Clinical and Experimental Health Sciences

Spiritual Care Needs and Perceived Social Support in Women Undergoing Hysterectomy: A Correlational Study

Şükran Başgöl[1], Şenay Karadağ Arlı[2], Eda Çiftçi Karan[3]

[1] Ondokuz Mayıs University, Faculty of Health Sciences, Department of Midwifery, Samsun, Türkiye.
[2] Ondokuz Mayıs University, Faculty of Health Sciences, Department of Nursing, Samsun, Türkiye.
[3] Istanbul Basaksehir Çam and Sakura City Hospital, Istanbul, Türkiye.

Correspondence Author: Şükran Başgöl
E-mail: sukran.basgol@omu.edu.tr
Received: February 16, 2025 **Accepted:** May 25, 2025

ABSTRACT

Objective: Hysterectomy is one of the most common surgical procedures in gynecology worldwide. It is directly related to a woman's fertility, and removal of the uterus could have irreparable psychological, physiological, and sexual consequences. This study aims to determine the relationship between spiritual care needs and perceived social support in women who underwent hysterectomy surgery.

Methods: The study utilized a cross-sectional and correlational design and included a total of 272 women who underwent hysterectomy in the surgical clinic of a hospital located in western Turkey. Data were collected through the Personal Information Form, the Spiritual Care Needs Inventory (SCNI), and the Multidimensional Scale of Perceived Social Support (MSPSS).

Results: Women's SCNI total mean score was found 62.01, MSPSS total mean score was found 70.72. Among MSPSS and SCNI sub-scales, a negative correlation was detected between MSPSS and the "caring and respect" sub-scale of SCNI ($p < .05$). The linear regression analysis showed that spiritual support needs sub-scales of "meaning and hope" ($\beta = .221$, $p < .01$) and "caring and respect" ($\beta = -.271$, $p < .001$) were found to be related factors affecting the perceived social support of women who underwent hysterectomy. The caring and respect sub-scale decreased with the increase in the women's perceived social support.

Conclusion: In conclusion, evaluation and reinforcement of the spiritual support needs and perceived social support of women who underwent hysterectomy are recommended as the foundation of holistic care.

Keywords: Spiritual care needs, social support, hysterectomy, women

1. INTRODUCTION

Hysterectomy surgery, which includes the removal of the uterus, cervix, and sometimes the ovaries and fallopian tubes, is now one of the most frequently administered pelvic surgical procedures and is a common operation among women. Reproductive organs are important for women's sexual image, so hysterectomy could affect women's psychological state, personal interactions, and especially marital adjustment and sexual functions (1-3). As the uterus is seen as a symbol of reproduction by many women, its loss could carry different meanings. Therefore, hysterectomy surgery may cause experience of negative emotions such as loss of sexual functions, fertility ability, and the role of womanhood; deterioration of the relationship with the spouse; experience of menopausal symptoms; and thoughts about losing physical strength (4–6). Hence, meeting spiritual needs and providing social support is very important for women to adapt to the physical and psychological changes they experience after surgery (1,7,8).

Spirituality is one of the fundamental characteristics of human beings. Spiritual care is not only a part of the art of nursing but also a very important component of holistic care. Spiritual care is very important for the individual's general health and well-being (9). Determination of spiritual needs, which is seen as the first step of holistic care, and provision of nursing care to meet these needs are reported to be important elements of health care services that support the individual's personal integrity and interpersonal relationships (10-12). Studies show that spiritual care can reduce anxiety and fears, and its effectiveness is closely linked to the presence of strong social support systems (13).

How to cite this article: Başgöl Ş, Karadağ Arli S, Çiftçi Karan E. Spiritual Care Needs and Perceived Social Support in Women Undergoing Hysterectomy: A Correlational Study. Clin Exp Health Sci 2025; 15: 440-446. https://doi.org/10.33808/clinexphealthsci.1640738

Perceived social support is generally defined as the perception that a person is cared for by others and has a reliable social network that she can turn to in times of need. At the same time, perceived social support is closely linked to spirituality and overall well-being. Women who feel socially supported are more likely to experience a sense of belonging and emotional security, which can enhance their spiritual well-being and coping mechanisms (7,14, 15). Research suggests that individuals with strong social support systems often report higher levels of spiritual well-being, highlighting the interplay between these factors (15,16).

