

Original Article

Pattern of presentation of gynecological diseases in a tertiary care hospital - a hospital based study

Nandi ER¹, Joty FS², Biswas B³, Akter R⁴, Monir F⁵, Ashraf F⁶, Dewan F⁷

Abstract

This retrospective study was carried out in Shaheed Suhrawardi Medical College & Hospital (ShSMCH) from January 2013 to December 2013. Total 2160 Gynaecological patients were evaluated in 1 year period, who were admitted either from outpatient department or through emergency. The aim of this study was to observe the gynecological disease pattern, top ten gynecological diseases & organ involvement of female reproductive system. Of all patients, maximum (87%) were of reproductive age group and most of them (66%) came from urban area. Almost 78% patients admitted with uterine pathology. Among total patients 47% had pregnancy related complications, of which 86.5% patients had history of early pregnancy termination either spontaneous or induced, 7% had ectopic pregnancy and 6.5% had molar pregnancy. Of all patients, 98% had benign diseases and 2% were suffering from malignant disorder. Other gynaecological diseases were utero-vaginal prolapse, fibroid uterus, benign ovarian tumour & dysfunctional uterine bleeding.

Key words: Gynecological diseases, disease pattern, tertiary hospital

Introduction

Maternal and child health is one of the eight basic components of primary health care in the Declaration of Alma-Ata.¹

1. Dr Eva Rani Nandi, Registrar, Department of Obstetrics & Gynaecology, Shaheed Suhrawardi Medical College & Hospital, Dhaka. Email: eva.nandi@gmail.com
2. Dr Fahmida Sharmin Joty, Registrar, Department of Obstetrics & Gynaecology, Shaheed Suhrawardi Medical College, Dhaka
3. Dr Bipul Biswas, Junior consultant (Gynae), UHC, Rajoir, Madaripur
4. Dr Roksana Akter, Medical Officer, OSD, DG Health, Mohakhali, Dhaka
5. Dr Fahmida Monir, Assistant Health Officer, Dhaka South City Corporation, Dhaka
6. Professor Dr Fatema Ashraf, Professor, Department of Obstetrics & Gynaecology, Shaheed Suhrawardi Medical College, Dhaka
7. Professor Dr Farhana Dewan, Head, Department of Obstetrics & Gynaecology, Shaheed Suhrawardi Medical College, Dhaka

*For correspondence

Although as prevention of maternal mortality has been identified as a priority, little attention has been given to the reproductive health of non-pregnant women. In third world countries, such women tend to encounter the health care system mostly when they are the target of family planning programs.

Women health has always remained neglected, because of the traditional reductionistic approach to women health research. In developing countries reproductive morbidity greatly affects the quality of a woman's life and until recently this form of ill health has been ignored by planners, researchers and woman herself.² Lack of awareness of the extent and effect of reproductive morbidity on the health and quality of life of women in developing countries is evident at national, community and individual levels.³

For policy development, a critical overview is required to identify firstly the extent of systematic list of gynaecological conditions & secondly the social burden of this disease which clearly have an impact on the quality at the lives of women in developing countries.

There is no consensus on spectrum of gynaecological diseases in Bangladesh. One of the public health challenges in Bangladesh is therefore to identify vulnerable groups and to provide them with needed preventive and curative health service.⁴

The purpose of this facility based study was to evaluate the extent and nature of gynaecological morbidity by clinical and laboratory examinations. These clinical studies will help us to prevent the gynaecological morbidity and decrease the burden of the disease.

Methods

This hospital based retrospective study was carried out at the inpatient's Department of Obstetrics and Gynaecology, Shaheed Suhrawardi Medical College & Hospital, Dhaka from January 2013 to December 2013. Data were collected from the Gynaecology inpatient's records, in which the presenting symptoms, clinical diagnosis and investigations were recorded. Data of all women, admitted with gynaecological problems in Shaheed Suhrawardi Medical College & Hospital were included in this study. Women

with non-gynaecological problems were excluded from this study. Information on age, various symptoms, clinical findings and diagnosis of 2160 women were recorded. Gynaecological diseases like abortion, uterovaginal prolapse, reproductive tract infections, menstrual irregularities, infertility, gynaecological cancers and others were included here.

Frequency of each disease was calculated separately. Patient demographics and the medical history i.e. including age, marital status, social class, economical status, education, parity were recorded. Details of all gynaecological diseases were recorded. Data were handled with statistical package for social science SPSS-17.

Results

Total 2160 patients with gynaecological diseases were evaluated within 1 year period. Among total patients, 87% were of reproductive age group, 11% were postmenopausal age & 2% were pre-pubertal age group. (Figure-1)

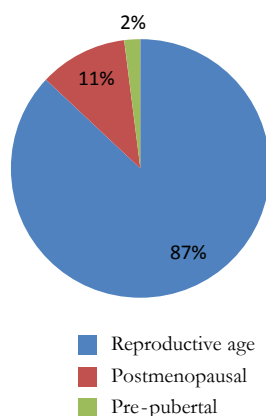


Figure-1: Age distribution of patients

Of all, 1426 (66%) were from urban area and 734 (34%) were from rural area. Majority of the patients (75%) were from lower socioeconomic status, followed by middle class (19%) & higher class (6%).

