

Exploring the spectrum of gynaecological disorders in geriatric women: A hospital based cross-sectional study

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Abstract

Background and objective: Elderly women suffer from gynaecological disorders due to ageing and hormonal changes in the post-reproductive period. However, there is inadequate evidence in Sri Lanka to deliver better care for geriatric women with gynaecological disorders. Therefore, we assessed the spectrum of gynaecological disorders among geriatric women in two out-patient settings at a tertiary hospital in northern Sri Lanka.

Methods: A hospital-based descriptive cross-sectional study was conducted among 216 women aged 60 years and above who attended the gynaecology and urology clinics at the Teaching Hospital Jaffna. The data were collected using an interviewer-administered questionnaire and data extraction sheet. Analysis was performed in SPSS V26. The chi-square test was used to determine the association of sociodemographic factors with gynaecological disorders (significance level 0.05).

Results: The mean age was 71.11±7.6 years, with the majority living in rural areas (60.2%). Common symptoms were lower urinary tract storage symptoms (77.3%), back pain (76.4%), and lumps at the vulva (74.1%). Less frequent symptoms included abdominal distension (27.3%), postmenopausal bleeding (15.7%), and vulvar growth/ulcer (3.2%). Common comorbid conditions were hypertension (55.1%), diabetes mellitus (29.6%), and gynaecological conditions such as pelvic organ prolapse (uterovaginal prolapse 59.7%, cystocele 51.9%). Additionally, the study highlighted that 7.9% of women had postmenopausal bleeding with a benign cause, 6.9% had postmenopausal bleeding with a malignant cause in their endometrial assessment, and 13.4% had urogenital infections. There was a significant association between age and cystocele ($p=0.004$) and uterovaginal prolapse ($p=0.007$).

Conclusion: Elderly women have notable gynaecological-related symptoms and disorders along with co-morbid conditions. By addressing the medical, social, and economic needs of elderly women, health systems can better support this growing demographic and improve their quality of life. The gynaecological disease burden in the geriatric group should be identified and addressed from the primary care level.

Keywords: Gynaecological disorders, Sri Lanka, Geriatric women, Pelvic organ prolapse.

Introduction

The ageing population is rapidly growing globally, with the proportion of individuals aged 60 years and above projected to increase significantly from 1 billion in 2020 to 1.4 billion by 2030 (1). These demographic changes pose substantial global challenges for health and social systems, necessitating significant adjustments to accommodate the growing number of elderly individuals. In Sri Lanka, one of the fastest-ageing countries in South Asia, 12.3% of the population is already 60 years or older (2).

Elderly women experience unique gynaecological issues due to extended life expectancy and hormonal changes after menopause (3). Annually, approximately 25 million women globally reach menopause, leading to increased vulnerability to various health issues, including vasomotor, urogenital, psychosomatic, and psychological symptoms, and sexual dysfunction (4). Gynaecological disorders in older women, such as vulvovaginal inflammation, genital prolapse, postmenopausal bleeding, malignancies, and bladder function alterations, are often underreported and undertreated due to cultural stigma, lack of awareness and limited access to healthcare (5).

The increasing life expectancy in Sri Lanka, projected at 77.6 years in 2023, underscores the urgency to address the healthcare needs of its ageing female population. By 2030, it is anticipated that 1 in 5 Sri Lankans will be over 60, with women comprising the majority (6). Despite the significant ageing population, there is a lack of evidence on geriatric gynaecological issues in Sri Lanka, particularly in the Northern Province. Thus, this study aimed to assess the spectrum of gynaecological disorders among geriatric women in two outpatient settings at Teaching Hospital Jaffna, the largest tertiary care hospital in northern Sri Lanka.

