

## A Hospital Based Prospective Observational Assessment of Gynecological Disorders among Geriatric Women

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### Abstract

**Aim:** The present study was conducted to assess gynecological disorders among geriatric women

**Material & methods:** The present prospective, observational study was conducted in the Department of Obstetrics and Gynaecology, PMCH, Patna, Bihar, over a period of one year which comprised of 200 women aged >65 years old. All subjects were enrolled after they agreed to participate in the study after signing written informed consent. Ethical clearance was obtained from institutional review and the Ethics Committee.

**Results:** Out of 200 patients, 85% belonged to age group 65-74 years. The study population was 60% from rural and 40% urban areas. Only 30% of the patients were literate. Geriatric women had higher number of pregnancies. Their mean age at menopause was 49.11±4.40 years and mean duration of menopause was 21.14±5.85 years. Something coming out of vagina (SCOV, 25%) and Postmenopausal bleeding (PMB, 32%) were the two major presenting complaints. Amongst the co-morbidities, Hypertension was the single most common followed by Anaemia, Diabetes mellitus, Thyroid disorders, Heart diseases. The most common gynaecological disorder was genital tract malignancies (34%), followed by POP (25%) and urogenital infections (16%). Of those with genital malignancies, 32 had carcinoma cervix, 18 had carcinoma ovary, 14 had carcinoma endometrium, and 2 had carcinoma vulva.

**Conclusion:** Pelvic organ prolapse and genital malignancy are the major gynaecological causes of hospital admissions in the patients above 60 years. Post-menopausal bleeding is the commonest complaint. Ovarian and endometrial cancer was showing a rising trend in this age group. Though cervical cancer were the second most common malignancy in this group, most of these patients presented at advanced stage and hence were inoperable.

**Keywords:** Geriatric Gynaecology, Gynaecological Pathologies, Postmenopausal Women

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### Introduction

Ageing is a natural process and should be regarded as a normal, inevitable biological phenomenon. [1] The word Geriatrics was coined by Dr. Ignatz Natcher an Austrian

physician in 1909. However, it was in 1935 that a British doctor Marjory Warren, working in USA first developed the practical concept of geriatric rehabilitation.

[2] Many studies from developed countries defined older persons as those aged more than 65 years, whereas some use the cut off of 60 yrs. Life expectancy of India is 61 years as compared to 72 to 82 years in the developed countries. Thus, the cut-off of 65 years may not be appropriate in Indian context and therefore a lower cut off of greater than and equal to 60 years is used.

[3] Geriatric gynaecology deals with gynaecological pathologies encountered in postmenopausal women aged 65 years and above. The age-related geriatric problems have emerged significantly with enhanced longevity of life. These are attributed to the physiological changes seen in reproductive organs due to their altered hormonal milieu. The unique features of geriatric illnesses are chronicity and heterogeneity, greater severity and slow or sometimes no recovery.

Age does not prevent the development of cancer of the genitalia or breast. Although the incidence of several genital malignancies decreases after menopause. That of some other cancers-notably of the endometrium, vagina, and vulva-actuality increases. Some older women with atrophic vaginal and vulvar tissue resulting from hypoestrogenism hesitate to come for examination because of the pain produced by digital vagino-abdominal palpation or by insertion of a Graves or Pederson vaginal speculum. [4]

Gynaecological disorders in older women differ from those who are younger. Elderly women experience vasomotor, urogenital, psychosomatic, psychological symptoms and sexual dysfunction. These urogenital changes make women vulnerable to gynaecological morbidities. The various gynaecological disorders peculiar to ageing are pelvic organ prolapse, postmenopausal bleeding, gynaecological malignancies, urinary incontinence, genital tract infections, vulvovaginal disorders. [5] The risk of developing Gynecologic tumor is highest in geriatric women when compared

with women aged up to 60 years. Those over the age of 65 have a higher risk of developing cancer of the uterus (two-fold), ovaries (three fold) and Cervix (10% increased risk) [7]. There is also an increased risk of cancer related death in geriatric women that seems to be independent of increased incidence. One possible explanation is related to stage of disease as Ovarian, Endometrial and Cervical cancers tend to be diagnosed at a more advanced stage in elderly women.8

The spectrum of gynecological disorders in India differ from those in developed world as there are no screening programmes for early detection and hardly any dedicated geriatric units. [6] The purpose of the present study is to assess the various types of gynecological problems faced by older women in India and to emphasize the need of promoting screening programmes for early detection and treatment of cancers and establishment of geriatric units to meet the special need of this subset of population

### Materials & Methods

The present prospective, observational, cross-sectional study was conducted in the Department Of Obstetrics And Gynaecology, PMCH, Patna, Bihar, over a period of one year which comprised of 200 women aged >65 years old. All subjects were enrolled after they agreed to participate in the study after signing written informed consent. Ethical clearance was obtained from institutional review and the Ethics Committee.

