

The Effect of Training Given According to the Health Promotion Model on Women's Reproductive Health Attitudes and Self-efficacy

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Abstract

In this study, the aim is to examine the effect of training given according to the health promotion model on the women's reproductive health attitudes and self-efficacy. The research was carried out as pretest-posttest, with control group and semi-experimental. The population of the research consists of 3528 women, the sample consists of 120 women determined by power analysis. The pre-test data were collected with "Personal Information Form", "Determining of the Reproductive Health Protective Attitudes Scale (RHPAS)" and "General Self-Efficacy Scale (GSE)". Afterwards, women in the experimental group received a 3-month group training structured according to the health promotion model. The RHPAS total score means of the women in the experimental group, which was 129.67 ± 16.190 before training, increased to 150.23 ± 16.492 after training ($p < 0.05$). In the experimental group, the total score means of the RHPAS post-test was found to be significantly higher than the control group ($p < 0.001$). No significant difference was found between the GSE pretest-posttest post-test total mean scores of the women in the experimental and control groups. ($p > 0.05$). The training provided according to the Health Promotion Model affected women's reproductive health attitudes but did not affect their self-efficacy.

Key Words: Training, nursing, health promotion model, women's reproductive health, self-efficacy

Reproductive health is defined as a state of physical, mental, and social well-being in all matters relating to the reproductive system, at all stages of life (Erbil & Göktaşlar, 2010; United Nations, 2014; Moller, et al., 2019). Although reproductive health is important for both women and men, changes such as pregnancy, birth, puerperium and menstruation that women experience make reproductive health more important for women. (Şentürk, 2008; WHO, 2019). Said changes can create not only physical but also mental and social problems associated with women reproductive system. (Ege & Eryılmaz, 2005; Taşkın, 2007). (Koştü & Taşçı, 2009).

Each year, more than 500,000 women die in the world due to complications of pregnancy and birth. When the causes of death are examined; unsafe abortions, particularly bleeding and infection, are at the top of the list (Şentürk, 2008). Problems such as low training and economic level, gender inequalities, violence, depression and anxiety affect women's reproductive health negatively (Taşkın, 2007; Erbil & Göktaşlar, 2010). Inability to talk about issues comfortably related to reproductive health in Turkey and missing or incorrect information increases the risk of reproductive health problems. In the study of Arslan et al., it was determined that the knowledge and practices of the couples about reproductive health were inadequate before marriage and training was required regarding this subject (Arslan, et al., 2000). There are studies with similar results in the literature (Kayacı, et al., 2007; Erbil & Göktaşlar, 2010).

Comprehensive, qualified and accessible health services are needed to protect and improve reproductive health and to solve existing problems. At this point, healthcare professionals have important responsibilities. Being an important member of the healthcare team, a nurse is in a position to make an important contribution to the protection and development of women's health, especially in the field of community health (Koştü & Taşçı, 2009).

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Health promotion focuses on maintaining and promoting the individual's well-being and taking responsibility for his/her own health (Yardımlı, et al., 2009; Özpulat, 2009). It is important to maintain and promote the reproductive health of women for a healthy society. Therefore, women must take responsibility for their own health (Ege & Eryılmaz, 2005). Nurses are needed to give women these responsibilities. In the 21st century healthcare training, one of the most important duties of nurses, continues to be the most important power in all levels of healthcare services, especially preventive services (Hacalıoğlu, 2019). With their health training, nurses can provide formation of adequate information in women and create a protective attitude for women towards reproductive health (Koştü & Taşçı, 2009).

When the literature is examined, it is observed that more descriptive studies about reproductive health were conducted (Lindberg, 2000; Charron-Prochownik, et al., 2006; Özbaş & Özkan, 2010; Koluçak, Güneş, & Pehlivan, 2010; Tyler, et al., 2014; Adıbelli, et al., 2014). Interventional studies on training generally examined sub-topics of reproductive health such as breast cancer, cervical cancer and genital hygiene by addressing them individually (Ersin, 2012; Adoğu et al., 2015). In the protective attitudes of women towards reproductive health, it is seen that interventional studies examining the effect of training on knowledge, attitudes and behaviors were not structured according to any model (Demirci, 2004; Arslan, et al., 2008; Topatan, 2012; Padhy, et al., 2013; Demirbağ, et al., 2013). On the other hand, it is recommended to use evidence-based service models for qualified service. (Ozan & Okumuş, 2013).

