

# Stress Urinary Incontinence and its Effect on Quality of Life among Women

Sujata Bhaskar Sawant<sup>1</sup> PhD Nursing Student, Dr. A.Y. Kshirsagar, Krishna Institute of Medical Sciences and Deemed University, Karad, Maharashtra.

Contact details: [Sujata.1sawant@gmail.com](mailto:Sujata.1sawant@gmail.com)

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## Abstract

**Background:** Urinary incontinence is the most under-reported conditions among some common conditions of female genito-urinary disorders and such is the case of studies related to its impact on quality of life (QOL) of women.

It is reported that globally every third women suffer from SUI.

Earlier researches done abroad and in the Indian settings report that this condition affects overall health related QOL of woman once the disorder is noticed.

**Objectives:** 1. To assess severity of urinary incontinence (UI) among women with stress urinary incontinence (SUI). 2. To assess quality of life of women with stress urinary incontinence utilizing King's Health Questionnaire (KHQ)

3. To associate the findings with selected study variables.

**Methods:** Research design: Pre experimental one group pretest-posttest design.

Settings: Multispecialty and Super-specialty hospitals of Pune City. Tools were developed in Marathi language and tested for validity and reliability before data collection of this study. Sample and sampling technique: 60 women with SUI were selected using purposive sampling for the study.

**Results:** 37/60 (61.7%) women reported average QOL whereas remaining 23/60 reported good QOL though they had some areas of QOL which were affected their overall scores did fell in good category of score. Majority of the women were in the category of Full term normal delivery, which also reaffirms the pathology of occurrence of SUI among women owing to their reproductive function.

**Conclusion:** QOL among all the study participants was affected in almost all areas under study as per the tool. Variations were present in the degree of affect as it was a subjective assessment of individual woman's views about her QOL. **Recommendation:** There should be comprehensive pelvic floor assessment and strengthening program for every woman throughout their reproductive period which may help in primary prevention and/or early diagnosis and treatment of UI and prevent negative impact of UI on their life.

**Key words:** Severity, SUI, Women, QOL.

## **Introduction:**

Quality of life is defined by WHO as individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs, and their relationship to salient features of their environment.<sup>1</sup> Identification of urinary incontinence and its treatment thereafter is among one of the dreary task for the health care providers in a public healthcare setup which is over-crowded on majority occasions in a day to day practice. Health care providers are bound with time frame to assess each case coming in their clinic in such setups. This is especially true when it comes to women in a country like India where there is lot of hesitation to share information or undergo examinations related to ones genitourinary system.<sup>4</sup> Even verbalization of such problems by the woman who herself is attending health care setting is a major barrier.<sup>5</sup> This can be attributed to socio-cultural issues, religious practices and value system that the women follow. Women are always very late to disclose their genito urinary problems.<sup>6</sup> There are very few studies in India related to effect of SUI on QOL of women. One of such studies is a cross sectional epidemiological study done to assess impact of UI on QOL among women, in rural India which had reported; more than 50% women suffered with SUI and among all different types of UI they were the ones who reported most severe impact of SUI on their QOL.<sup>2</sup>

A metadata study done by Mohammed<sup>1</sup> S. etal; suggests that there are multiple factors which influence the QOL among women with UI thus assessment of QOL should be a part of routine assessment of woman and special care to be taken to sensitize primary health care providers into management of UI.<sup>5</sup>

The purpose of this study was to identify how much effect stress urinary incontinence had caused on the quality of life among women.

## **Materials and Methods:**

The study was conducted at the inpatient and outpatient department of the Multispecialty and Superspeciality hospitals of Pune City. Sixty women participated in the study who had history of SUI (loss of urine during physical activity; coughing, sneezing, abdominal thrust etc.)<sup>8</sup>. Data collection was done with the structured questionnaire.

Once it had been agreed to meet the requirements of study signing of an informed consent form was done. Data was collected and calculated for the study participants who had answered all the questions. The scoring key was

given with the questionnaire which had subjective component for the women to answer and numerical scores for statistical calculation of overall impact in each category in the numerical form. Range of domains scores was 0(zero) as best score to 100(hundred) as worst score.

**Statistical Methods:** Statistical analysis was done using SPSS 17 version. General data was subjected to frequency and percentage (descriptive statistics) and then data obtained from KHQ was calculated as per the standards given along with the questionnaire and the Fisher's exact test was used to assess differences and association among variables under study.

