



PREVALENCE OF URINARY INCONTINENCE AND ITS IMPACT ON QUALITY OF LIFE OF ELDERLY.

Medicine

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ABSTRACT

Though the symptoms of urinary incontinence are experienced over a long period of time, elderly people do not perceive it as a significant problem. The symptoms of incontinence can be severely incapacitating, causing considerable impairment to various aspects of an individual's life and ultimately reducing the quality of their life. The aim of this study is to determine the impact of urinary incontinence on the quality of life of elderly. The first 250 males and 250 females attending the geriatric OPD of a tertiary care centre were selected based on inclusion and exclusion criteria. Selected patients were subjected to history, clinical examination and questionnaires like Revised Urinary Incontinence scale, International Prostate Symptom Score, King's Health questionnaire, Geriatric depression scale. Using appropriate statistical methods prevalence of urinary incontinence and its impact on quality of life were studied. It was found that depressive symptoms were more in patients with urinary incontinence. It was also inferred that as the severity of urinary incontinence increases, quality of life decreases and the patients were psychologically disturbed, emotionally distressed, and socially isolated.

KEYWORDS

Urinary Incontinence, Quality Of Life, Depression.

INTRODUCTION:

Urinary Incontinence is the involuntary loss of urine and can occur at any age^(1,2). Incontinence ranges in severity from occasional episodes of dribbling small amounts of urine to continuous urine leakage, having significant impact on the quality of life. Estimates of the prevalence of urinary incontinence vary; ranging from 5 to 35% of community dwelling elderly adults⁽³⁾. The prevalence of incontinence increases with age and with increasing frailty.

Quality Of Life may refer to an overall sense of happiness and contentment or to a specific evaluation of the impact of the symptoms on daily life⁽⁴⁾. Health-related Quality Of Life is multidimensional and includes physical, social and emotional functioning. The traditional clinical approach focuses on the aetiology of the disease, pathophysiology, symptoms and clinical outcomes, whereas the social science model concentrates on the impact of the disease on the patient's Quality Of Life and functional status⁽⁵⁾.

Studies have documented that urinary incontinence has negative effects on daily activities, social relationships and the emotional and physical well-being of older adults^(5,6). Alternatively, some suggest that urinary incontinence does not have devastating consequences for most persons⁽⁷⁾. Better information is needed to clarify the relationship between urinary incontinence and quality of life of older adults. Hence we took up this study to determine the impact of urinary incontinence on the quality of life of the elderly.

METHODS:

This is an observational study conducted from January 2016 to June 2016 in a tertiary care hospital for a period of 6 months. Institutional ethical committee approval was obtained. Patients attending geriatric OPD and willing to participate in the study were included. Patients with severe cognitive impairment and acute illness were excluded from the study. The first 250 males and 250 females were subjected to routine history, physical examination and questionnaires like Revised Urinary Incontinence scale, International Prostate Symptom Score for males, King's Health questionnaire for females and Geriatric depression scale.

Revised Urinary Incontinence scale (RUIS) was used to assess the type and severity of incontinence. A score of 4-8 was considered mild, a score of 9-12 was considered moderate and a score of 13 or above was considered severe.

International Prostate Symptom Score (IPSS), King's Health questionnaire were used to assess quality of life in male and female patients respectively. In IPSS, quality of life was assessed based on patient response. 0-4 indicates a better score. 5/6 indicates poor score. In king's questionnaire quality of life was assessed based on

parameters like general health perception, incontinence impact, role limitation, physical limitation, social limitation, personal relationship, emotions, sleep and energy. Each parameter was scored individually in percentage. Patients with more than 50% score were considered as impaired or poor score in that parameter.

Geriatric depression scale (GDS) was used to assess depression in patients. In Geriatric depression scale, a score of more than five indicated depression. Using appropriate statistical methods prevalence of urinary incontinence, the impact of urinary incontinence on quality of life were studied.

RESULT:

Prevalence of urinary incontinence was 16.4% with 82 out of 500 patients having complaint of involuntary urinary leakage. Prevalence of urinary incontinence in male was 11.2% (28 patients) and female was 21.6% (54 patients). Among 82 patients, 11 were between 65 to 69 years, 18 patients were between 70 to 74 years, 22 patients were between 75 to 79 years, 31 patients were above 79 years.

