



A STUDY OF IMPACT OF URINARY INCONTINENCE ON QUALITY OF LIFE IN GERIATRIC PATIENTS

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ABSTRACT **Introduction:** Urinary incontinence is not really a disease, but rather a symptom, as a result of either a bladder, sphincter or central nervous system disorder. Urinary incontinence is frequently associated with a negative impact on quality of life of the patient. **Objective:** To study the Impact of Urinary Incontinence on the Quality of Life in Geriatric patients (Age 60 and above). Participants: 165 geriatric patients. **Results:** The association between type of urinary incontinence and quality of life, performance status, depression, cognitive impairment was found statistically significant with logistic regression ($p = 0.0001$, $p = 0.0001$, $p = 0.007$, $p=0.010$ respectively). Half of the patients with UI believe that it is part of normal aging and no definite treatment is available. **Conclusion:** Urinary Incontinence is a bothersome problem for elderly and an important risk factor hindering activities of daily living, causing depression and acting as a barrier for normal social function.

KEYWORDS :

INTRODUCTION:

The term "Urinary Incontinence" (UI) refers to any involuntary urine leakage. ⁽¹⁾ Urinary incontinence (UI) is a WHO-designated high-priority health concern. A comprehension of this condition's epidemiology successfully leads to a greater understanding of its significance and impact on health-care delivery system and the population. ⁽²⁾ Urinary incontinence is a prevalent health issue among the elderly. UI is a symptom of a variety of illnesses rather than a single ailment. ⁽⁴⁾

The prevalence of urine incontinence has been documented in numerous investigations. The prevalence in the community, has ranged from 2.5% to 60% and the rate has been greater in the past. ⁽⁶⁾ Incontinence is very common. It is possible that it is greatly undervalued. The wide range in prevalence may be due to the belief it is a natural part of the ageing process. ⁽²⁾ There are five major types of urinary incontinence associated with lower urinary tract dysfunction: ⁽¹⁾

1. **Stress incontinence:** The symptoms of stress incontinence are very specific:

- Leakage coincident with increase in intra-abdominal pressure caused by coughing, sneezing, laughing, or exercise.
- Stress incontinence may be infrequent and involve very small amounts of urine.

It does not need any specific treatment in women who are not bothered by it; on the other hand, it may be so severe and/or bothersome that it may render the person housebound.

2. **Urgency incontinence:** This can be caused by a variety of lower genitourinary and neurologic disorders. Symptoms include:

- A sudden strong desire to void, along with a fear of leakage, and followed by urine loss.
- Urine lost is variable and dependent on sphincter function and the ability of the patient to abort a bladder contraction.

Urgency incontinence, when it occurs along with urinary urgency, daytime urinary frequency, and nocturia, has been called "wet overactive bladder."

Urgency incontinence is associated with involuntary bladder contractions. Some patients may have a poorly compliant bladder without involuntary contractions (e.g., interstitial cystitis or following irradiation).

3. **Mixed incontinence:** Many older patients have more than one type of incontinence. Most common are a combination of urgency and stress incontinence among older women and a combination of urge and functional incontinence among nursing home residents. Urge and stress incontinence have different aetiologies, and it is conceivable that the two types develop independently of each other. However, incontinent patients frequently experience symptoms of both urge and stress incontinence, raising the possibility of a progression from one type to a combination of the two.

4. **Functional incontinence:** This type of incontinence results when an older person is unwilling to attempt or unable to reach a toilet on time. It is critical to recognize and remove these barriers to continence. A number of factors such as inaccessible toilets and psychological disorders also exacerbate other types of persistent incontinence. Patients with incontinence that appears to be predominantly related to functional factors in addition may have abnormalities of the lower genitourinary tract, most commonly detrusor overactivity.

5. **High postvoid residual (formerly referred to as "overflow"):** Experts now recommend against the use of the term "overflow incontinence" in favour of terms such as acute or chronic urinary retention and (either stress or urge) incontinence with a high postvoid residual.