Regarding disease pattern, 47% of patients presented with pregnancy related complication like abortion, ectopic pregnancy, molar pregnancy, 16.8% with uterovaginal prolapse, 15% with benign tumours, 4.3% with DUB, 2.8% with genital infection, 2% with malignant diseases, 1.5% with subfertility and 10.6% with others. (Table-I)

Regarding pregnancy related complications, abortion was most common(87%) followed by ectopic pregnancy(7%) and molar pregnancy (6%). (Table-II)

Table-I: Disease profile of the patients (n= 2160)

Gynaecological disorders	No. of patients	(%)
Abortion	880	40.7
Uterovaginal prolapse	364	16.8
Fibroid uterus	209	9.6
Benign ovarian tumour	113	5.2
DUB	95	4.3
Ectopic pregnancy	73	3.3
Molar pregnancy	66	3
Chronic PID	52	2.4
Cervical polyp	48	2.2
Endometriosis	44	2
Bartholin abscess	33	1.5
Cervical cancer	26	1.2
Wound infection	25	1.1
Adenomyosis	24	1.1
Perineal tear	23	1.06
Primary subfertility	16	0.74
Secondary subfertility	15	0.69
Malignant ovarian tumour	12	0.55
Primary amenorrhea	10	0.46
Acute PID	09	0.41
Puberty menorrhagia	07	0.32
Vault prolapsed	06	0.27
Choriocarcinoma	05	0.23
VVF	05	0.23
Total	2160	100%

Table-II: Pregnancy related complications (n=1019).

Complications	Number (%)
Abortion	880 (87%)
Ectopic pregnancy	73 (7%)
Molar pregnancy	66 (6%)

Among top ten diseases, 40.7% were abortion, 16.8% utero-vaginal prolapse, 9.6% fibroid uterus, 5.2% benign ovarian tumour, 4.3% DUB, 3.3% ectopic pregnancy, 3% molar pregnancy, 2.4% chronic PID, 2.2% cervical polyp & 2% had endometriosis. (Figure-2)

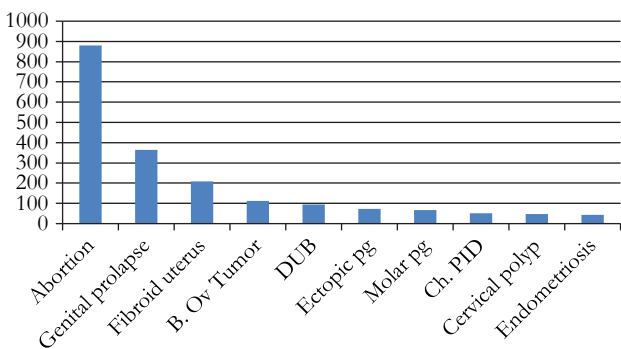


Figure-II: Top ten (10) diseases

While evaluating the origin of gynaecological diseases, it was found that, 78% were uterine origin followed by others variety-12%, tubal-6% and ovarian origin-6%. (Figure-3)

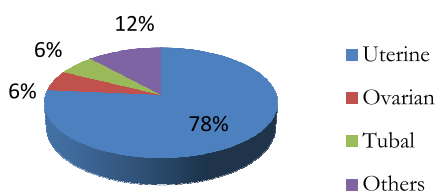


Figure-III: Organ of origin of the disease

Among gynaecological neoplasms, 322 (88%) were benign in nature & 43 (12%) were malignant. (Figure-4)

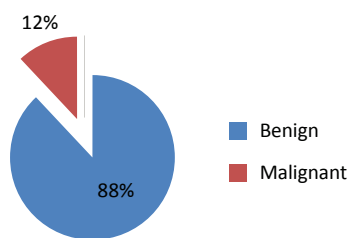


Figure-4: Gynaecological neoplasm

Discussion

Gynaecological morbidity has implications for a range of interrelated aspects of women's lives. This study shows that a large number of women are seeking help for gynaecological problems, hence emphasizing the importance of research in this area. The two most commonly used study designs to assess the prevalence of gynaecological morbidity are community-based approaches and facility-based studies. This is a facility based study. No such study was available in our country. So we could not

compare our study. Though it was a small retrospective study, it might act as nidus for future larger studies to find out & triage of common gynaecological diseases prevalent in our community in order to prevent both morbidity & mortality. In this study it has been tried to find out the disease varieties, age, organ involvement, top diseases among the admitted patients. Most of the patients were in reproductive age group, most involved organ was uterus. Among all patients, cases of abortion was 40.7%, uterovaginal prolapse 16.8% and fibroid uterus 9.6%; these were main burden. Other important gynecological diseases were benign ovarian tumor, DUB, ectopic pregnancy, molar pregnancy, chronic PID etc.

