

## GYNAECOLOGY

# Quality of Life and Urinary Incontinence in Women

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## ABSTRACT

**Objective** To assess the impact of urinary incontinence on quality of life of women attending menopause clinic.

**Subjects** Women attending menopause clinic, Faculty of Medicine, Ramathibodi Hospital

**Methods** A survey using a modified self-administered, incontinence-specific quality of life (I-QOL) questionnaire was performed among women attending the menopause clinic, Ramathibodi Hospital, Bangkok, Thailand. The questionnaire consists of 22 items, each with a 4-point response scale. There were also three subscale scores for the avoidance and limiting behavior, psychosocial impacts, and social embarrassment. The individual responses to the 22 items were summed and averaged for a total score and subscale scores. Unpaired t-test and ANOVA were used to analyse the data.

**Results** Nine hundred and twenty completed questionnaires were returned. The prevalence of urinary incontinence was 71.74%. The results showed that incontinence-specific quality of life was affected by urinary incontinence in aspects of avoidance and limiting behavior, psychosocial impacts and social embarrassment. Impairment of quality of life was not related as statistically significant to age, menopausal status, and hormone replacement therapy.

**Conclusion** Urinary incontinence was experienced by nearly three fourth of women attending the menopause clinic and it adversely affects quality of life.

**Key words:** quality of life, urinary incontinence, menopause

The International Continence Society (ICS) defines incontinence as "a condition of involuntary urine loss that is a social or hygienic problem and is objectively demonstrable".<sup>(1)</sup> Urinary incontinence, with symptoms of frequency, urgency, stress and urge

incontinence, substantially affects the lives of millions of people all over the world.<sup>(2)</sup> The symptoms associated with urinary incontinence can significantly affect the social, psychological, occupational, physical and sexual aspects of those who suffer from it.<sup>(3-6)</sup>

Health-related quality of life can be measured objectively, and several instruments have been developed, validated, and used in research.<sup>(7-11)</sup> The measurement of quality of life allowed the quantification of morbidity, the evaluation of treatment efficacy and also acts as a measure of how lives are affected from this problem. The true prevalence of urinary incontinence and its impact on the quality of life amongst those attending menopause clinic are not well established particularly in Thai women. The objective of this study was to assess the impact of urinary incontinence on quality of life of women attending the menopause clinic.

## Materials and Methods

A survey using a modified self-administered, incontinence-specific quality of life (I-QOL) questionnaire was performed among women attending the menopause clinic, Ramathibodi Hospital, Bangkok, Thailand. The questionnaire consists of 22 items, each with a 4-point response scale. There were also three subscale scores for the avoidance and limiting behavior, psychosocial impacts, and social embarrassment. The individual responses to the 22 items were summed and averaged for a total score and subscale scores. High score indicated better incontinence-specific quality of life. Women were divided into

incontinent and continent groups on the basis of reported at least one symptoms of urinary incontinence (frequency, urgency, stress incontinence, urge incontinence) in the last three-month before the survey. Unpaired t-test and ANOVA were used to analyse the data.

## Results

The modified self-administered, incontinence-specific quality of life (I-QOL) questionnaire was distributed to 1,000 women attending the menopause clinic, Ramathibodi Hospital. The number of completed questionnaire return was 920. The mean age of the 920 women was 53.05 years (range 45 to 76). The prevalence of urinary incontinence (frequency, urgency, stress incontinence or urge incontinence) was 71.74%. The results showed that incontinence-specific quality of life was affected by urinary incontinence in aspects of avoidance and limiting behavior, psychosocial impacts and social embarrassment as shown in Table 1. Women with symptoms of urinary incontinence found it to be a disturbing symptom and reported that it had a detrimental effect on their quality of life.

Impairment of quality of life was not related as statistically significant to age, menopausal status, and hormone replacement therapy as shown in Table 2.