For this reason, the training content was created according to the Health Promotion Model (HPM). HPM focuses on cognitive factors for health promotion (Ay, 2011) and is used in many fields related to health promotion (Bahar, 2013; Ersin & Bahar, 2012). The model enables changes in the patient's behavior by working in cooperation with the nurse and the patient for a healthy life (Çalık & Kapucu, 2017; Polat & Aylaz 2020). Training initiatives planned and implemented according to HPM are thought to contribute significantly to the literature by positively improving women's protective reproductive health attitudes.

In the research, it was aimed to determine the effect of training which is structured and implemented according to HPM, on the reproductive health attitudes and self-efficacy of women.

The hypotheses of the research

1. The training given according to the Health Promotion Model positively affects women's reproductive health attitudes.
2. The training given according to the Health Promotion Model increases women's self-efficacy levels.

Material method

Type of the research

The research was conducted with pretest-posttest control group and semi-experimental model.

The population and sampling of the research

Research was conducted with married women in a region Family Health Center (ASM) at the center of the province of Bingöl, the east of Turkey. The population of the research was 3528 women registered in the said ASM, and the sampling was 120 women, determined by power analysis. The sample has 90% representation power, with a significance level of 0.05 error level, 0.6 effect size, 95% confidence interval. Simple random sampling method was used to select the women as sampling. In the selection of experiment and control groups, a total of 120 women including 60 experiments and 60 controls who meet the research criteria were included in the scope of the study.

Included Criteria

In the research, women who were at least literate, within the 20-49 age group and married, did not go through menopause, not in pregnancy and postpartum period, who did not have any physical or mental disability that prevents them from participating in the research were included.

Data collection tools

Personal Information Form: In the form prepared by the researcher, there are a total of 11 questions, 7 for the socio-demographic characteristics and 4 for the obstetric characteristics of women. Determining of the Reproductive Health Protective Attitudes Scale (RHPAS) of Married Women: It was developed by Demirci (2004) to determine the protective attitudes of married women. The Cronbach Alpha value of the scale is 0.82. In this study, RHPAS Cronbach Alpha value was found as 0.82. RHPAS is a likert type consisting of 39 items and scored between 1-5. In the scale, individuals are asked to select one of the options "1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Most of the time and 5 = Always. Items 5, 10, 16 and 28 of the scale were scored as reversed.

The total score obtained by adding 39 items in the scale varies between 39-195. The scale has five sub-dimensions including the behavior to go to the doctor about issues related to reproductive health (13, 14, 15, 16, 24, 25, 33, 39th items), protection from reproductive organ and breast cancer (20, 21, 22, 23 items), general health behaviors (1, 29, 30, 31, 32, 34, 35, 36, 37, 38) to protect reproductive health, protection from genital tract infections (2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 17, 18, 29th items) and protection from unintended pregnancies (26, 27, 28th items).

General Self-Efficacy Scale (GSE): It was developed by Sherer et al. (1982) its Turkish adaptation was performed by Yıldırım et al. (2010). Cronbach alpha value of the scale is 0.80 and Cronbach alpha value in this study was found to be 0.78. The scale has three sub-dimensions including initiative (items 2, 4, 5, 6, 7, 10, 11, 12, 17), persistence (items 3, 13, 11, 15, 16) and effort (items 1, 8, 9). There are 17 items in the scale and for each item, they are asked to choose one of the options, such that 1 = does not describe me at all, 2 = describes me somewhat, 3 = I am indecisive, 4 = describes me well, 5 = describes me very well. However, items 2, 4, 5, 6, 7, 10, 11, 12, 14, 16, 17 get opposite points. The total score of the 17 items in the scale varies between 17 and 85. High scores indicate that the individual's self-efficacy perception is at a good level.

Data collection

The information of women included in the study was taken from the records. An explanation about the research was made by phone. and appointments were made for home visits. "Personal Information Form", RHPAS and GSE were applied to women in the experimental and control groups to collect pretest data during the planned home visits. After the pre-test data were collected, a three-month training was given to the women in the experimental group, and a follow-up was performed for three months at the end of the training. No intervention or follow-up was performed for the women in the control group during this period. At the end of three-months training and three-months follow-up, post-test data was collected by applying RHPAS and GSE to women in the experimental and control groups. The data were collected by the researcher using face-to-face interview method.