The literature reported that determining patients' spiritual needs and meeting them and increasing their social support increase their compliance to treatment and quality of life in the treatment process and reduce their psychosocial problems (16, 17). Although women's spiritual and social support needs are considered to increase during the hysterectomy surgery process, the literature does not include an adequate number of studies on this issue. Therefore, this study aims to investigate the relationship between spiritual care needs and perceived social support in women who underwent hysterectomy surgery and thus contribute to the literature.

1.1. Research Questions

What are the perceived levels of spiritual care needs and perceived social support in women who underwent hysterectomy surgery?

What is the relationship between spiritual care needs and perceived social support in women who have undergone hysterectomy?

2. METHODS

2.1. Study design and participants

This study used a descriptive and correlational design. It was conducted in the surgical clinic of a hospital located in western Turkey. The reason for choosing this hospital is that women with various socio-demographic characteristics from the surrounding provinces seek treatment here, and annually an average of 950-1000 hysterectomy operations are administered. The target population of the study consisted of women who were hospitalized in the surgical clinic of the hospital between the 1st of August, 2022, and the 31st of January, 2023 and underwent hysterectomy surgery. The minimum sample size was calculated as 217 women according to the sampling formula with a known population (5% deviation, 95% confidence level). The sample of the study consisted of 272 women who were hospitalized in the surgical clinic, underwent hysterectomy surgery on the dates when the study was conducted, and met the research criteria. The inclusion criteria were being aged 18 years and older, being hospitalized in the surgical ward and having undergone hysterectomy surgery on the dates when the study was conducted, being able to speak and write Turkish, having no communication problems, and agreeing to participate in the study. Exclusion criteria for this study included women who were unable to communicate, had a diagnosed psychiatric disorder, were taking psychiatric medication, did not fully complete the data collection forms., and wished to withdraw from the study. Additionally, women who underwent hysterectomy for malignant conditions, and those who underwent emergency obstetric hysterectomy (e.g., due to uterine atony) were excluded.

2.2. Data collection and measurements

Data were collected between the 1st of August, 2022 and the 31st of January, 2023 by meeting the participants face-to-face. Data collection was performed by meeting the women in the surgical clinic room where they were hospitalized. Filling in each form took around 15 minutes. Before data were collected, each woman participating in the study was given information about the purpose and method of the study. The participants were assured that the data obtained would be used only within the scope of the study; their names would not be included in the questionnaires; and participation was on a voluntary basis. Data were collected through the Personal Information Form, the Spiritual Care Needs Inventory (SCNI), and the Multidimensional Scale of Perceived Social Support (MSPSS).

2.3. The Personal Information Form

The Personal Information Form, which was prepared by the researchers in line with the literature, consists of a total of 18 questions that aimed to determine the participants' socio-demographic characteristics (age, education level, employment status, etc.), their spiritual support needs, and the factors that may affect their perceived social support (12, 15, 18).

2.4. Spiritual Care Needs Inventory (SCNI)

The Turkish validity and reliability of the scale, which was developed by Wu et al. (2016), was conducted by İsmailoğlu et al. (2019). The scale consists of 21 items and provides information about patients' spiritual care needs (18, 19). The items in the scale include patients' potential spiritual care needs. Respondents are asked to rate each spiritual care needs item on a 5-point Likert scale.

The items are responded on a scale from 1 to 5 as 1 = "Not at all necessary", 2 = "Not necessary", 3 = "Does not matter", 4 = "Necessary", and 5 = "Absolutely necessary". Higher total mean scores indicate patients' more spiritual care needs. The scale consists of two components: "meaning and hope" (13 items (questions:1-12, 14) and "caring and respect" (8 items (questions: 13, 15-21). The minimum score for the meaning and hope component is 13, and the maximum score is 65; for the caring and respect component, the minimum score is 8, and the maximum score is 40. The lowest possible total score on the scale is 21, and the highest possible total score is 105. An increase in the total score average indicates that

the patient has greater spiritual care needs. Cronbach's alpha internal consistency coefficient of the scale was reported as 0.93 (19). In this study, Cronbach's alpha internal consistency coefficient was found to be 0.94.

