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Assessment of Coping Strategies with Stress Urinary Incontinence among Saudi Menopausal Women

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Abstract

The most common urinary issue among women going through menopause is stress urinary incontinence (SUI). It lowers women's quality of life on a physical and psychological level. As a result, to enhance their quality of life, menopausal women with SUI often take up either constructive or destructive coping mechanisms. Objective: Identify coping strategies among menopausal women with urinary stress incontinence. Setting: Urinary incontinence clinic of Makkah hospital, Saudi Arabia. Subjects: A convenience sample of 200 menopausal women with stress urinary incontinence were recruited in this study. Tools: Three tools were used; I: Basic Data Structured Interview Schedule, II: Urinary Incontinence Interview Schedule: PRAFAB- Questionnaire, and III: Revised Jalowiec Coping Scale. Results: Self-reliance was the most common coping method, while emotive coping was the least common, with 50% of research participants using no coping strategies at all. In conclusion, women try to constructively cope with health issues by using problem-based coping techniques (evasive and confronting). Recommendations: In order to help menopausal women develop adequate coping skills, gynecological nurses are recommended to attend training regarding the psychological effects of stress incontinence.

Keywords: *Menopausal women; Urinary incontinence; Coping strategies.*

Introduction

For women, the menopause marks the physical and psychological shift from the childbearing years to the post-reproductive period of life. Midlife women report a wide range of symptoms during the menopausal transition. Menopause can occur at any age between 40 and 60 years old, with the average onset age being 51. (1).

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It is distinguished by significant alterations in the physiology, which have an impact on the bodily functions, structure, and form of the woman, both physiologically and psychologically (2). Numerous symptoms have been observed, including as vaginal dryness, hot flashes, night sweats, mood swings, sleep issues, sexuality changes, cognitive decline, somatic complaints, and urinary symptoms. [(1)].

The most common urinary issue among women going through menopause is stress urinary incontinence (SUI). The National Institute for Health and Clinical Excellence (NICE) defines it as the involuntary leakage of urine during exertion, effort, or when one coughs or sneezes [(3)].

The main cause of stress incontinence in menopausal women is typically inadequate urethral support. The sub-urethral endopelvic fascia, which is primarily made of collagen, and the muscles of the pelvic floor, together with their intact nerve supply, are the supporting tissues of the urethra and bladder neck (4). Collagen turnover during menopause shows that stress incontinence differs in collagen remodeling from controls on the continent due to gradual collagen attenuation brought on by ovarian hormone insufficiency during the menopausal transition. [(5)].

Women's quality of life is negatively impacted by stress incontinence on a physical and psychological level. Therefore, every woman tries to come up with useful coping mechanisms to counteract the detrimental effects of incontinence on her intimacy and quality of life.[(6)].

Coping strategies are very important to maintain women's identity and perceived competence since UI is often associated with lack of self-control, Menopausal women with SUI use a larger variety of coping strategies to manage their difficulties[(7)]. They follow different measures to solve their problem by cognitively transforming their situation. Under difficult circumstances, they accept the challenge though continuing concentration on the problem in their situation turns out to be a depressing factor and is associated with a lower quality of their life[(8)]. Coping strategies could be in the form of applications that protect menopausal women from UI symptom.

Aim of the Study

This study aims to identify coping strategies among menopausal women with urinary stress incontinence.

Research Question

What are coping strategies among menopausal women with urinary stress incontinence?

Materials and Method

Materials

Design: A descriptive research design was utilized.

Setting: Urinary incontinence clinic of Makkah hospital, Saudi Arabia

Subjects: A convenience of 200 menopausal women.

Tools: Three tools used for data collection:

Tool I: Basic Data Structured Interview Schedule

It has three parts: Part I: Socio- demographic characteristics Part II: Health related data. Part III: Reproductive characteristics of the study subjects.

