Clinical and Experimental Health Sciences

Self-care Agency in Pregnancy

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ABSTRACT

Objective: This study was conducted to evaluate the self-care agency of women during pregnancy.

Methods: A descriptive and cross-sectional design was used in the study. The population of the study consisted of women with pregnancy who presented to obstetrics outpatient clinics in Gumushane public hospital between January 30, 2018 and June 20, 2018, and the sample included women who accepted to voluntarily participate in the study (n=201). Data collection tools included a personal information form and the Self-Care Agency Scale. The data were analyzed on a statistical software package, and the level of significance was determined as $p<0.05$.

Results: : The mean age of the pregnant women who participated in the study was 27.50±4.84 (min.-max.=18-41), 72.5% of them had high school and higher education, and 54.8% was housewives. Profession, adequate and balanced nutrition, participation in social activities, and getting social support were found to create statistically significant differences in self-care agency scale scores ($p<0,05$). It was determined that more than half of the women with pregnancy had a very good level of self-care agency.

Conclusion: Many factors (increasing number of curettage, occupational groups, participation in social activities, adequate and balanced nutrition, and support from the family) affect the self-care agency of women during pregnancy. It is recommended that health professionals discuss and evaluate self-care issues in pregnancy in their in-service education programs.

Keywords: Pregnancy, self-care, self-care agency

1. INTRODUCTION

Pregnancy is a natural phenomenon, but every pregnancy poses a potential risk due to the emergence of psychological, physiological, and several social changes during pregnancy. It is a period in which the risk of morbidity and mortality is higher compared to other periods of life and may lead to a decrease in self-care agency (1,2). Self-care is defined by WHO as “the ability of individuals, families and communities to prevent disease, maintain health, promote health, and to cope with disability and illness with or without the support of a health-care provider” (3). Briefly, self-care refers to activities that individuals carry out to initiate and sustain daily living activities and well-being.

Many factors can affect self-care. Therefore, individuals may not be able to manage their self-care in some periods of life. In case of a deterioration of health and failure to meet care requirements during pregnancy, women with pregnancy may need complete or partial help while implementing self-care. At this point, nurses have important duties. Nurses make up an important professional group that supports those who are incompetent and in need of help to attend their medical care and self-care (4,5). Nurses should help women with pregnancy until they can handle their self-care and ensure that they can undertake and meet their self-care as soon as possible. Thus, nurses can be effective in improving the quality of life of women with pregnancy by promoting their general health, enhancing their self-care agency, and having them manage their self-care (5,6).

The support of relatives, especially of the spouse, is important and necessary for women with pregnancy to gain self-care agency. Some socio-demographic characteristics (education, age, income, occupation) and factors such as fatigue affect self-care agency in women with pregnancy (7). Fatigue can lead to the development of psychological problems in women with pregnancy (feeling tense, anxious, fearful, emotional, and worthless), incompetence in fulfilling the care of family members and the baby, decrease in social and sexual activities, or dissatisfaction with life, as well as adversely impacting their abilities, such as thinking, decision-making, and problem-solving (1,6,8).

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In recent years, the concept of self-care has come to the fore with the importance given to protecting, maintaining, and improving health as a primary healthcare philosophy rather than treating the disease. Self-care is a basic human need, and when it is not met, the situation results in a lack of care and deterioration of health (1,5,9). Therefore, this study was planned to determine and evaluate the self-care agency of women with pregnancy and the factors affecting it.

2. METHODS

2.1. Research Type

This study used a descriptive and cross-sectional design.

2.2. Place of the Research

The study was carried out in a public hospital in Gumushane, a province in the Eastern Black Sea region. The research was carried out between January 30, 2018 and June 20, 2018.

2.3. The Universe and the Sample of the Research

The population of the study consisted of women with pregnancy who presented to public hospital maternity outpatient clinics, and the sample included 201 women with pregnancy. To administer the Exercise of Self-Care Agency Scale, which is evaluated on a 5-point Likert-type scale, the sample size was calculated as 201 women with pregnancy who visited Training and Research Hospital within a year, based on ±3 standard deviation and a confidence interval of 95% (5% significance level). Inclusion criteria were being aged 18 or older, being in the 14-40th gestational week, speaking and understanding Turkish, having no cognitive problems, and accepting to participate in the study voluntarily. Women with pregnancy in the first trimester were excluded due to the difficulty of adaptation to pregnancy. Eight women with pregnancy refused to participate in the study. Verbal informed consents were obtained by making necessary explanations about the purpose of the research to the women. Each woman with pregnancy was given 20 minutes to complete the questionnaire.