As pointed out in previous studies in Asian regions,⁵ reproductive tract infections were a major health problem encountered⁶⁻⁸; these being the eighth largest problem in our study highlighting the need for improving the preventive and curative aspects of this issue.

In Gynaecology & Obstetrics unit of a tertiary level teaching hospital at Peshawar, infertility was the leading cause with 21% of admissions, followed by fibroid uterus 6.5%.⁹ But in this study, pregnancy related complication - abortion was the leading disease with 40.7% of admissions, followed by uterovaginal prolapse 16.8%.

A significant number of PID cases were identified, which not only affect the quality of life, but also impair the future fertility. Sub fertility has a psychological impact as well, and considering the proportion of women coming to us with this morbidity, attention has to be given to improve the diagnosis of this problem. Unlike a high percentage of couples with primary sub fertility in other Asian countries (unpublished data), the ratio of primary and secondary sub fertility was the same in our study.

Benign ovarian neoplasms are more frequently diagnosed due to an easy access to ultrasound. Cervical carcinoma is the second commonest female cancer worldwide; cervical carcinoma was more frequently encountered also in our study.

N Takkar et al showed pelvic organ prolapse were 28%, which was grade 3 in 82%; urogenital infections were 25%; postmenopausal bleeding (PMB) were 23%.¹⁰ In our study, uterovaginal prolapse was 16.8%, DUB 4.3% & infective causes was 2.8%; it matched with N Takkar study.

Sultana et al showed that most of the diagnoses were made after evaluation of organ involvement; 53% uterine origin & 3% ovarian.¹¹ Common organ involvements in our study were uterine (78%), ovarian (6%), tubal (6%) and others (12%).

This study not only gives us a baseline data about the most prevalent gynaecological problems, it may help us to modify our resources to the diagnosis and treatment of the three major morbidities identified.

During this study, it was revealed that there was no standard written procedure or definitions on maintenance of indoor patient's records. That's why data quality was low. A well define Health Information System at the level of the outpatient's clinics and hospitalized patients at various health facilities is a requirement of the modern era. A computer based health information system can improve a patient's quality of life and promote more efficient use of health care facilities.¹²

Abortion, pelvic organ prolapse, fibroid uterus were the major gynaecological problems in this study. Common organ involvement was uterus. Benign neoplasm was more common than malignancy. Details regarding frequencies of various types of diseases, top ten diseases in a tertiary care health facility highlighting its value both for the development of health information system and patient's care were evident from this study.

References

1. WHO. Declaration of Alma-Ata, 1978. Available from: http://www.who.int/publications/almaata_declaration_en.pdf.
2. Graham W, Berer M, Price J. Raising awareness about reproductive morbidity. *Ann Trop Med Parasitol*. 1992; 86:11-8.
3. Evans J, Lamb G, Murthy N. Reproductive health and child survival: report to the trustees of the Ford Foundation for its mid-decade review of programs. New York: The Ford Foundation, 1987.
4. Sadiq H, Muynck AD. Health care seeking behavior of pulmonary tuberculosis patients visiting Rowalpindi. *J Pak Med Assoc*. 2002; 51:10-16.
5. Bang RA, Bang AT, Baitule M. High prevalence of gynecological diseases in rural Indian women. *Lancet*. 1989; 14:85-8.
6. Koenig M, Jejeebhoy S, Singh S et al. Investigating women's gynaecological morbidity in India: not just another KAP survey. *Reprod Health Matters*. 1998; 11:1-13.
7. Brabin L, Gogate A, Gogate S. Reproductive tract infections, gynaecological morbidity and HIV seroprevalence among women in Mumbai, India. *Bull WHO*. 1998; 76:277-87.
8. Panyadilok S. The situation of infertility in Thailand. Bangkok: Division of Family Planning and Population, Department of Health, 1996.
9. Johnson RJ. The potential for Ontario region's health information system to facilitate case management, programme planning and evaluation and to promote enhanced first nations control of health services. *Int J of Circumpolar Health*. 1998; 1: 671-4.
10. Takkar N, Goel P, Dua D, Mohan H, Huria A, Sehgal A. Spectrum of gynaecological disorders in older Indian women: a hospital based study. *Asian Journal of Gerontology & Geriatrics*. 2010;5 (2):69-73
11. Sultana A, Akter M, Noor T, Hossain M. Study of disease pattern of patients admitted in Gynae & Obstetrics Department in a rural tertiary medical institute. *KYAMC Journal*. 2012; 3:220-2
12. Ahmad N, Aamir AH, Hussain I, Ghulam S. Annual prevalence of various diseases in hospitalized patients in a tertiary level teaching hospital at Peshawar. *Pakistan J Med Res*. 2004; 43 (4): 166-71