Urinary incontinence is a very important cause of great discomfort, shame, loss of self-confidence and may cause patients to withdraw from social life. Troublesome nocturia and urge incontinence disturbs sleeping patterns and affects daily activities. ⁽⁶⁾

Some older people may be humiliated by their incontinence or have a fear of incontinence. In Medical clinics, hospitals and primary health care clinics patients are rarely asked about this by health care providers. In addition, incontinence is rarely brought up by patients. Invasive testing is avoided, and hence evaluation is missed. ⁽⁵⁾ Urinary incontinence impacts the lives of older individuals and it is considered one of the most important and recurrent geriatric syndromes. ⁽⁸⁻¹¹⁾

The perception of the severity of symptoms and its influence on daily life may not be directly related to the amount or frequency of urine loss. ⁽²⁰⁾ It is the degree of impairment of quality of life (QOL) which determines whether a patient seeks medical treatment. Prevalence data about symptoms of urinary incontinence are inadequate when used in isolation to assess health needs and to plan health care services. Thus, assessing the effects on QOL is also vital.

Management of Urinary incontinence is expensive. ⁽⁶⁾ Costs for women over 65 years of age were more than twice the costs for those under 65

years.⁽¹³⁾ The costs of incontinence in the elderly population are truly staggering. Medical expenses include cystitis, urosepsis, pressure sores, perineal rashes, and falls.⁽¹²⁾ The cost of incontinence care includes three major cost items: labour, supplies, and laundry. Routine costs vary significantly and depends on:⁽¹⁶⁾

- (1) the care setting;
- (2) the degree of incontinence;
- (3) the functional status of the patient; and
- (4) the techniques to manage the urinary incontinence

Social consequences of urinary incontinence range from embarrassment, depression, and confusion to extreme social isolation and vulnerability to institutionalization^(17,18,19).

UI affects emotional well-being. Elderly patients with UI had a worse perception of health and are more likely to be depressed. Approximately half to one-third of the patients, more men than women, experienced feelings of anxiety, frustration, and embarrassment. Men also experience more sleep disorder and feelings of depression. Travelling for long distances, going to places where they do not know whether there is a toilet present, and shopping are the outdoor activities most restricted by UI.⁽¹⁴⁾ The consultation rate for UI was low in the north Indian women in spite of the severe consequences in quality of life.⁽¹⁵⁾

Guilt and isolation are among the social implications, with some elderly people unwilling to leave their homes.⁽⁵⁾ Because of shyness, fear of surgery, lack of funds, reliance on husbands, and the dearth of female doctors in the periphery, women in India have a high tolerance threshold for obtaining treatment.⁽²⁾ Urinary incontinence can have a negative impact on sexual function, limit activities, and degrade interpersonal relationships. Self-esteem suffers, caregiver load rises, and self-esteem plummets. This leads to anxiety, depression as well as financial strain on the already frail elderly.⁽⁷⁾ The major reason for not seeking medical help was that the symptoms were not considered to be so serious and that it is part of normal aging and perception that no definite treatment is available^(13,15)

MATERIALS AND METHODS:

165 geriatric patients (Age 60 and above) were evaluated after taking valid written informed consent in geriatric out-patient Incontinence clinic and geriatric in-patient department at Government Medical College and Hospital, Aurangabad from August 2019 to June 2021. The study is approved by the Institutional Ethics Committee.

Patients were asked “Whether they experienced any involuntary loss of urine”. Patients with a positive answer were included in the study after valid, written, informed consent and evaluated in detail.

A validated instrument- Incontinence Impact Questionnaire-7 (IIQ-7) was used to determine the impact of Urinary incontinence on the quality of life in the elderly. The IIQ-7 is a seven-item questionnaire developed to assess different domains of QOL impairment. The following domains are evaluated: (Table 5)

- 1. Physical activity (Ability to do household chores, physical recreation, entertainment activities)
- 2. Travel (Travelling for > 30 mins)
- 3. Social activities (Participating in social activities)
- 4. Emotional health

A four-point rating scale is assigned: 0=not at all, 1=slightly, 2=moderately, and 3=greatly

A composite score can be computed from the data obtained. A higher score indicates poorer QOL.