2.4. Ethical Considerations

In order to conduct the research, necessary approval was obtained from the Ministry of Health Scientific Research Platform and the Scientific Research and Publication Ethics Committee of Gumushane University (Ethics committee number=95674917-044-E.9674). At the top of the questionnaire form, participants were provided information about the criteria of the Helsinki Declaration. The study was conducted with those who volunteered to participate.

2.5. Data Collection Tools

Data were collected using a personal information form and the Exercise of Self-Care Agency Scale.

The personal information form: This form was prepared by the researchers following a literature review (3,6,9). The form consisted of a total of 35 questions about the participants' socio-economic characteristics, obstetric history, and behaviors during pregnancy.

The Self-Care Agency Scale (SCAS): This scale was developed by Kearney and Fleischer in 1979. It aims to determine individuals' capacity and agency to handle their self-care. The validity and reliability study of the scale in Turkey was conducted by Nahcivan in 1993 (10). The scale, which focuses on the self-assessment of individuals' capacity to manage their self-care, consists of 35 items. Also, it has a 5-point Likert-type rating structure. Each statement on the scale is scored between 0 and 4 points. Cronbach's α internal consistency coefficient of the scale is 0.89 (10), and it was found as 0.85 in this study.

2.6. Statistical Analysis

The data obtained in the study were evaluated on the Statistical Package for the Social Sciences (SPSS-21) software package. The independent variables of the study are the socio-demographic characteristics of women with pregnancy, and the dependent variable is the Self-Care Agency Scale score. Descriptive data were presented as numbers and percentages. Kolmogorov-Smirnov analysis was performed to test the suitability of the scales for normal distribution. Results showed that none of the scales met the normality conditions in terms of their total scores. After it was determined that the scales contained parametric analysis conditions, Kruskal-Wallis and Mann-Whitney U tests were carried out for the variables. The level of statistical significance was accepted as $p<0.05$.

3. RESULTS

The mean age of the women with pregnancy participating in the study was 27.48±4.85 (min-max=18-41), the mean age of the spouses was 31.40±5.33 (min-max=20-48). Also, 72.5% of the women with pregnancy had high school or above education level, 55% were housewives, 45.7% were workers, and 86.6% of the spouses had a high school or above education level. Besides, 67.2% of the participants were found to live in a province, and 70.1% defined their income equal to expenses (Table 1).

When we look into the distribution of obstetric features of the women with pregnancy included in the study, 67.5% had one or two pregnancies, 60% had one delivery, 6% had curettage, and 14% had one or two miscarriages (Table 2). Also, 12.4% of women with pregnancy did not have a history of a risky pregnancy.

In the study, 81.9% of the women had a planned pregnancy, 7% got pregnant with fertility treatment, 96.5% went to regular health checks, 48% received training on pregnancy (36.5% from health personnel), and 68.9% had a regular sexual life. Also, 29.1% of the women were found to use complementary and alternative therapy during pregnancy, and 75.9% of them were observed to prefer herbal treatment (19.5% nausea, 10.5% vomiting, 4.0% anemia, 4.5% dizziness, 1% other complaints), 10.3% meditation, and 8.6% massage.

Also, 13.4% of the women with pregnancy were found to smoke, and 5.5% continued to smoke during pregnancy. Besides, 31% of the women stated that they felt calm, 47.5% happy, 26.5% anxious, and 3.5% upset. Moreover, 58.0% attended social activities, 87.9% had an adequate and balanced diet, 15.5% received dietician support, 77.0% brushed teeth every day, 76% slept 8 hours a day or more, 25% exercised regularly, and 91.4% had adequate family support.

The average score of the pregnant women from the Self-Care Agency Scale was 112.17±20.61 (min=51, max=136). Self-care of the women with pregnancy was at a good level.

When the factors affecting self-care agency in women with pregnancy was evaluated, it was found to be generally affected positively in women with pregnancy who worked as a civil servant, had an adequate and balanced diet, attended social activities, received social support from their family during pregnancy, and received help from someone in daily activities (Table 3, $p<0.05$).

On the other hand, the self-care agency was found to be higher in women with pregnancy who had a high income, had a core family type, did not have a risky pregnancy history, continued sexual life during pregnancy, had a planned pregnancy, and did not use complementary and alternative therapy during pregnancy, but no statistically significant differences were determined (Table 3, $p>0.05$).

Although there were no significant differences as a result of the analyses, self-care agency was found to be higher in women with pregnancy whose spouse had a high level of education, who did not smoke, went to regular pregnancy checks, did not have any education on pregnancy, did regular exercise, brushed teeth regularly, and had a chronic disorder.

