

Prevalence of Urinary Incontinence and Health Seeking Behaviours among Middle Age Women

Kalpana Shrestha,¹ Hira Niraula,² Ajita Silwal³

¹Civil Service Hospital of Nepal, Baneswor, Kathmandu, Nepal.

²Dadeldhura Hospital, Dadeldhura, Nepal

³National Academy of Medical Sciences, Bir Hospital Nursing Campus, Kathmandu, Nepal.

Correspondence: Kalpana Shrestha, Civil Service Hospital of Nepal, Baneswor, Kathmandu, Nepal. Email:kalpanaujjanshrestha@gmail.com, Phone: +977-9841353399

ABSTRACT

Introduction: Urinary incontinence is one of the most common problems of middle-age. It is one of the inconvenient experiences that have adverse physical, psychological and social effects. The shame, taboos and associated knowledge deficit have interfered with its health seeking approaches that further lower the quality of life. This study was designed to assess the prevalence and health seeking behaviour on urinary incontinence among middle aged women.

Methods: The community-based descriptive cross sectional study was conducted to find out the prevalence and health seeking behaviours on urinary incontinence among middle aged women. A total number of 175 women of age group 40-60 years were purposively selected from the Kathmandu metropolitan city ward number 31 from among the voters. Face to face interview was conducted using structured interview schedule. Data were analysed using descriptive (frequency, percentage, mean, standard deviation range) statistics.

Results: The study showed that 56% of the women had urinary incontinence. Among them 59.18% had stress urinary incontinence, and 40.82% women had both stress and urge urinary incontinence. Among them, 74.5 % women did not seek medical consultation. Some of the common reasons for not seeking medical advices were perceiving urinary incontinence as a natural process (79.22%), lack of knowledge(55.84%) and embarrassment (33.77%). The study findings also showed that urinary incontinence was statistically significant with the age of women, parity, place of delivery and mode of delivery.

Conclusions: Urinary incontinence is prevalent in more than half of the women and stress urinary incontinence was common among them. Most of the women had not sought any medical advice. embarrassment, lack of knowledge and perceiving condition as natural were some of the reasons for not approaching for medical consultation.

Keywords: heath seeking behaviour; urinary incontinence.

ARTICLE INFORMATION

Source of Support: No external support


Received: 12 July 2022

Accepted: 22 December 2022

Conflict of Interest: None

Published Online: 30 December 2022

Copyright © 2022 by the author(s), wherein the author(s) are the only owners of the copyright of the published content.

Licensing: It is distributed under the terms of the [Creative Commons Attribution International License 4.0](https://creativecommons.org/licenses/by/4.0/) under the CC-BY 4.0  license, and is free to access on the Journal's website. The author(s) retain ownership of the copyrights and publishing rights without limitations for their content, and they grant others permission to copy, use, print, share, modify, and distribute the article's content even for commercial purposes.

Disclaimer: This publication's claims, opinions, and information are the sole creations of the specific author(s) and contributor (s). Errors in the contents and any repercussions resulting from the use of the information included within are not the responsibility of the publisher, editor, or reviewers. Regarding any jurisdictional assertions in any published articles, their contents, and the author's institutional affiliations, the Journal and its publisher maintain their objectivity.

INTRODUCTION

The International Continence Society (ICS) defines incontinence as a complaint of any involuntary leakage of urine. Stress urinary incontinence is the complaint of involuntary leakage of urine on effort or exertion, or on sneezing or coughing; whereas urge incontinence is the complaint of involuntary leakage accompanied by or immediately preceded by urgency. Mixed urinary incontinence encompasses involuntary leakage associated with urgency and also with exertion, effort, sneezing or coughing.¹ Urinary incontinence does impact on quality of life of a woman.² It is a worldwide problem affecting large number of women of all age groups with broad peak around middle age (30%-40%).³ It is a public health problem affecting women of all economic classes and its economic burden is increasing with time.^{3,4} A study conducted in Eastern Nepal found urinary incontinence in 50.6% of the women, among them urge incontinence was more common (60%) than stress incontinence (40%).⁵

Urinary Incontinence (UI) encompasses adverse effects on various dimensions of health including both physical, psychological as well as social circumstances. The effects range from skin breakdown, recurrent urinary tract infections, sleep disturbances, social withdrawn, anxiety, depression, embarrassment and low self-esteem^{6,7}. Many women suffer in silence, believing that it is a normal aging process, matter of shame and embarrassment, leading to delayed seeking of treatment which further lowers the quality of life.⁸⁻¹⁰ The objective of the study was to find the prevalence of and health seeking behavior related to urinary incontinence among middle-aged women.

