

THE EFFECT ON KNOWLEDGE AND ATTITUDE LEVELS OF FAMILY PLANNING EDUCATION GIVEN TO SYRIAN REFUGEE WOMEN

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Abstract

The use of family planning services prevents about one in three pregnancy-related deaths and 44% of neonatal deaths. The study was conducted with the aim of assessing the effectiveness of family planning education given to refugee women coming from Syria to Hatay province in Turkey. The research was planned as a quasi-experimental study with a non-randomized control group and a pre/post-test design. The experimental group were interviewed at the beginning, right after training and after one month. The control group were not given education. A personal information form, a Family Planning Information Form, and the Family Planning Attitude Scale were used to collect data. Data analysis was performed with the use of frequencies, percentages, means, minimum and maximum values, medians, standard deviations, the chi-square test, and the paired sample t test. After providing education to the Syrian refugee women, family planning knowledge and attitudes had significantly improved in the experimental group compared to the control group ($p<0.05$). The family planning education program, which was given while taking into account cultural considerations and native language, significantly developed the women's knowledge and attitudes. It was recommended that family planning education programs should be included in all clinics focusing on women's health.

Keywords: Refugees; Women's Health; Nurses; Knowledge and Attitude; Family Planning.

SURİYELİ MÜLTECİ KADINLARA VERİLEN AİLE PLANLAMASINA YÖNELİK EĞİTİMİN BİLGİ DÜZEYİ VE TUTUMA ETKİSİ

Öz

Aile planlaması hizmetlerinin kullanımı, gebeliğe bağlı her üç ölümden birini ve yenidoğan ölümlerinin %44'ünü engellemektedir. Çalışma, Türkiye'de Suriye'den Hatay iline gelen mülteci kadınlara verilen aile planlaması eğitiminin etkinliğinin değerlendirilmesi amacıyla yapılmıştır. Araştırma, randomize olmayan kontrol gruplu, ön/son test deseninde yarı deneysel bir çalışma olarak planlanmıştır. Deney grubu ile eğitimin başında, eğitimden hemen sonra ve bir ay sonra görüşme yapılmıştır. Kontrol grubuna eğitim verilmemiştir. Veri toplamak için kişisel bilgi formu, Aile Planlaması Bilgi Formu ve Aile Planlaması Tutum Ölçeği kullanılmıştır. Verilerin analizi, frekans, yüzde, ortalama, minimum ve maksimum değer, medyan, standart sapma ki-kare testi ve bağımlı örneklem t testi kullanılarak yapılmıştır. Suriyeli sığınmacı kadınlara eğitim verildikten sonra, deney grubunda kontrol grubuna göre aile planlaması bilgi ve tutumlarında anlamlı düzeyde iyileşme görülmüştür ($p<0.05$). Kültürel unsurlar ve anadil dikkate alınarak verilen aile planlaması eğitim programı kadınların bilgi ve tutumlarını önemli ölçüde geliştirmiştir. Kadın sağlığına odaklanan tüm kliniklerde aile planlaması eğitim programlarına yer verilmesi önerilmektedir.

Anahtar Kelimeler: Mülteciler; Kadın Sağlığı; Hemşireler; Bilgi ve Tutum; Aile Planlaması.

1. INTRODUCTION

Family planning (FP) is an important health service, which plays a role in preventing unwanted pregnancies, increasing the quality of life, supporting gender equality, raising the level of public health, preventing mother and child deaths (1), and reducing poverty. The World Health Organization (WHO) (2019) defines it as helping couples to anticipate and attain their desired number of children and the spacing and timing of their births (2). The aim of FP is to protect family and public health in general, and specifically the health of the mother and baby. In the world, FP services are used by individuals of reproductive age between 15 and 49 years old. In 2017 in the world in general, 63% of women who were married or who had male partners used FP methods, but in Turkey, according to the latest studies, 70% of women of childbearing age do not use any FP method (3).

The proportion of use of modern FP methods among war refugees coming from Syria to Turkey was found to be 27.2%. The low proportion of use of modern methods among refugee women is noted in the literature (4).

Recently, even though the use of FP methods has become more general, it is affected by many sociodemographic and sociocultural factors (5). Age, status, education level, economic status, social security, ethnic origin, social class, religion, language, shame, fear (6), state of relationships, partner's agreement to the method used, pregnancy and number of children, years of marriage, thoughts of pregnancy, satisfaction with the method (7) and attitude to FP (4) all affect the use of a method (8).