2.5. Multidimensional Scale of Perceived Social Support (MSPSS)

The Turkish validity and reliability of the scale developed by Zimet et al. (1988) were conducted by Eker et al. (2001). The scale, which was developed to measure the level of perceived social support, measures the adequacy of perceived social support from three different sources such as family, friends, and a significant other (20, 21). The 12-item scale consists of three sub-scales including family, friends, and a significant other. The items consist of the family (items 3,4,8 and 11), friends (items 6,7,9, and 12), and a significant other (items 1,2,5 and 10). Each item is rated on a seven-point Likert scale. While the sub-scale scores range from 4 to 28, the total score ranges from 12 to 84. The sub-scale score was obtained by summing the scores of four items in each sub-scale, and the total score of the scale was obtained by summing all sub-scale scores. Higher scores indicate a high level of perceived social support. Cronbach's alpha internal consistency coefficient of the scale was reported as 0.89 (21). In this study, Cronbach's alpha internal consistency coefficient was found to be 0.87.

2.6. Statistical analysis

The data obtained from the study were analyzed using SPSS 23.0 program (IBM SPSS Statistics for Windows, Version 23.0). Skewness and Kurtosis values (-1.50 and +1.50) were used to test the normality assumption. Numbers, percentages, arithmetic means, and standard deviations (SD) were used for descriptive statistics. Since the data were normally distributed, independent samples t-tests from parametric tests were performed. Mean differences were calculated by one-way analysis of variance (ANOVA) to test the significance of the difference among the three means. The relationship between two continuous variables was analyzed by Pearson correlation analysis. Analysis of variance (further analysis Bonferroni test) was used in multiple groups that were found significant according to independent variables. Multiple linear regression analysis was performed to analyze the factors affecting perceived social support. All other significant variables were included in the regression analysis. The level of significance was taken as $p<.05$ in statistical analyses. To assess multicollinearity, variance inflation factor (VIF) values were examined, and all were found to be below 5, indicating no significant multicollinearity issues. Additionally, the Durbin-Watson statistic was 1.758, suggesting no serious autocorrelation problem.

3. RESULTS

The average age of women who underwent hysterectomy was 53.06 years (SD 8.62) and 87.9% of them were married. The average number of children was 2.88 (SD 1.49); 51.1% of the participants were not employed; 59.9% were primary school graduates and 60.7% had middle income (moderate). Besides, while 84.2% of the women lived in a nuclear family and 66.5% lived in a city, 54.4% went through menopause and 52.9% had no chronic diseases (Table 1). Results also showed that 96.7% of the women reportedly had a constant companion in the hospital and that their children (51.5%), husbands (20.6%), mothers/sisters (20.5%), and neighbors/friends (2.9%) supported them the most after hysterectomy surgery.

Spiritual support needs were found to be higher in women who had medium income (moderate) than women who had low income and in women who lived in the village than in women who lived in the district ($p<.05$). The perceived social support was found to be higher in working women than in non-working women, in those living in nuclear families than in those living in extended families, and in women who reported an impact on their sexual life after hysterectomy compared to those who did not ($p <.05$) (Table 1).

Participating women's SCNI mean score was found 62.01 (SD 17.45), and the "meaning and hope" and "caring and respect" sub-scale mean scores were found 35.27 (SD 1.09) and 26.73 (SD 8.37), respectively. The MSPSS mean score was found 70.72 (SD 11.74), and the sub-scale mean scores were 23.18 (SD 5.09) for the friends sub-scale, 25.27 (SD 3.08) for the family sub-scale, and 22.88 (SD 5.64) for the significant other sub-scale (Table 2).