Tool II: PRAFAB-Questionnaire[(9)]

To evaluate the severity of urinary incontinence in women. It consists of 20 items distributed among 5 dimensions as follows; Protection (use of pads) 4 items; Amount of

urine loss 4 items; Frequency of UI 4 items; Adjustment of behavior due to the symptoms 4 items and Body (or self)- image as result of the symptoms of incontinence.

Tool III: Revised Jalowiec Coping Scale[10]

This Scale was adopted and translated to Arabic language by the researcher and used to assess either general coping behavior or coping in specific situations. It comprises 60 items Confrontive (N=10) Evasive (N=13) Optimistic (N=9) Fatalistic (N=4) Emotive (N=5) Palliative (N=7) Support (N=5) Self-reliant (N=7).

Method

The study was conducted according to the following steps:

- Necessary approval was obtained.
- Official letter was directed to the responsible authorities of the previously mentioned research settings to obtain their permission to conduct the study and collect the necessary data after explanation of research purpose.

- Tool I was developed by the researcher after an extensive review of recent & relevant literature.
- Tool II was adopted and translated by the researcher while tool three was adapted, translated and scoring system modified by the researcher.
- Tools' Content Validity and Reliability.
- Tools reliability (internal consistency) was tested by Cronbach's Alpha test and the result was reliable (r=0.879) which is statistically accepted.
- A pilot study was carried out on 20 menopausal women who were excluded from the study sample to test the relevance, validity, and clarity of tool as well as the time needed to complete it.
- Each subject was individually interviewed after physician examination which was conducted in total privacy. The duration of each interview ranged between 25-30 minutes depending upon the degree of understanding and response of the interviewee. An average number of interviewee per day ranged from 6-8 from menopausal women with stress urinary incontinence depending upon the number of women in clinic.
- Two days / week were specified for data collection over a period of 4 months, started from the beginning of January till the end of April 2022.

Ethical considerations:

For each subject an informed oral consent was obtained after explaining the purpose of the study. In addition her anonymity, privacy, freedom to withdraw from the study at any time and confidentiality of her data were all emphasized prior starting the interview.

Statistical Analysis

Analysis of data was carried out using Statistical Package for Social Sciences (SPSS) version 25. The collected data were categorized, coded, computerized, tabulated and analyzed. Frequency and distribution were used for describing and summarizing categorical data. Cross tabulation with percentages were used to explore relationships between variables. Appropriate tests such as ANOVA, T test and Chi-square at 0.05 level of significance were used.

Results

Table (1) shows distribution of the study group according to their socio- demographic characteristics. It was found that the studied women's age ranged from 45 to 60 with a

mean of 55.41 ± 7.636. slightly more than one-half (52.0%) of the women aged 55-60 years, while nearly one-quarter (27.0%) of them aged less than 50 years. Almost one-quarter (24.0%) of them were illiterate, compared to 28.0% university or post university graduate. On the other hand, those women with secondary or technical education constituted 34.0% of them. Less than two-thirds (60.0%) of them were married, while11.5% of them were widowed and the rest (28.5 %) were divorced. The same table reveals that the majority (80.0%) of them were from urban areas, and less than two- thirds (60.0%) of them had nuclear families. Slightly about one-quarter (26.0%) of the women reported income insufficiency. On the other hand, only 8.0% of the women mentioned that their income is enough and they can save from it.

Women's characteristics	Total N=200	
	No	%
Age (years)		
▪ 45-	54	27.0
▪ 50-	42	21.0
▪ 55-60	104	52.0
Mean ± SD	55.41±7.636	
Level of education		
▪ Illiterate	48	24.0
▪ Read & write	19	9.5
▪ Basic education	9	4.5
▪ Secondary/ technical education	68	34.0
▪ University / Post university education	56	28.0
Marital status	N= 200	
▪ Married	120	60.0
▪ Widowed	23	11.5
▪ Divorced	57	28.5
Type of family		
▪ Nuclear	120	60.0
▪ Extended	80	40.0
Income sufficiency		
▪ Enough and save	16	8.0

