ORIGINAL ARTICLE

https://doi.org/10.1590/1806-9282.20221395

# The effect of perceived social support levels on coping methods for urinary incontinence in elderly men

Zehra Kocak[1], Berna Bayir[1], Ibrahim Goksoy[2], Hakan Hakki Taskapu[2]

## SUMMARY

**OBJECTIVE:** This study aimed to determine the effect of the perceived social support level on coping methods for urinary incontinence among men aged 65 years and over with urinary incontinence.

**METHODS:** A total of 92 male patients over the age of 65 years with urinary incontinence and adequate cognitive levels were included in the study. The coping methods, the environmental support, and the Multidimensional Scale of Perceived Social Support were used to collect data.

**RESULTS:** The most common method of coping was changing clothes (64 [69.6%]). The Multidimensional Scale of Perceived Social Support total mean score was 55.83±14.8, which was considered above the medium-level support. The perception level of social support caused significant differences in coping methods in individuals with urinary incontinence.

**CONCLUSION:** The view that urinary incontinence is a problem related to aging is regarded as an obstacle to seeking healthcare. Society should be made aware that urinary incontinence is not a normal condition related to aging and that it is not an insoluble problem that the elderly must endure.

**KEYWORDS:** Social support. Men. Urinary incontinence.

## INTRODUCTION

Aging causes changes in many organs and bodily systems, and it can affect the functioning of those systems[1]. The management of diseases such as diabetes[2,3], hypertension[4], and cancer[5,6] is more difficult in elderly patients. Urinary incontinence (UI) is a difficult condition to accept, often hidden by those who experience it, and is referred to as a "silent epidemic"[7]. The risk of UI steadily increases with increasing age and decreasing physical and mental performance. The worldwide prevalence of UI varies between 20 and 68%[8]. Prior to the age of 80 years, UI is 1.3–2 times more common in women than in men; after the age of 80 years, its prevalence is similar among both genders.

UI causes psychosocial problems, such as the fear of smelling bad, anxiety, feelings of dirtiness, unhappiness, stigma, deterioration in body image, and depression[9]. Individuals, especially the elderly, rarely report UI, as it is considered a natural consequence of aging. Additional negative consequences, such as anxiety, depression, decreased sexual life, decreased physical activity, poorer quality of life, social isolation, and the loss of self-confidence, can affect those who hide their UI[10].

Social support is defined as the emotional, financial, and information support that an individual receives from their environment. Perceived social support is an individual's overall impression of the support they receive from their social environment. Although the importance of environmental support for health-seeking behavior and health promotion is known, to the best of our knowledge, there are no studies in the literature examining the levels of environmental support and perceived social support among individuals with UI. This study aimed to determine the effect of the perceived social support level on coping methods for UI among men aged 65 years and over with UI.

## METHODS

This cross-sectional study was conducted in the Urology Outpatient Clinic of Necmettin Erbakan University Meram Medical Faculty Hospital between December 2021 and May 2022. Ninety-two male patients over the age of 65 years with UI and adequate cognitive levels were included in the study. Patients with impermanent UI, active infection, impaired cognitive function, or malignancy were not included in the study.

A personal information form and the Multidimensional Scale of Perceived Social Support (MSPSS) were used to collect data. The personal information form consisted of 28 structured questions to determine the state of being affected by incontinence,

[1]Karatay Ticaret Odası Karatay Üniversitesi, High School of Health Sciences, Department of Nursing – Konya, Turkey.
[2]Necmettin Erbakan Üniversitesi, Meram Faculty of Medicine, Department of Urology – Konya, Turkey.
*Corresponding author: zzzehrakocak@hotmail.com

Conflicts of interest: the authors declare there is no conflicts of interest. Funding: none.
Received on October 18, 2022. Accepted on December 08, 2022.

the support received from the environment, the expectation from the environment, coping methods, and sociodemographic characteristics. Ten of these questions examined introductory features, and 18 gathered information about UI.