Using RUIS, type and severity of incontinence was recorded. Urge incontinence was common in males accounting for 39.2% (11 patients), stress incontinence accounted for 4.2% (4 patients). In females, stress incontinence was common accounting for 39.3% (21 patients) and urge incontinence constituted 12.1% (7 patients). Mixed incontinence accounted for 46.4% in males and 48.4% in females. It was found that 39.2% (11 patients) of men and 44.4% (24 patients) of women had mild incontinence, 25% (7 patients) of men, 24% (13 patients) of women had moderate incontinence and 35.7% (10 patients) of men, 31.4% (17 patients) of women had severe incontinence.

Using IPSS, quality of life was measured in male patients with urinary incontinence. It was found that good quality score like, delighted, pleased, satisfied, mixed, dissatisfied was present in 0%, 0%, 10.7%, 21.4%, 28.5% patients respectively. Poor score like unhappy, terrible was present in 21.4% and 17.8% respectively.

Using King's questionnaire, quality of life was assessed for all the female patients. It was found that association of women with urinary incontinence with poor general health perception, daily activities limitation, social limitation, personal relationship limitation was significant with a 'p' value of < 0.05.

Using GDS, it was found that the association between depression and urinary incontinence was statistically significant. It was also found that among 27 patients with severe incontinence, 25 had depression. With a p value of 0.012, the relationship between severity of urinary incontinence and depression was also statistically significant.

The association of Urinary Incontinence with Quality Of Life and depression is shown in Table 1.

Table 1. Association of Urinary Incontinence with Quality Of Life and depression.

S.no	Scale	Parameter	Urinary incontinent	Urinary continent	P value
1	International Prostate Symptom Score for men	Poor score in quality of life	17	30	.00001
2	Kings questionnaire for women	General health perception	30	140	.026
		Impact of incontinence	20	96	.119
		Daily activity of living	28	138	.028
		Physical limitation	32	145	.025
		Social limitation	30	150	.022
		Personal relationship	40	30	<.00001
		Emotion	14	110	.0008
		Sleep and energy	22	94	.101
3	Geriatric depression scale	Depression	62	250	.0056

DISCUSSION:

The present findings suggest that incontinence of urine had implications on quality of life of community-dwelling older adults. This study showed that elderly patients with urinary incontinence had a worse perception of health and were more likely to be depressed.

Study at Qatar stated that >70% of Qatari women with Urinary Incontinence were ashamed of themselves and troubled by Urinary Incontinence⁽⁶⁾. Important social activities such as work, driving a car and shopping were interrupted and affected by urinary incontinence emphasizing the way the quality of life can be affected by this problem. More than half of women with urinary incontinence were reported to have low self-esteem.^(9,10)

Studies have shown that patients suffering with urinary incontinence appeared more depressed, found to be distressed, emotionally disturbed and socially isolated. Moreover, compared with continent individuals, those patients with urinary incontinence also have higher levels of anxiety, lower quality of life, and poorer life satisfaction⁽¹¹⁻¹⁴⁾. The severity of urinary incontinence was also correlated with degree of mental distress, social restrictions, and restricted activities⁽¹⁵⁾.

A study using the Geriatric Depression Scale on homebound elders with urinary incontinence found that up to 50% of the elderly patients had significant depressive symptomatology⁽¹⁶⁾. Another study found that those patients with urinary incontinence were more likely to have major depression than those without urinary incontinence (odds ratio [OR] = 4.5; 95% confidence interval [CI] = 2.3-8.8), as assessed using the Diagnostic and Statistical Manual of Mental Disorders, Third Edition (DSM- III)⁽¹³⁾. Research had shown that urinary incontinence can adversely affect quality of life, leading to depression, negative affect, low life satisfaction, and restriction of activities⁽¹⁷⁾. The elderly tend to be embarrassed of their problem and may even experience a sense of guilt. They are reluctant to go out and socialize because of their problem. This eventually lead to self-imposed social isolation⁽¹⁸⁾.