**Table 1.** Urinary incontinence and quality of life

Subscale	Score		p value	
	Continent group			
	Mean $\pm$ SD ( N = 260 )	Mean $\pm$ SD ( N = 660 )		
Avoidance and - limiting behavior	31.58 $\pm$ 1.14	29.94 $\pm$ 3.71	< 0.001	
Psychosocial impacts	30.91 $\pm$ 1.69	28.94 $\pm$ 3.75	< 0.001	
Social embarrassment	23.51 $\pm$ 1.09	21.54 $\pm$ 3.10	< 0.001	
Total	86.01 $\pm$ 3.50	80.42 $\pm$ 9.94	< 0.001	

**Table 2.** Factors associated with incontinence-specific quality of life

Factors	Score (Mean $\pm$ SD)		
	Avoidance and limiting behavior	Psychosocial impacts	Social embarrassment
Age group (yrs)*			
$\leq 49$	30.52 $\pm$ 3.02	29.46 $\pm$ 3.41	22.16 $\pm$ 2.86
50 - 59	30.24 $\pm$ 3.51	29.39 $\pm$ 3.55	21.90 $\pm$ 2.93
$\geq 60$	30.25 $\pm$ 3.68	29.42 $\pm$ 3.55	22.25 $\pm$ 2.86
Menopausal status*			
Premenopause	30.74 $\pm$ 3.18	29.89 $\pm$ 3.13	22.33 $\pm$ 2.86
Perimenopause	30.34 $\pm$ 2.91	29.32 $\pm$ 3.16	21.92 $\pm$ 2.78
Postmenopause	30.25 $\pm$ 3.41	29.33 $\pm$ 3.57	21.99 $\pm$ 2.86
Hormone replacement therapy*			
HRT	30.46 $\pm$ 2.75	29.48 $\pm$ 3.23	21.97 $\pm$ 2.79
Non-HRT	30.14 $\pm$ 3.71	29.26 $\pm$ 3.77	22.00 $\pm$ 2.90

\* p-value  $> 0.05$

## Discussion

The prevalence of urinary incontinence and other related lower urinary tract symptoms increased with age, menopause, obesity and coexisting chronic disorders and were more common in women than men.<sup>(12,13)</sup> Urinary incontinence may be related to estrogen deficiency and postmenopausal atrophic changes of vaginal tissue and the tissues of the urethra and bladder. The prevalence of urinary incontinence (frequency, urgency, stress incontinence and urge incontinence) was high in women attending the menopause clinic, Ramathibodi Hospital. Most of the subjects were older than 50 years old and being in postmenopausal period. This result was higher than other prevalence in previous studies which found that 36 - 51 % of women reported one or more symptoms of urinary incontinence.<sup>(13,14)</sup> However, this prevalence was comparable to the results of previous reports<sup>(12,15)</sup> that studied in the older women. From this finding, it should be noted that urinary incontinence is a common problem among women attending menopause clinic. Gynecologists, family physicians and nurse practitioner should raise the issue as a part of the routine general health check-up in menopause clinic.

Quality of life means a combination of patient-assessed measures of health, including physical function, role function, social function, emotional or mental state, burden of symptoms and sense of well-being. In this study, women with urinary incontinence had significantly lower scores on all three aspects; the avoidance and limiting behavior, the psychological impacts, and the social embarrassment. It was similar to previous studies<sup>(3-6,16-18)</sup> which found that incontinence reduces social relationships and activities, impairs emotional and psychological well-being, causes avoidance behavior and careful planning to avoid or conceal incontinence episodes, and also causes considerable inconvenience. A simple, self-administered, incontinence-specific quality of life questionnaires would be useful to determine the burden of incontinence in women attending menopause clinic and to calculate the service provision and expense required to provide appropriate continence care.

There were no correlation between age, menopausal status, estrogen use and the quality of life score in women with or without incontinence in this study. However, there is a need for more information about menopausal status and the effect of estrogen on the incontinence-related quality of life.

In conclusion, urinary incontinence were experienced by nearly three fourth of women attending the menopause clinic and it adversely affected quality of life. Only by fully understanding the impact of urinary incontinence on quality of life of women, they could hope to receive the better care and treatment from health care providers.

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