

A STUDY TO ASSESS THE PREVALENCE OF URINARY INCONTINENCE AMONG WOMEN IN A SELECTED URBAN AREA IN COIMBATORE DISTRICT.

¹ J.Poornima Mary Rodriguez, ² Dr.A.Jayasudha, ³ Rajeswari.P.M⁴ Vikashini.P⁵ Vedavalli.K

¹Assistant Professor,²Principal,³Assistant Professors

¹Community Health Nursing Department,

¹PSG College of Nursing, Coimbatore,India

Abstract :

Urinary incontinence (UI) is a common problem among adults living in the community. Its incidence increases with age and it is more frequent in women, being particularly common amongst elderly women in residential care. Urinary incontinence can take the form of stress incontinence (losing bladder control during exercise, a cough or a sneeze), urge incontinence (losing control because of a sudden need to urinate) or a combination of the two. The main aim of the study was to assess the prevalence of urinary incontinence among women in a selected urban area in Coimbatore district. **Methodology:** By using descriptive survey design 200 women between the age group 40-70 years were selected using Purposive sampling technique from January 2018 to December 2018. **Results:** Among 200 samples, 46.5%(93) women were identified as having urinary incontinence. 52.6 % (49) of women have stress incontinence, 35.4%(33) women have urge incontinence and 11.82%(11) women have mixed incontinence. On associating with selected risk factors there is significant association found between Stress incontinence and Menopause, medical illness, mode of delivery, postnatal exercise and Body Mass Index at $p < .05$. **Conclusion:** Majority of women in middle age group are suffering from stress urinary incontinence, leakages are the most important factor affecting the quality of life adversely. Hence Kegel exercise is better management for urinary incontinence. Moreover, motivation for exercise and education program is also very important factors for reducing the prevalence of urinary incontinence.

Key words: Urinary incontinence, Kegel exercise

I. INTRODUCTION

Urinary incontinence is a storage symptom and is defined as the complaint of any involuntary loss of urine. Urinary Incontinence (UI) has considerable social and economic impact on the individuals and society. The International Continence Society (ICS) has defined the symptoms of UI as "Involuntary loss of urine that is a social or hygienic problem" (Abrams P and et al 2010). Worldwide over 200 million people have an incontinence problem, which is encountered often in healthy persons, especially in women. Its prevalence is between 15 and 50 % (Basak et al 2013).

Due to the fear of incontinence, routine daily life activities might be stressful and embarrassing. It is determined that the incontinence might affect negatively traveling, shopping, playing with children, exercising and sexual activity and the quality of life might impair. Urinary incontinence may develop as a result of aging and childbirth. (Williams et al. 2001)

Most women with this problem withdraw from social life and try to hide the problem from their families, friends and even their doctors. Globally, urinary incontinence (UI) affects the quality of life of at least one third of women. Many large studies reporting on the prevalence of incontinence in a specific population do not distinguish between the different types. (Baranitharan R et al 2009) In India, there have been varying attempts at estimating prevalence of Urinary incontinence among women, but none have looked at the degree of bother and help seeking behavior in these women. Urinary Incontinence is a common problem especially for women after childbirth though it can occur due to other reasons like surgeries and old age. Though worldwide one out of four women suffers from it, they feel embarrassed and it takes at least five years for them to seek help. (Dr. Karthik Gunasekaran 2012)

1.1 Need for the study:

Urinary incontinence (UI) is a common problem among adults living in the community. Its incidence increases with age and it is more frequent in women, being particularly common amongst elderly women in residential care. Estimates of the prevalence of urinary incontinence in women vary from 10% up to 40%. However, these figures probably do not reflect the true scope of the problem, because of under-reporting arising from social embarrassment associated with the condition. (Natalia and et al 2010).

Urinary incontinence can take the form of stress incontinence (losing bladder control during exercise, a cough or a sneeze), urge incontinence (losing control because of a sudden need to urinate) or a combination of the two. Women suffering from urinary incontinence can benefit from pelvic floor muscle training, commonly known as Kegel exercises. A supervised regimen of Kegel exercises for at least three months was found to be especially effective. (Jean Hay-Smith and et al 2009).