**Results:** Following are the results of statistical data calculations.

**Table 1: Description of samples based on demographic characteristics.**

(\*) in the table below indicate clubbing of data

n=60

Demographic variable	Frequency(F)	Percentage (%)
<b>Age in years</b>		
20-25	6	10.0
25-30	6	10.0
*30-35	11	18.3
*35-40	11	18.3
*40-45	10	16.7
*45-50	14	23.3
50-60	2	3.3
<b>Education</b>		
Illiterate	9	15.0
*Primary	20	33.3
*Secondary	17	28.3
*H.Sc.	11	18.3
*Graduation	3	5.0
Other	0	0.0

Above table-1 depicts majority\* 46(76.66%) samples were from the age group of 30-50 years. \*51(85%) of them were literate.

**Table 2: Description of samples based on their medical history**

(\*) indicates the significant findings

**n=60**

<b>Medical History variable</b>	<b>Frequency</b>	<b>percentage%</b>
<b>Number of pregnancies</b>		
*One	28	46.7%
Two	18	30.0%
Three	10	16.7%
Four	2	3.3%
Five	2	3.3%
<b>Age at first delivery</b>		
*Below 18 years	33	55.0%
19-23 years	17	28.3%
24-29 years	10	16.7%
<b>Type of delivery</b>		
*FTND	49	81.67%
PTVD	3	5.0%
Full term forceps	2	3.33%
Full term vacuum	3	5.0%
LSCS	1	1.67%
Abortion	2	3.33%
<b>Place of delivery</b>		
Both (Home and Hospital)	13	21.7%
Home	2	3.3%
*Hospital	45	75.0%
<b>H/O pelvic surgery if any type of surgery</b>		
Abdominal TL	10	16.7%
Bilateral Episiotomy	1	1.7%
D&C	1	1.7%
Episiotomy	23	38.3%
Episiotomy and D&C	1	1.7%
Episiotomy and Abdominal TL	5	8.3%
Episiotomy and Laparoscopic TL	2	3.3%
Laparoscopic TL	3	5.0%
LSCS	1	1.7%
NO	13	21.7%
<b>H/O prolapse</b>		
No	48	80.0%
Vault	8	13.3%
First degree	4	6.7%
<b>Symptom duration of UI (in months )</b>		
Up to 3 months	18	30.0%
*3 - 6 months	20	33.3%
6 - 9 months	9	15.0%
9 - 12 months	7	11.7%
More than 12 months	6	10.0%

Table 2 above represents the medical history of participants and where majority\* of them were primigravida who had delivered after full term pregnancy in hospital and were below the age of 18 years during birth of their first child. Also 30% and 33.3% of them were suffering from SUI upto 3 months and upto six months before inclusion in the study.

**Table 3: Severity of urinary incontinence among women.**

**n=60**

Severity	Frequency	Percentage (%)
Mild (Score 0-11)	38	63.3
Moderate (Score 12-22)	22	36.7
Severe (Score 23-33)	0	0.0

**Table 4: Fisher's exact test: Association of severity with demographic variables**

**n=60**

Demographic variable		Severity		p-value
		Mild	Moderate	
Age	20-25 years	5	1	0.358
	25-30 years	4	2	
	30-35 years	8	3	
	35-40 years	8	3	
	40-45 years	7	3	
	45-50 years	5	9	
	51- 60 years	1	1	
Education	Graduation	1	2	0.810
	H.Sc.	8	3	
	Illiterate	5	4	
	Primary	13	7	
	Secondary	11	6	

Table 4 above represents the summary of Fisher's exact test results for association of severity with demographic variables. Since p-values corresponding to age and education are large (greater than 0.05), none of the demographic variable was found to have significant association with severity of urinary incontinence.

**Table 7: Aspect wise Quality of life among women with stress urinary incontinence.**

**n=60**

Impact of Stress Urinary Incontinence on Aspect-wise Quality of Life in percentage (%)	Quality of Life Score out of 100		
	Poor (>66.7)	Average (33.3 – 66.7)	Good (<=33.3)
General Health Perception	0	30	70
Incontinence impact	0	58.3	41.7
Role limitations	0	46.7	53.3
Physical limitations	0	45	55
Social limitations	0	46.7	53.3
Personal relationships	0	35	65
Emotions	0	33.3	66.7
Sleep/energy	0	35	65
Severity measures	0	43.3	56.7

Above table 7 confirms that, urinary incontinence has negative impact on quality of life. The severity of impact may vary from one domain to other and person to person which is attributed to their socio-cultural practices, religious values and beliefs, support system.

Women in this study reported average impact of incontinence on their life. It was also found to limit their role performance in personal as well as social context.