The MSPSS, developed by Zimet et al.[11], consists of 12 items. Each item is answered using a 7-point Likert-type scale that ranges from 1 ("Very Strongly Disagree") to 7 ("Very Strongly Agree"). The scale consists of 3 subdimensions, namely, friend, family, and special person support, that examine an individual's support system. Each subdimension includes 4 items. The score for each subdimension ranges from 4 to 28, while the score for the entire scale ranges from 12 to 84. Higher scores indicate higher levels of perceived social support. Eker et al.[12] examined the scale's validity and reliability in Turkey. The scale's internal consistency and reliability were found to be high, with Cronbach's alpha coefficient between 0.80 and 0.95. In our study, the results of the scale were found to be very good for factor analysis (Kaiser-Meyer-Olkin value: 0.84; Bartlett test: chi-square=1284.5, df=66, p<0.001), and a three-factor structure was detected in the factor analysis of the scale. Our study is similar to the original scale. These three factors explained 87% of the total variance of the MSPSS. Ethics committee approval was obtained from the Ethics Committee for our study (approval no. 2022/002).

### Statistical analysis

The SPSS software (21.0 version) was used to analyze the data. The participants' characteristics were given as percentages and frequencies. Skewness and kurtosis were used to test the normality of the scale scores. The comparison of homogeneously distributed parameters was performed with an independent sample t-test and analysis of variance. The Games-Howell *post hoc* analysis was used to evaluate the subgroups. The significance level was set at p<0.05.

## RESULTS

The participants' median age was 69 (65–83) years, and the median duration of UI was 3 (0.5–10) years. The sociodemographic characteristics are presented in Table 1. Notably, 54 (58.7%) participants indicated that their UI was due to old age, 26 (28.3%) indicated that it was due to benign prostate gland enlargement, and 5 (5.4%) indicated that it was due to both. Seven (7.6%) subjects did not know the cause of their UI (Table 1).

With respect to the impact of UI on daily life, it most frequently affected the participants' daily activities (57% [62%]) and least frequently affected their work lives (5 [5.4%]). The additional affected daily activities and their frequencies were as follows: sleeping (50 [54.3%]), going out (34 [37%]), worshiping (33 [35.9%]), traveling (11 [12%]), and visiting friends (5 [5.4%]). Of note, 69 (75%) participants shared their UI status with other people, while 23 (25%) did not disclose this information to anyone. Individuals most commonly shared this information with their spouses (29 [42%]) and least commonly shared it with their caregivers (2 [2.9%]). The most common method of coping was changing clothes (64 [69.6%]). It was determined that the use of special panties was never preferred

**Table 1.** Demographic characteristics of patients with urinary incontinence (UI) in the study (n=92).

| Features | Groups | n | % |
|---|---|---|---|
| Marital status | Single | 32 | 34.8 |
| | Married | 60 | 65.2 |
| Working status | No | 80 | 87 |
| | Yes | 12 | 13 |
| Income level status | Income less than expenses | 21 | 22.8 |
| | Income equals expense | 49 | 53.3 |
| | Income more than expenses | 22 | 23.9 |
| Living place | City | 46 | 50 |
| | Districts | 25 | 27.2 |
| | Village | 21 | 22.8 |
| Health insurance | No | 11 | 12 |
| | Yes | 81 | 88 |
| Family type | Elementary family | 72 | 78.3 |
| | Extended family | 20 | 21.7 |
| Live with at home | Alone | 25 | 27.2 |
| | Spouse | 44 | 48.8 |
| | Spouse and child | 23 | 25 |
| The status of UI causing problems in daily life | Sometimes | 53 | 57.6 |
| | Most of the time | 32 | 34.8 |
| | Always | 7 | 7.6 |
| Frequency of UI | Once a day | 10 | 10.9 |
| | Several times a day | 19 | 20.7 |
| | Once a week or less | 26 | 28.3 |
| | Two/three times a week | 29 | 31.5 |
| | Always | 8 | 8.7 |
| Reasons for UI | Aging | 54 | 58.7 |
| | Prostate hypertrophy | 26 | 28.3 |
| | Unknowing | 7 | 7.6 |
| | Aging and prostate hypertrophy | 5 | 5.4 |

as a coping method. The frequency of other coping methods was given as follows: going to the doctor, 58 (63%); using medications, 46 (50%); trying to drink less water, 46 (50%); going to the toilet more often, 46 (50%); using a pad/cloth/napkin, 23 (25%); foot keeping warm, 37 (40.2%); and exercising, 2 (2.2%).