Investigator from her field experience and through extensive literature realized that urinary incontinence is a major problem affecting women of all age groups. Many times it was noted that women who experience symptoms of urinary incontinence do not reveal to their family. Majority of them do not have enough knowledge regarding the impact of urinary incontinence. Thus the investigator felt the need to assess the prevalence of urinary incontinence among women.

II. Objectives of the study:

1. To identify the prevalence of urinary incontinence among women.
2. To analyse the impact on quality of life of women with urinary incontinence.
3. To find the association between urinary Incontinence and demographic variables.
4. To educate Kegel's exercise for women affected with urinary Incontinence.

III. Research Methodology:

By using descriptive study design, 200 women who met the inclusion criteria were selected as samples with purposive sampling technique in the selected urban areas of Coimbatore district from January 2018-December 2018. Tool consisted of three parts. Sec I: Baseline data, Sec II: Risk factors associated with urinary incontinence, Sec III: Identification of women with urinary incontinence, Sec IV: Impact of quality of life of women with urinary incontinence. Ethical clearance was obtained from Institutional Human Ethics Committee. Informed consent was obtained from the study participants. Data was collected through interview technique. Descriptive and inferential statistics was used to analyze the data.

IV. RESULTS:

4.1 Demographic variables:

Among 200 samples, majority of the women 36.5%(73) are in the age group between 50-59 years. Most of them 39.5% (79) have done primary schooling. 121(60.5) are home makers. Nearly 28% (56) income is less than 5000/-. Most of the women 130(65%) are sedentary workers. Maximum 65% (130) of women work for 6-8 hours. 19.5% (39) members are underweight, 56.5%(113) maintains normal weight, 9.5(19) are overweight and 14.5(29) women are obese.

Table 4.1. Distribution of samples according to demographic data:

N = 200

S.No	Demographic variables	Frequency	Percentage
1.	Age in Years		
	40-49 years	69	34.5
	50-59 years	73	36.5
	60-69 years	58	29
2.	Educational Status		
	Illiterate	55	27.5
	Primary	79	39.5
	Middle	54	27
	Higher secondary	10	5
	Graduate	2	1
3.	Occupation		
	Coolie	14	7
	Non Government	56	28
	Home maker	121	60.5
	Retired	9	4.5
4.	Income		
	Below 5000	111	55.5
	5000-10,000	29	14.5
	<10,000	60	30
5.	Nature of work		

	Sedentary	130	65
	Moderate	56	28
	Heavy	14	7
6.	Hours of work		
	Less than 6 hours	17	8.5
	6 -8 hours	139	69.5
	8-10 hours	30	15
	10-12 hours	14	7
7.	BMI		
	Underweight: BMI is less than 18.5.	39	19.5
	Normal weight: BMI is 18.5 to 24.9.	113	56.5
	Overweight: BMI is 25 to 29.9	19	9.5
	Obese: BMI is 30 or more	29	14.5

4.2 Risk factors associated with urinary incontinence among women

On assessing the risk factors, most of the women had early pregnancy. Maximum of the women delivered the first baby between the age group of 15-20 years. 20.5%(41) members had history of medical illness. 11.5%(23) members are known case of Diabetes Mellitus and 9%(18) members are hypertensive. 62%(124) women have two children. Most of the women had 63.5%(127) normal vaginal delivery and 97%(194) of women had not done postnatal exercise. 62.5% (125) members have attained menopause. Most of them 59.5%(119) had attained menopause in the age group between 50-59 years.