Methods

This hospital-based descriptive cross-sectional study was conducted at the gynaecological and urology clinics in Teaching Hospital Jaffna from January 2023 to June 2024. All women aged 60 years and above attending the gynaecological and urological clinics were included in this study. The estimated sample size was 327, and a convenience sampling method was employed to select the participants. We were able to recruit 216 participants within the data collection period. An interviewer-administered questionnaire and data extraction sheet were used to collect data. The study instruments were designed based on the specific objectives of the research team and content validated by experts in the relevant fields. The data collection tool included socio-demographic factors, presenting complaints or symptoms and diagnosed gynaecological disorders. Details regarding gynaecological disorders were obtained from clinical records.

A female medical professional administered the questionnaire on clinic days. Informed written consent was obtained from all the participants prior to data collection. Data were analysed using the Statistical Package for the Social Sciences, version 26 software. The proportion of each gynaecological disorder was calculated. The chi-square test determined the factors associated with specific gynaecological disorders. Ethical clearance was obtained from the Ethics Review Committee, Faculty of Medicine, University of Jaffna (J/ERC/23/148/NDR/0297)

Results

The study included 216 participants, with a 100% response rate. The mean age was 71.1 ± 7.6 years. The majority of the sample were between 60 and 70 years old (53.1%), from rural areas

(60.2%) and did not have O/L qualifications (71.8%). Most had been housewives (77.3%) and were economically dependent on their children (75%) (Table 1). In the sample, 6% (n=13) had never given birth. While the mean menopausal age was 47.3 ± 5.5 years, the majority (89.4%) had reached menopause naturally, and approximately 5% had early or surgical menopause. A few participants (n=7; 3.2%) were on hormonal replacement therapy

Table 1. Socio-demographic characteristics of elderly women (n=216)

	n (%)
Age (years)	
60-70	115 (53.1)
Above 70	101 (47.9)
Residential area	
Rural	130 (60.2)
Urban	86 (39.8)
Marital status	
Living with partner	108 (50.0)
Not living with a partner	108 (50.0)
Educational level	
Below O/L	155 (71.8)
O/L and above	61 (28.2)
Previous occupation	
Was employed	49 (22.7)
Housewife	167 (77.3)
Type of family	
Nuclear	115 (53.2)
Extended	101 (46.8)
Economic support	
Self-earned	13 (6.0)
Spouse	16 (7.4)
Siblings	11 (5.1)
Children	162 (75.0)
Pension scheme	7 (3.2)
Others	14 (6.5)

The most common gynaecological symptoms were lower urinary tract storage symptoms (77.3%), back pain (76.4%), lump at the vulva (74.1%), and urinary incontinence (63.4%) (Table 2).

Table 2 Gynaecological symptoms (n=216)

Variables	n (%)
Lump at vulva	160 (74.1)
Lower urinary tract symptoms	
Dysuria	87 (40.3)
Voiding symptoms	99 (45.8)
Storage symptoms	167 (77.3)
Pain symptoms	
Abdominal distension	59 (27.3)
Lower abdominal pain	92 (42.6)
Back pain	165 (76.4)
Post-menopausal bleeding	34 (15.7)
Vulval Symptoms	
Vulval itching	47 (21.8)
Vaginal discharge	104 (48.1)

Considering long-term co-morbid conditions, hypertension (55.1%), diabetes mellitus (29.6%), heart disease (15.7%), bronchial asthma (13.0%), thyroid disorders (9.7%), chronic kidney diseases (5.1%), anaemia (3.2%), and chronic obstructive pulmonary disease (1.9%) were identified in the sample. The study highlighted a diversity of gynaecological disorders among geriatric women; 7.9% had benign postmenopausal bleeding compared to 6.9% who had malignant postmenopausal bleeding and 13.4% had urogenital infections. The proportions affected by carcinoma in the cervix, endometrium, ovary, and vulva were 3.7%, 3.7%, 4.2%, and 0.5%, respectively. The prevalence of malignant ovarian masses (5.1%) was slightly higher than benign ovarian masses (2.8%). Cystocele and uterovaginal prolapse were observed among 51.9% and 59.7%. Age was significantly associated with having a cystocele ($p=0.004$) and uterovaginal prolapse ($p=0.007$). Age, residential area, marital status, educational level, occupation, and type of family were not associated with any gynaecological disorders like malignant ovarian masses, benign masses and uterovaginal prolapse.

