

Clinical Profile of Patients Attended in Obstetrics and Gynaecology Outpatient Department of Marine City Medical College Hospital, Chattogram

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Abstract

Background: Prevalent Disease : The number of cases of a disease, number of infected people or number of people with same other attribute present during a particular interval of time. The objective of this study to see the prevalent diseases among the patients attended in Gynae OPD of Marine City Medical College Hospital.

Materials and methods: This cross-sectional descriptive study included all patients attended in OPD of Marine City Medical College Hospital during the year 2024. Patient's data were taken from hospital registration books.

Results: Among a total of 24,985 outdoor patient attended in this institute during the study period, 3045 (12.2%) attended in Gynaecological and Obstetrics OPD. Among them, majority (65.3%) were obstetrics patients. Married women were 2932 (96.3%) and unmarried were 1113 (3.7%). Among them 89.3% came for antenatal checkup and 10.7% for postnatal checkup. Gynaecological most common cases were Abortion 184 (17.4%) Vaginal discharge 179 (17%) and AUB 151 (14.3%).

Conclusion: The major bulk of the patients were obstetric patients attended for antenatal care. Increasing awareness among people in this area will increase access to medical services.

Key words: Clinical profile; Gynaecology and Obstetrics; Outpatient.

Introduction

The World Health Organization (WHO) put emphasis on ensuring access to health care for all women.¹ However, many women in the developing world face barriers to accessing essential health care. Outpatient Departments (OPDs) in Gynaecology and Obstetrics serve as the first point of contact for women seeking healthcare services related to reproductive health, pregnancy and other gynaecological conditions. The clinical profile of patients attending these OPDs often reflects the socio-demographic and economic characteristics of the surrounding population, which can influence healthcare needs, disease burden and access to medical services. Marine City Medical College, a private medical college hospital located in an area surrounded by garment factories and inhabited apparently by a lower-middle-class population, provides a unique perspective on healthcare challenges in this socio-economic setting. Women in such communities often face barriers to healthcare, including limited financial resources, lack of awareness, and occupational hazards, which may lead to delayed presentation and underdiagnosis of conditions.² This study aims to analyse the clinical profile of patients attending the Gynaecology and Obstetrics OPD of Marine City Medical College. Understanding the common presentations, disease patterns and socio-economic challenges faced by this population can help in designing targeted interventions, improving healthcare delivery and addressing the specific needs of this community.

Materials and methods

This is a descriptive, cross-sectional study conducted in the Gynaecology and Obstetrics Outpatient Department (OPD) of Marine City Medical College, a private medical college hospital at Chattogram. The study included all female patients attended in the Gynaecology and Obstetrics OPD during the study period. The

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hospital caters apparently lower-middle-class population, primarily composed of women working in garment factories and their families. The study was conducted over a period of one year, from January 2024 to December 2024. A total of 3045 patients were selected for the study using a consecutive sampling technique, where every patient attended the OPD during the study period and meeting the inclusion criteria was enrolled.

Inclusion criteria

- All female patients attended the Gynaecology and Obstetrics OPD
- Patients referred from other departments for - Gynaecological issues.

Data CollectionData were collected from registry books and clinical examination records composed of Socio-demographic information: Age, occupation, marital status, socio-economic status. Clinical profile that is diagnosis made by presenting complaints, duration of symptoms, obstetric history, gynaecological conditions, and comorbidities, clinical findings and relevant investigations (e.g. Ultrasonography, blood tests).

The data were analysed using descriptive statistics. Frequencies and percentages were calculated for categorical variables and means or medians with standard deviations were used for continuous variables. The clinical patterns and socio-economic characteristics of the study population were summarized and correlated with the presenting complaints. Socio-demographic information: Age, occupation, marital status, socio-economic status.

The study was approved by the Ethical Review Committee of Marine City Medical College. Informed written consent was obtained from all participants. Confidentiality and anonymity of patient data were strictly maintained throughout the study.

Results

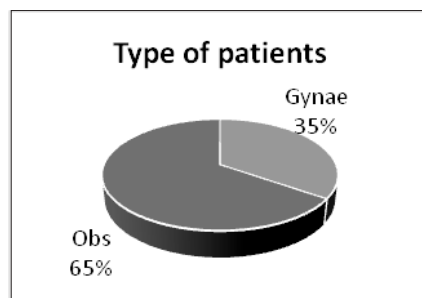


Figure 1 Type of patients attended in Obstetrics and Gynaecology OPD [n= 3045]

Among a total of 24,985 outdoor patient attended in this institute during the study period, 3045 (12.2%) attended in Gynaecological and Obstetrics OPD. Among them, majority (65.3%) were obstetrics patients (Figure 1). Married women were 2932 (96.3%) and unmarried were 1113 (3.7%).