Patient demographics such as age, education, marital status, parameters such as parity, age at menopause, type of menopause, years since menopause, medical history and details of all gynecological problems were recorded. Health related quality of life was assessed by using Menopause Rating Scale (MRS). A thorough clinical and gynecological examination was done. Routine investigations such as complete haemogram, blood biochemistry, urine

examination, pelvic sonography and pap smear were done.

Pelvic organ prolapsed (POP) was graded as per the Baden-Walker system on a scale of 0 to 4; grade 0 was defined as no prolapse, grade 1 as prolapse halfway to hymen, grade 2 as prolapse upto hymen, grade 3 as prolapse halfway beyond the hymen, and grade 4 complete prolapse. 4 The degree of cystocele, urethrocele, rectocele, and enterocele was also assessed. Postmenopausal bleeding (PMB) was defined as vaginal bleeding 12 months after spontaneous cessation of menstruation. Urinary incontinence was

defined as involuntary leakage of urine. Urinary tract infection (UTI) was the presence of viable

### Statistical Analysis

Results thus obtained were subjected to statistical analysis P value less than 0.05 was considered significant. The data was analysed by computer software IBM Statistical Package for Social Sciences (SPSS) version 20.0. The qualitative variables were assessed as mean±standard deviation. The quantitative variables were expressed as frequencies and percentages.

### Results

**Table 1: Patient demographics and Distribution of patients according to mean age, mean age at menopause, mean duration of menopause**

	Number (n)	%
<b>Age (Years)</b>		
65-74	170	85
75-84	24	12
≥85	6	3
<b>Parity</b>		
P 0	4	2
P 1-3	40	20
P 4-6	100	50
P 7-14	56	28
<b>Educational status</b>		
Illiterate	160	80
Literate	40	20
<b>Background</b>		
Rural	120	60
Urban	80	40
Age (years) Mean±SD		64.36±4.80
Age at menopause Mean±SD		49.11±4.40
Years since menopause Mean±SD		21.14±5.85

Out of 200 patients, 85% belonged to age group 65-74 years. The study population was 60% from rural and 40% urban areas. Only 30% of the patients were literate. Geriatric women had higher number of pregnancies. Their mean age at menopause was 49.11±4.40 years and mean duration of menopause was 21.14±5.85 years.

**Table 2: Chief presenting complaint**

Chief Complaint	Number (n)
SCOV	50
PMB	64
Abdominal distension	18
Pain lower abdomen	22
Discharge per vaginum	15
Dysuria	10
Backache/joint pains	15
Vulval itching	4
Vulval growth	2
Total	200

Something coming out of vagina (SCOV, 25%) and Postmenopausal bleeding (PMB, 32%) were the two major presenting complaints.

**Table 3: Associated co-morbidities**

Comorbidity	Number (n)
Hypertension	70
Anaemia	30
Diabetes mellitus	20
Thyroid disorders	15
Heart disease	10
COPD	9
Asthma	5
Others	11
Total	175

Amongst the co-morbidities, Hypertension was the single most common followed by Anaemia, Diabetes mellitus, Thyroid disorders, Heart diseases. Presence of multiple co-morbidities complicates the diagnosis, treatment and natural course of individual gynaecological health problems in older women.

**Table 4: Gynecological disorders**

	Number (n)	%
Pelvic organ prolapse (POP)	50	25
Genital malignancies	68	34
-Carcinoma cervix	32	16
-Carcinoma endometrium	14	7
-Carcinoma ovary	18	9
-Carcinoma vulva	4	2
Benign adnexal masses	14	7
Urogenital infections	32	16
Urinary incontinence	4	2
Endometrial hyperplasia	8	4
Proliferative endometrium	2	1
Atrophic endometrium	2	1
Endometrial polyp	2	2
Cervical polyp	1	1
Vulval papilloma	1	1
Osteoporosis	12	6
Pseudomyxoma peritonei	1	1

The most common gynaecological disorder was genital tract malignancies (34%), followed by POP (25%) and urogenital infections (16%). Of those with genital malignancies, 32 had carcinoma cervix, 18 had carcinoma ovary, 14 had carcinoma endometrium, and 2 had carcinoma vulva.

