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Clinical profile of Female Urinary Incontinence: A Hospital Based Study

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ABSTRACT

Aim: To determine the prevalence of urinary incontinence of women attending gynaecology outdoor patient department.

Method: It is a prospective cross sectional study conducted at Paropakar Maternity and Women's Hospital for three months. Types of incontinence, their presentation, associated factors, age and parity were the variables studied. Data were analyzed by descriptive statistics.

Results: Out of 950 gynaecological out-patients, 97 had urinary incontinence (10.2%); 34.1% were in 50-59 years and 37.2% were multipara. Stress urinary incontinence (SUI) was the most common incontinence (56.7%) followed by mixed urinary incontinence (22.7%) and urge urinary incontinence (20.6%). Common complaints were leakage during coughing (63.6%) and sneezing (18.2%) in SUI; urgency and frequency were main problem in mixed and urge urinary incontinence. Three-fourth cases had associated medical conditions and rest had gynecological factors.

Conclusions: Urinary incontinence is common in the fifth decade of life of women and more than half had stress incontinence.

Keywords: incontinence, mixed, stress, urge, urinary

INTRODUCTION

Urinary incontinence is a common problem among women of all age groups which may affect her physical, social and mental wellbeing; and significantly changes her quality of life.¹⁻³ However, only one-third of them seek for medical care.⁴ Globally, there is substantial variation in prevalence of urinary incontinence. It affects men and women with higher prevalence in women affecting 15-55%.⁵ One study conducted in Nepal reported 50.6%⁶ whereas it was 21.87%⁷ in an Indian study. Stress urinary incontinence (SUI), urge urinary incontinence (UUI) and mixed urinary Incontinence (MUI) are main three problems women are usually presented with. While prevalence of SUI peaks at fifth decade, UUI and MUI increase with age.^{1,2} The most prevalent is SUI (51%) followed by MUI (39.0%) and UUI (10.0%).⁵

SUI occurs in the presence of increased abdominal pressure without

perception of micturition desire. Factors associated for this condition are aging, pregnancy, vaginal delivery, obesity, post hysterectomy pelvic organ prolapse, hypertension, diabetes Mellitus and hypoestrogenism.^{2,3,5}

In UUI, there is sudden urge to urinate and there is no control over the detrusor muscle. Recurrent urinary tract infection is independently associated with UUI. Similarly, increased BMI and advanced age are also associated with UUI. Additionally, women, whose mother or sisters are incontinent, are more likely to develop SUI and MUI. Moreover, Parkinson's disease or stroke can lead to neurogenic detrusor overactivity.⁵

Urinary incontinence in woman with MUI is associated with increased abdominal pressure and also prior or simultaneously with urgency without abdominal effort. The pathological mechanism that generates symptoms of SUI and UUI in the same patient is unknown.⁵

Women with UI are usually presented with leakage during coughing, sneezing, weight lifting or frequency, urgency and nocturia causing significant trouble in performing day to day activities. Urinary incontinence is common but significantly under reported condition. Hence, this study aims to study the prevalence, types and associated factors with this bothersome condition so that the findings of this study may be used to screen, diagnose and manage in order to improve the quality of life of women.

METHODS

This prospective cross-sectional study was conducted at Paropakar Maternity and Women’s Hospital for three months February to May 2021. Pregnancy, postpartum cases and age under 20 years were excluded from the study. Ninety seven cases who met the criteria were taken with informed consent. Cases were analyzed in terms of age, parity, type of urinary incontinence and associated risk factors using MS Excel and SPSSv25.

RESULTS

During study period, 950 women attended Gynae OPD and 97 had urinary incontinence (10.2%). Majority were between 50-59 years (n=33;34.1%) and para three (n=36;37.2%). [Table-1]

Table-1: Distribution according to age and parity (N=97)

Parameters	N	%
Age in years	20-29	3 3.0
	30-39	10 10.3
	40-49	25 25.8
	50-59	33 34.1
	60-69	12 12.4
	70-79	8 8.2
	≥80	6 6.2
Parity	1	21 21.6
	2	29 29.9
	3	36 37.2
	≥ 4	11 11.3

Com-types of urinary incontinence were stress, mixed type and urge in order.[Figure-1]

Urinary leakage during cough was the main complaint of women with stress incontinence followed by the sneezing; urgency in urge urinary incontinence; and cough and frequency in mixed type. [Table-3]

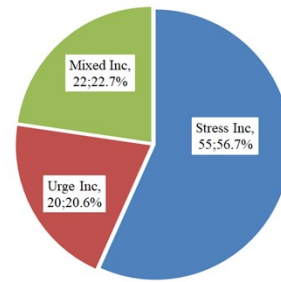


Figure-1: Types of Urinary Incontinence (N=97)