Table 4.2 Distribution of samples according to Risk factors associated with urinary incontinence

N = 200

S.No	Associated risk factors	Frequency	Percentage
1.	Age of marriage		
1.1	15-20	89	44.5
1.2	21-25	48	24
1.3	26-30	61	30.5
1.4	31-35	2	1
2.	Age at first delivery		
2.1	15-20 years	73	36.5
2.2	21-25 years	59	29.5
2.3	26-30 years	64	32
2.4	31-35 years	4	2
3.	History of medical illness		
3.1	Yes	41	20.5
3.2	No	159	79.5
4	Medical illness		
4.1	Diabetes Mellitus	23	11.5
4.2	Hypertension	18	9
5	Menopause		
5.1	yes	125	62.5
5.2	no	75	37.5
6	Age at menopause		
6.1	40-49 years	6	3
6.2	50-59 years	119	59.5
7.	Number of children		
7.1	One	17	8.5
7.2	Two	124	62
7.3	Three	54	27
7.4	More than three	0	
8	Number of deliveries		
8.1	one	17	8.5
8.2	Two	124	62
8.3	Three and More than three	59	29.5
9.	Place of delivery		
9.1	Home	37	18.5
9.2	Institution	163	81.5

10.	Mode of delivery		
10.1	Normal	127	63.5
10.2	LSCS	73	36.5
11.	Normal-Episiotomy		
11.1	Yes	121	95.5
11.2	No	6	4.72
12	LSCS - Type of anaesthesia		
12.1	General	4	5.47
12.2	Spinal	69	94.52
13	Birth weight in kilograms		
13.1	1-2	4	2
13.2	2.1- 3	137	68.5
13.3	>3	59	29.5
14.	History of Postnatal exercise		
14.1	Yes	6	3
14.2	No	194	97

4.3: Identification of women with urinary incontinence:

Among 200 samples, 46.5%(93) women were identified as having urinary incontinence.52.6 %(49) of women have stress incontinence,35.4%(33) women have urge incontinence and 11.82%(11) women have mixed incontinence.

4.4 Assessment of the impact on quality of life of women with urinary incontinence.

Table 4.3 Impact on quality of life of women with urinary incontinence

S.No	Area of life affected	Least comfortable	%
1.	Performing heavy house hold activity.	84	90.3
2.	Participation in entertainment activities.	74	79.5
3.	Long travel.	59	63.4
4.	Attending family/social functions.	67	72.04

Among 200 samples ,90%(84) members are least comfortable in performing heavy house hold activity,79.5%(74)members are least comfortable in participating in entertainment activities,63.4%(59)members are least comfortable in long travel,72.04%(67)members are least comfortable in attending family/social functions.

4.5: Association between urinary incontinence and risk factors:

On associating with selected demographic variables there is significant association found between Stress incontinence and Menopause, medical illness, mode of delivery, postnatal exercise and Body Mass Index at $p < .05$

V. Discussion:

Among 200 samples, 46.5%(93) women were identified as having urinary incontinence. Majority of women 52.6 %(49) of women have stress incontinence,35.4%(33) women have urge incontinence and 11.82%(11) women have mixed incontinence. The results of the study is similar to study conducted by Meral and etal 2016 which reported a higher incidence of stress incontinence. Chi square test was used to find out the association between risk factors and women with urinary incontinence. Significant association found between Stress incontinence and Menopause, medical illness, mode of delivery, postnatal exercise and Body Mass Index at $p < .05$. On Assessing the impact on quality of life of women with urinary incontinence 90%(84) members are least comfortable in performing heavy house hold activity,79.5%(74)members are least comfortable in participating in entertainment activities,63.4%(59)members are least comfortable in long travel,72.04%(67)members are least comfortable in attending family/social functions. Women identified with urinary incontinence have not gone for consultation. The affected women considered urinary incontinence as a normal part of their routine life and mentioned this as a reason was for not seeking any treatment. Anxiety of treatment, economic problem, time, shyness, and tolerance by women were also stated as reasons for non-consultation. Women of our study were taught Pelvic floor exercises at their own place. The findings are also similar to study conducted by Brijesh Kumar and et al 2017.

VI.Conclusion:

Majority of women in middle age group are suffering from stress urinary incontinence, leakages are the most important factor affecting the quality of life adversely. Kegel exercise is associated with increase in strength and endurance in pelvic floor muscles. Hence Kegel exercise is better management for urinary incontinence. Moreover, motivation for exercise and education program is also very important factors for reducing the prevalence of urinary incontinence.

