Journal of Research and Development
Vol.6, Issue-1, May 2023, pp.30-38
DOI:https://doi.org/10.3126/jrdn.v6i01.55237
ISSN: 2616-0366 (Print)
Research and Development Nepal (RDN)

Knowledge on Urinary Incontinence among Women in a Community at Barahachhetra, Nepal

Urmila Basnet[1], Namita Yangden[2], Punam Kumari Mandal[3*]

Abstract

Urinary Incontinence is a condition in which involuntary loss of urine is a social or hygienic problem for the patient. Urinary incontinence is regarded as a disgraceful situation, with a negative effect on the quality of life, and is usually kept disguised. It is an important problem leading to physical, social, psychological, sexual, and economic problems among women of all age groups. The aim of this study was to assess knowledge of urinary incontinence among women in a community at Barahachhetra. A descriptive study was conducted among women aged 40-65 years residing in Barahachhetra-5. A non-probability purposive sampling technique was used to gather data from 105 women using a semi-structured interview schedule with Face-to-face interviews. SPSS version 16 (SPSS Inc., Chicago, III., USA) was used for data entry and analysis. Descriptive analysis and inferential statistics i.e., chi-square test was used to find the association of the level of knowledge with selected demographic variables. This study revealed that out of 105 respondents, 21% had good knowledge and 59% had average knowledge on urinary incontinence which concluded that only less than one-fourth of respondents have good knowledge and the level of knowledge is not associated with selected demographic variables. It is recommended that awareness programs on urinary incontinence should be conducted at the community level by concerned authorities.

Keywords: knowledge, Urinary Incontinence, women, community study

Introduction

Urinary incontinence (UI) is one of the most distressing and debilitating conditions affecting women. Urinary incontinence has a detrimental impact on women's quality of life, particularly in regard to the physical, mental, social, emotional, financial, and sexual elements. (Reda, Hanan & Omaima, 2010). The International Continence Society defines urinary incontinence (UI) as an involuntary loss of urine that poses a social or hygienic concern for the individual (Poomalar & Priyadharshini, 2015). Around the world, 200 million people suffer from urinary incontinence. Seventy-five to eighty percent of the 25 million adult Americans who

[1] Ms. Basnet is a Registered Nurse at Tribhuvan University Teaching Hospital.
[2] Ms. Yangden is a Lecturer at Biratnagar Nursing Campus TU, IOM
[3] Ms. Mandal is an Assistant Professor, Biratnagar Nursing Campus TU, IOM, Corresponding E-mail: *punammandal777@gmail.com*

experience urine incontinence are female. Every fourth woman over the age of 18 experiences episodes of leaking urine involuntarily. 80% of those affected by UI can be cured or improved. Despite the high success rate in treating UI, only 1 out of every 12 people seeks help due to the misinformed idea that UI is an untreatable consequence of having had children or as a result of aging (National Association for incontinence, 2017).

Urinary incontinence is a significant problem in developing countries. A study revealed a prevalence of 28.7 % in developing countries (Walker & Gunasekera, 2011). A study conducted in BPKIHS, Dharan also reported UI in 50.6% of women (Regmi & Uprety, 2012). Women who are incontinent are burdened with worries, feelings of embarrassment, and shame, and they constantly worry that someone will find out about their condition. Women's incontinence has a substantial impact on their sexual function and relationships with their partners, which exacerbates already poor self-confidence issues. Furthermore, it has been shown that incontinent women are more likely to experience significant depression, which reinforces the cycle of low self-esteem, increasing social withdrawal, and, eventually, a decrease in their quality of life (Sinclair & Mrcog, 2011). According to studies, the disease is frequently underreported since many people do not comprehend what the word "incontinence" means. Past studies revealed that it takes several years before an incontinent woman consults a healthcare provider about her symptoms because they think that the condition could not be treated, feel embarrassed, and think that this is a “normal” part of aging (Taylor et al, 2011).