Also, a lack of motivation to use FP is associated with accessibility problems, fear of side-effects, religious (9) and social considerations, misinformation and lack of education (2,9). In addition, the choice of FP methods generally depends on the correct knowledge and the awareness of the woman. A lack of information is accepted as one of the main obstacles to the continued use of birth control methods in Turkey (4). Studies have shown that education on FP education is needed (6, 9 10, 11), and it has been emphasized that particularly in developing countries, attitudes and practices relating to FP must be changed for a better quality of life (9).

Education interventions and counselling services along these lines may increase awareness of FP, enable conscious decisions, reduce pregnancies and their complications in older women, and increase the use of FP methods. In this way, the efficiency of health workers and institutions may be increased.

Also, another important point about this study is that few studies have been conducted on the refugees coming to Turkey from Syria (4,12). In this regard, nurses must meet the needs of refugees for FP services, education and counselling on FP methods must be provided, and the sustainability of this service must be monitored (4, 9). In order to be successful, nurses must take account of the cultural practices of the target group when determining the education intervention.

This research had the aim of assessing the effectiveness of education on FP services given to refugee women, and was conducted as a quasi-experimental study with a non-randomized control group and a pre/post-test design.

Research hypotheses

1. FP education given to Syrian refugee women has an effect on their knowledge level.
2. FP education given to Syrian refugee women has an effect on their attitude.

2. METHODS

2.1. Sample and Data Collection

The population of the study was women between 15 and 49 years of age who had migrated from Syria to Hatay. According to 2018 data from the Turkish Interior Ministry Migration

Administration General Directorate, 110,729 refugee women in the 15-49 year age group live in the provincial capital of Hatay (13). In determining sample size, the program G*Power 3.1 was used. Analysis showed that for medium effect size (0.5), 0.05 margin of error and 80% statistical power, the total number of participants should be 102, and in accordance with this, the study sample was formed with 112 (experimental group=56, control group=56) refugee women. Among the participants of the experimental group, one woman in the post-test and three women in the follow-up test could not be reached. In the control group, four participants were excluded from the study due to incomplete answers to the questions in the data collection tools in the post-test. Thus, the study was concluded with 104 participants; the experimental group (n=52) and the control group (n=52).

Collection of data was performed between December 2019 and March 2020 by face to face interviews with the participants with the help of an interpreter who could speak Turkish and Arabic well. The interpreter was a final year student at the Nursing Department who had taken classes in Gynecological Nursing and Family Planning. The researchers explained the data collection form in detail to the interpreter. Before beginning the study, the comprehensibility of the questions was assessed by interview with seven people who conformed to the study criteria. No change was made to the questions, and they were later given to the participants by the interpreter in face to face interviews. The seven people in the pilot interview were not included in the study.

Inclusion criteria

Refugee women were included in the study who were between 15 and 49 years of age, who were married, who had no hearing, speaking or mental problems, who could communicate with the interpreter, who knew Arabic and who answered the questions independently.

Exclusion criteria

Women who had no need of FP methods – those who were in menopause or who were infertile – were excluded from the study.

2.2. Data Collection Form

Personal Information Form: This form was devised by the researchers by scanning the literature (4, 9, 11, 14), and consisted of 25 questions on age, education level, profession, husband's profession, income status, family structure, social security, smoking, chronic illness and obstetric characteristics, and assessed the level of knowledge of family planning, sources of information, methods used and frequency of use.

Family Planning Information Form: This form was developed by the researchers in line with the relevant literature (6,15) to evaluate the knowledge of the participants concerning FP methods. It consisted of 28 items on the definition of FP, the interval between pregnancies, hormonal methods, barrier methods, the effect mechanisms of intrauterine devices and natural methods, rules for use, positive and negative aspects, and information on use. The use of Minipill, Norplant and diaphragm methods is very low in Turkey, and so these were not included on the form. The items were answered with by selecting "correct", "incorrect", or "I don't know". A correct answer scored 1, and a wrong answer or "I don't know" scored 0. Incorrect statements (items 2, 3, 9, 11, 16, 17, 20, 24, 26 and 27) were scored in reverse. The lowest possible score was 0, and the highest was 28. A high score indicated a higher level of knowledge of FP.

