

Psychosocial Dilemma in Urinary Incontinent Patients

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ABSTRACT

Background: Urinary incontinence leaves the sufferer with physical and psychological stresses. Majority of the cases are caused by an underlying treatable condition however the it is under reported to medical care providers. The objective of this study was to explore the psychosocial impacts of urinary incontinence and assess quality of life in patients with urinary incontinence in Pakistan. **Methods:** This study was conducted at five tertiary care hospitals in the city of Karachi during January 2013 to December 2013. Self-administered questionnaire was prepared and adjusted according to the local social dynamics of the community based on 'Incontinence Impact Questionnaire' and 'The Kings Health questionnaire'. Inclusion criteria included urinary incontinent patients visiting outpatient departments. **Results:** The study comprised of 280 participants with a response rate of 80%. Overall 89 males and 191 females participated. Majority of the sample population (40.7%) believed that the

weak anatomy was the etiology of their Urinary Incontinence. More than 40 % of the participants declared that they would rate 'the fear that an embarrassing condition could arise in result of their disease' as 'Moderate' followed by 38.2% as 'Highly'. 39.64% stated that their social life including interaction with people was 'Moderately' affected and 21.7% believed that they their social interaction was 'highly' limited. Regarding travel, majority of the participants asserted that their travel has been restricted to a great extent and rated as Highly (30.7%) or Moderate (29.6%). In total 28.5 % patients stated that their exercise schedule had been 'Moderately' affected as a consequence of their disease.

Conclusion: Patients with urinary incontinence should be heard comprehensively by the care providers. Coping techniques for patients and education regarding Urinary incontinence should be provided by the medical practitioner to the sufferers. **Keywords:** Incontinence, psychiatric, involuntary, questionnaires

INTRODUCTION

Urinary Incontinence (UI) is a common medical condition where the urine is lost involuntary.¹ The condition adversely affects patient's office work, travel, studies, daily activities and relationships. UI can compromise one's psychological health and has major impacts on social behaviors.² The sufferer is at a greater risk of acquiring negative mental health outcome and the frequent psychiatric conditions associated with UI are depression and anxiety.³

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Majority of the cases of UI are treatable with conservative treatment or surgery, however the severity of disease varies from case to case depending on the type and extent of the illness.⁴ It has been noted that the patients with UI experience difficulties in maintaining their exercise schedule due the involuntary leakage of their urine and inability to find a toilet to urinate in urgent situations,⁵ resulted limitation of exercise puts additional burden on one's health by complicating comorbid conditions which are relatively commoner in older age than in young adults.⁶ The risk of Diabetes Mellitus (DM type 2) and ischemic heart diseases (IHD) increase significantly due to increase weight, hence UI can contribute to patient's morbidity with an extended period of time.⁷

Travel is stressful for many and becomes even harder for patients with complains of UI. The uncontrollable flow of urine in a situation where the patients is in public place, leave the sufferers infuriate and frustrated. Majority of the patients with UI view their recent trips unmemorable either due to uneventful circumstances where they felt embarrassment in front of public or due to a constant fear of embarrassment throughout their journey.⁸

Another determinant of health which is negatively affected by UI is patient sleep.⁹ Sleep is an important component of general well being including both physical and mental health.¹⁰ Disturbances in the sleep can adversely influence daily work and individual's thought process.¹¹ Depends on the extend of the disease; majority of the patients with UI wake up multiple times to void.¹²

The objective of this study was to investigate the extent of social and psychological problems faced by the patients with Urinary incontinence and to contribute to the compromised social determinants data of urinary incontinent patients.