CONCLUSION:

Though the presence or absence of urinary incontinence and other health conditions were self-reported, our results suggest that urinary incontinence is more prevalent and can have significant impact on both the physical and mental health of the elderly population. This is an important epidemiological and clinical finding that suggest further study and action, both by clinicians and policymakers. Future studies need to focus on whether early diagnosis and more aggressive

intervention for urinary incontinence could reduce long-term healthcare costs, decrease disease burden, increase quality of life and patient satisfaction. Thus, the goal of healthy aging should be to not only extend life expectancy, but improve quality of life as well.

REFERENCES:

- Hellstrom L, Ekelund P, Milsom I, Mellstrom D. The prevalence of Urinary Incontinence and use of incontinence aids in 85-year-old men and women. *Age Ageing*. 1990;19:383-389.
- Brown JS, Seeley DG, Fong J, Black DM, Ensrud KE, Grady D. Urinary Incontinence in older women: who is at risk? Study of Osteoporotic Fractures Research Group. *Obstet Gynecol*. 1996;87:715-721.
- Herzog AR, Fultz NH. Prevalence and incidence of Urinary Incontinence in community dwelling populations. *J Am Geriatr Soc* 1990; 38: 273-281.
- Kelleher CJ, Cardozo LD, Toozs-Hobson PM. Quality Of Life and Urinary Incontinence. *Corr Opin Otisfei Gynecol* 1995; 7: 404-408.
- Grimby A, Milsom I, Molander U, Wiklund I, Ekelund P. The influence of Urinary Incontinence on the Quality Of Life of elderly women. *Age Ageing* 1993; 22: 82-89.
- Herzog AR, Fultz NH, Brock BM, Brown MB, Diokno AC. Urinary Incontinence and psychological distress among older adults. *Psychol Aging* 1988; 3: 115-121.
- Wyman JF, Hawkins SW, Fantl JA. Psychosocial impact of Urinary Incontinence in the community-dwelling population. *Am Geriatr Soc* 1990; 38(3): 282-288.
- Saleh N, Bener A, Khenyab N, Al-Mansori Z, Al Muraikhi A. Prevalence, awareness and determinants of health care-seeking behavior for Urinary Incontinence in Qatari women: a neglected problem? *Maturitas* 2005;10(5):5865
- Barghouti FF, Yasein NA, Jaber RM, Hatamleh LN, Takruri AH. Prevalence and risk factors of Urinary Incontinence among Jordanian women: impact on their life. *Health Care Women Int* - 2013;34:101523.
- Zhu L, Lang J, Liu C, Han S, Huang J, Li X. The epidemiological study of women with Urinary Incontinence and risk factors for stress Urinary Incontinence in China. *Menopause* 2009;16:8316.
- Valvanne J, Juva K, Erkinjuntti T, Tilvis R. Major depression in the elderly: a population study in Helsinki. *Int Psychogeriatr*. 1996;8:437-443.
- Herzog AR, Fultz NH, Brock BM, Brown MB, Diokno AC. Urinary Incontinence and psychological distress among older adults. *Psychol Aging*. 1988;3: 115-121.
- Bogner HR, Gallo JJ, Sammel MD, Ford DE, Armenian HK, Eaton WW. Urinary Incontinence and psychological distress in community-dwelling older adults. *J Am Geriatr Soc*. 2002;50:489-495.
- Grimby A, Milsom I, Molander U, Wiklund I, Ekelund P. The influence of Urinary Incontinence on the Quality Of Life of elderly women. *Age Ageing*. 1993;22: 82-89.
- Hunskar S, Sandvik H. One hundred and fifty men with Urinary Incontinence. III. Psychosocial consequences. *Scand J Prim Health Care*. 1993;11:193-196.
- Engberg S, Sereika S, Weber E, Engberg R, McDowell BJ, Reynolds CF. Prevalence and recognition of depressive symptoms among homebound older adults with Urinary Incontinence. *J Geriatr Psychiatry Neurol*. 2001;14:130-139.
- Liu CU and Andrews GR. Prevalence and incidence of Urinary Incontinence in the elderly: a longitudinal study in South Australia. *Chin Med J*. 2002;115(1):119-122.
- Chan KM, Pang WS, Ee CH, Ding YY and Choo P. Functional status of the elderly in Singapore. *Singapore Med J*. 1999;40(10):635-638.