The total mean score of the respondents on the MSPSS was 55.83±14.8. The lowest score was 16, whereas the highest score was 82. These findings suggest that the perception of individuals with UI regarding social support was above the medium level. Social support from family and special person was considered high, but that from friends was of a moderate level. With respect to the perception of family support, the scores of UI patients who applied fluid intake were significantly higher than those who did not adopt this coping method (p=0.04) (Table 2). In terms of the perception of support from friends, however, the scores of these individuals were significantly lower than those who did not use fluid intake-related coping method (p=0.001) (Table 2). The total MSPSS score and the subdimension scores of patients who rarely changed clothes as a coping method were significantly higher than those who used this method (p>0.05, for all) (Table 2). The total MSPSS score and the special person support scores among patients who visited their doctors were significantly higher than those who did not consult physicians (p=0.029 and p=0.027, respectively). No difference was found among the patients in terms of their total MSPSS score and subdimension scores on drug use as a coping method (p>0.05) (Table 2).

The total MSPSS score, family support scores, and special person support scores of married patients were significantly higher than those of single patients (p>0.05) (Table 2). No significant difference was found between these individuals in terms of scores on the perception of friend support and marital status (p=0.097). The same absence of significant differences was identified with regard to the scores on support from family, friends, and special individuals and the total support scores of

**Table 2.** Comparison of the Multidimensional Scale of Perceived Social Support and subdimensions scores with coping methods.

| Coping methods | | Multidimensional Scale of Perceived Social Support (Mean±SD) | | | |
|---|---|---|---|---|---|
| | | Family support | Friend support | Special person support | Total support |
| Trying to drink less fluids | Yes | 22.1±4.8 | 14.4±5.8 | 18±5.3 | 54.7±10.7 |
| | No | 19.5±6.9 | 18.5±5.9 | 18.8±6.7 | 56.9±18 |
| | t/p* | **-2.085/0.04** | **3.325/0.001** | 0.601/0.55 | 0.723/0.47 |
| Going to the toilet more often | Yes | 20.5±6.7 | 15.8±7 | 18.3±6.8 | 54.7±17.2 |
| | No | 21.2±5.4 | 17±5.2 | 16.6±5.2 | 56.9±12 |
| | t/p* | 0.544/0.58 | 0.939/0.35 | 0.257/0.79 | 0.723/0.47 |
| Using pad/cloth/napkin | Yes | 22.5±4.6 | 17±7.2 | 19.8±5.2 | 59.4±12.4 |
| | No | 20.3±6.4 | 16.3±5.8 | 18±6.2 | 54.6±15.4 |
| | t/p* | -1.798/0.07 | -0.463/0.6 | -1.287/0.2 | -1.352/0.18 |
| Frequent laundry changes | Yes | 20±6.6 | 15.5±6.1 | 17.4±5.9 | 53±15.1 |
| | No | 22.8±4 | 18.5±5.9 | 20.8±5.8 | 62.3±11.9 |
| | t/p* | **2.543/0.013** | **2.182/0.032** | **2.581/0.011** | **2.888/0.005** |
| Keep feet warm | Yes | 21.5±6.1 | 16.4±5.4 | 17.8±6.1 | 55.8±13.4 |
| | No | 20.4±6.1 | 16.5±6.7 | 18.8±6 | 55.8±15.7 |
| | t/p* | -0.835/0.4 | 0.058/0.95 | 0.746/0.45 | -0.015/0.98 |
| Medication | Yes | 21.2±6.2 | 17.1±6.3 | 19.4±6.1 | 57.8±16 |
| | No | 20.55±6 | 15.7±6 | 17.5±5.8 | 53.8±13.3 |
| | t/p* | -0.510/0.61 | -1.109/0.27 | -1.509/0.13 | -1.293/0.19 |
| Visit the doctor | Yes | 21.2±5.9 | 17.2±6.1 | 19.3±6.1 | 57.9±15.5 |
| | No | 20.2±6.3 | 15.1±6.1 | 16.9±5.6 | 52.2±12.8 |
| | t/p* | **-0.822/0.46** | **-1.623/0.11** | **-1.877/0.027** | **-1.793/ 0.029** |