**Table 6: Fisher's exact test: Association of quality of life with demographic variables.**

**n=60**

Demographic variable		Quality of Life		p-value at (0.05) level
		Mild	Moderate	
Age	20-25 years	3	3	0.375
	25-30 years	2	4	
	30-35 years	5	6	
	35-40 years	8	3	
	40-45 years	7	3	

	45-50 years	11	3	
	51- 60 years	1	1	
Education	Graduation	2	1	0.174
	H.Sc.	10	1	
	Illiterate	6	3	
	Primary	10	10	
	Secondary	9	8	

Table 6 above, represents the summary of Fisher's exact test results for association of quality of life with demographic variables. Since p-values corresponding to age and education are large (greater than 0.05), none of the demographic variable was found to have significant association with quality of life of women with urinary incontinence.

**Table 7: Fisher's exact test: Association of Quality of life with severity of urinary incontinence among women with urinary incontinence.**

**n=60**

Severity	Quality of Life		p-value at (0.05) level
	Average	Good	
Mild	20	18	0.097
Moderate	17	5	

Since findings of table 7 revealed, p-value corresponding to association between severity of urinary incontinence and quality of life as larger (greater than 0.05), the association of severity of urinary incontinence with quality of life was not significant.

## Discussion:

The KHQ was a questionnaire that assessed the QOL among women from different reproductive age groups and varying degrees of severity of SUI. There are many studies done with use of this questionnaire to assess QOL among women.<sup>5,9</sup>

It was very well presented in the results of this study that urinary incontinence did imposed limitations on various aspects of life of a woman. The impact was reported on their household tasks as well as tasks outside

home to, moderate, by majority of the women. Followed by slight to moderate impact reported on physical activities, travels, social life and visits to friends.

Almost 50% of the women reported SUI affected their relationship with partner, in terms of sex life and family life altogether. <=40% reported slight to moderate impact on their emotional life in terms of feeling depressed or feeling anxious or nervous and feeling bad about oneself. The results of this study match with other studies,<sup>2, 3,7,6,9</sup>, showing adverse effect on all aspects of quality of life although the scores vary and can be attributed to the demographic, socio-cultural differences between the study participants.<sup>4</sup>

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### **References:**

1. The World Health Organization, document from division of mental health and prevention, of substance abuse on, measuring quality of life; WHO quality of life instruments; the WHOQOL – 100 and the WHOQOL – BREF, Geneva, 1997:1.
2. Bodhare T, Valsangkar S, Bele S. An epidemiological study of urinary incontinence and its impact on quality of life among women aged 35 years and above in a rural area. Indian journal of urology:IJU: journal of the Urological Society of India.2010;26(3):353-358.
3. Bo Eun Kwon, Gi Yon Kim<sup>1</sup>, Youn Jung Son<sup>2</sup>, Young Sook Roh<sup>3</sup>, Mi Ae You<sup>4</sup>. Quality of Life of Women with Urinary Incontinence: A systematic Literature Review. Int Neurourol J: October 2010; 14(3):133,138-139.
4. Santosh Kumari, A. J. Singh<sup>1</sup>, Vanita Jain. Treatment seeking Behavior for Urinary Incontinence among North Indian Women. Indian J Med Sci: September 2008;62(9): 354-358.
5. SanyaZakarya Mohammed, Effat EL Karmallawy, RagaaAli Mohamed. Assessing Quality of Life of Women with Urinary Incontinence. Egyptian Nursing Journal: October 2010;1-17.
6. Dugan E, Cohen SJ, Bland DR, Preisser JS, Davis CC, Suggs PK, et al. The association of depressive symptoms and urinary incontinence among older adults. J Am Geriatr Soc. 2000;48(4):413-416.



7. Kelleher CJ, Cardozo LD, Khullar V, Salvatore S. A new questionnaire to assess the quality of life of urinary incontinent women. Br J Obstet Gynaecol 1997; 104:1374-1379.
8. Abrams P, Cardozo L, Fall M, Griffiths D, Rosier P, Ulmsten U, et.al. al. Standardisation of terminology in lower urinary tract function: report of the Standardisation sub-committee of the International Continence Society. Neurourol Urodyn. 2002; 21(2): 176-178.
9. Joao Bosco Ramos Borges, Larissa Neri, Rosa Maria Silveira Sigrist, Larissa Oliverira Martins, Telm a Guarisi, AnaCarolina Marchesini. Assessing quality of life of women with urinary incontinence using the Kings Health Questionnaire. Available from: <http://www.researchgate.net/publication/26851526>. [Accessed 14<sup>th</sup> August 2016]

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