MATERIALS AND METHODS

This cross sectional study was conducted from January 2013 to December 2013. The data was collected from five tertiary care hospitals located in the city of Karachi. Recruitment was limited to the patients presenting with complains of Urinary incontinence attending out-patient departments. Both male and females were included in the study. There was no age limitation to participate in the study. Patients' perceptions were explored by designing a self-administered questionnaire in consideration of the social stigma associated with the condition. Few contextual relevant questions were included from the disease specific questionnaires such as 'Incontinence Impact Questionnaire' and The Kings Health questionnaire. The respondents were required to rate severity of the social determinants as 'Not at all', 'Somehow', 'Moderate', 'Highly' or 'don't know'. The questionnaires were in English with a translated version in the local national language 'Urdu'. Oral and written consent was taken from the participants before the start of the study. The confidentiality of the patients was maintained and

they were not required to disclose their names or identity. The outcome variables measured included embarrassment fear, social interactions, travel restriction and exercise limitation. The data were analyzed with the statistical software for social sciences version 17.

RESULTS

The study comprise of 89 males and 191 females with total of 280 participant. Initially 350 patients were approached but 70 left the study either at the beginning or at any other stage before the end, hence the response rate was calculated to be 80 %. The age group with maximum number of participants was between 61-80 years, with 42 males and 71 females and total of 113 participants. (Table 1)

Table 1: Demographics of the participants

Age groups	Male	Female	Total
21-40	9	48	57
41-60	23	55	78
61-80	42	71	113
81 and above	15	17	32
	89	191	280

Majority of the study participants (40.7%) believed that the weak anatomy was the cause of their Urinary Incontinence, however a large number of patients (40%) were not aware of any risk factor that contributed to their condition. More than 40 % (P-Value 6.87)of the patients stated that they would rate 'the fear that an embarrassing condition could arise in result of their disease' as 'Moderate' followed by 38.2%(P-Value 0.55) as 'Highly' while 10.7% of the patient rated their fear as 'Somehow', 1% did not fear embarrassment.(Table 2,3)

Table- 2: Etiology of stress incontinence

ETIOLOGIES	MALES (% of males)	FEMALES (% of females)	Total (%)	P-value
Infectious	10(11.2)	25(13.08)	35(12.5)	6.18
inflammatory	6(6.74)	13(6.80)	19(6.78)	3.57
Weak anatomy	33(37.07)	81(42.40)	114(40.7)	0.04
Don't know	40(44.94)	72(37.7)	112(40)	3.25

Table- 3: Embarrassment fear or botheration

FEELINGS	MALES (% of males)	FEMALES (% of females)	Total (%)	P-value
NOT AT ALL	2(2.24)	1(0.52)	3(1.07)	9.86
SOMEHOW	8 (8.98)	22(11.51)	30(10.71)	16.3
MODERATE	32(35.95)	81(42.40)	113(40.35)	6.87
HIGHLY	39(43.82)	68(35.6)	107(38.21)	0.55
DON'T KNOW	8(8.98)	19(9.94)	27(9.64)	4.78

Maximum number of participants (39.64%) believed that their social life including interaction with people was 'Moderately' compromised due to UI. 21.7% stated that they their social interaction was 'highly' limited. (Table 4)

Table- 4: Social interference (Interference with social inter actions)

FEELINGS	MALES (% of males)	FEMALES (% of females)	Total (%)	P-value
NOT AT ALL	1(1.12)	4(2.09)	5(1.78)	2.10
SOMEHOW	18(20.22)	43(22.51)	61(21.78)	0.03
MODERATE	32(35.95)	79(41.36)	111(39.64)	0.34
HIGHLY	31(34.83)	30(15.7)	61(21.78)	0.78
DON'T KNOW	7(7.86)	35(18.32)	42(15)	8.31

Majority of the participants believed that their travel has been restricted to a greater extend, as 'Highly' (30.7%) or 'Moderate' (29.6%). Maximum number of patients (28.5 %) stated that their exercise schedule had been 'Moderately' compromised due to their disease.(Table 5,6)