*Independent sample t-test. Bold values indicate statistical significance.

nuclear and extended families (p>0.05 for all) (Table 3). Similar scale scores were derived by working and nonworking groups (Table 3). The friend support scores of patients with comorbidities were significantly lower than those without comorbidities (p=0.02). However, no difference was found among the comorbidity and family support scores, special person support scores, and total support scores (p>0.05 for all, Table 3).

## DISCUSSION

In this study, it was found that the participants shared their UI most frequently with their spouses, they used the change of clothes most frequently as their coping method, and they exhibited a moderate perception of social support. In addition, it was observed that this level of perception of social support gave rise to significant differences in coping methods.

In a previous study, 45.5% of the participating women and 52.8% of the participating men reported that they first shared their UI problem with their spouses, families, or friends/neighbors[7]. Of the elderly participants, 43.7% shared their UI issues with their relatives[13]. In another study, 59% of UI patients talked to the people around them, mostly relatives, but only 23.2% consulted a professional. In this study, individuals mostly shared their UI with their close relatives. The evaluation of UI frequency showed that 10% of the participants experienced this condition once a week, 23.3% had it two to three times a week, 30% experienced it once a day, and 36.6% encountered it more than once a day[14]. Other researchers reported a

**Table 3.** Comparison between Multidimensional Scale of Perceived Social Support and subdimensions scores and marital status, family type, comorbidity status, and working status.

| Subdimension scores | Marital status | | |
|---|---|---|---|
| | Married (n=60) Mean±SD | Single (n=32) Mean±SD | p-value* |
| Family support | 23±5.19 | 16.9±5.78 | **<0.001** |
| Friend support | 17.16±6.54 | 15.18±5.38 | 0.097 |
| Special person support | 19.65±6.53 | 16.25±6.54 | **0.004** |
| Total | 69.81±14.94 | 48.37±11.42 | **<0.001** |
| **Subdimension scores** | **Family type** | | |
| | Elementary (n=72) Mean±SD | Extended (n=20) Mean±SD | p-value* |
| Family support | 20.2±6.3 | 23.2±4.5 | 0.056 |
| Friend support | 16.3±6.4 | 16.8±5.3 | 0.76 |
| Special person support | 18±6.2 | 20±5.3 | 0.2 |
| Total | 54.6±15.4 | 60±11.3 | 0.15 |
| **Subdimension scores** | **Comorbidity status** | | |
| | No (n=24) Mean±SD | Yes (n=68) Mean±SD | p-value* |
| Family support | 21.5±5.6 | 20.6±6.2 | 0.57 |
| Friend support | 19±6.8 | 15.5±5.7 | **0.02** |
| Special person support | 19.2±7.1 | 18.1±5.6 | 0.44 |
| Total | 59.7±16.2 | 54.4±14.1 | 0.12 |
| **Subdimension scores** | **Working status** | | |
| | No (n=80) Mean±SD | Yes (n=12) Mean±SD | p-value* |
| Family support | 20.9±5.9 | 20.8±7.6 | 0.97 |
| Friend support | 16.1±6.1 | 18.7±6.4 | 0.17 |
| Special person support | 18.1±5.9 | 20.4±6.3 | 0.23 |
| Total | 55.2±14 | 60±19.5 | 0.29 |

*Independent sample t-test. Bold values indicate statistical significance.