Table 1. *Some socio-demographic characteristics of the women with pregnancy (n: 201).*

Education (the women)	n	%	Education (the spouses)	n	%
Elementary school	26	12.5	Elementary school	11	5.5
Middle school	30	15.0	Middle school	16	7.9
High school	59	29.5	High school	65	32.3
University	86	43.0	University	109	54.3
Job (the women)	**n**	**%**	**Job (the spouses)**	**n**	**%**
Education sector	12	5.9	Education sector	18	8.9
Health sector	43	21.3	Health sector	29	14.4
Civil servant	17	8.5	Civil servant	59	29.4
Worker	19	9.5	Worker	92	45.8
Housewife	110	54.8	Unemployed	3	1.5
Income	**n**	**%**	**Place of residence**	**n**	**%**
Income less than expenses	22	10.9	Village	13	6.4
Equal income and expenses	141	70.1	County	53	26.4
Income more than expenses	38	19.0	Province	135	67.2

Table 2. *The obstetric history of the women.*

Number of pregnancies (n:201)	n	%	Number of deliveries (n:130)	n	%
One	66	32.8	One	78	60.0
Two	70	34.9	Two	40	30.8
Three	35	17.4	Three	9	6.9
Four and more	30	14.9	Four and more	3	2.3
Number of miscarriages (n:201)	**n**	**%**	**Number of curettages (n: 201)**	**n**	**%**
Yes	28	13.9	Yes	13	6.5
No	173	86.1	No	188	93.5
Total	201	100.0	Total	201	100.0
Type of the previous delivery (n:130)	**n**	**%**	**History of risky pregnancies (n:201)**	**n**	**%**
Vaginal	80	61.5	Yes	24	11.9
Cesarean delivery	48	37.0	No	177	88.1
Vaginal/Cesarean delivery	2	1.5			

Table 3. *The distribution of the self-care agency scale scores of the women with pregnancy by some characteristics.*

Some Characteristics		n	Median (%95 CI)	Test Value
Level of education	Elementary school	26	106.00 (89.76-120.52)	
	Middle school	30	111.00 (85.36-118.92)	KW=2.916
	High school	59	101.00 (96.89-118.82)	p=0.405
	University	86	113.00 (107.25-117.44)	
Job	Education sector	12	129.50 (107.74-134.59)	
	Health sector	43	108.00 (103.32-115.81)	KW=12.990
	Civil servant	17	127.00 (111.85-131.03)	**p=0.01**
	Worker	19	102.00 (91.94-113.06)	
	Housewife	110	110.00 (88.41-111.16)	
Income Status	Income < expenses	22	107.50 (94.87-116.04)	KW=2.71
	Income = expenses	141	116.00 (109.02-116.09)	p=0.258
	Income > expenses	38	120.50 (109.59-122.14)	
Family type	Core family	178	116.00 (109.87-116.12)	U=1528.000
	Extended family	21	109.00 (97.87-116.99)	p=0.172
History of risky pregnancies	Yes	24	111.00 (97.61-116.56)	U=1763.500
	No	177	116.50 (109.98-116.22)	p=0.19
Continuation of sexual activity during pregnancy	Yes	135	115.50 (110.72-117.42)	U=3743.500
	No	61	111.44 (104.62-115.71)	p=0.309
Using complementary therapy during pregnancy	Yes	58	112.00 (103.92-114.99)	U=3620.000
	No	141	115.60 (110.89-117.61)	p=0.204
Planned pregnancy	Yes	163	116.00 (109.78-116.24)	U=2710.500
	No	36	113.00 (102.17-117.22)	p=0.474
Getting help in daily living activities	Yes	118	116.38 (111.00-118.73)	U=3752.500
	No	81	110.13 (104.24-113.36)	**p=0.010**
Participation in social events	Yes	116	118.53 (113.69-120.60)	U=3405.500
	No	84	107.00 (100.99-110.79)	**p=0.000**
Adequate support from the family	Yes	181	115.05 (110.73-116.68)	U=998.000
	No	17	101.03 (87.60-112.05)	**p=0.017**
Adequate and balanced nutrition	Yes	176	115.68 (11.42-117.36)	U=1242.000
	No	25	97.91 (86.98-107.72)	**p=0.001**