Several studies concluded high prevalence of UI and lack of knowledge on urinary incontinence among women. Due to lack of knowledge on urinary incontinence they do not report their problem to health care providers which lead to reduced quality of life. As only limited research is conducted in the province one as well as in the country context related to knowledge on Urinary Incontinence, it is very crucial to find out how much information women have about urinary incontinence. The aim of this study is to assess knowledge of urinary incontinence among women of Barahachhetra.

Methods and Materials

A descriptive study was conducted to identify knowledge of urinary incontinence among women in Barahachhetra-5. Barahachhetra is a municipality located in the Sunsari district, province 1. The location was selected purposively as limited studies have been conducted in the province one as well as country context. Besides studies have shown a high prevalence of Urinary Incontinence in women above the age of 40 years and a lack of knowledge on Urinary Incontinence among women.

Data was collected using the semi-structured interview schedule. The tool was divided into 2 parts: Part I: Demographic information (age, income, occupation, marital status, no. of children, menstrual status) Part II: Questions related to knowledge on Urinary Incontinence among women (It includes questions related to the definition, causes, symptoms, preventive measures, treatment and complication of UI). A thorough assessment of the literature and consultation with subject experts was done to maintain the instrument's content validity. Pretesting was carried out on 10% of the sample, and modifications were made as needed. After consulting with English and Nepali experts, the questionnaire was finalized. Altogether there were 14 questions related to urinary incontinence. Among them, 8 questions were related to knowledge. Knowledge score was calculated through knowledge-related questions. There were yes/no, multiple choice, and multiple response questions in knowledge-related questions. The total knowledge score was 28 which was

then transformed into percentages and was interpreted as above 75% (>21) good knowledge, 50-75% (14-21) average knowledge, and below 50% (<14) poor knowledge.

Data was collected by non-probability purposive sampling method from 105 women of age 40-65 years of Barahachhetra-5 who participated voluntarily and who were available during the data collection period from 13th of May, 2018 to 27th of May, 2018. Approval was taken from the Research Management Committee of Biratnagar Nursing Campus before data collection. The approval was taken from the chairperson of Barahachhetra-5 for conducting the study. Written informed consent was taken from the respondents. Privacy and confidentiality of information were maintained throughout the study. Each household was visited for data collection and the interview was taken with women of age 40-65 years old. The respondents were face-to-face interviewed approximately for 25-30 minutes. Data were checked for completeness on the same day of data collection.

Data entry and analysis were done by using the computer Statistical Package for the Social Sciences (SPSS) version 16. Descriptive statistics like frequency, percentage, mean, and standard deviation was used, and inferential statistics i.e., chi-square test was used to find the association of the level of knowledge with demographic variables.

Results and Discussion

The findings showed mean age and standard deviation were 49.78 ± 7.97. In regard to education, 64.8% were literate. Among them, 45.6% of respondents were informally educated. Almost respondents (95.2%) were homemakers. Most of the respondents (72.4%) had a family income of 25000 and below per month. Likewise, 91.4% were married with 64.8% having two or three children followed by 28.6% with four or more children. Likewise, 51.4% were menopausal.

Similarly, 29.5% had a problem with urinary incontinence. Among them, only 6.5% of respondents who were having problems sought treatment because most of the respondents (75.9%) think that urinary incontinence is normal in aging and 6.9% of respondents had no idea about treatment.

Among respondents, more than half of respondents (59%) respondents gave a correct response about the meaning of urinary incontinence and 83.8% responded aging is a cause of urinary incontinence followed by pregnancy (82.9%). Similarly, 88.65% stated a sudden uncontrollable need to urinate as a symptom of urinary incontinence, and 90.5% of respondents were known about the preventive measures for urinary incontinence. Similarly, 81.9% agreed to avoid lifting heavy loads and adequate rest up to 45 days after delivery as a preventive measure for urinary incontinence followed by limiting childbirth (71.4%). The majority of respondents (86.7%) agreed urinary incontinence is treatable but only 3.8% stated pelvic floor muscle exercise can treat urinary incontinence. Regarding complications, 92.4% of respondents pointed out the loss of interest to participate in social activities as a complication. This study shows only 21% of the respondents had good knowledge about urinary incontinence and the level of knowledge was not associated with selected demographic variables as the *p*-value is more than 0.05.