MATERIALS AND METHODS

A Community based descriptive cross sectional research design was carried out in ward no. 31 of Kathmandu Metropolitan City, Kathmandu, Nepal from July to August 2018.

Ethical clearance was obtained from Institutional Review Board of National Academy of Medical Science Bir Hospital and administrative permission was obtained from ward no. 31. All the women of age group 40-60 years residing in Kathmandu metropolitan city ward no. 31 were included in the study. According to central election

committee data 2017, there were 3,654 voters aged in between 40–60 years of age. The sample size was calculated using Solvin's Formula [$n = N / (1 + N * (e)^2)$]
 $= 3654 / [1 + 3654 * (0.08)^2]$
 $= 3654 / 24.3856 = 150$

Where; n = the desired sample size; N = population size (total number of middle age women lived in ward number 31 of Kathmandu metropolitan city is 3654); e = margin of error i.e. at 95% confidence interval, the margin of error is 0.08; Adding Non response rate =17%, final sample size for the analysis was 150 + 25 =175. Thus, the sample size of the study was 175.

Written informed consent was obtained from each women willing to participate in the study. Non probability, purposive sampling technique was used in this study. Door to door visit was done. The data were collected via an interview using a pretested pro forma. The pro forma consisted of demographic variables such as age, education and occupation; obstetric variables such as parity, mode and place of delivery. It was followed by a screening question to find out the prevalence of urinary question and questions related to health seeking behaviors.

The data were entered in Microsoft Excel 2010 and analyzed using Statistical Package for Social Sciences (SPSS) Version 17. Descriptive analysis was applied to show the categorical data in terms of frequencies and percentages while continuous data were expressed as means.

RESULTS

Out of 175 women, 98 had urinary incontinence. Most of the women (59.18%) had stress incontinence whereas 40.82% had mixed incontinence. None of them was suffering from urge incontinence only (Table 1). Similarly, more than half of the women (52.04%) had occasional urinary incontinence whereas majority of them had continence enough to wet their underwear (Table 2).

The mean age of women was 49.1±5.83 years. The majority of women (77.78%) with age group 50-55 years had urinary continence. The urinary incontinence was found statistically significant with the age of the women. Nearly two-third of the literate women (63.64%) had urinary incontinence. The urinary incontinence was prevalent more (60.67%) among housewife (Table 3).

Table 1. Prevalence of urinary incontinence among middle aged women. n=175		
	Frequency	Percent
Prevalence	98	56.00
Type (n=98)		
Stress incontinence	58	59.18
Mixed incontinence	40	40.82

Table 2. Magnitude of urinary incontinence.		
	Frequency	Percent
Frequency of UI		
Occasionally	51	52.04
At least once a month	27	27.55
At least once a week	9	9.18
At least once a day	11	11.22
Quantity of urine leaked		
Few drops	25	25.51
Enough to wet underwear	73	74.48

Table 3. Socio-demographic characteristics of women			
	Prevalence of Urinary Incontinence		P value
	Yes	No	
Characteristics	n(%)	n(%)	
Age			
40-45	17(29.82)	40(70.18)	0.00* χ^2
45-50	28(58.33)	20(41.67)	
50-55	21(77.78)	6(22.22)	
55-60	32(74.42)	11(25.58)	
Mean±SD = 49.1±5.83			
Educational Status			
No education	11(52.38)	10(47.62)	0.751 χ^2
Literate	21(63.64)	12(36.66)	
Primary	11(45.83)	13(54.17)	
Secondary	21(56.76)	16(43.24)	
More than secondary	34(56.67)	26(43.33)	
Occupation			
Service	17(47.22)	19(52.78)	0.369 χ^2
Housewife	54(60.67)	35(39.33)	
Self employed	27(54.00)	23(46.00)	

χ^2 Pearson Chi-square test, * p value significant at <0.05

Table 4. Obstetric characteristics of women.			
	Prevalence of Urinary Incontinence		p value
	Yes	No	
Characteristics	n(%)	n(%)	
Parity			
No Children	0(0.00)	7(100.00)	0.01*

Only 1 child	9(36.00)	16(64.00)	
2 Children	49(60.49)	32(39.51)	
More than 2 children	40(64.52)	22(35.48)	
Place of Delivery			
Home Delivery	28(63.64)	16(36.36)	0.01*
Institutional Delivery	60(56.60)	46(43.40)	
Both	10(55.56)	8(44.44)	
Mode of delivery#			
Normal delivery	91(63.6)	52(36.40)	0.00*
CS	12(32.40%)	25(67.6)	
Instrumental	2(66.70)	1(33.33)	

χ^2 Pearson Chi-square test, * p value significant at <0.05 ,# Multiple response

Table 5. Health seeking behaviour of the middle age women.