Nursing interventions

Nursing intervention for women was carried out in the form of training and follow-up regarding the improvement of reproductive health. The training program prepared according to HPM was applied to groups of 10-15 people in a three-months period (6 training sessions in total, every 2 weeks). The "Women's Reproductive Health Training Booklet", which covers training topics, was distributed to women after the training was completed and a three-months follow-up started. During the follow-up, women's attitudes and behaviors towards training were observed, and the questions about training were answered and information was reinforced. The topics, duration, training methods and training materials of the training provided according to HPM are given in detail in table 1.

Evaluation of data

The data obtained from the research were uploaded to the computer in SPSS 16 program. In the analysis of the data; frequency, percentage distributions, chi-square, student t test and pairedsample t test were used.

Ethical principles of the research

In order to conduct the research, approval was obtained from the Ethics Committee of the Institute of Health Sciences of a university and official permission was obtained from the Public Health Directorate of Bingöl to collect the data. Study participants were informed on the study, confidential handling of the study data and the voluntary nature of participation in or withdrawal from the study.

Findings

Comparison of control variables is given in Table 2. When the table is examined; it was observed that the women in the experimental and control groups were in a homogeneous structure and there was no difference between them in terms of control variables ($p > 0.05$). Comparison of the RHPAS and GSE score averages of women in the experimental and control groups according to the pretest measurements are presented in Table 3. When the table was examined, it was seen that the RHPAS and GSE scores of women in the experimental and control groups were similar and there was no difference between the groups ($p > 0.05$).

Comparison of the RHPAS and GSE scores of women in the experimental group according to the pretest-posttest measurements is presented in Table 4. When the table was analyzed, it was seen that women in the experimental group increased their RHPAS total score and sub-dimension scores (except for the unwanted pregnancy prevention sub-dimension) in the post-test and this increase was statistically significant ($p < 0.05$).

When the table was examined, GSE total scores were not statistically different in women in the experimental group in the pretest and posttest ($p > 0.05$). Comparison of the RHPAS and GSE scores of women in the control group according to the pretest-posttest measurements is presented in Table 5. When the table was analyzed, it was seen that there was no difference between the pretest-posttest mean scores of the women in the control group, the RHPAS total and sub-dimension scores (excluding the general health behaviors towards protecting reproductive health) ($p > 0.05$).

As seen in Table 5, the total scores of GSE in the women in the control group did not differ from the pretest and posttest ($p > 0.05$).

Comparison of the mean scores of RHPAS and GSE in the post-test measurements of women in the experimental and control groups participating in the study is presented in Table 6. When the table was examined, the RHPAS total score and sub-dimension scores of the women in the experimental group (excluding the unwanted pregnancies sub-dimension) increased in the post-test compared to the control group and the difference between the groups was significant ($p < 0.05$). As seen in Table 6, GSE total scores of women in the experimental group increased compared to the control group, but there was no significant difference between the groups ($p > 0.05$).

Discussion

In this section, the findings obtained from the research conducted in order to determine the effect of the training given according to the health promotion model on the reproductive health attitudes and general self-efficacy of women are discussed in accordance with the literature.

In the literature review, no study evaluating the effectiveness of training according to HPM according to women's protective attitudes to reproductive health was found. However, there are some studies that evaluate the effectiveness of training without using a model. In the study, the RHPAS total scores of women in the experimental group were found to be significantly higher in the post-test measurements compared to the pre-test ($p < 0.001$) (Table 4). In the study OF Demirci (2004) it was found that women's RHPAS total scores increased significantly after training. In the study of Toptan (2012), it was determined that the RHPAS total scores of adolescent women in the experimental group were significantly higher at the 6th month after the training. The results of this study support other study results.

In this study, the post-test scores of women in the experimental group were significantly high in RHPAS sub-dimensions: going to the doctor in matters related to reproductive health, protection from reproductive organ and breast cancer, general health behaviors to protect reproductive health and protection from genital tract infections (GTI) ($p < 0.001$). ($p < 0.001$). However, although the post-test scores increased in the sub-dimension of RHPAS protection against unwanted pregnancies, the difference between the groups was not significant (Table 4).

