Effect of Coping with Anxiety Education on Women's Anxiety Level

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Abstract

Objective: This research was conducted for the purpose of determining the effect of coping anxiety education on women's anxiety level.

Method: The research population was comprised of 174 women who were in families being followed as part of the Community Health Nursing course by 46 senior nursing students and who were registered at two Primary Health Care Clinics between April 14 and May 14, 2007. The research sample was comprised of 160 of these women, 80 of whom were in the education group and 80 in the control group. Coping with anxiety education was given to the education group in two sessions for a total of two hours and was given an education booklet. In the education, explanation, question-answer and demonstration techniques were used.

Results: The difference in the before and after coping with anxiety education Beck Anxiety Inventory (BAI) score means for the education group was found to be significant (p<0.001) but not for the control group (p>0.05).

Conclusion: Findings that were obtained show that anxiety management training in two one-hour sessions with a two week interval was effective in lowering women's anxiety level.

Keywords: Anxiety, coping with anxiety education, woman.

Anksiyete ile Başetme Eğitiminin Kadınların Anksiyete Düzeylerine Etkisi
Özet

Amaç: Araştırma anksiyete ile baş etme eğitiminin kadınların anksiyete düzeylerine etkisini belirlemek amacıyla yapılmıştır.

Yöntem: Kontrol gruplu ön test son test yarı deneysel düzende yapılan araştırmanın evrenini 14 Nisan - 14 Mayıs 2007 tarihleri arasında iki sağlık ocağı bölgesinde 4. sınıf Halk Sağlığı Hemşireliği dersini alan 46 öğrencinin izlem yaptıkları ailelerde bulunan, 18 yaş üstü, 174 kadın oluşturmuştur. Araştırmanın örneklemini ise 80 eğitim, 80 kontrol grubu olmak üzere 160 kadın oluşturmuştur. Eğitim grubuna iki oturum halinde toplam 2 saat süren anksiyete ile başetme eğitimi verilmiş ve eğitim kitapçığı dağıtılmıştır. Eğitimde, anlatma, soru-cevap ve demonstrasyon tekniklerinden yararlanılmıştır. Veriler anket formu ve Beck Anksiyete Envanteri (BAE) ile toplanmıştır.

Bulgular: Eğitim grubunun anksiyete ile başetme eğitimi öncesi ve sonrası BAE puan ortalaması arasındaki fark anlamlı (p< 0.001), kontrol grubunun öntest ve sontest puan ortalamaları arasındaki fark anlamsız bulunmuştur (p> 0.05).

Sonuç: Elde edilen bulgular; 2 hafta arayla 1'er saatlik anksiyete ile başetme eğitiminin kadınların anksiyete düzeylerinin düşmesinde etkili olduğunu göstermiştir.

Anahtar Sözcükler: Anksiyete; anksiyete ile başetme eğitimi, kadın.

Introduction

Anxiety is a term used for a group of changes that occur automatically in emotional, behavioral and physical areas in the face of threat or danger and to define the subjective experience of these. Individuals experiencing anxiety feel anxious, worried, nervous and tense, and they are unable to focus on anything other than the situation or object creating danger. Over time anxiety, no matter how severe, that is chronic or repetitive exhausts the individual, disturbs their concentration, creates difficulty falling asleep and staying asleep, and makes the individual tense, nervous and impatient (Kaplan and Sadock 2004, Kercher and Tobias 2009). Anxiety disorders are one of the health care problems that significantly increase requests for health care services (Zeidner 1998).

Anxiety is an emotional disorder seen in children, adults, and the elderly, and most often in women, which disturbs individuals' health and also has a negative effect on their social and professional lives (Stein and Hollander 2002). Anxiety disorders are more common in women than in men by at least two to one and are among the most prevalent, disabling and chronic of all the psychiatric disorders (Townsend 2003, Stein et al. 2005).

Statement of The Problem and Purpose of The Study

The results of one of the most comprehensive studies on the prevalence of anxiety disorders was conducted by Sartorius et al. (1993) and published by the World Health Organization (WHO) in 1996. In this study conducted in 15 centers in 14 countries which screened 25,000 adults for psychiatric disorders a prevalence of 10.5% was found for anxiety disorders. In a comorbidity study conducted in the US a one-year anxiety prevalence of 17.3% was found (Kessler et al. 1994). In a study conducted by Nguyen et al. (2005) with 15-24 year old individuals in Canada the life-long incidence of anxiety was determined to be 12.1%. In a study by Earle and Kelly (10) generalized anxiety syndrome was reported by 12% of residents, and 2% met the criteria for panic syndrome. In the study by (Trollor et al. 2007) which described the 1- and 12-month prevalence of mental disorders in individuals 65 years of age and over in Australia, women experienced higher rates of generalized anxiety disorder and had lower rates of substance abuse compared with men.