Characteristics	Frequency	Percent
Seeking any medical consultation (n=98)		
Yes	25	25.51
No	73	74.49
Type of treatment received (n=25) *		
Medicine	4	16.00
Kegel's exercise	21	84.00
Timing of seeking treatment from onset of symptoms		
Less than 6 months	3	12.00
6 months to 1 year	6	24.00
1 to 3 years	9	36.00
3 years above	7	28.00
Treatment Outcome		
No recovery from the symptoms	8	32.00
Some recovery from the symptoms	17	68.00
Level and reason of satisfaction from treatment		
Somewhat satisfied: Symptoms decreased	22	88.00
Not satisfied: Symptoms still present	3	12.00
Reason for not seeking consultation * (n=98)		
Shame	22	28.95
Embarrassment	26	33.77
Economic Problem	7	9.09
Lack of Knowledge	43	55.84
Fear of Side effects	5	6.49
Perceive as a Natural Process	61	79.22
Others	3	3.90

* Multiple Response

The urinary incontinence was not prevalent in women with no children whereas 60.49% of the women with 2 children had urinary incontinence. Nearly two-third of the women (63.64%) with home delivery were suffering from urinary incontinence. The maximum of the women (66.70%) with instrumental delivery had problem of urinary incontinence. The urinary

incontinence was found statistically significant with parity, place of delivery and mode delivery. (Table 4). Only 25.51% of the women having urinary incontinence had sought medical consultation and majority of them (84.00%) was advised for Kegel's exercise. None of them were surgically treated. More than two-third of them (68.00%) had some recovery

from the symptoms. Eighty- eight percent of the women were somewhat satisfied with the treatment. Nearly three-fourth of the (74.49%) women with urinary incontinence had not sought any medical consultation. The majority of the women (79.22%) perceived urinary incontinence as a natural process and 55.84% of them did not seek any medical advice due to lack of knowledge (Table 5).

DISCUSSION

The prevalence of urinary incontinence was 56% in the current study with 59.18% stress incontinence as the most common type and mixed incontinence accounting in (40.82%). The findings of the study is similar to another study done in eastern Nepal where urinary incontinence was prevalent in 50.6%. However, the stress incontinence was prevalent in only 20.6%.⁵ Similarly, the study findings also supports another study conducted in India revealing the prevalence of 50%.⁴ In support of the study findings, a French study also showed prevalence of urinary incontinence of 58%.¹¹

In contrast to the present study, study done in Uttar Pradesh (India) among 236 middle aged women showed that almost 1 in 12 women suffered from urinary incontinence.¹²

The study showed 76.53% women did not seek the medical consultation. In line with the study findings, other studies had also reported not seeking medical consultation in majority of the their participants.^{13, 14}

In the current study 16.67% of the women had received treatment by medicine and 84.00% were practising Kegel exercises as per advice. In Egypt, 11.1% of the women were treated by medicine which is similar to the present study.¹³ In contrast, in an Asian survey, out of 66 females with some or other urinary problems, 32 had consulted with a doctor and all of them had received medical treatment and only one woman had received treatment through exercises.¹⁵ Another study done in Egypt showed that only 6% of the women were practicing Kegel's exercises.¹³

On the basis of treatment outcomes of the urinary incontinence, 70.83% respondents had felt some recovery from the symptoms. In contrast to our study, study done in Egypt showed that 59.3% reported some recovery from the urinary incontinence symptoms after treatment.¹³

Regarding the level and reason of satisfaction from treatment, 91.67% of the respondents were somewhat satisfied as symptoms were decreased. In contrast to our study, study done in Egypt showed, only 37% were satisfied from treatment, whereas 8.33% women were satisfied as symptoms still present, whereas very higher percentage (63%) of women had felt not satisfied though symptoms had decreased.¹³