When the scores of women in the control group are examined; it was observed that post-test scores increased significantly only in the dimension of "general health behaviors aimed at protecting reproductive health" ($p < 0.005$). There was no difference between RHPAS total score and other sub-dimension scores in the pretest-posttest measurements ($p > 0.05$; Table 5). In the post-test measurements of women in the control group, the increase in the scores of general health behaviors towards protecting reproductive health, may be due to the fact that pretest applications create a general awareness among women. In this way, women who become sensitive about the subject may obtain information by research and improve their general reproductive health levels.

As a result, the RHPAS total scores of women in the experimental group increased compared to the control group in the post-test measurements and the difference between the groups was found to be significant ($p < 0.001$; Table 6). This finding confirmed the hypothesis of the research that "Training given according to the Health Promotion Model positively affects women's reproductive health attitudes".

When the posttest RHPAS sub-dimension mean scores of women in the experimental and control groups were compared; Except for the unwanted pregnancies sub-dimension, the scores of the experimental group were significantly higher in all sub-dimensions ($p < 0.05$; Table 6).

The sub-dimensions of women's behavior to go to the doctor about issues related to RHPAS reproductive health after training increased significantly in the experimental group compared to the control group ($p < 0.05$; Table 6). In the study of Demirci (2004), the behavior dimension scores of women to go to the doctor about RHPAS reproductive health were found to be significantly higher after the training. In the study of Topatan, the behavior dimension scores of the experimental group to go to the doctor about issues related to RHPAS reproductive health increased significantly after the training compared to the control group.

In the study of (Demirbağ, et al., 2013) where they examined the transfer of the training given to the mother on reproductive health to the girls, it was determined that the mother and their daughters increased their “knowledge level about going to the doctor about reproductive health problems” after the training. The results of this study are compatible with the results of other studies.

In the study, after the training, the size of RHPAS reproductive organ and breast cancers increased in women in the experimental group compared to the control group, and the difference between the groups was found statistically significant ($p < 0.05$; Table 6). In the study of Demirci (2004), a significant increase was found in the RHPAS reproductive organ and breast cancer protection scores of the experimental group after the training. Similar results were found in the study of Topatan (2012). In the study of Moustafa, Abd-Allah, & Taha (2015), it was determined that the training given on breast examination (BSE) was effective in developing the knowledge, attitudes and behaviors of university students. In the study of Adoglu, et al., (2015) with secondary school girls, it was found that training positively affected knowledge, attitudes and behaviors about BSE. In two separate studies conducted by Ersin (2012) and Aydoğdu (2011), it was determined that the frequency of performing BSE, mammography and pap smear test increased after the training in the experimental group. The results of this study are similar to those of other studies.

In the study, the overall health behavior sub-dimension scores for maintaining RHPAS reproductive health after training were found higher in women in the experimental group than in the control group. The difference between the groups was found statistically significant ($p < 0.05$; Table 6). In the study of Demirci (2004), the general health behavior dimension scores for protecting RHPAS reproductive health increased significantly after the training in the experimental group. In the study of Topatan (2012), it was found that the scores of the same size increased significantly after the training in the experimental group compared to the control group. In the study where Demirbağ, et al., 2013) analyzed the transfer of maternal training related to the protection and development of reproductive health to girls; there was an increase in the knowledge level and reproductive health attitudes of mothers and daughters after training. In the research conducted by Padhy, et al., (2013) with adolescents; It has been determined that the training provided on reproductive health, adolescent sexuality and high-risk behavior in sexuality has increased the reproductive health knowledge level significantly. It was determined that Rabiepoor & Taşkın (2011) increased their knowledge level about reproductive health in the group in which they provided training with the peer training method on reproductive health. The results obtained from this research support other study results.