Family Planning Attitude Scale (FPAS): This scale was developed by Örsal and Kubilay to determine the attitude of individuals to FP (16). The scale is of five-way Likert type, with 34 items and three sub-dimensions. The three sub-dimensions concern society's attitude to FP, the attitude to FP methods, and the attitude to birth. The sub-dimension of society's attitude to FP has 15 items (15-75 points), the attitude to FP methods has 11 items (11-55 points), and the attitude to birth has eight items (8-40 points). The total possible score ranges from 34 to 170 points. A higher score indicates a

more positive attitude to FP. The Cronbach alpha value of the scale is reported as 0.90, and in this study it was found to be 0.84.

2.3. Pilot Study

A pilot study was carried out after developing the tools and before starting the data collection phase. The pilot study was carried out on seven women who were not included in the main study sample. No changes were made to the questions. The time required for filling in the questionnaire was estimated to be 15–20 min.

2.4. Intervention

Intervention group interviews

Interviews with the experimental group were carried out in three stages.

Phase I (Interview stage, pre-test)

At this stage, all of the women who met the inclusion criteria were informed about the study and their written approval was obtained. A data collection form was given to each of the women, and they were asked to complete it carefully. If a woman was illiterate, the form was read out to her and filled in by the researchers. Application of the data collection form (the pre-test) took approximately 15-20 minutes. Before passing to the second phase, the participants were divided into groups in order to increase the effectiveness of the education, with approximately ten women in each group. The place and time of the education session was decided with the women in the groups.

Phase II (Application stage, post-test)

At the second stage, an education session of approximately 45 minutes was given to the women, who were invited to come as groups. These sessions were held at schools which were near to the refugee women's homes. Before starting the education, the hall where the education was to take place was suitably arranged by the researchers so as to be quiet, light, and closed to the outside. The education included an introduction to contraceptive methods, the use and importance of contraceptive methods, the types of contraceptive methods, classification of contraceptive methods, the advantages and disadvantages of contraceptive methods, the side-effects and complications of contraceptive methods, and the warning signs and following them up. The content of the education was formed in accordance with the Family Planning Methods Application Guide of the Turkish Ministry of Health (17).

The education was conducted along with a powerpoint presentation using a computer and a projector, and audiovisual means and pictures were used. Techniques of giving information, questions and answers, problem solving and demonstration were used in the sessions. At the end of the education session, all of the data collection forms that were given in the first stage were given again as a post-test.

Phase III (Assessment stage, follow-up test)

One month after the education program was completed, all participants were once again given the data collection form as a follow-up test to determine whether the effect of the education continued. The participants in the groups were informed that the study was finished.

Control group interviews

Interviews with the control group were conducted so as to be in parallel in terms of time with the application of the pre-test and post-test to the experimental group.

Phase I (Pre-test)

At this stage, all of the women who met the inclusion criteria of the study were informed about the research and their written consent was obtained. Each woman was given the data collection form and asked to answer it carefully. For women who were illiterate, the researchers read out and completed the form. Application of the data collection form (pre-test) took approximately 15-20 minutes.

Phase II (Post-test)

In parallel with the time of the post-test to the experimental group, the participants were once more given the data collection forms as a post-test. Participants in the group were informed that the study was finished.

2.5. Data Analysis

Analysis of data was performed using the program SPSS (Statistical Package for Social Sciences) 21.0. Data was evaluated for conformity to normal distribution with the Kolmogorov Smirnov test. Descriptive data was presented as frequencies, percentages, means, standard deviations, median and minimum-maximum values. The chi-square test was used to determine the correlation between the sociodemographic and obstetric characteristics of the intervention and control groups, and the independent samples t-test was used to analyze the differences between the intervention and control groups in the FP knowledge and attitude scores. In addition, the paired samples t-test was applied to determine differences among the pre-test and post-test scores of the intervention and control groups. A level of statistical significance of $p < 0.05$ was accepted.

2.6. Ethical Consideration

Written permission was obtained from the ethics committee for non interventional clinical research of a university (Protocol No: 77192459-050.99-E.24464 31.10.2018) participants and head of the Migration Policies and Projects Office of the General Directorate of the Turkish Interior Ministry.