Table-5: Travel Restrictions

FEELINGS	MALES (% of males)	FEMALES (% of females)	Total (%)	P-value
NOT AT ALL	5(5.61)	20(10.47)	25(8.92)	13.5
SOMEHOW	21(23.59)	31(16.23)	52(18.57)	9.86
MODERATE	29(32.58)	54(28.27)	83(29.64)	0.22
HIGHLY	23(25.84)	63(32.98)	86(30.71)	0.48
DON'T KNOW	11(12.35)	23(12.04)	34(12.14)	7.88

Table- 6: Exercise limitations

FEELINGS	MALES (% of males)	FEMALES (% of females)	Total (%)	P-value
NOT AT ALL	18(20.22)	25(13.08)	43(15.35)	11.2
SOMEHOW	13(14.60)	54(28.27)	67(23.92)	3.64
MODERATE	23(25.84)	57(29.84)	80(28.57)	1.86
HIGHLY	20(22.47)	39(20.41)	59(21.07)	0.33
DON'T KNOW	15(16.85)	16(8.37)	31(11.07)	6.23

DISCUSSION

Urinary Incontinence is common and affects patients' quality of life, as it progresses it puts additional mental stress on patients beyond the physical complications of the disease. Some major psychosocial areas commonly affected by UI were also studied in the present study. More than two third of the participants were females and the rate of incontineses increases with advancing age, this trend is universal throughout, a study conducted in the United States by the platform of

National Institutes of Health (NIH) included more than 3500 participants and it found out a clear association of advancing age with the higher prevalence of UI.¹³ Another study by Samuelsson et al, showed that the prevalence of UI in women increase with advancing age and age is a significant risk factor for UI in women.¹⁴

Majority of the respondents in this study admitted that their travel has been restricted to a considerable extent. A study by Sinclair et al demonstrated that most patients with urinary incontinence are reluctant to visit places or shorten duration of their trips.¹⁵ One of the major reasons is non availability of toilets in a public place or the fear of embarrassment faced if the urine dribbles involuntary.¹⁶ The overall quality of life has been negatively influenced by lack of navigation or movement.

Exercise is vital for healthy life and prevents or minimizes disablement.¹⁷ Patients with UI experience difficulty in maintaining their exercise schedule they had before the development of the disease.¹⁸ The main reason which compels them to restrict exercise is the fear that others will discover their conditions.¹⁵ Other rationale to quit exercise was the involuntary leakage of the urine and the perceived awkwardness of their condition.¹⁹ In the present study a vast majority of participants perceived that their daily exercise faced limitation in result of UI. Bo et al found that the majority of women diagnosed with UI, have either quitted or limited their exercises.²⁰ In some cases, where surgery is a viable treatment option for UI, it is advised to reduce weight for the surgery, hence the patient faces a dilemma where he/she has to reduce weight for the definite treatment of their condition and faces psychological issues in maintaining their exercise schedules.¹⁵

UI affects different health parameters, Papanicolaou et al in his study which was conducted in four European countries, found out that the greatest negative effects of UI were observed in self esteem, confidence, social and physical activities.²¹ In the present study, results showed that the majority of the respondents were feared of an embarrassing situation or bothered by the symptoms of their condition. A study by Fultz et al observed that more than three fourth of the

patients with UI were bothered by their symptoms and more than a quarter believed that the condition is moderately or highly bothersome and they were significantly concerned regarding social embarrassment.¹⁶

CONCLUSION

Urinary incontinence is a frequent and distressful condition for the majority of the patients. By virtue of it mental and physical affects, UI should be taken seriously and every effort should be made to address the concerns of the patients. The results of this study reinforce the need for primary health care givers to educate the patients regarding the disease and its progression.