In the study, after the training, the experimental group's RHPAS genital tract protection size scores were found higher than the control group, and the difference between the groups was found to be significant ($p < 0.05$; Table 6). In the study of Demirci (2004) and Topatan (2012), the scores of women in the experimental group increased significantly in terms of protection from RHPAS genital tract infections compared to pre-training. In a study conducted by Davey-Rothwell, Tobin, Yang, Sun, & Latkin (2011) in America, it was determined that training and follow-up reduced risk sexual behavior. There are studies with similar results in the literature (Ege & Eryılmaz(2006); Demirbağ, et al., 2012; Şimşek Küçükkeleşçe, et al., 2019) The results obtained from this research are compatible with the results of other studies.,

In the study, the size of RHPAS protection against unwanted pregnancies increased in women in the experimental group after the training compared to the control group, but the difference was not significant ($p > 0.05$; Table 6). In the study of Demirci (2004), there was no significant difference in the dimensions of protection from unwanted pregnancies before and after training. In the study of Topatan (2012), there was no significant difference in the experimental group compared to the control group in the sub-dimension scores of protection from unwanted pregnancies in the 6th month after the training.

However, at the 12th month after the training, a statistically significant difference was found in the experimental group compared to the control group. This difference in the work of Topatan explained that training and follow-up on family planning developed positive health behavior in the long term. The results obtained from this research are consistent with the results of Demirci and Topatan's similar studies. In the literature; It is stated that the knowledge, attitudes and behaviors of men about family planning affect the fertility behavior of women (Ceylan & Tekbaş, 2000; AÇSAP, 2009; Akın, et al., 2006). It is stated that talking to the spouses of women about family planning increases the rate of using modern methods. In line with this information, it can be said that increasing the duration of training will increase the effectiveness in order to change the attitudes of women to be protected from unwanted pregnancies. At the same time, the participation of spouses in the trainings can positively affect the attitudes of women.

Self-efficacy is defined as “the self-confidence of the individual to perform the desired behavior in any situation” (Bandura, 1982; Aksayan & Gözüm, 1998). The level of self-efficacy is stated to be important in the control of sexual risk behaviors (Pender, et al., 2011).

For this reason, the effect of training on the self-efficacy level of women was also investigated, but at the end of the study, it was observed that the training given in the experimental and control groups did not add GSE scores and there was no difference between the pretest and posttest scores ($p > 0.05$; Table 4), Table 5, Table 6).

In the study conducted by Ersin (2012) by giving training on breast cancer and cervical cancer with women, no statistically significant difference was found between the experimental and control groups' BSE self-efficacy scale averages before training, while a significant difference was found after the training. In the study of Aydoğdu (2011), it was determined that BSE self-efficacy perceptions increased after the training given to women. In the study conducted by Kılınc, et al., (2009) with university students, BSE self-efficacy levels of students having knowledge about BSE were found higher than those without knowledge about BSE.

In the study conducted by Kılınc & Erci (2007) with the women in the premenopausal period, after the training given, it was found that the women in the experimental group had significantly higher osteoporosis self-efficacy scores than the control group. In the study of (Lindberg, 2000) with women, a positive relationship was found between condom use knowledge and self-efficacy. In the study of Tanrıverdi & Erci (2003) in which women in the climacteric period performed training and follow-up about menopausal complaints and ways of coping, it was found that the posttest self-efficacy scores of the women in the experimental group were significantly higher than the control group.

In this study, no difference was found in the self-efficacy total scores, both between the experimental and control groups, and between the pretest and posttest scores. This finding did not confirm the hypothesis of the research that "Training given according to the Health Promotion Model increases the self-efficacy scores of women".

The reasons for this situation may be related to self-efficacy studies in different regions, with different groups. Also the structuring of the trainings in the studies; training and follow-up times; situations such as the difference of training tools and methods may also have affected total self-efficacy scores.

Conclusion and recommendations

In the research, it was determined that the training and follow-up given to women by structuring according to the health promotion model positively affects women's reproductive health attitudes, but not their general self-efficacy.

In line with these results:

- Structuring the trainings to be given in developing women's reproductive health attitudes according to HPM,
- Sharing the results obtained from this study with primary health care institutions such as family health centers and maternal and child health centers,
- Ensuring that nurses providing services for women in primary care institutions to structure their training according to HPM were proposed.