KW: Kruskal Wallis Test, U: Mann Whitney U Test, CI: Confidence Intervals

4. DISCUSSION

Pregnancy is a process in which the physiological and emotional states of women change. The process of pregnancy is critical in terms of the health of the mother and the newborn, as well as going through the whole process healthily. For this reason, it is very important that the pregnancy is planned, the woman with pregnancy goes to regular health checks, and she actively participates in her self-care (11). In our study, the majority of the participants had a planned pregnancy. Almost all of them were found to go to health checks regularly. Also, the vast majority of the participants had an adequate and balanced diet, slept and relaxed for an average of 8 hours or more a day, and brushed their teeth. In our study, the mean self-care agency scale score of the women with pregnancy was determined to be 112.17±20.61. The results of studies conducted in Turkey were found to be different from those of ours. For example, the mean self-care agency score was found to be 80.3±10.0 in Manisa province, 87.1±23.0 in a study conducted with 80 women with pregnancy in Erzurum province, and 92.0±18.9 in İstanbul province. In our study, the mean score on the self-care agency scale was higher compared to other studies. This difference was observed to be because the majority of the participants in other studies were elementary school graduates. Although there was no significant difference between educational status and self-care agency in the present study, the mean scores of those with high education levels were higher. Also, most of the women with pregnancy had a planned pregnancy, they paid attention to their diets, they went to regular health checks, they relaxed adequately during the day, and they were careful about their dental care, all of which showed that the women with pregnancy paid attention to their self-care. In some studies, no relationship was found between self-care agency and educational status. While some studies indicated that self-care agency increased in parallel to the increase in the level of education (12), others showed that the level of education had no effect or did not increase the self-care agency (1,13,14).

According to the results of studies conducted so far, self-care agency has been reported to be high among working women (6,12,14). In our study, self-care agency was found to be higher among women working as civil servants or those

working in the education sector. On the other hand, it was determined to be low among women working as workers and those working in the health sector.

In our study, although there was no significant difference between income status and self-care agency, self-care agency was observed to increase with the increase in income status. A review of the literature indicated that there were different relationships between self-care agency and income status. For example, Aktas (2015) stated that self-care decreased with the increase in income status, while Celik and Aksoy (2019) reported that self-care agency increased in parallel with the increase in income status (14,15).

In the present study, 77% of the women with pregnancy were found to brush their teeth every day, and self-care agency was higher among women who cared about dental care. Dental care also brings about important health consequences during pregnancy. Periodontal diseases pose risks, such as preterm birth and low birth weight (16,17). Tooth decay is reported to increase the risk of miscarriage by 15-20% before the 20th gestational week. Medical treatments are recommended especially before the 12th gestational week to reduce the teratogenicity effect and possible risks. Recommendations also include providing the women with pregnancy with oral hygiene education, giving them care support, monitoring them, and thus increasing the comfort of the woman, especially in this period (18). In their study conducted in Poland, Gaszynska et al. (2015) stated that 70% of the women with pregnancy had gingivitis. In the present study, it was noteworthy that approximately three out of four women with pregnancy paid attention to their dental care. It is also important to increase this rate (19).

Although there were no significant differences as a result of the analysis, self-care agency was higher in women who had a spouse with a high level of education, did not smoke, went to regular pregnancy controls, did not receive any training about pregnancy, exercised regularly, and had a chronic disease. In a study, it was recommended that women should be encouraged for physical activity for a healthy pregnancy (20). It was interesting that self-care agency was high in those who did not receive any training about pregnancy and that health care professionals had low self-care agency compared to other occupational groups. This suggested that individuals who were knowledgeable about health behaviors and pregnancy did not pay attention to these issues. However, there were contrasting results in the literature. Yılmaz and Beji (2010) determined that self-care agency was high among women with pregnancy who participated in pregnancy education (1). Ozcan and Beji (2015) reported that self-care agency scores of the women with pregnancy who received education before pregnancy were higher than those who did not receive any training (21). Tortumluoğlu et al. (2003) reported that the mean self-care agency scores of the women with pregnancy who went to regular health checks were higher than those who did not (22).

Providing individuals with information on self-care by encouraging them through effective communication enables them to participate in their self-care and strengthens the relationship between the person and the caregiver. Active involvement of the patient in healthcare often improves treatment outcomes and results in greater satisfaction (24-26).

5. CONCLUSION

High levels of self-care agency during pregnancy lead to a healthy and comfortable pregnancy. Exercising regularly, adequate and balanced nutrition, participation in social activities, and continuance of sexual activity are quite high among women with pregnancy who have high levels of self-care agency. It is very important that nurses participate in the process of promoting and sustaining self-care agency during pregnancy and support women with pregnancy. We recommend that in-service training programs on self-care should be organized and that the self-care status of women with pregnancy should be assessed especially during the prenatal period.

Limitations of the Study

Since the study was conducted in only one province, it cannot be generalized to all pregnant women.

Conflict of Interest

No conflict of interest was declared by the authors.

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