Discussion

Most of the participants were rural dwellers, less educated, previously housewives, now widowed and economically dependent on their children. These social circumstances underscore the potential economic vulnerability of elderly women, often amplified by reduced healthcare access, limited awareness and understanding of health issues (7) and available medical services. They are also prone to psychological distress (8) and require social support.

The high prevalence of pelvic organ prolapses is consistent with existing literature that highlights it as a common issue among elderly women due to the weakening of the pelvic floor muscles and tissues during the post-reproductive period (9).

The occurrence of post-menopausal bleeding in participants is also warranting attention because of its potential association with malignancies. A notable incidence of carcinoma found in this study emphasises the critical need for regular screening and early detection measures in this population to manage and mitigate cancer risks effectively. The high prevalence of comorbidities such as hypertension, diabetes mellitus, heart disease, and bronchial asthma complicates treatment (10) of gynaecological disorders, and a comprehensive approach that coordinates both gynaecological and general health needs is required.

Conclusion

Health systems must prioritise developing accessible and culturally sensitive healthcare programs that cater to the unique needs of geriatric women. Rural, economically dependent women may face more financial and social difficulties. Our findings suggest that a substantial proportion of women are affected by symptoms that are usually associated with underlying cancer, such as post-menopausal bleeding, that necessitate urgent and targeted healthcare interventions. This highlights the need for coordinated care between primary and specialised geriatric gynaecological services, especially in triaging geriatric women with gynaecological conditions at the primary care level and referring them as needed to tertiary centres. By addressing the medical, social, and economic needs of elderly women, health systems can support this growing demographic and improve their quality of life.

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Conflict of interest

The authors have no conflicts of interest to declare.

References

1. World Health Organization. Ageing and health [Internet]. WHO. 2024. Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health#:~:Every%20country%20in%20the%20world%20is%20experiencing%20growth,from%201%20billion%20in%202020%20to%201.4%20billion>
2. World Bank. Sri Lanka must increase its efforts to protect and promote the human capital of the elderly [Internet]. Washington, DC: World Bank; 2023 May 10 [cited 2024 Jul 16]. <https://blogs.worldbank.org/en/endpovertyinsouthasia/sri-lanka-must-increase-its-efforts-protect-and-promote-human-capital-elderly>
3. Kaur B, Gupta S, Kumar S, Sharma S, Verma M. Spectrum of gynaecological disorders in geriatric women: a tertiary care centre study. *Int J Reprod Contracept Obstet Gynecol.* 2017 Oct 28;6(11):4869.
4. Singh M, Chourasia S. Geriatric gynaecology: need and spectrum. *Int J Reprod Contracept Obstet Gynecol.* 2020 May 27;9(6):2556.
5. Sood N, Chandra P, Dhiman B. Gynecological disorders in geriatric women regarding their frequency, diagnosis and management in the state of Himachal Pradesh, India. *Int J Reprod Contracept Obstet Gynecol.* 2017 Dec 25;7(1):297.
6. UNFPA. Making Active Ageing a Reality. 2018.

7. Chesser AK, Keene Woods N, Smothers K, Rogers N. Health literacy and older adults: A systematic review. *Gerontol Geriatr Med.* 2016 Jan 1;2:233372141663049.
8. Thapa DK, Visentin DC, Kornhaber R, Cleary M. Prevalence and factors associated with depression, anxiety, and stress symptoms among older adults: A cross-sectional population-based study. *Nurs Health Sci.* 2020 Dec;22(4):1139–52.
9. Raju R, Linder BJ. Evaluation and management of pelvic organ prolapse. *Mayo Clin Proc.* 2021 Dec;96(12):3122–9.
10. Choi EJ, Cho SB, Lee SR, Lim YM, Jeong K, Moon HS, et al. Comorbidity of gynaecological and non-gynaecological diseases with adenomyosis and endometriosis. *Obstet Gynecol Sci.* 2017;60(6):579.