REFERENCES

1. "Managing Urinary Incontinence". National Prescribing Service, available at http://www.nps.org.au/health_professionals/publications/nps_news/current/nps_news_66_managing_urinary_incontinence_in_primary_care
2. Abrams, P., Kelleher, C. J., Kerr, L. A et al. Overactive bladder significantly affects quality of life. *The American journal of managed care.* 2000; 6(11 Suppl):580-90.
3. Zorn, B. H., Montgomery, H., Pieper, K., Gray, M et al. Urinary incontinence and depression. *The Journal of Urology*1999; 162(1): 82-84.
4. Johnson, T. M., Ouslander, J. G., Uman, G. C., Schnelle, J. F. Urinary Incontinence Treatment Preferences in Long-Term Care. *Journal of the American Geriatrics Society.*2001; 49(6): 710-718.
5. Jiang, K., Novi, J. M., Darnell, S., Arya, L. A. Exercise and urinary incontinence in women. *Obstetrical & gynecological survey.*2004; 59(10): 717-721.
6. Weil, E., Wachterman, M., McCarthy, E. P et al. Obesity among adults with disabling conditions. *Jama.*2002; 288(10): 1265-1268.
7. Lee, J., Ma, S., Heng, D et al. Should central obesity be an optional or essential component of the metabolic syndrome? Ischemic heart disease risk in the Singapore Cardiovascular Cohort Study. *Diabetes Care.*2007; 30(2): 343-347.

8. Teunissen, D., Van Den Bosch, W., Van Weel, C., Lagro-Janssen, T. "It can always happen": The impact of urinary incontinence on elderly men and women. *Scandinavian journal of primary health care*.2006; 24(3): 166-173.
9. Coyne, K. S., Zhou, Z., Thompson, C., Versi, E. The impact on health-related quality of life of stress, urge and mixed urinary incontinence. *BJU international*.2003; 92(7): 731-735.
10. Tanaka, H., Taira, K., Arakawa, M et al. Short naps and exercise improve sleep quality and mental health in the elderly. *Psychiatry and clinical neurosciences*.2002;56(3): 233-234.
11. Durmer, J. S., Dinges, D. F. Neurocognitive consequences of sleep deprivation. In *Seminars in neurology*. 2005; 25(1): 117-129.
12. Milsom, I., Abrams, P., Cardozo, L et al. How widespread are the symptoms of an overactive bladder and how are they managed? A population-based prevalence study. *BJU international*.2001; 87(9): 760-766.
13. Melville, J. L., Katon, W., Delaney, K., Newton, K. Urinary incontinence in US women: a population-based study. *Archives of internal medicine*.2005; 165(5): 537-542.
14. Samuelsson, E., Victor, A., Svärdsudd, K. Determinants of urinary incontinence in a population of young and middle-aged women. *Acta Obstetrica et Gynecologica Scandinavica*, 2000; 79(3): 208-215.
15. Sinclair, A. J., Ramsay, I. N. The psychosocial impact of urinary incontinence in women. *The Obstetrician & Gynaecologist*. 2011; 13(3): 143-148.
16. Fultz, N. H., Burgio, K., Diokno, A. C et al. Burden of stress urinary incontinence for community-dwelling women. *American journal of obstetrics and gynecology*2003; 189(5): 1275-1282.
17. Keysor, J. J. Does late-life physical activity or exercise prevent or minimize disablement?: a critical review of the scientific evidence. *American journal of preventive medicine*.2003; 25(3):129-136.
18. Nygaard, I., Girts, T., Fultz, N. H et al. Is urinary incontinence a barrier to exercise in women?. *Obstetrics & Gynecology*.2005; 106(2): 307-314.
19. Nygaard, I., Thom, D., Calhoun, E. Urinary incontinence in women. *Urologic diseases in America*. 2004; 71-103.
20. Bø, K. Urinary incontinence, pelvic floor dysfunction, exercise and sport. *Sports Medicine*. 2004; 34(7): 451-464.
21. Papanicolaou, S., Hunskaar, S., Lose, G., Sykes, D. Assessment of bothersomeness and impact on quality of life of urinary incontinence in women in France, Germany, Spain and the UK. *BJU international*.2005; 96(6): 831-838.

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