Table 1

Problem of Urinary Incontinence and Treatment in Respondents

Variables	Frequency (f)	Percentage (%)
Experience with problems of UI		
Yes	31	29.5
No	74	70.5
Duration of a problem (n=31)		
<5yrs	26	83.9
≥ 5yrs	5	16.1
Treatment (n=31)		
Yes	2	6.5
No	29	93.5
Reason for no treatment (n=29)		
Think that it is normal in aging	22	75.9
Low economy	5	17.2
Do not have idea about treatment	2	6.9

Note. N= 105

Table 2

Knowledge of Respondents on Urinary Incontinence

Variables	Frequency (f)	Percentage (%)
Meaning of Urinary Incontinence		
Infection of the urine	35	33.3
Involuntary leakage of urine due to inability to control bladder	62	59
Retention of urine	2	1.9
Weakening of the pelvic bone	6	5.7
Source of information		
Friends	85	81
Television	14	13.3
Family	5	4.8
Health workers	1	1
Causes*		
Aging	88	83.8
Pregnancy	87	82.9
Multiple child birth	84	80
Poor postnatal care	78	74.3
Inadequate birth spacing	50	47.6
Menopause	20	19
Uterine prolapsed	8	7.6
Diabetes	4	3.8
Others	4	4.0

Symptoms*		
The sudden uncontrollable need to urinate	93	88.6
Urine leaks before you have time to go to the toilet.	91	86.7
Involuntary leakage on effort or exertion, or on sneezing coughing, and lifting something heavy.	86	81.9
Involuntary leakage on exercising, and laughing.	52	49.5
Frequent or constant dribbling of urine	35	33.3

Note. N= 105, (*) Multiple response questions

Table 3

Knowledge on Prevention, Treatment and Complication of Urinary Incontinence

Variables	Frequency (f)	Percentage (%)
Preventable		
Yes	95	90.5
No	10	9.5
Preventive measures* (n=95)		
Avoid lifting heavy loads and adequate rest up to 45 days after delivery	86	81.9
Limiting childbirth	75	71.4
Keeping adequate birth spacing	75	71.4
Maintaining healthy body weight	31	29.5
Pelvic floor muscle exercises	13	12.4
Treatable		
Yes	91	86.7
No	14	13.3
Treatment* (91)		
Drugs	46	43.8
Surgery	28	26.7
Ring pessary	6	5.7
Pelvic floor muscle exercises	4	3.8
Complications *		
Loss of interest to participate in social activities	97	92.4
Difficult in daily activities	96	91.4
Skin infections and sores around urethra	92	87.6
Interference with sexual life	83	79

Note. N= 105, *Multiple response questions

Table 4

Respondent's Level of Knowledge on Urinary Incontinence

Level of knowledge	Frequency (f)	Percentage (p)
Good	22	21
Average	62	59
Poor	21	20

Note. N= 105

Table 5
Association of Level of Knowledge with Selected Demographic Variables

	Level of knowledge		
Variables	Adequate	Inadequate	*p* value
Age group			
40-50	48(45.7%)	9(8.6%)	
51-60	28(26.7%)	7(6.7%)	0.183
>60	8(7.6%)	5(4.8%)	
Education			
Illiterate	30(28.6%)	7(6.7%)	
Literate	54(51.4%)	114(13.3%)	1.000
Income			
<25000	60(57.1%)	16(15.2%)	
25000-50000	19(18.1%)	5(4.8%)	0.519
>50000	5(4.8%)	0	
No of children			
≤2	36(34.3%)	8(7.6%)	0.807
>2	48(45.75%)	13(12.4%)	
Experience of UI			
Yes	25(23.8%)	6(5.7%)	1.000
No	59(56.2)	15(14.3%)	