Table 3 presents the correlation coefficients between the perceived social support and spiritual care needs of women who underwent hysterectomy surgery and age, number of children, spiritual support needs, and sub-scale total scores. A weak and negative correlation was found between the MSPSS and "caring and respect" (SCNI sub-scale) ($p <.05$). No relationship was found between MSPSS and SCNI total score, "meaning and hope" (SCNI sub-scale), age, and number of children ($p>.05$) (Table 3).

Table 4 demonstrates a multiple linear regression analysis of the risk factors that may affect the perceived social support of women who underwent hysterectomy surgery. The variables that were found to be significant as a result of the MSPSS total score statistics were included in the multiple linear regression analysis. The multiple linear regression model established to examine the independent variables affecting the perceived social support scale score of women who underwent hysterectomy surgery was found to be statistically significant ($F=5.177$; $p=0.000$). Hence, spiritual support needs sub-scales of "meaning and hope" ($\beta= .221$, $p = .004$) and "caring and respect" ($\beta= – .271$, $p = .000$) were found to be related factors affecting the social support perceived by women who underwent hysterectomy surgery. The perceived social support score of women whose sexual life was affected after hysterectomy surgery was found to be 3.347 units lower compared to those whose sexual life was not affected ($\beta= – .127$, $p= .034$). Family type and women's employment status were found to have no statistically significant effects on the Perceived Social Support Scale score ($p> .050$) (Table 4).

Table 1. *SCNI and MSPSS scale score comparisons according to the participants' descriptive characteristics (n=272)*

Characteristics			SCNI		MSPSS	
	n	(%)	*Mean (SD)*	*Test p value*	*Mean (SD)*	*Test p value*
Marital status						
Married	239	87.9	62.04 (17.44)	t= .069	71.00 (11.37)	t= 1.044
Single	33	12.1	61.81 (17.81)	p= .876	68.72 (14.20)	p= .139
Education level						
Primary school	163	59.9	63.31 (18.62)	F= 1,378	70.07 (12.40)	F= .639
High school	101	37.1	60.40 (15.08)	p= .254	71.76 (10.52)	p= .529
University and above	8	2.9	55.87 (19.88)		70.87 (13.09)	
Income level						
Low[a]	92	33.8	58.14 (14.30)	F= 3.996	70.43 (9.73)	F= .096
Moderate[b]	165	60.7	64.38 (18.63)	**p= .019**	70.96 (12.62)	p= .909
Good[c]	15	5.5	59.73 (18.16)	*b>a*	69.93 (13.63)	
Employment status						
Working	133	48.9	58.54 (16.43)	t= 3.259	71.23 (11.04)	t= – .695
Not working	139	51.1	65.33 (17.82)	p= .055	70.24 (12.40)	**p= .039**
Family type						
Nuclear family	229	84.2	60.95 (17.31)	t= – 2.336	71.58 (11.14)	t= 2.415
Extended family	43	15.8	67.67 (17.32)	p= .770	66.18 (13.82)	**p= .031**
Lived place						
Province[a]	181	66.5	62.40 (17.60)	F= 3.245	71.18 (12.03)	F= .802
County [b]	72	26.5	58.91 (16.79)	**p= .040**	70.38 (10.57)	p= .450
Village [c]	19	7.0	70.05 (16.42)	c>b	67.68 (13.29)	
Smoking						
Yes	49	18.0	60.10 (15.98)	t= – .847	69.59 (11.76)	t= – .747
No	223	82.0	62.43 (17.77)	p= .056	70.97 (11.75)	p= .825
Alcohol consumption						
Yes	8	2.9	62.50(20.90)	t= .080	74.87 (11.39)	t= 1.014
No	264	97.1	62.00 (17.39)	p= .887	70.60 (11.75)	p= .970
Menopausal status						
Yes	148	54.4	59.70 (17.27)	t= – 2.407	70.87 (11.88)	t= .220
No	124	45.6	64.77 (17.34)	p= .632	70.55 (11.62)	p= .987
Having a chronic illness						
Yes	128	47.1	62.14 (17.49)	t= .112	71.39 (11.53)	t= .887
No	144	52.9	61.90 (17.48)	p= .885	70.13 (11.93)	p= .462
Presence of a constant companion at the hospital						
Yes	263	96.7	61.70 (17.48)	t= – 1.575	70.93 (11.68)	t= 1.549
No	9	3.3	71.00 (14.78)	p= .402	64.77 (12.75)	p= .,876
Impact on sexual life after hysterectomy surgery						
Yes	74	27.2	59.90 (17.91)	t= – 1.219	73.77(10.00)	t= 2.883
No	198	72.8	62.80(17.26)	p= .854	69.59 (12.16)	**p= .004**
Age (years) mean±SD	53.06	±8.62				
Child number, mean±SD	2.88	±1.49				