The reasons for not seeking medical consultation were perceiving urinary incontinence as natural process (79.22%), lack of knowledge (55.84%), embarrassment (33.77%), shame (28.95%), economic problem (9.09%), fear of side effect of the drug (6.49%) in the present study. Another study showed 96% feel embarrassed to talk with doctors about urinary incontinence, 78% indicated that leakage of urine is natural process, 60% were afraid of the side effects of treatment, 30% did not know where to seek medical consultation.¹³ A study done in Uttar Pradesh India reported that 42.9% of women didn't sought medical treatment because urinary incontinence was considered normal, 14.3% because of feeling shame and 7.05% respondents because of fear of hospital.¹²

CONCLUSION

The present study concludes that more than half of women had the urinary incontinence. The stress urinary incontinence was common type of urinary incontinence. Most of the women did not seek medical advice for their condition. Lack of knowledge, perceiving as natural process, shame and embarrassment were some of the common reasons for not seeking medical consultation. Awareness program addressing the common myths can be planned and implemented to improve the health seeking behaviours.

REFERENCES

1. Abrams P, Cardozo L, Fall M, Griffiths D, Rosier P, Ulmsten Ulf, et al. The standardisation of terminology of lower urinary tract function: Report from the standardisation sub-committee of the international continence society. *Neurourol Urodyn*. 2002;21:167–178. [[PubMed](#)] [[DOI](#)]
2. Senra C, Pereira MG. Quality of life in women with urinary incontinence. *Rev Assoc Med Bras*. 2015;61:178–183. [[PubMed](#)] [[DOI](#)]
3. Hunskaar S, Arnold EP, Burgio K, Diokno AC, Herzog AR, Mallett VT. Epidemiology and natural

- history of urinary incontinence. *Int Urogynecol J Pelvic Floor Dysfunct*. 2000;11:301–319.[[PubMed](#) | [DOI](#)]
4. Avellanet M, Fiter M, Cirera E, Coll M. Prevalence of urinary incontinence in Andorra: Impact on women's health. *BMC Womens Health*. 2003;3:1–6.[[PubMed](#) | [DOI](#)]
 5. Regmi MC, Uprety D. Prevalence of urinary incontinence among gynecological admissions at tertiary care hospital in eastern Nepal. *Heal Renaiss*. 2012;10:16–19.
 6. Elenskaia K, Haidvogel K, Heidinger C, Doerfler D, Umek W, Hanzal E. The greatest taboo: Urinary incontinence as a source of shame and embarrassment. *Wien Klin Wochenschr*. 2011;123:607–610.[[PubMed](#) | [DOI](#)]
 7. Sange C, Thomas L, Lyons C, Hill S. Urinary incontinence in Muslim women. *Nurs Times*. 2008;104:49–52.[[PubMed](#)]
 8. Ghafouri A, Alnaimi AR, Alhothi HM, Alroubi I, Alrayashi M, Molhim BA, et al. Urinary incontinence in Qatar: A study of the prevalence, risk factors and impact on quality of life. *Arab J Urol*. 2014;12:269–274.[[PubMed](#)]
 9. Samir Ahmed A, Hassan Zaky N. Health Care-Seeking Behaviors among Women Suffering from Urinary Incontinence. *J Nurs Care*. 2016;05:1–10.[[DOI](#)]
 10. Saaqib S, Jameel A, Ghufraan M, Eusaph AZ. Predictors of Delay in Treatment of Urinary Incontinence Among Pakistani Women – A Cross-sectional Study. *Research Square*. 1–14.[[DOI](#)]
 11. Peyrat L, Haillot O, Bruyere F, Boutin JM, Bertrand P, Lanson Y. Prevalence and risk factors of urinary incontinence in young and middle-aged women. *BJU Int*. 2002;89(1):61-6. [[PubMed](#) | [DOI](#)]
 12. Agarwal BK, Agarwal N. Urinary incontinence: prevalence, risk factors, impact on quality of life and treatment seeking behaviour among middle aged women. *Int Surg J*. 2017;4: 1953.[[DOI](#)]
 13. Huang KC. Health Care-Seeking Behaviors among Women Suffering from Urinary Incontinence. *Phys Ther*. 2016;6:1[[DOI](#)]
 14. Samir Ahmed A, Hassan Zaky N. Health Care-Seeking Behaviors among Women Suffering from Urinary Incontinence. *J Nurs Care* 2016; 05:1–9.[[DOI](#)]
 15. Shah ZR, Sheth MS, Talapalli R, vyas N. Perception of females with urinary incontinence. *Int J Ther Rehabil Res*. 2015;4: 256–259.[[DOI](#)]