Note. N= 105

The findings of the study revealed that 51.4% of women were menopausal which is inconsistent with the finding of a study done in New Haven County, US which revealed 59.9% of respondents were menstruating. This might be due to different sample sizes, age groups, and settings (Mandimika, 2014). Out of 105 respondents, 29.5% had a problem with urinary incontinence which corresponds with a study done in Lalitpur, Nepal which showed out of 129 respondents 34.9% had a problem with urinary incontinence (Pradhananga & Gautam, 2014). Likewise, a study done in New Haven County which showed 32.2% had urinary incontinence among 431 respondents also supports this finding of the study (Mandimika, 2014). Regarding treatment, only 6.5% of respondents sought treatment which is similar to the finding of the same study which illustrated only 4.6% sought medical help (Mandimika, 2014). Most of the respondents (75.9%) thought that it is normal in aging so they did not seek treatment. A study done in Japan among 40 years and older 3500 women supports this finding which revealed 63% regarded UI as an unavoidable consequence of aging (Ueda et al, 2010). Similarly, this study depicted that 62.9% of respondents correctly responded urinary incontinence is the involuntary leakage of urine due to the inability to control the bladder which is consistent with the finding of a study in which 65.6% interpreted the word “incontinence” correctly as the inability to control urine or the involuntary leakage of urine. In this study, the main source of information about urinary incontinence were friends and television at 13.3%.

In regard to the level of knowledge,59% of the respondents had average knowledge of Urinary Incontinence which is supported by a study done in Israel among 323 women aged 20-50 years which presented a moderate (mean = 7.37 ± 3.6) level of knowledge. Another study was

done among American Korean 182 women 30 years and older showed contrasting results which revealed the mean incontinence quiz 4.85 out of 14, which was much lower than the midpoint of 7.0 indicating that respondents tended to have limited knowledge (Kang, 2009). This might be due to different settings and age groups.

This study showed the level of knowledge was not associated with demographic variables such as age and education which is in contrast to the study done in Israel (Liebergall-Wischnitzer et al, 2015). This might be due to different age groups and settings. Similarly, a study conducted in Brazil among women of different socioeconomic level reported an association between the level of knowledge and income which support the finding of this study (Prado et al, 2013). A study done in the US showed an association between the level of knowledge and no. of children which is inconsistent with the findings of this study (Mandimika, 2014). No statistical association was found between respondents having problems with urinary incontinence and their level of knowledge.

Conclusion

This study concluded that only less than one-fourth of women have good knowledge of urinary incontinence. It is recommended that awareness programs about urinary incontinence should be conducted by health workers at the community level and by concerned authorities and health camps should be organized focusing on this problem.

Acknowledgement

The authors would like to express gratitude and thanks to Tribhuvan University, Institute of Medicine, Biratnagar Nursing Campus, Biratnagar for providing the opportunity to carry out this research work. We wish to extend heartfelt gratitude to the chairperson of Barahachhetra-5 and all the respondents for their kind cooperation and valuable time.

References

Ahmed, A.S., & Zaky, N.H. (2016).Health care-seeking behaviors among women suffering from urinary incontinence. *Journal of Nursing and Care*, 5, 319. doi:10.4172/2167-1168.1000319.

Almousa, S.,&Van Loon, A.B.(2018).The prevalence of urinary incontinence in nulliparous adolescent and middle-aged women and the associated risk factors: A systematic review. *The European Menopause Journal*, 107, 78-83. https://doi.org/10.1016/j.maturitas.2017.10.003

Kang, Y. (2009). Knowledge and attitudes about urinary incontinence among community-dwelling Korean American women. *Journal of Wound Ostomy & Continence Nursing*, 36(2).doi:10.1097/01.WON.0000347662.33088

Krishna Rao, B. (2015). Prevalence of pelvic floor dysfunction among married women of Udupi Taluk, Karnataka, India. *Journal of Womens Health Care*, 4(03). https://doi.org/10.4172/2167-0420.1000236

Liebergall-Wischnitzer, M., Cnaan T., Hochner, H., & Paltiel, O. (2015). Self-reported prevalence of and knowledge about urinary incontinence among community-dwelling Israeli women of child-bearing age. *J Wound Ostomy Continence Nurs,* 42(4),401-6. doi:10.1097/WON.0000000000000133

Mallah, F., Montazeri, A., Ghanbari, Z., Tavoli, A.,Haghollahi, F., & Aziminekoo E.(2014).Effect of urinary incontinence on quality of life among Iranian women. Retrieved2018 april 17 from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4064760/