SD: Standard Deviation; SCNI: Spiritual Care Needs Inventory; MSPSS: Multidimensional Scale of Perceived Social Support; t: independent samples t-test; F: One-way analysis of variance; Difference Between Groups: Bonferroni test; p=Significance Level.
Bold values: p < .05 is a statistically significant value

Table 2. *SCNI and MSPSS scores of women who underwent hysterectomy (n = 272)*

Scale and Sub-scales	Mean ± SD	Min-Max
SCNI	62.01±17.45	23-105
Meaning and hope	35.27±1.09	13-65
Caring and respect	26.73±8.37	9-40
MSPSS	70.72±11.74	31-84
Friends	23.18±5.09	6 – 28
Family	25.27±3.08	10-28
Significant other	22.88±5.64	4-28

SCNI: Spiritual Care Needs Inventory; MSPSS: Multidimensional Scale of Perceived Social Support; SD: Standard Deviation

Table 3. *Relationship between Perceived Social Support and Spiritual Care needs of women who underwent hysterectomy, sub-scales, age, and the number of children (n=272)*

Variables	Multidimensional Scale of Perceived Social Support	
	r	p
Spiritual Care Needs Inventory	– .058	.343
Meaning and hope	.035	.564
Caring and respect	– .166	**.006**
Age	.031	.613
Number of children	-.017	.780

r: Pearson correlation test; bold value: p <.05 is a statistically significant value

Table 4. *Multilinear regression analysis according to the factors affecting the Perceived Social Support of women who underwent hysterectomy*

Variables	Multidimensional Scale of Perceived Social Support				
	β_0 (%95 CI)	Std. Error	βeta	t	p value
Constant	75.140	2.835	-	26.503	**.000**
Meaning and hope	.236	.081	.221	2.937	**.004**
Caring and respect	-.380	.107	-.271	-3.567	**.000**
Working status Working	.524	.811	.038	.645	.519
Family type Nuclear family	-2.528	1.562	-.097	-1.618	.107
Impact on sexual life after hysterectomy surgery Yes	-3.347	1.566	-.127	-2.137	**.034**

β0= Unstandardized beta coefficient; βeta= Standardized coefficient; F=5.177; p <.001; R2=0,089; Adjusted R2 = 0.072, Durbin Watson=1.758

4. DISCUSSION

Hysterectomy is one of the most common surgical procedures in gynecology worldwide. It is directly related to a woman's fertility, and removal of the uterus could have irreparable psychological, physiological, and sexual consequences (1,3,22). Women who underwent hysterectomy have been reported to experience physical discomfort and negative emotions and have strong mental resilience and self-adjustment skills to cope with negative emotions. Support and assistance to be provided by family, friends, and healthcare professionals is very important, particularly in the early postoperative period. The understanding and help of her husband are undoubtedly the most important of all the support needed by a female patient. Meanwhile, identifying and eliminating prejudices against women who have undergone a hysterectomy in countries and regions with different cultural beliefs are considered to reduce the spiritual burden and social pressure on women (2,5,23). The women in this study were found to have an above-average level of spiritual care needs and a high level of perceived social support. The spiritual needs of women living in the village were found to be higher, which is considered to have resulted from the inadequate educational and sociocultural characteristics of individuals living in the village.