Table 1 Age distribution of the patients attended in Obstetrics and Gynaecology OPD

Age group (Years)	Frequency	Percentage
< 20	317	10.4%
21-30	1823	59.9%
31-40	319	10.5%
41-50	349	11.5%
51-60	151	5.0%
>60	86	2.8%
Total	3045	100.0%

Majority of the patients (1823, 59.9%) belonged to 21-30 years age group. Median age group were 21 -30 and mean age of the attended patients as 29.94 years.

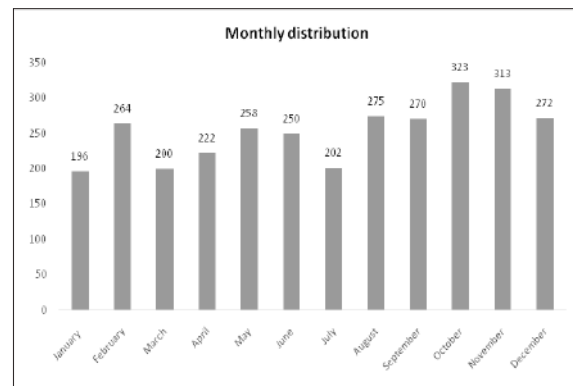


Figure 2 Monthly distribution of patients attended in OPD

Number of patients were more during the months of October to December while it was fewer in January. Regression analysis shown that $R=0.179$, p -value 0.170, So the variation of patient's number was statistically not significant.

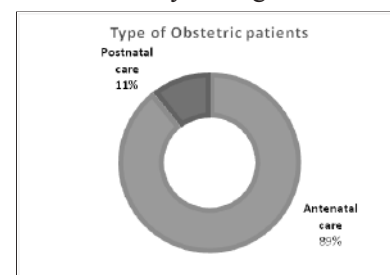


Figure 3 Type of Obstetric patients (n= 1989)

Among the Obstetric patients, 1776 (89.3% came for antenatal care and 213 (10.7%) came for postnatal care (Figure 3). Among the postnatal care 153 (71.8%) were postnatal checkup, 29 (13.6%) surgical site infection, 14 (6.6%) cracked nipple, 11 (5.2%) breast engorgement and 6 (2.8%) were secondary PPH.

Among the gynaecological patients, three most common diseases were Abortion (184, 17.4%), Vaginal discharge (179, 17.0%) and Abnormal uterine bleeding (151, 14.3%) and UTI (127, 12%) were observed as top four causes. Among other diseases PCOS, Primary and secondary subfertility, Endometriosis, PID were also prevalent.

Table II Distribution of Gynaecological and Obstetric patients attended in OPD

Gynecological diseases□	Frequency□	Percentage
Abortion□	184□	17.4%
Vaginal discharge□	179□	17.0%
AUB□	151□	14.3%
UTI□	127□	12.0%
PCOS□	89□	8.4%
Post operative follow up□	76□	7.2%
Primary subfertility□	56□	5.3%
Secondary sub fertility□	43□	4.1%
Endometriosis□	36□	3.4%
PID□	31□	2.9%
SSI□	21□	2.0%
Stress incontinence□	19□	1.8%
Cervical polyp□	8□	0.8%
Carcinoma cervix□	7□	0.7%
Adnexal mass□	6□	0.6%
Ectopic pregnancy (unruptured)□	6□	0.6%
Puberty menorrhagia□	5□	0.5%
Molar pregnancy□	4□	0.4%
Genital tract injury□	3□	0.3%
Primary amenorrhea□	2□	0.2%
Labial adhesion□	2□	0.2%
Gartner duct cyst□	1□	0.1%
Total □	1056□	100.0%

*AUB-abnormal uterine bleeding, UTI-urinary tract infection, PCOS-polycystic ovary syndrome, PID-pelvic inflammatory disease, SSI-surgical site infection.

Number of patients came for family planning services were 105. Among them majority (63, 60.0%) came for I-plant insertion. 16.2% for IUD insertion and 12% for DMPA. A total of 104 patients received VIA.

Table III Type of family planning services (n= 105)

Type of service □	Frequency□	Percentage
I-plant insertion □	63□	60.0%
IUD□	17□	16.2%
DMPA□	13□	12.4%
I-plant removal □	11□	10.5%
IUD removal □	1□	1.0%

Discussion

This study shows that gynaecological and obstetric patients are an important portion of OPD attendance in the hospital and majority of patients are obstetric cases. 21-30 years age group were the majority treatment seeker. Patients ages varied among different studies which may be dependent on the type of services different centres provide and demography of that region. A study by Johora et al showed that 30-39 years were the common presenter and ages between 20 and 59 years almost equally presented in their study.³ Another study by Puja et al. found 18-30 years were the more common age group.² A study by da Silva et al. found 35-44 years to be common.⁴ Our study finds that majority of the OPD care seekers were young mothers. It also found that it provides services almost uniformly over every month of a year with October and November being the busiest months.