Patients having urinary incontinence were questioned regarding the reasons of “not seeking medical help” in the past.

The Functional status was assessed by Barthel Index and cognitive status assessed using the Mini Mental Status Examination. The mood was assessed by Geriatrics depression scale-4 (GDS-4).

Data Analysis: The data obtained through proforma was entered in Microsoft Excel and analysed.

Statistical Analysis:

Statistical Analysis was employed by using the Chi-Square test. The association between the type of urinary incontinence and depression, quality of life, functional status, cognitive function was assessed.

RESULTS:

- Out of 165 patients studied, 41 patients (25%) came with incontinence as a presenting complaint and 124 patients (75%) gave incidental history of incontinence on asking specific question.

TABLE 1: REASON FOR NON-REPORTING

REASON FOR NON-REPORTING	%	NUMBER
EMBARASSED	35.1	46
CONSEQUENCE OF AGING/NORMAL	32.1	42
NO ONE TO ACCOMPANY	16	21
FEAR OF SURGERY	11.5	15
NON-DISTURBING/NOT SERIOUS	5.3	7

GRAPH 1. IMPACT OF URINARY INCONTINENCE ON QUALITY OF LIFE BY INCONTINENCE IMPACT QUESTIONNAIRE-7

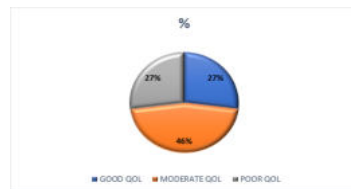


TABLE 2. - TYPE OF INCONTINENCE VS DOMAIN OF QOL AFFECTED IN MALES AND FEMALES WITH POOR QOL.

TYPE OF INCONTINENCE	DOMAIN AFFECTED	% MALES WITH POOR QOL	%FEMALES WITH POOR QOL
URGE	PHYSICAL ACTIVITY	7.46	4.02
	TRAVEL	5.97	10.2
	SOCIAL /RELATIONSHIPS	4.47	5.1
STRESS	EMOTIONAL HEALTH	4.47	9.18
	PHYSICAL ACTIVITY	2.98	4.02
	TRAVEL	1.49	5.1
MIXED	SOCIAL /RELATIONSHIPS	2.98	7.14
	EMOTIONAL HEALTH	1.49	7.14
	PHYSICAL ACTIVITY	4.47	3.06
FUNCTIONAL	TRAVEL	5.97	6.12
	SOCIAL /RELATIONSHIPS	4.47	1.02
	EMOTIONAL HEALTH	5.97	8.16
	PHYSICAL ACTIVITY	2.98	4.02
	TRAVEL	5.97	2.04
	SOCIAL /RELATIONSHIPS	4.47	5.1
	EMOTIONAL HEALTH	5.97	2.04

The Association between quality of life and type of incontinence (Urge) was significant (p Value:0.0001).

In our study, 44 % were depressed by GDS-4. The type of incontinence with maximum % of people who were depressed was urge incontinence (17.6 %). There was significant association between type of incontinence (Urge) and depression (p Value: 0.007).

Out of 165 patients, 11 patients (7%) had total dependency while 25 (15%) patients had severe dependency. There was significant association between Dependency and the type of incontinence (p Value:0.0001).

41 patients (25%) had severe cognitive impairment. The association between type of incontinence and cognitive impairment by MMSE is significant (p Value:0.010).

CONCLUSION:

Urinary Incontinence is a bothersome problem for elderly and an important risk factor hindering activities of daily living, causing depression and acting as a barrier for normal social function. Follow up and counselling about management is necessary to eliminate the taboo associated with UI.

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