Studies have reported on women's need for education about bodily changes and expectations after hysterectomy as well as the importance of social support from family, friends, and other women (24-26). This study determined a relationship between the effects on sexual life after hysterectomy surgery and perceived social support, which is in line with the literature. Regression analysis results in our study also showed that the perceived social support score of women whose sexual life was affected after hysterectomy surgery was lower than those whose sexual life was not affected. A study reported a decrease in marital adjustment and sexual function following hysterectomy. Therefore, specialized treatment and family counseling interventions are reported to be necessary to improve sexual performance and marital adjustment in women who underwent hysterectomy (27,28). After hysterectomy, women may experience sexual dysfunction and psychological challenges, which can increase their need for social support. However, when adequate support is not provided, their perception of social support may be negatively impacted. Furthermore, societal expectations may also influence this perception, as women may experience feelings of loneliness and social exclusion after the surgery (15,16). Therefore, our findings suggest that the perception of social support after hysterectomy may be influenced by the emotional and psychological challenges women face, such as sexual dysfunction and feelings of isolation, which can alter their social support needs and perceptions

Social support could come from family members, such as parents or siblings, friends, or health professionals. Therefore, knowing the availability of others to lend a helping hand in times of need is considered to be an important social resource. Surgical patients who have inadequate social support networks have been reported to be at greater risk for poor surgical outcomes (29,30). Since social support is one of the important factors affecting women's lives, the focus should be on building and strengthening the patient support network when working with female patients who are

in the process of hysterectomy surgery (7,30,31). Our study highlights the importance of spiritual care needs in women undergoing hysterectomy. This study found that "caring and respect", one of the sub-scales of spiritual care needs, decreased with the increase in the perceived social support. This may result from the decrease in the spiritual needs of women who had more social support. This result may also be associated with strong family ties in Turkish society. This study showed that their children and husbands provided the greatest support to women after hysterectomy surgery. Our study reinforces the idea that a holistic approach, integrating spiritual care and social support, is essential in improving the psychological and emotional outcomes for women post-hysterectomy.

The topic and the sample size of the study constitute the strength of the study, which is considered to contribute to the literature. The limitation of the study is that the data were collected from a single hospital in a region. Therefore, the study results cannot be generalized.

5. CONCLUSION

Women's spiritual care needs and perceived social support should be considered and evaluated while they are provided with patient-centered care and holistic care during the hysterectomy surgery process. In this regard, women should be provided with quality healthcare services. Trainings should be planned to meet the spiritual and social support needs of women in the hysterectomy process. It is recommended to establish protocols prepared in line with evidence-based care for the monitoring and care of women who underwent hysterectomy.

Acknowledgements: *Authors would like to thank all the participants for being a part of this study.*
Funding: *The author(s) received no financial support for the research.*
Conflicts of interest: *The authors declare that they have no conflict of interest.*
Ethics Committee Approval: *This study was approved by Ethics Committee of Ondokuz Mayıs University, Noninvasive Clinic Ethics Committee (Approval date: 27.05.2022.; Number: 2022-509)*
Peer-review: *Externally peer-reviewed.*
Author Contributions:
Research idea: ŞB, ŞKA
Design of the study: ŞB, ŞKA
Acquisition of data for the study: EÇK
Analysis of data for the study: ŞB
Interpretation of data for the study: ŞB, ŞKA, EÇK
Drafting the manuscript: ŞB, ŞKA, EÇK
Revising it critically for important intellectual content: ŞB, ŞKA, EÇK
Final approval of the version to be published: ŞB, ŞKA, EÇK

REFERENCES

[1] Scime NV, Brown HK, Metcalfe A, Brennand EA. Prevalence of hysterectomy by self-reported disability among Canadian women: Findings from a national cross-sectional survey. Womens Health Rep. 2021;2(1):557-565. https://doi.org/10.1089/whr.2021.0069

[2] Toye F, Pearl J, Vincent K, Barker K. A qualitative evidence synthesis using meta-ethnography to understand the experience of living with pelvic organ prolapse. Int Urogynecol J. 2020;31(12):2631-2644. https://doi.org/10.1007/s00192.020.04494-z