Mandimika, C. L. (2014). Knowledge Of urinary incontinence and pelvic organ prolapse in community-dwelling women. Retrieved april 7 from httpselischolar.library.yale.educgiviewcontent.cgiarticle=1902&context=ymtd

M. Wu, J., Stinnett, S., Jackson, R.A., Jacoby, A., Learman, L.A., & Kuppermann, M. (2010) Prevalence and incidence of urinary incontinence in a diverse population of women with noncancerous gynecologic conditions. *Female Pelvic Med ReconstrSurg*, 16(5): 284–289.doi: 10.1097/SPV.0b013e3181ee6864

National Association for Incontinence. (2017). Retrieved march 1, 2018 from https://www.nafc.org/urinary-incontinence/

Neels, H., Wyndaele, J., Tjalma, W.A., De Wachter, S., Wyndaele, M., & Vermandel, A. (2016). Knowledge of the pelvic floor in nulliparous women. *Journal of Physical Therapy Science*, *28*(5), 1524–1533. https://doi.org/10.1589/jpts.28.1524

Office on Women's Health, US Department of Health and Human Services. (2012). Retrieved march 1, 2018 from https://www.womenshealth.gov/a-z-topics/urinary-incontinence

Paudel, I.S., Bhattarai, S., Adhikari, P., Gautam, R. & Singh, S.B. (2014) Gynecological and other health problems of postmenopausal women and their health seeking behavior in rural terai, Nepal. Retrieved april 27, 2018 from https://www.nepjol.info/index.php/HREN/article/viewFile/14106/1142

Poomalar, G.K. &Priyadharshini,M. (2015). Prevalence of urinary incontinence in reproductive women and its impact on quality of life. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*, 4(5), 1353–1358. https://doi.org/10.18203/2320-1770.ijrcog20150710

Pradhananga, R.D., Gautam, S.(2014). Awareness of rural women regarding urinary incontinence.*Journal of the Nepal Nursing Council*, 9, 16-19.

Prado, D., Lima, T., & Mota, V. (2013) Knowledge about Urinary Incontinence in Two Groups of Women from Different Socio-economic Levels, 2(2), 12-17. Retrieved july 7, 2018.

Regmi, M.C., Uprety, D. &Poonam.(2012). Prevalence of urinary incontinence among gynecological admissions at tertiary care hospital in eastern Nepal, *Health Renaissance,*10(1),16-19. Retrieved april 15,2018 from https://www.nepjol.info/index.php/HREN/article/view/6001

Regmi, M.C., Subedi, L. (2016). Community based prevalence of pelvic floor disorders in eastern Nepal BPKIHS. Retrieved april 15, 2018 from httpswww.ics.orgAbstractsPublish326000707.pdf

Sensoy, N., Dogan, N.,Ozek, B., & Karaaslan L.(2013).Urinary incontinence in women: prevalence rates, risk factors and impact on quality of life. *Pakistan Journal of Medical Sciences*, 29(3). Retrieved april 12, 2018 from httpswww.ncbi.nlm.nih.govpubmed24353635

Sinclair, A.J., &Ramsay, I.N.(2011). The psychosocial impact of urinary incontinence in women, https://doi.org/10.1576/toag.13.3.143.27665

Tremback-BallZ, A.J. PT., Levine, A.M., Geraldine, D., & Perlis, S.M.(2008). Urinary incontinence knowledge among women 18-30 years of age. *Journal of Women's Health Physical Therapy,* 32(2), 17–22 . Retrieved april 16 from imhttpsjournals.lww.comjwhptAbstract200832020Urinary_Incontinence_Knowledge_Among_Women_18_30.4.aspx

Ueda, T., tamaki, M., Susumu, K., Yoshimura, N., Yoshida, O.(2010).Urinary incontinence among community-dwelling people aged 40 years or older in Japan: prevalence, risk factors, knowledge and self-perception. *International Journal of Urology* https://doi.org/10.1046/j.1442-2042.2000.00147.x

Vasavada, S.P. (2017). Urinary incontinence.retrievedapril 14 from httpsemedicine.medscape.comarticle452289-overview#a2

*