UI frequency of one or more times a day (72.6%)[15]. In our study, for the most part, the respondents experienced UI only occasionally. UI frequency differs depending on the target population and ethnicity, as well as study design[16]. As individuals with UI typically prefer to conceal their problems, the results of face-to-face studies and confidential surveys may vary[17,18]. The findings of this research, whose data were collected face to face, are compatible with the literature. Shaw et al.[18] indicated that 68.6% of individuals with UI believe that the condition is a normal consequence of aging. Regardless of the type of society, UI due to old age is perceived as a natural result of physical regression and loss of power.

The literature indicated that the level of perception of social support among married individuals is higher than that among their single counterparts[19,20]. It has been reported that there is no significant difference in the perception of social support between individuals with and without comorbidities[20]. Individuals with UI prefer to share their problems with their spouses because they are ashamed of this condition. In our study, the feeling of shame was predicted to be effective. The results correspond with the literature. Nevertheless, considering that individuals with chronic diseases may have minimal socialization, in addition to grappling with UI, low perceptions of social support can be expected. This possibility highlights the importance of family support.

No studies have been devoted to perceptions of social support among elderly male individuals with UI. As perceived social support levels decrease, the severity of internalized stigma increases[21]. Studies have indicated that a high perception of social support exerts a positive effect on individuals' adaptation to and recovery from the disease[21,22]. Social support also has a favorable influence on coping[21]. The findings of this research on the patient group exhibiting a moderate perception of social support and using positive coping methods, such as doctor consultations, support the literature.

## CONCLUSION

The view that UI is a problem related to aging is regarded as an obstacle to seeking healthcare. Society should be made aware that UI is not a normal condition related to aging and that it is not an insoluble problem that the elderly must endure.

## AUTHORS' CONTRIBUTIONS

**ZK:** Conceptualization, Data Curation, Formal Analysis, Funding Acquisition, Investigation, Methodology, Project Administration, Resources, Software, Validation, Writing – Original Draft. **BB:** Methodology, Project Administration, Resources, Software, Supervision, Validation, Visualization, Writing – Original Draft, Writing – Review & Editing. **IG:** Data Curation, Formal Analysis, Resources, Software, Supervision, Validation, Visualization, Writing – Review & Editing. **HHT:** Data Curation, Formal Analysis, Funding Acquisition, Investigation, Methodology, Resources, Software, Validation, Visualization, Writing – Review & Editing.

## REFERENCES


1. Blokzijl F, Ligt J, Jager M, Sasselli V, Roerink S, Sasaki N, et al. Tissue-specific mutation accumulation in human adult stem cells during life. Nature. 2016;538(7624):260-64. https://doi.org/10.1038/nature19768
2. Kocak MZ, Aktas G, Duman TT, Atak BM, Bilgin S, Kurtkulagi O, et al. Type 2 diabetes mellitus is more commonly well controlled in younger men compared to older men. Aging Male. 2020;23(5):906-10. https://doi.org/10.1080/13685538.2019.1621833
3. Alaca B, Kocak MZ, Gürler M. Clinical significance and prevalence of frailty syndrome in type 2 diabetes patients. Osmangazi Med J. 2022;44(2):169-76. https://doi.org/10.20515/otd.986794
4. Atik F, Aktas G, Kocak MZ, Erkus E, Savli H. Analysis of the factors related to the blood pressure control in hypertension. J Coll Physicians Surg Pak. 2018;28(6):423-6. https://doi.org/10.29271/jcpsp.2018.06.423
5. Kocak MZ. Comment on "frailty screening by geriatric-8 and 4-meter gait speed test is feasible and predicts postoperative complications in elderly colorectal cancer patients". J Geriatr Oncol. 2021;12(4):685. https://doi.org/10.1016/j.jgo.2021.02.017
6. Kocak MZ. Letter to the editor regarding the article 'frailty and skeletal muscle in older adults with cancer'. J Geriatr Oncol. 2020;11(6):1041. https://doi.org/10.1016/j.jgo.2020.02.009
7. Bilgic D, Kizilkaya Beji N, Ozbas A, Çavdar İ, Aslan E, Yalcin O. Coping and help-seeking behaviors for management of urinary incontinence. Low Urin Tract Symptoms. 2017;9(3):134-41. https://doi.org/10.1111/luts.12120
8. Seshan V. Coping strategies & self measures adopted by the women with urinary incontinence & its effects on QOL. Obstet Gynecol Int J. 2016;5:00187. https://doi.org/10.15406/ogij.2016.05.00187
9. Schluter PJ, Ward C, Arnold EP, Scrase R, Jamieson HA. Urinary incontinence, but not fecal incontinence, is a risk factor for admission to aged residential care of older persons in New Zealand. Neurourol Urodyn. 2017;36(6):1588-95. https://doi.org/10.1002/nau.23160
10. Pizzol D, Demurtas J, Celotto S, Maggi S, Smith L, Angiolelli G, et al. Urinary incontinence and quality of life: a systematic review and meta-analysis. Aging Clin and Exper Res. 2021;33(1):25-35. https://doi.org/10.1007/s40520-020-01712-y
11. Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. J Pers Assess. 1988;52:30-41. https://doi.org/10.1207/s15327752jpa5201_2