Abortion was the most common cause of Gynae OPD consultation which constituted about 17 % along with vaginal discharge (17%) and AUB (14%). It demands further research where abortion is increasing in the country or is it a local occurrence found in this locality. In other studies, their findings were menstrual irregularities, discharge, ANC and UTI to be more common cause of OPD consultation.^{5,6} The pattern of diseases for which OPD consultation were similar across the studies. A study by Singh et al showed that in 2014, an estimated 1,194,000 induced abortions were performed in Bangladesh (29 per 1,000 women aged 15–49) and 257,000 women were treated for complications of such abortions (6 per 1,000 women aged 15–49). Among women with complications, the proportion presenting with haemorrhage increased significantly, from 27% to 48%. About 430,000 MR procedures were performed in health facilities nationwide.⁷

A study by Crouthamel et al. conducted to contextualize MR in Bangladesh and understand systemic barriers to seeking care in formal settings and facilitators to seeking care in informal settings found that there were three overlapping themes, logistics of obtaining MR/abortion, provider attitudes, and overcoming barriers to safe MR.⁸ Koly et al. found that among patients who experienced spontaneous abortion, 77.50% experienced mild to severe depressive symptoms and 58.75% experienced mild to severe anxiety, within one and half years of experiencing spontaneous abortion.⁹

Primary subfertility was 5% and secondary subfertility was 4% in this study. Afreen et al. found the frequency of primary and secondary subfertility was 55% and 45% respectively among their patients of subfertility.¹⁰ Subfertility is any form of reduced fertility with prolonged time of unwanted non-conception. Prolonged subfertility is a social problem and may result in extreme physical, psychological and financial burden to the subfertile couple. Timely intervention and patient-oriented treatment is needed. A study by Chowdhury et al showed that 47% of women of subfertility were between 30-35 years of age who were mostly (92%) housewives in their study. Among them most (89%) had subfertility of 10-15 years.¹¹ In their study 77% of the couples had primary subfertility while the rest had secondary subfertility.

The most common pre-operative USG finding was Polycystic Ovarian Syndrome (PCOS) 62% had normal uterus and 14% had bilateral tubal block. 47% had normal ovarian morphology and 34% had PCOS. but a significant number of women had PCOS (34%) 16% had pelvic endometriosis and 18% had pelvic adhesions other than endometriosis. Adequate education to overcome the barriers associated with fertility workup and awareness through social and print media may play a significant role in reducing the duration in infertility in couples. Bari et al. found that among the causes of secondary subfertility, 52% were female factors, 13% male factors, unexplained 27% and both male and female factors lie behind 8% of cases. 31% of the female causes were tubal factors, 26% cases PCOS, ovulatory disorders and endometriosis 21% and 22% respectively.¹⁰ The etiological factors found

by Afreen et al were PCOS 46.15%, tubal factor 31.86%, endometriosis 8.79%. Among hormonal disorder hypothyroidism was responsible in 5.49% and hyperprolactinemia in 2.19 % cases, and ovarian cause like poor ovarian reserve was responsible in 4.39% cases. Uterine factor was responsible in 1.09% cases. Among male factors of subfertility male partner 69.04% had oligospermia, 16.66% show Asthenospermia, another 9.52% show Teratospermia. Azoospermia was detected in 4.76% cases.¹⁰ VIA screening was performed in 104 patients. Cervical cancer is the fourth most common cancer among women in the world and in Bangladesh, national screening programme for cervical cancer has been running in Bangladesh since 2004 through VIA.¹² A study by Qayum et al. showed that 87% respondent knew about cervical cancer and 13% knew that HPV is a risk factor for cervical cancer. Women who had sufficient knowledge were more likely to test VIA than those who had insufficient knowledge. However, only 26% had a VIA test and 2% were vaccinated HPV. They concluded that VIA test was underutilized and HPV vaccine coverage was low.¹³ Over the year, only 105 women came for family planning service. This is unexpectedly low given the highly populated suburb around the hospital which mainly consist of low-income households. A study on family planning practice among married women attending primary health care centres in Bangladesh showed that about 32.57% women off 31-35 ages were aware of family planning, 87.71% heard about contraceptives, 82.57% condom, 76.29% IUCD and 41.13% implant. They advocated for organized campaign about family planning in different places in different occasions to increase awareness and practice. Among the 105 patients who came for family planning service in this study, 60% were provided I-plant. Kamruzzaman and Hakim showed that current practice of family planning was pills and only 3% uses implant.¹⁴ Our study shows that use of implant is encouraging among the locality. Family planning services in Bangladesh is still developing and even though there are some advances in knowledge (88%) , practice of it was around 46%.¹⁴ the development of knowledge, awareness and availability of contraceptive is needed to improve the scenario.

