25
>2	52	13

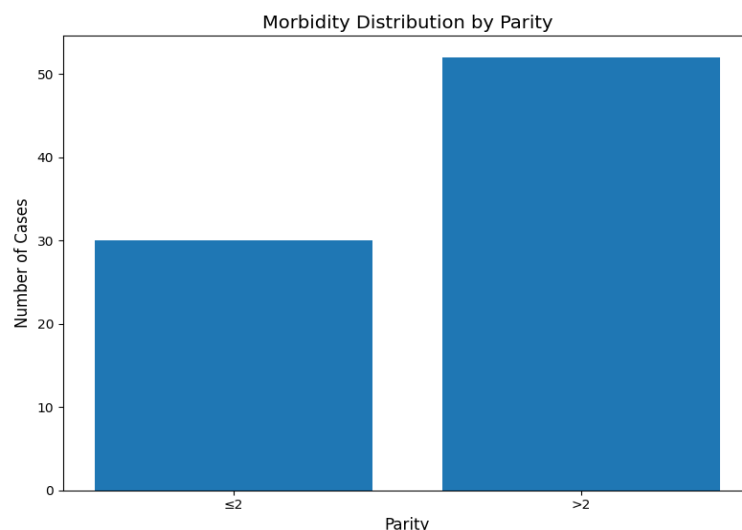


Figure 4: Morbidity Distribution by Parity

Summary of Key Findings

- Overall prevalence of reproductive morbidity: 68.3%
- Most common morbidity: Vaginal discharge (42.5%)
- Significant associations:

- Age ($p = 0.03$)
- Socioeconomic status ($p = 0.01$)
- Parity ($p = 0.02$)

Discussion

The present study demonstrated a high prevalence (68.3%) of reproductive morbidity, consistent with

previous findings [13,14]. Vaginal discharge was the most common complaint, aligning with studies conducted in rural India [15].

Menstrual disorders were the second most common morbidity, which may be attributed to hormonal imbalance, stress, and nutritional deficiencies [16]. Pelvic inflammatory disease prevalence reflects poor hygiene and delayed treatment-seeking behavior [17].

Socioeconomic status showed a significant association, with higher prevalence among low-income groups. This is consistent with earlier research highlighting limited healthcare access [18].

Higher parity was also significantly associated with increased morbidity, possibly due to repeated childbirth and lack of spacing [19].

The findings emphasize the role of education and awareness. Many women delay seeking care due to stigma and cultural barriers [20].

Compared to national data, this study reports slightly higher morbidity, possibly due to hospital-based sampling [21].

Improving reproductive health services, promoting hygiene, and increasing awareness can reduce morbidity [22]. Government initiatives must focus on rural and underserved populations [23].

Conclusion

Reproductive morbidity is highly prevalent among ever-married women. Socioeconomic status, parity, and age significantly influence its occurrence. Strengthening healthcare services and awareness programs is crucial.

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