[3] Wilson LF, Pandeya N, Byles J, Mishra GD. Hysterectomy and perceived physical function in middle-aged Australian women: A 20-year population-based prospective cohort study. Qual Life Res. 2018;27(6):1501-1511. https://doi.org/10.1007/s11136.018.1812-9

[4] Toptaş Acar B, Aksu H. Knowledge and thoughts of women and their spouses about hysterectomy. J Women's Health Nurs. 2023;9(2):53-63. (Turkish)

[5] Li N, Shen C, Wang R, Chu Z. The real experience with women's hysterectomy: A meta-synthesis of qualitative research evidence. Nurs Open. 2023;10(2):435-449. https://doi.org/10.1002/nop2.1348

[6] Can AA, Buldum A, Değirmenci F, Yılmaz DV. Total abdominal histerektomi bilateral salfingooferektomi ameliyatı olan kadınların beden algıları ve benlik saygıları arasındaki ilişki. Mersin Univ Saglık Bilim Derg. 2022;15(2):225-233. (Turkish) https://doi.org/10.26559/mersinsbd.1057848

[7] Parsons CS. Hystersisters: Messages of social support in an online health support group for women. J Commun Healthcare. 2019;12(2):121-133. https://doi.org/10.1080/17538.068.2019.1612211

[8] Goudarzi F, Khadivzadeh T, Ebadi A, Babazadeh R. Women's interdependence after hysterectomy: A qualitative study based on Roy adaptation model. BMC Womens Health. 2022;22(40):1-11. https://doi.org/10.1186/s12905.022.01615-2

[9] Garssen B, Ebenau AF, Visser A, Uwland N, Groot M. A critical analysis of scales to measure the attitude of nurses toward spiritual care and the frequency of spiritual nursing care activities. Nurs Inq. 2017;24(3): e12178. https://doi.org/10.1111/nin.12178

[10] Otuzoğlu M. Kanser hastalarının manevi gereksinimlerini değerlendirmeye ilişkin ölçek çalışmalarının incelemesi. J Contemp Med. 2020;10(1):138-145. https://doi.org/10.16899/jcm.591105 (Turkish)

[11] Ghorbani M, Mohammadi E, Aghabozorgi R, Ramezani M. Spiritual care interventions in nursing: An integrative literature review. Support Care Cancer. 2021;29(3):1165-1181. https://doi.org/10.1007/s00520.020.05747-9

[12] Taylor EJ, Pariñas S, Mamier I, Atarhim MA, Angeles L, Aslan H, Aktürk Ü, Erci B, Soriano G, Sinaga J, Chen YH, Merati-Fashi F, Odonel G, Neathery M, Permatasari W, Ricci-Allegra P, Foith J, Caldeira S, Dehom S. Frequency of nurse-provided spiritual care: An international comparison. J Clin Nurs. 2023;32(3-4):597-609. https://doi.org/10.1111/jocn.16497

[13] Li L, Chen M, Yu N, Zhang Q. Effectiveness of spiritual care interventions among patients in the intensive care unit: A systematic review and meta-analysis. Nurs Crit Care. 2025;30(3):1-13. https://doi.org/10.1111/nicc.13202

[14] Hare A. M, Tappy E, Schaffer J. I, Kossl K, Gaigbe-Togbe B, Kapadia A, Dieter A. A, Hamner J, Laporte A. K, Mou T, Mueller M. G, Doo J, Park A. J. Chapman G. C, Northington G, Shockley M, Iglesia C. B, Heit M. Effects of social determinants of health and social support on surgical outcomes among patients undergoing hysterectomy. Obstet Gynecol. 2025;145(1):115-123. https://doi.org/10.1097/AOG.000.000.0000005771

[15] Feng Y, Liu X, Zhang S, Lin T, Guo X, Chen J. Relationship among post-traumatic growth, spiritual well-being, and perceived social support in Chinese women with gynecological cancer. Sci Rep.2024; 14(4847):1-9. https://doi.org/10.1038/s41598.024.55605-5

[16] Mahardika P, Setyowati S, Afiyanti Y. The holistic needs of women with hysterectomy: A grounded theory study. Enferm Clin. 2021;31(Supl 2):24-28. https://doi.org/10.1016/j.enfcli.2020.10.009