Limitations

The study has some Limitations. Data were gathered from patient records. There was no follow up and study period was not long enough.

Conclusion

Understanding the common presentations, disease patterns, and socio-economic challenges faced by this population can help in designing targeted interventions, improving healthcare delivery, and addressing the specific needs of this community.

Recommendation

Multicenter with large sample size study is recommended.

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Authors contribution

KN-Conception, design, drafting and final approval.

TFR-Data analysis, interpretation of data, drafting and final approval.

SFM-Data analysis, interpretation of data, critical revision and final approval.

AM-Interpretation of data, critical revision and final approval.

RAT-Interpretation of data, critical revision and final approval.

NS-Data analysis, drafting and final approval.

Disclosure

All the authors declared no conflict of interest.

References

1. WHO. The prevention and elimination of disrespect and abuse during facility-based childbirth: WHO statement [Internet]. World Health Organization. 2015.
https://apps.who.int/iris/bitstream/handle/10665/134588/WHO_RHR_14.23_cze.pdf.
2. Puja SS, Neha NN, Alif OR, Sultan TJ, Husna MGZA, Jahan I et al. Exploring the barriers to feminine healthcare access among marginalized women in Bangladesh and facilitating access through a voice bot. *Heliyon* [Internet]. 2024;10(14):e33927.
<https://doi.org/10.1016/j.heliyon.2024.e33927>.
3. Johora F, Ali M, Abbasy A, Mahboob S. Pattern of surgical antibiotic prophylaxis in a tertiary care Hospital of Bangladesh. *Int J Infect Control*. 2010;6(2).
4. da Silva ATM, Menezes CL, de Sousa Santos EF, Margarido PFR, Soares JM, Baracat EC, et al. Referral gynecological ambulatory clinic: Principal diagnosis and distribution in health services. *BMC Womens Health*. 2018;18(1):8.
5. Sarkar S, Chowdhury RR, Mukherji J, Samanta M, Bera G. Comparison of Attendance of Patients Pre-lockdown and during Lockdown in Gynaecology and Antenatal Outpatient Department in a Tertiary Care Hospital of Nadia, West Bengal, India. *J Clin Diagnostic Res*. 2021.
6. Walwekar M, Sakhare A, Vaidya S. Gynecological Disorders in Adolescent Girls and Women (14 to 60 Years) on OPD Basis in Rural Parbhani : Prevalence and Diagnosis. 2024;18(10).
7. Singh S, Hossain A, Maddow-Zimet I, Vlassoff M, Bhuiyan HU, Ingerick M. The incidence of menstrual regulation procedures and abortion in Bangladesh, 2014. *Int Perspect Sex Reprod Health*. 2017;43(1):1–11.
8. Crouthamel B, Pearson E, Tilford S, Hurst S, Paul D, Aqtar F, et al. Out-of-clinic and self-managed abortion in Bangladesh: menstrual regulation provider perspectives. *Reprod Health [Internet]*. 2021;18(1):1–12.
<https://doi.org/10.1186/s12978-021-01123-w>.
9. Koly KN, Saba J, Billah MA, McGirr A, Sarker T, Haque M et al. Depressive symptoms and anxiety among women with a history of abortion living in urban slums of Bangladesh. *BMC Psychol [Internet]*. 2023;11(1):1–10.
<https://doi.org/10.1186/s40359-023-01224-0>.
10. Bari S, Begum MS, Nessa K. Secondary subfertility among the couple attending selected fertility centre of Dhaka, Bangladesh. *Int J Reprod Contraception, Obstet Gynecol*. 2018;7(3):817.
11. Chowdhury TS, Shume MM, Chowdhury TA. The Factors for Prolonged Subfertility in Bangladesh: An Observational Study. *Orig Artic Bangladesh J Fertil Steril*. 2022;2(2):83–87.
12. Article O, Sadat A, Nurunnabi M, Sultana T. Correspondence to : Dr . Abu Sadat Mohamad Nurunnabi , Bangladesh Medical Research Coun -. 2012;04(03):189–193.
13. Qayum O, Billah MM, Akhter R, Flora MS. Women's Knowledge, Attitude and Practice on Cervical Cancer and Its Screening in Dhaka, Bangladesh. *Asian Pacific J Cancer Prev*. 2021;22(10):3327–3335.
14. Kamruzzaman M, Hakim A. Family Planning Practice Among Married Women Attending Primary Health Care Centers in Bangladesh. *Int J Bioinforma Biomed Eng [Internet]*. 2015;1(3):251–255.
<http://www.aiscience.org/journal/ijbbe>.