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Table 1. Training Subjects, Duration, Training Methods and Training Tools by Week

Training Interviews	Training Subjects	Duration of Training	Training Methods	Training Tools
1. Interview	<ul style="list-style-type: none"> Reproductive health and importance Female reproductive system organs Reproductive system problems Protecting and improving reproductive health 	45 min	Narration Question answer Discussion Brainstorming	Power point presentation Genital organ models Writing board Projection
2. Interview	<ul style="list-style-type: none"> Risky pregnancies affecting MCH Definition and importance of family planning The objectives of family planning Family planning methods 	90 dk	Narration Question answer Discussion Demonstration	Power point Presentation Writing board Projection

3. Interview	<ul style="list-style-type: none"> • STD and its importance • Ways of transmission of STIs • Symptoms of STD • Early diagnosis and treatment in STD • Protection from STD • Genital hygiene 	90 dk	Narration Question answer Discussion Brainstorming Demonstration	Power point presentation Writing board Projection
4. Interview	<ul style="list-style-type: none"> • Breast tissue and functions • Definition of breast cancer • Breast cancer incidence • Risk factors in breast cancer • Symptoms of breast cancer • Early diagnosis and treatment in breast cancer 	90 dk	Narration Question answer Discussion Demonstration	Power point presentation Writing board Projection Breast mockup
5. Interview	<ul style="list-style-type: none"> • Definition of cervical cancer • Cervical cancer frequency • Risk factors of cervical cancer • Symptoms of cervical cancer • Cervical cancer early diagnosis and treatment • Organizations to apply for cervical cancer and breast cancer 	90 dk	Narration Question answer Discussion	Power point Presentation Writing board Projection Uterus mockup
6. Interview	<ul style="list-style-type: none"> • Obstacles to be encountered in applications for the protection and improvement of reproductive health • Developing self-efficacy on behaviors that improve reproductive health • Experiences in improving reproductive health • Interpersonal support in improving reproductive health • Situational effects on reproductive health 	90 dk	Narration Question answer Discussion	Power point Presentation Writing board Projection

Table 2. Comparison of Control Variables of the Study

	Control Group (n=60)		Experimental Group (n=60)		Test and materiality
	S	%	S	%	
Introductory Features					
Age					
20-24	4	6.7	0	0.0	X ² =6.531 p=0.258
25-29	9	15.0	7	11.7	
30-34	11	18.3	8	13.3	
35-39	16	26.7	18	30.0	
40-44	11	18.3	18	30.0	
45-49	9	15.0	9	15.0	
Education Status					X ² =0.711 p=0.701
Literate	14	23.3	17	28.3	
Primary education	24	40.0	25	41.7	
High school and above	22	36.7	18	30.0	
Working Status					X ² =0.045 p=0.831
Working	15	25.0	14	23.3	
Not working	45	75.0	46	76.7	
Social Security Status					X ² =1.976

Yes	39	65.0	46	76.7	p=0.160
No	21	35.0	14	23.3	
Family Income Status					
My income is more than my expenses	7	11.7	2	3.3	X ² =4.458 p=0.108
My income is equal to my expenses	28	46.7	24	40.0	
My income is less than my expenses	25	41.7	34	56.7	
Longest Settlement Place					
Village	11	18.3	8	13.3	X ² =4.384 p=0.112
County	9	15.0	3	5.0	
Province	40	66.7	49	81.7	
Use of AP Method					
Yes	35	58.3	41	68.3	X ² =1.292 p=0.256
No	25	41.7	19	31.7	
Bath in Menstrual Period How					
No bath	6	10.0	6	10.0	X ² =0.606 p=0.739
Showering	21	35.0	25	41.7	
Bath while sitting	33	55.0	29	48.3	
Washing the Hopper					
Yes	50	83.3	51	85.0	X ² =0.063 p=0.803
No	10	16.7	9	15.0	
Mean Values					
	X	Ss	X	Ss	Test and materiality
Year of Marriage	15.7	7.76	16.90	8.30	t=-0.823 p=0.412
Total Number of Pregnancies	3.30	2.14	3.42	1.86	χ ² =0.318 p=0.751

Table 3. Comparison of the Mean and Self-Efficacy Scale Scores of the Experimental and Control Groups for the Determining of the Reproductive Health Protective Attitudes Scale According to Pretest Measurements