### Discussion

Geriatric gynaecology deals with gynaecological pathologies encountered in postmenopausal women aged 65 years and above. The Indian society which was pyramidal till 20th century is now on the verge of becoming a rectangular society- a society in which nearly all individual survive to advanced age and then succumb rather abruptly over a narrow age range cantering around the age of 85. [8] Older women often question the need for periodic gynecologic examinations after menopause. The answer of course is that they should continue to protect their health. [9] Age does not prevent the development of cancer of the genitalia or breast. Although the incidence of several genital malignancies decreases after menopause. That of some other cancers-notably of the endometrium, vagina, and vulva-actuality increases. Some older women with atrophic vaginal and vulvar tissue resulting from hypoestrogenism hesitate to come for examination because of the pain produced by digital vagino-abdominal palpation or by insertion of a Graves or Pederson vaginal speculum. [4] The various gynaecological disorders peculiar to ageing are pelvic organ prolapse, postmenopausal bleeding, gynaecological malignancies, urinary incontinence, genital tract infections, vulvovaginal disorders. The spectrum of gynecological disorders in India differ from those in developed world as there are no screening programmes for early detection and hardly any dedicated geriatric units.[6]

Out of 200 patients, 85% belonged to age group 65-74 years. Their mean age at menopause was  $49.11 \pm 4.40$  years and mean duration of menopause was  $21.14 \pm 5.85$  years which were comparable to that for

north Indian women. [10] The study population was 60% from rural and 40% urban areas. Only 30% of the patients were literate. Geriatric women had higher number of pregnancies. Something coming out of vagina (SCOV, 25%) and Postmenopausal bleeding (PMB, 32%) were the two major presenting complaints. PMB in older women should be considered a sign of underlying genital cancer and warrants thorough evaluation. The unique features of geriatric illnesses are chronicity and heterogeneity, greater severity and slow or sometimes no recovery. There is an obvious need of screening programme for early detection of gynecological malignancy to provide better geriatric services, but a paucity of data regarding gynaecological morbidity in geriatric women hampers proper planning. Gynaecological disorders in older women differ from those who are younger. [11] Elderly women experience vasomotor, urogenital, psychosomatic, psychological symptoms and sexual dysfunction. [12] Studies have shown that there is a significant increase in the incidence of cancer after 65 years of age. In western world, endometrial cancer was commonest genital malignancy, followed by ovarian malignancy.4 This was in contrast to our population, where carcinoma cervix was most common followed by ovarian and endometrium, in that order. Detection of carcinoma cervix at advanced stages was due to lack of screening programmes.

The most common gynaecological disorder was genital tract malignancies (34%), followed by POP (25%) and urogenital infections (16%). Of those with genital malignancies, 32 had carcinoma cervix, 18 had carcinoma ovary, 14 had carcinoma endometrium, and 2 had carcinoma vulva. Sood et al [13] assessed gynaecological disorders in geriatric women regarding their frequency, diagnosis and management. 224 patients aged 60 years and above were admitted over a period of one year. The commonest presenting complaint was

postmenopausal bleeding in 41.07% of patients. 80.80% patients had one or more comorbid conditions. Malignancy was the most frequent diagnosis 54% followed by uterovaginal prolapse in 30.35%. Olsen AL et al, showed in their study that the age-specific incidence of genital prolapse increased with advancing age and most patients were older, postmenopausal, parous, and overweight. [14] This was similarly found in our study. Estrogen receptors are widely present in the tissues that form the pelvic floor. Rizk et al. argued that postmenopausal estrogen deficiency has adverse effects on biologic ageing and pelvic floor support mechanism. [15]

### Conclusion

Pelvic organ prolapse and genital malignancy are the major gynaecological causes of hospital admissions in the patients above 60 years. Post-menopausal bleeding is the commonest complaint. Ovarian and endometrial cancer was showing a rising trend in this age group. Though cervical cancer were the second most common malignancy in this group, most of these patients presented at advanced stage and hence were inoperable. Therefore, recommendations to discontinue screening in older age groups must be viewed with caution. Reluctance to undergo pelvic examination in this group must be sensitively addressed so that increased morbidity due to delay in diagnosis is avoided. With 87.50% of these patients having comorbidities, these patients are at high risk for surgery. Therefore, there should be separate operation theater units to handle this fragile subset of population. In future, geriatric gynaecology will play an important role in India, as elderly population is demographically expanding. It is suggested that establishment of geriatric clinics in the current primary health care system can centralize attention to menopausal women and their needs. There is a necessity of multidisciplinary approach to the problems of menopause with more stress on preventions and

interventions. The geriatric clinic is poised to meet these new challenges and provide opportunities to help patients live healthier lives.

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