▪ Hardly enough	132	66.0
▪ Not enough	52	26.0

Table (2) illustrates distribution of the study group according to their reproductive history. It was noticed that the majority (92.5%) of the women had previous history of gravida with a mean of 3.47 ± 2.168. Less than three-quarters (70.8%) of them has 3 and more pregnancies, and (60%) of those women had 3 and more deliveries with a mean of 2.90± 1.717. Less than two-thirds (62.7%) of them had normal deliveries, and less than one-quarter (23.2%) of them faced complications with their last delivery mainly bleeding as mentioned by (34.9%) of them followed by perineal laceration (23.3%), vaginal injuries (16.3%), and lastly, precipitated labor as reported by 7.0 % of them.

Only (35.7%) of them had previous abortion, while more than three-quarters (83.3%) of them have less than 3 abortions. Additionally, the date of their last delivery was 10 years ago and more as declared by vast majority (93.0%) of them .Furthermore, more than two-fifth (42.2%) of the women had three to four children followed by (38.4%) had one to two children while, 2.7% of them had 9 children and more, with a mean of 3.12±2.487 children.

Obstetrical data	Total N=200	
	No	%
Number of gravida	N= 185	
▪ < 3	54	29.2
▪ 3 and more	131	70.8
Mean ± SD	3.47 ± 2.168	
Number of parities		
▪ < 3	74	40.0
▪ 3 and more	111	60.0
Mean ± SD	2.90 ± 1.717	
Type of last delivery		
▪ Normal	116	62.7
▪ Normal with episiotomy	21	11.4
▪ Caesarian Section	48	25.9
Number of abortions	N=66	
▪ < 3	55	83.3
▪ 3 and more	11	16.7
Mean ± SD	1.57 ± 0.119	
Mean ± SD	3.12 ± 2.487	

Figure (1) shows distribution of the study group according their severity of stress urinary incontinence (PRAFAB assessment). It shows that about one-half (49.5%) of the studied women had moderate degree of stress urinary incontinence, more than one– quarter (27.05%) of them had severe degree while, (23.0%) of them had mild degree of UI.

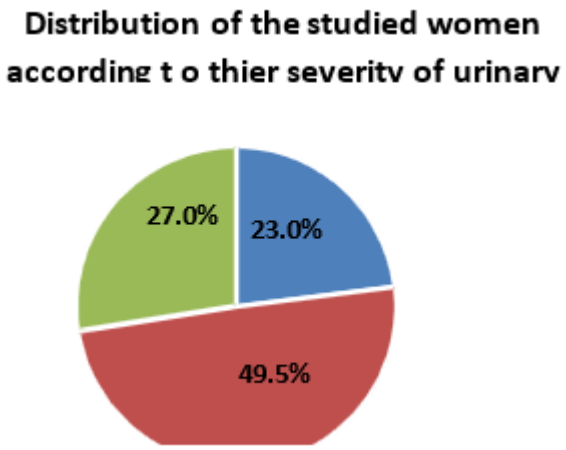

Figure (2) shows distribution of the study group according to their total score of used coping strategies (revised Jalowiec scale). The figure shows that one-half (50.0%) of studied women were seldomly used coping strategies, less than one–half (48.0%) of them were sometimes used coping strategies. On the other hand, only (2.0%) often used coping strategies.