There are no large scale studies reported on the prevalence of anxiety in Turkey, however there have been some studies with small sample groups. In a study by Rezaki et al.(1995) which

examined the prevalence of emotional disorders in a total of 14 countries the anxiety prevalence for Ankara was found to be 0.9%. In a study by Oğuzhanoğlu et al. (1993) 22.9% of patients who came to an outpatient clinic were found to have the diagnosis of anxiety and of these 45.9% were under 30 years old and 67.2% were female.

In some research education and care given to individuals has been determined to decrease their anxiety levels (Wachelka and Katz 1999, Garland 2001, Masia et al. 2001, Erci et al. 2003, Jallon et al. 2008). Coping-skills procedures, techniques which teach the individual an active skill for dealing with a variety of anxiety-provoking situations, may be an effective method of preventing fears and anxiety reactions. Coping-skills training techniques reviewed include anxiety management training, applied relaxation, cue-controlled relaxation, self-control desensitization, and self-statement modification (Sanders and Wills 2003).

It is clearly an important duty of health care workers to prevent anxiety which is so widespread and to ensure its early diagnosis and treatment. Coping with anxiety education is spreading in primary health care facilities and can help individuals at risk to cope with their symptoms of anxiety at an early stage. For these reasons this research was conducted for the purpose of determining the effect of coping with anxiety education on women's level of anxiety.

Method

Participants

The research population was comprised of 174 women who were in families being followed as part of the Community Health Nursing course by 46 senior nursing students and who were registered at two Primary Health Care Clinics between April 14 and May 14, 2007. The sample group was determined to be the women who agreed to participate voluntarily from the population. Half (87) of the women were put in the experimental group and the remaining 87 in a waiting list control group. To ensure balance between the groups for controllable variables women who met these variables were put in the groups. For this reason the number of women was limited to 80 for the experimental and waiting list control groups. The research sample was comprised of 160 women, 80 of whom were in the education and 80 in the control group.

Design

The research was conducted with an waiting list control group in a pretest-posttest quasi experimental design. An attempt was made to ensure balance for controllable variables when forming the experimental and control groups. The controlled variables in the study were the women's age, Beck Anxiety Inventory Score Mean, education level, marital status, number of children, and status of having an income-generating job.

Evaluation of Coping with Anxiety Education

Beck Anxiety Inventory (BAI): this tool is used for the purpose of determining symptoms of anxiety in adolescents and adults. It is a 21-item 0-3 point likert-type instrument. The inventory was developed by Beck et al. (1988) and the validity and reliability study for the Turkish adaptation of the inventory was conducted in 1998 by Ulusoy et al. (1998). Its test-retest reliability was been determined to be r=0.57 and its internal consistency coefficient to be 0.93 (Ulusoy et al. 1998). In this study the internal consistency coefficient was 0.89. An elevation of the score from the instrument shows the severity of anxiety experienced by the individual.

Data Collection and Education Administration

First the necessary permissions were taken from the institutions. Students who would give the education were given detailed information by the researchers about the research content, purpose and education that would be given. A

questionnaire to determine demographic characteristics and Beck Anxiety Inventory were administered as a pretest to the education and control group individuals. Immediately after the pretest was administered the educators gave the women in the education group a one hour, one-on-one education on methods of coping with anxiety. To reinforce the education that had been given, the women in the education group were given an education booklet. One week after the education had been given the educators met with the women again to evaluate the education that had been given and to answer their questions, and the education was reinforced using question and answer and discussion methods. One month after the education had been given the BAI was repeated as the posttest to both the education and waiting list control group women. At the end of the research, taking ethical principals into consideration and for the purpose of spreading coping with anxiety education in primary health care facilities, the control group women and primary health care center personnel were given the educational booklet. After the posttest the waiting list control group was also given coping with anxiety education.

Educators

Education was given by 46 students and three clinical instructors during the clinical portion of the Community Health Nursing course at School for Health which is in a city in the Mediterranean Region.

Education Program and Booklet Contents

The education program and booklet were prepared by the researchers in light of literature information. The contents of the education program and booklet were the definition of anxiety, its types, factors causing it, its effects and symptoms, and methods of coping with it. Education specifically about methods of coping with anxiety included relaxation exercises to decrease tension, recognizing troubling feelings

and thoughts, looking at them and dealing with them in a more realistic manner, turning negative thoughts into positive ones, systematically developing insensitivity to situations and events that create anxiety, being at peace with oneself and doing what is best for oneself. During the education, educational material prepared from colorful poster paper and the educational booklet were used. The study was explained and question-answer and demonstration techniques were used.

Data Analysis

Data were coded and statistical analyses were done in the SPSS 11.5 packet program. The Shapiro Wilk test was used to determine whether the continuous variables were normally distributed or not and it was found that the continuous variables were not normally distributed. In order to compare study and control groups in terms of control variables, for continuous measurements the Mann-Whitney U test and for categorical variables the Pearson Chi-square and Likelihood Ratio Chi-square tests were used. Descriptive statistics (min, max, median, % 25-75 percentils, mean, standard deviation, the number and percentage) were calculated. for socio-demographic variables examined in the research. Comparison of Pretest and Posttest Beck Anxiety Inventory Score Means of Education and Waiting List Control Groups with Themselves Wilcoxon Signed Ranks test was used.