[17] Pierce A, Hoffer M, Marcinkowski B, Manfredi RA, Pourmand A. Emergency department approach to spirituality care in the era of COVID-19. Am J Emerg Med. 2021;46(1):765-768. https://doi.org/10.1016/j.ajem.2020.09.026

[18] Wu LF, Koo M, Liao YC, Chen YM, Yeh DC. Development and validation of the spiritual care needs inventory for acute care hospital patients in Taiwan. Clin Nurs Res. 2016;25(6):590-606. https://doi.org/10.1177/105.477.381557

[19] İsmailoğlu EG, Özdemir H, Erol A, Zaybak. Spiritüel bakım gereksinimleri ölçeği Türkçe formunun geçerlik ve güvenirliği. DEUHEFED. 2019;12(4):255-263. (Turkish)

[20] Zimet GD, Dahlem NW, Zimet SG, Farley GK. The multidimensional scale of perceived social support. J Pers Assess. 1988;52(1):30-41. https://doi.org/10.1207/s15327752jpa5201_2

[21] Eker D, Arkar H, Yaldız H. Factorial structure, validity, and reliability of revised form of the multidimensional scale of perceived social support. Turk J Psychiatry. 2001;12(1):17-25.

[22] Hammer A, Rositch AF, Kahlert J, Gravitt PE, Blaakaer J, Søgaard M. Global epidemiology of hysterectomy: possible impact on gynecological cancer rates. Am J Obstet Gynecol. 2015;213(1):23-29. https://doi.org/10.1016/j.ajog.2015.02.019

[23] Pilli P, Sekweyama P, Kayira A. Women's experiences following emergency peripartum hysterectomy at St. Francis hospital Nsambya: A qualitative study. BMC Pregnancy Childbirth. 2020;20(1):1-6. https://doi.org/10.1186/s12884.020.03428-3

[24] Bossick AS, Sangha R, Olden H, Alexander GL, Wegienka G. Identifying what matters to hysterectomy patients: Post-surgery perceptions, beliefs, and experiences. J Patient Cent Res Rev. 2018;5(2):167-175. https://doi.org/10.17294/2330-0698.1581

[25] Björkström LM, Wodlin NB, Nilsson L, Kjølhede P. The impact of preoperative assessment and planning on the outcome of benign hysterectomy: a systematic review. Geburtshilfe Frauenheilkd. 2021;81(2):200-213. https://doi.org/10.1055/a-1263-0811

[26] Burma E, Kavlak O. Histerektomi ameliyatı geçiren kadınlarda kaygı, ağrı ve sosyal desteğin derlenme kalitesine etkisi. BAUN Health Sci J. 2021;10(3):325-333. (Turkish) https://doi.org/10.53424/balikesirsbd.940627

[27] Mohammadi-Zarghan S, Ahmadi K. Marital adjustment, sexual function, and body image after hysterectomy. Shiraz E-Med J. 2021;22(9):e107565. https://doi.org/10.5812/semj.107565

[28] Peksoy Kaya S, Terzioğlu F. Determination of sexual functioning and factors affecting sexual functions of women following abdominal and vaginal hysterectomy. BAUN Health Sci J. 2024; 13(1): 119-127. https://doi.org/10.53424/balikesirsbd.1221224

[29] Cardoso-Moreno MJ, Tomás-Aragones L. The influence of perceived family support on post-surgery recovery. Psychol Health Med. 2017;22(1):121-128. https://doi.org/10.1080/13548.506.2016.1153680

[30] Aliche JC, Ifeagwazi CM, Eze JE. Emotional reactivity and surgical anxiety: The protective nature of perceived social support. Psychol Health Med. 2020;25(4):434-445. https://doi.org/10.1080/13548.506.2019.1668030

[31] Goudarzi F, Khadivzadeh T, Ebadi A, Babazadeh R. Iranian women's self-concept after hysterectomy: A qualitative study. Iran J Nurs Midwifery Res. 2021;26(3):230-237. https://doi.org/10.4103/ijnmr.IJNMR_146_20