References:

- Abrams P, Cardozo L, Fall M, Griffiths D, Rosier P, Ulmsten U, et al. The standardization of terminology of lower urinary tract function: Report from the Standardization Sub-committee of the International Continence Society. *Urology*. 2003;61:37-49.
- Agarwal BK et al. *International Surgery Journal* 2017 Jun;4(6):1953-1958 <http://www.ijurgery.com>
- Amrute KV, Vanderbrink B, Badlani G. What is the prevalence of overactive bladder symptoms in a lower socio economic female population? A suggestion for a study in India. *Indian J Urol*. 2007;23(2):192-194.
- Basak T and et al Prevalence, risk factors and quality of life in Turkish women with urinary incontinence: a synthesis of the literature *Int Nurs Rev*. 2013 Dec;60(4):448-60. doi: 10.1111/inr.12048. Epub 2013 Jul 26.
- Bent AE, Gousse AE, Hendrix SL, Klutke CG, Monga AK, Yuen CK, et al. Validation of a two-item quantitative questionnaire for the triage of women with urinary incontinence. *Obstet Gynecol*. 2005;106:767-773.
- Brown JS, Seeley DG, Fong J, Black D, Ensrud K, Grady D. Urinary Incontinence in older women: Who is at risk? Study of Osteoporotic Fractures Research Group. *Obstet Gynecol*. 1996;87: 715-721.
- Blaivas GJ, Groutz A. Urinary incontinence: epidemiology, pathophysiology, evaluation, and management overview. Vol 2. 8th ed. *Campbell's Urology*. In: Walsh CP, editor. Philadelphia: WB Saunders; 2002. pp. 1207-1252.
- Currie CJ, McEwan P, Poole CD, Odeyemi IA, Datta SN, Morgan CL. The impact of the overactive bladder on health-related utility and quality of life. *BJU Int*. 2006;97:1267-1272.
- Danforth KN, Townsend MK, Lifford K, Curhan GC, Resnick NM, Grodstein F. Risk factors for urinary incontinence among middle-aged women. *Am J Obstet Gynecol*. 2006;194:339-345.
- Herzog AR, Fultz NH. Prevalence and incidence of urinary incontinence in community dwelling populations. *J Am Geriatr Soc*. 1990;38(3):273-281.
- Kumari S, Singh AJ, Jain V. Treatment seeking behavior for urinary incontinence among north Indian women. *Indian J Med Sci*. 2008;62:352-356.
- Luber KM. The definition, prevalence, and risk factors for stress urinary incontinence. *Rev Urol*. 2004;6:S3-9.
- Meral and etal Incidence and risk factors of urinary incontinence in women visiting Family Health Centers *Springerplus*. 2016; 5(1): 1331
- Morley R, Cumming J, Weller R. Morphology and neuropathology of the pelvic floor in patients with stress incontinence. *Int Urogynecol J Pelvic Floor Dysfunct*. 1996;7:3-12.
- Newman DK. Stress Urinary Incontinence in women. *Am J Nursing*. 2003;1:46-55.
- Song YF, Zhang WJ, Song J, Xu B. Prevalence and risk factors of urinary incontinence in Fuzhou Chinese women. *Chin Med J (Engl)*. 2005;118(11):887-892.
- Swanson JG, Kaczorowski J, Skelly J, Finkelstein M. Urinary incontinence: Common problem among women over 45. *Can Fam Physician*. 2005;51:84-85.
- Thom DH, van den Eeden SK, Ragins AI, Wassel-Fyr C, Vittinghof E, Subak LL, et al. Differences in prevalence of urinary incontinence by race/ethnicity. *J Urol*. 2006;175:259-264
- Uma Singh and et al,Prevalence and risk factors of urinary incontinence in Indian Women:A Hospital Based Survey *Indian Journal Urology* 2013 Jan 29(1):31-36