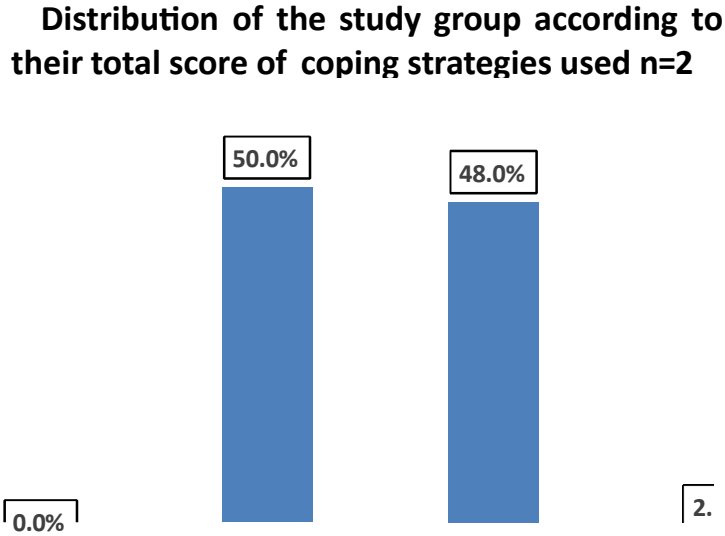

Table (3) reveals the correlation coefficient between the total mean score of used coping strategies and SUI severity. Positive significant correlation was found between SUI severity among study subjects and their coping strategies such as confronting, fatalistic, emotive and palliative, while coping strategies such as optimism coping strategies were negatively significance correlation with SUI severity.

Statistical Test Pearson's r	Correlation Coefficient	Significance
. Confronting	0.228	0.001*
. Evasive	0.046	0.521

▪ Optimism	-0.229	0.001*
▪ Fatalistic	0.239	0.001*
▪ Emotive	0.344	0.000*
▪ Palliative	0.204	0.004*
▪ Supportive	0.095	0.183
▪ Self-reliance	-0.022	0.760
Total coping strategies used	0.196	0.026*

Discussion

Of all the requirements and issues menopausal women face, stress urine incontinence stands out as the most significant one that negatively impacts quality of life.

The present study revealed that one-half of menopausal women aged 40 years at onset of SUI. This result in line with Hijaz et al, (2011)[11] who reported that women older than 35 years at had 2.36 higher odds of developing SUI than women younger 35 year and Hannestad et al. (2000)[12] when stratified women with SUI by decade of age found the peak prevalence of SUI (60%) occurred in 40-to 49-year-old women in the Norwegian EPINCONT.

The majority of research indicates that the prevalence of urine incontinence rises with age, and multivariate analysis reveals that the menopause plays a major role in its onset, particularly in stress urinary incontinence, which is linked to the effects of estrogen depletion, parity, and gravida on the strength of the detrusor contraction [13].

In addition to the known adverse effects of menopause as an aging process in developing UI, different reproductive characteristics among the study subjects contributed to onset of SUI such as high gravidity and parity among more than two- thirds of the study subjects associated with reduced PFM strength, which cause SUI through increased pressure on the PFM and bladder resulting in greater urethral mobility leading to urethral sphincter incompetence. Similarly, majority of subjects in a study by Nezam et al. (2011)[14] were more likely to have five pregnancies or more with four deliveries. The difference between gravidity and parity was due to abortion.

Furthermore, the current findings corroborated those of a study by Mohamed HG et al. (2018)(15) titled "Effect of pelvic floor muscle strengthening-kegel exercises-on severity of stress urinary incontinence and quality of life among women," which found that a significant number of the study's participants had more than three vaginal births.

The study conducted by Sensoy et al. (2013)(16) titled "Urinary incontinence in women: prevalence rates, risk factors, and impact on quality of life" also showed that over 30% of the patients had more than three deliveries and six to nine gravidas. It also showed that the increased intra-abdominal pressure during pregnancy caused by the gravid uterus weakens the pelvic floor muscles, particularly the levator ani muscle, which can ultimately be evidenced by urinary incontinence (UI).

The current study showed about two- thirds of study subjects had normal vaginal delivery and less than one-quarter had complications of last delivery, this may be attributed to the injuries that may be caused in the musculature and innervation in the pelvic floor. This musculature and innervation represents an important factor in the development of the stress urinary incontinence. These findings aligned with those of Nezam et al. (2011)(14), who discovered that over 50% of research participants had vaginal births that went well and who reported that multiple birth trauma causes women to have SUI by impairing the function of the urethral sphincter.