Limitations of The Study

Used sampling method is being not likelihood, sample group is being small that limited the generalizability of the results and could be generalized only for the research group

Results

The mean age for the women in the education group was 33.61 and in the waiting list control

group was 37.28. The education group women's pretest BAI score mean was 19.94±12.53 and the waiting list control group women's was 16.99±8.31. In the education group 97.5% of the women were married and 2.5% were single; in the waiting list control group 93.8% were married and 6.3% were single. The women in the education and waiting list control groups were not found to be significantly different for the controlled variables other than educational level and the groups were determined to be homogeneous (p>0.05; p=0.002) (Table 1).

Tablo 1: Comparison of Education and Waiting List Control Group According To Controlled Variables

Controlled variables	Education group			Waiting list control group			
	Min-max	Median [% 25-75 percentils]	X+SD	Min-	Median [% 25-75 percentils]	X+SD	P value
Age	20-60	32.5	[27-37.75] 33.61±9.13	18-73	34	[26-46.75] 37.28±14.85	0.37
Pretest beck anxiety inventory score means	3-63	16.50	[10-28.75] 19.94±12.53	2-40	16	[11-21.75] 16.99±8.31	0.31
	n		%	n		%	
Education level							
Cannot read or write	0		0	13		16.3	X^2=18.771 df=5 p=0.002
Can read and write	7		8.8	12		15.0	
Primary school	49		61.3	37		46.3	
Middle school	8		10.0	7		8.8	
High school	11		13.8	10		12.5	
University	5		6.3	1		1.3	
Marital status							
Married	78		97.5	75		93.8	X^2=1.345 df=1 p=0.246
Single	2		2.5	5		6.3	
Number of children							
None	7		8.8	15		18.8	X^2=9.636 df=6 p=0.067
1-2	51		63.8	37		46.3	
3-4	21		26.3	21		26.3	
5-6	1		1.3	7		8.8	
Status of having an income producing job							
Employed	3		3.8	4		5	X^2=11.84 df=1 p=0.699
Not employed	77		96.3	76		95	

Tablo 2: Comparison of Pretest and Posttest Beck Anxiety Inventory Score Means of Education and Waiting List Control Groups with Themselves

Groups	Min-max	Median [% 25-75 percentils]	± SD	P value
Education group				
Pretest	3-63	16.50 [10.00-28.75]	19.94±12.53	< 0.001
Posttest	0-37	11.00 [7.00-19.00]	13.78±9.11	
Waiting list control group				
Pretest	2-40	16.00 [11.00-21.75]	16.99±8.31	0.063
Posttest	2-51	13.50 [8.25-21.75]	15.33±9.74	

The BAI scores for the women in the education group before receiving coping with anxiety education were between three and 63 and after the education the lowest score was 0 and the highest was 37. In the waiting list control group the women's BAI pretest score means were between two and 40 and in the posttest were between two and 51 (Table 2).

In Table 2 it was determined that the education group women's BAI score mean before education about coping with anxiety was 19.94±12.53 and after education was 13.78±9.11. The difference between the education group's pretest and posttest score means was found to be statistically significant (p<0.001). The waiting list control group women's pretest BAI score mean was 16.99±8.31, and their posttest was 15.33±9.74. The difference between the waiting list control group's pretest and posttest score means was not found to be statistically significant (p=0.063).

The findings obtained show that coping with anxiety education in two one-hour sessions with a two week interval was effective in lowering women's anxiety level.

Discussion

In similar research it has been determined that education and care given to individuals decreases their anxiety level. In a study by Erci et al. (2003) coping with anxiety education was given to adolescents and the experimental group's post-education anxiety score mean fell by a significant degree. In a study by Masia et al. (2001) six adolescents with social anxiety disorder were treated in a 14-session group treatment program conducted at their school. Clinician severity ratings, as measured by the Anxiety Disorders Interview Schedule for Children for DSM-IV, were decreased significantly after intervention.

In the study by Wachelka and Katz (1999) eleven students completed an 8-week long treatment, which consisted of progressive muscle relaxation, guided imagery, self-instruction training, as well as training in study and test-talking skills. They found that the treated group showed significant reductions in test anxiety, as well as improvement in study skills and academic self-esteem. In a study by Jallon et al. (2008) relaxation guided imagery intervention was administered to women in the second trimester of pregnancy. At the end of 12 weeks the women's anxiety level was observed to decrease. Our study is consistent with these results.

In conclusion women who are given coping with anxiety education can be helped to cope with their symptoms of anxiety at an early stage; coping with anxiety education given by nurses

can be spread to other primary health care facilities; the number of studies to determine the effectiveness of these types of planned educational programs for women can be increased; and nursing students' participation in these types of planned interventions can be used to help them gain experience before graduation.

Authors Contributions

The study design: S T

Data collection and / or analysis: S T, B K, G Y

Preparation of the manuscript: S T, B K, G Y

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