Table-3: Presentation of Urinary Incontinence

Types	Presentation	N	%
Stress (N=55)	Cough	35	63.6
	Sneezing	10	18.2
	Weight Lifting	5	9.1
	Posture Changing	3	5.5
	Sexual Activity	2	3.6
Urge (N=20)	Urgency	8	40.0
	Frequency	6	30.0
	Nocturia	6	30.0
Mixed (N=22)	Cough, Frequency	12	54.5
	Cough, Frequency, Nocturia	8	36.4
	Cough, Frequency, Urgency	2	9.1

(N=97)

Medical factors were associated in three-fourth and gynecological factors in one-fourth of cases. [Table-4]

Table-4: Factors associated with urinary inconti-

Associated factors	N	%
Medical disorder (N=71;73.2%)	COPD	10 10.3
	DM	15 15.5
	HTN	20 20.6
	Neurological disorder	3 3.0
	Psychiatric disorder	3 3.0
	UTI	20 20.6
Gynael factors (N=26;26.8%)	POP	15 15.5
	Post TAH	6 6.0
	Post VH	5 5.3

nence (N=97)

DISCUSSION

Urinary incontinence (UI) is common but significantly under reported. It affects women of all age groups.¹ Its prevalence varies. The major reason for this variation is the way urinary incontinence is defined.¹ In the present study, the prevalence of UI is 10.2%. This is much lower than the findings of studies done by MinassianVA¹ (25.0%), Regmi

MC⁶ (50.6%), Singh U⁷ (21.87%), Jolleys JV⁸ (41.0%), Masenga GG⁹ (42.0%).^{1, 6-9} Such difference may be related with culture difference in the perception of UI and willingness to report UI as well as methodological differences.

Age is the independent risk factor for UI.¹ This study found the majority of women (n=59, 34.1%) with UI belong to age group 50-59 years. Such finding was also reported by Minassian VA.¹ However, Regmi MC⁶ and Singh U⁷ reported that its prevalence increases 40 years above.

Similarly, very high prevalence of UI (60.0%) was reported by Jolleys JV in the age group 45-54 years.⁸ Many studies reported that prevalence of UI increases with increasing parity.⁷⁻¹¹ The present study found highest number of UI (n=36, 37.2%) in multiparity (para 3). Such findings were also reported by studies of Masenga GG⁹, Zago AC¹⁰, Prabhu SA¹¹ and Wu JM.¹² Similarly, Jolleys JV⁸ also reported that there is linear increase in UI with increasing parity.

The most common UI in this study was SUI (n=55; 56.7%) followed by MUI (n=22; 22.7%) and UUI (n=20; 20.6%). Similar observation was also reported by Mota RL.⁵ However, much higher incidence of SUI was reported by Singh U (68.4%) but less UUI (15.8%) and MUI (15.8%).⁷ In contrast to this, Regmi MC⁶ reported lower incidence of SUI (40.0%) and higher incidence of UUI (60.0%). Similarly, Wood L³ reported SUI in 10.0%, UUI in 7-33% and MUI in 14-61%.

This study showed that urine leakage during coughing (63.6%) and sneezing (18.2%) were the main complaints of women with SUI; urgency in 40.0% in UUI; and cough and urgency in 54.5% in MUI. However, Wu JM et al in his study reported that urgency (51.0%) and nocturia (43.0%) were chief complaints in women with UUI.¹² Such clinical presentations are mentioned in many studies but their frequencies are not well quoted.

In this study, 71 (73.2%) women with UI had medical disorders like hypertension and urinary tract infection being the leading factors (n=20, 20.6%, each). Such association was also reported by Singh U⁷, Jolleys JV⁸, Masenga GG⁹ and Prabhu SA¹¹ and Berghmans.¹³

This study observed that the 15 (15.5%) women with UI had pelvic organ prolapse (POP). De Laney et al also showed that POP potentially leads to UI. Moreover, some authors consider that this association is probably, due to similar pathophysiology.¹⁴

This study also found that 11 women (11.3%) reported UI following hysterectomy. Similarly, Wu JM et al also reported that the cumulative incidence of new onset UI following hysterectomy after 4 year of hysterectomy was 16.7% (SUI 16.1%, UUI

This study also found that 11 women (11.3%) reported UI following hysterectomy. Similarly, Wu JM et al also reported that the cumulative incidence of new onset UI following hysterectomy after 4 year of hysterectomy was 16.7% (SUI 16.1%, UUI 13.8%, MUI 13.7%).¹²

CONCLUSIONS

Prevalence of urinary incontinence peaks in the fifth decade of life and stress urinary incontinence is the most common type of presentation. Most of the incontinence is associated with medical disorders than gynecological factors.

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