12. Eker D, Arkar H. Factor structure, validity and reliability of multidimensional perceived social support scale. Turk J Psychol.1995;10:45-55.
13. Bulga M, Avcı İA. Awareness of urinary incontinence in elderly patients and affecting factors and methods of coping with urinary incontinence. J Nursol. 25:1-6. https://doi.org/10.54614/JANHS.2022.729980
14. Jafarizadeh H, Maghsoudi Z, Namadi F, Mohammadpour Y, Moradi Y. The effect of pelvic floor muscles training, bladder exercises and lifestyle modification on urinary incontinence in elderly men. J Nephropathol. 2022;11(1):e8. https://doi.org/10.34172/jnp.2022.08
15. El Gayar N, Ahmed S, Abou-Raya S, Mohamed A, Mahmoud H. Prevalence, impact and correlates of treatment-seeking for urinary incontinence in elderly patients attending main university hospital of Alexandria, Egypt. NILES J Geriatr Gerontol. 2022;5(1):150-76. https://doi.org/10.21608/niles.2022.211777
16. Murukesu RR, Singh DK, Shahar S. Urinary incontinence among urban and rural community dwelling older women: prevalence, risk factors and quality of life. BMC Public Health. 2019;19(Suppl 4):529. https://doi.org/10.1186/s12889-019-6870-6
17. Veronese N, Smith L, Pizzol D, Soysal P, Maggi S, Ilie P-C, et al. Urinary incontinence and quality of life: a longitudinal analysis from the english longitudinal study of ageing. Maturitas. 2022;160:11-15. https://doi.org/10.1016/j.maturitas.2022.01.010
18. Shaw C, Rajabali S, Tannenbaum C, Wagg A. Is the belief that urinary incontinence is normal for ageing related to older canadian women's experience of urinary incontinence? Inter Urogynecol J. 2019;30(12):2157-60. https://doi.org/10.1007/s00192-019-03906-z
19. Ozvurmaz S. Relationship between the loneliness levels of elderly individuals and their perceptions of social support. Adnan Menderes University Faculty of Health Sciences Journal. 2018;2:118-25.
20. Yanik A, Saglam Y. Evaluation of life satisfaction and social support perception of elderly individuals. J Health Scien Profes. 2019;6(3):501-12.
21. Chen L, Alston M, Guo W. The influence of social support on loneliness and depression among older elderly people in China: coping styles as mediators. J Com Psychol. 2019;47(5):1235-45. https://doi.org/10.1002/jcop.22185
22. Szymona-Pałkowska K, Janowski K, Pedrycz A, Mucha D, Ambroży T, Siermontowski P, et al. Knowledge of the disease, perceived social support, and cognitive appraisals in women with urinary incontinence. BioMed Res Int. 2016;2016:3694792. https://doi.org/10.1155/2016/3694792