Scale and Sub-Dimensions	Experimental group Mean ±SS	Control Grup Mean ±SS	Test and materiality
RHPAS Total Score	129.67±16.190	128.80±15.768	t=-0.297 p=0.767
Behavior of going to the doctor on issues related to reproductive health	29.47±4.973	29.63±4.857	t=0.186 p=0.853
Protection from reproductive organ and breast cancer	8.42±3.707	8.13±4.233	t=-0.390 p=0.697
General health behaviors to protect reproductive health	30.23±7.352	28.82±6.660	t=-1.106 p=0.271
Protection from GTI	48.78±5.672	48.40±4.996	t=-0.393 p=0.695
Protection from unintended pregnancies	10.55±2.295	10.93±2.393	t=0.896 p=0.372
GSE Total Score	48.28±9.361	46.37±8.727	t=-1.160 p=0.248

Table 4. Comparison of the Mean and Self-Efficacy Scale Scores of the Experimental Group for the Determining of the Reproductive Health Protective Attitudes Scale According to Pre-Test-Post-Test Measurements

Scale and Sub-Dimensions	Experimental group Mean \pm SS	Control Grpup Mean \pm SS	Test and materiality
RHPAS Total Score	129.67 \pm 16.190	150.23 \pm 16.492	t=-9.224 p=0.000
Behavior of going to the doctor on issues related to reproductive health	29.47 \pm 4.973	32.42 \pm 5.490	t=-4.354 p=0.000
Protection from reproductive organ and breast cancer	8.42 \pm 3.707	13.63 \pm 4.562	t=-7.204 p=0.000
General health behaviors to protect reproductive health	30.23 \pm 7.352	36.45 \pm 6.895	t=-6.129 p=0.000
Protection from GTI	48.78 \pm 5.672	53.62 \pm 5.053	t=-6.449 p=0.000
Protection from unintended pregnancies	10.55 \pm 2.295	12.07 \pm 6.772	t=-1.613 p=0.112
GSE Total Score	48.28 \pm 9.361	47.60 \pm 11.411	t=0.422 p=0.674

Table 5. Comparison of the Mean and Self-Efficacy Scale Scores of the Control Group for the Determining of the Reproductive Health Protective Attitudes Scale According to Pre-Test-Post-Test Measurements

Scale and Sub-Dimensions	Experimental group Mean \pm SS	Control Grpup Mean \pm SS	Test and materiality
RHPAS Total Score	128.80 \pm 15.768	130.37 \pm 17.289	t=-0.713 p=0.479
Behavior of going to the doctor on issues related to reproductive health	29.63 \pm 4.857	30.08 \pm 5.328	t=-0.687 p=0.495
Protection from reproductive organ and breast cancer	8.13 \pm 4.233	7.83 \pm 3.996	t=0.766 p=0.447
General health behaviors to protect reproductive health	28.82 \pm 6.660	32.07 \pm 7.449	t=-3.283 p=0.002
Protection from GTI	48.40 \pm 4.996	47.58 \pm 6.323	t=1.016 p=.314
Protection from unintended pregnancies	10.93 \pm 2.393	10.32 \pm 2.771	t=1.853 p=0.069
GSE Total Score	46.37 \pm 8.727	45.36 \pm 8.576	t=1.119 p=0.268

Table 6. Comparison of the Mean and Self-Efficacy Scale Scores of the Experimental and Control Groups for the Determining of the Reproductive Health Protective Attitudes Scale According to Post-Test Measurements

Scale and Sub-Dimensions	Experimental group Mean \pm SS	Control Grup Mean \pm SS	Test and materiality
RHPAS Total Score	150.23 \pm 16.492	130.37 \pm 17.289	t=-6.441 p=0.000
Behavior of going to the doctor on issues related to reproductive health	32.42 \pm 5.490	30.08 \pm 5.328	t=-2.362 p=0.020
Protection from reproductive organ and breast cancer	13.63 \pm 4.562	7.83 \pm 3.996	t=-7.408 p=0.000
General health behaviors to protect reproductive health	36.45 \pm 6.895	32.07 \pm 7.449	t=-3.345 p=0.001
Protection from GTI	53.62 \pm 5.053	47.58 \pm 6.323	t=-5.774 p=0.000
Protection from unintended pregnancies	12.07 \pm 6.772	10.32 \pm 2.771	t=-1.853 p=0.066
GSE Total Score	47.60 \pm 11.411	45.36 \pm 8.576	t=-1.211 p=0.228