Assessment of severity urinary incontinence revealed that about one-half of studied women had moderate degree of urinary incontinence and more than one- quarter had severe degree. This may be attributed to the fact that some women with SUI of a mild nature do not feel that treatment of the condition is warranted, others are embarrassed to speak with a health care provider about their condition or fear that treatment requires surgery treatment which in turn resulted in gradual increase in the severity of SUI often to the point of causing women to stop doing their normal activities[14]. Similar results were observed by Singh et al. (2015)[17] who noted that half of study subjects have moderate urinary incontinence. Orhan C et al. (2019)[18] studied the "Effect of incontinence severity on symptom distress, quality of life, and pelvic floor muscle function in Turkish women with urinary incontinence" reported that two-thirds of study subjects had mild and moderate degrees urinary incontinence. On the other hand, Kobashi (2011)[19] concluded that stress urinary incontinence generally considered majority of studied women were mild degree who only experience light leakage during vigorous activity such as playing sports or exercising, or while sneezing, laughing and coughing.

In relation to coping strategies, the current study shows that one- half of studied women were seldomly use coping strategies. This result is expected where slightly more than one-third of the studied women mentioned that urinary incontinence does not affect their daily activities and more than one half of them aged 55 and more and usually did not attach much importance to UI due to perceiving it as a normal consequence of aging .These findings were not in harmony with those of Potdar & Shinde (2015)[20] study titled Psychological Problems and Coping Strategies Adopted By postmenopausal Women they found 76% post-menopausal women's were using coping strategy often.

Relationship between the degree of stress-related urine incontinence and the coping mechanisms employed According to Senra et al. (2015)(22), women used expression of feelings as supportive coping strategies according to degree of urine loss, as moderate versus severe. Similarly, Bosworth et al. (2003)(9) found avoidance and seeking social support as evasive and supportive coping strategies have significant relations with menopausal stress. The current study found statistically significant correlations between SUI severity and evasive, supportive, and self-reliant coping strategies. In order to cope with the UI positive connection, women who reported severe urine loss expressed their emotions more.

The current study significantly clarified that coping strategies were used by menopausal women in an attempt to cope with of SUI symptoms and improve their quality of life. Gynecological nurses should be alert and sensitive to this issue consequently Health problems of the menopausal women should be underlined and addressed to some extent in the government's policy.

Conclusion

The current study's findings suggest that menopausal women rarely used problem-based coping strategies, such as evasive and confronting, in an effort to effectively manage their health issues. Instead, they tended to use mostly useful coping strategies based on ranking, and a positive statistically significant relationship was discovered between the mean scores for UI severity and confronting, fatalistic, emotive, and finally, the total score of coping strategies. Conversely, a statistically significant negative correlation was discovered between the mean ratings for UI severity and positive coping mechanisms.

Recommendations

Based on the findings of this study, the following recommendations were suggested:

- Gynecological nurses are advised to attend workshops as like-wise about the

psychological impact of stress incontinence among menopausal women that enables them to gear women toward the appropriate coping strategies

- Dissemination simple information guide (booklet) for gynecological nurses about improvement and prevention SUI and other problems related to PFM dysfunction through education about Kegel exercises is needed.
- Plan an individualized care to patients needs to empower them to cope with their condition and adopt healthy behavior
- Influencing health education policy to promote health and adopt a menopause lifestyle requires alternative strategies, including health training programs with community-based interventions.
- Mass media sector should be utilized in dissemination simple information about awareness of menopausal women about prevention, management, help seeking behavior and how to cope with SUI and other health problem associated to menopause.
- Educating physicians and the public about the effect of different coping strategies especially effective coping strategies toward UI management may assist women to seek and receive more timely care for incontinence symptoms through health promotion programs.

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