3. RESULTS

Table 1 shows refugee participants' socio-demographic and obstetric characteristics. One hundred four refugee women completed the study. The mean age of refugee women in the intervention group was 31.52 (± 7.64), and the mean age of marriage was 19.62 (± 3.11). Most was housewives. Also, 44.2% of the refugee women experienced abortion and 17.3% curettage and 51.9% stated that them used FP method. The mean age of refugee women in the control group was 30.73 (± 8.23), and the mean age of marriage was 18.45 (± 2.39). Most was housewives. Also, 25% of the refugee women experienced abortion and 13.5% curettage and 46.2% stated that them used FP method (Table 1). There was no significant difference in age, age in marriage, education, professional status, professional status of husband, family structure, residence time in Turkey, abortion experience, curettage experience and FP methods used between the groups ($p > 0.05$; Table 1).

Table 1. The Socio-Demographic and Obstetric Characteristic of Syrian Refugee Women

	Intervention group		Control group		t / p value
Variables	Mean ± SD		Mean ± SD		
Age (year)	31.52 ± 7.64		30.73 ± 8.23		t=0.496, p=.621
Age of marriage (years)	19.62 ± 3.11		18.45 ± 2.39		t=1.982, p=.051
Obstetric features	Median (min-max.)		Median (min-max.)		
Number of pregnancies	4.00 (0-13)		3.00 (0-18)		
Number of live births	3.00 (0-9)		3.00 (0-10)		
Number of living children	3.00 (0-9)		3.00 (0-10)		
Number of normal births	3.00 (0-9)		3.00 (0-10)		
	n	%	n	%	X ² / p value
Educational status					
≤ 8 years	37	71.1	8	84.6	p=0.257*
≥ 9 years	15	28.9	44	15.4	
Professional status					
Housewife	43	82.7	41	78.8	p=1.000*
Officer / Manual worker /other	9	17.3	11	21.2	
Professional status of husbands					
Manual worker	28	53.8	37	71.2	X ² =0.002
Officer/artisan/unemployed/other	24	46.2	15	28.8	p=0.962**
Family structure					
Nucleus family	33	63.5	35	67.3	X ² =0.553
Extended family	19	36.5	17	32.7	p=0.457**
Time in Turkey (years)					
<1 year	11	21.2	10	19.2	X ² =0.942 p=.919***
1-5 years	20	38.4	21	40.4	
>5 year	21	40.4	21	40.4	
Experienced abortion					
Yes	23	44.2	13	25.0	X ² =0.650 p=0.420**
No	29	55.8	39	75.0	
Experienced curettage					
Yes	9	17.3	7	13.5	p=0.090*
No	43	82.7	45	86.5	
Using a method of family planning					
Yes	27	51.9	24	46.2	X ² =1.997 p=0.158**
No	25	48.1	28	53.8	
Total	52	100.0	52	100.0	

SD=Standard deviation

* Fisher examp test, **Pearson chi square test ***Likelihood ratio

Repeated test results of FP knowledge and attitude scores of refugee women in the interventional group are given in Table 2. After the education program, the FP knowledge and attitude score of the interventional group increased and a statistically significant difference was found between the pre-test and post-test scores ($p < 0.001$). In addition, the statistically significant difference was found between the pre-test and follow-up test scores ($p < 0.001$; Table 2).

Table 2. Repeated Test Scores of Syrian Refugee Women in The Interventional Group

	Pre-test	Post-test	Follow-up test	t, p* value	t, p** value
	Mean ± SD	Mean ± SD	Mean ± SD		
Total FP knowledge score	14.63 ± 3.11	17.88 ± 1.96	16.51 ± 2.90	t=-8.329, p<0.001	t=-3.932, p<0.001
Total FP attitude score	104.53 ± 20.52	138.72 ± 13.69	130.01 ± 10.40	t=-12.109, p<0.001	t=-12.109, p<0.001
Community's attitude towards FP	47.26 ± 10.27	65.50 ± 8.20	59.42 ± 3.37	t=-10.798, p<0.001	t=-8.467, p<0.001
Attitude towards FP methods	32.03 ± 7.61	41.98 ± 4.75	40.82 ± 4.41	t=-9.716, p<0.001	t=-8.848, p<0.001
Attitude towards pregnancy	25.23 ± 5.82	30.17 ± 6.25	29.74 ± 6.31	t=-7.204, p<0.001	t=-10.010, p<0.001

* The comparison of scores pre and post tests in the interventional group

**The comparison of scores pre and follow-up tests in the interventional group,

Pre-test and post-test scores of FP knowledge and attitude of refugee women in the control group are given in Table 3. No significant difference was found between the pre-test and post-test scores in the control group for the FP knowledge and attitude (Table 3).

Table 3. The Mean Pre-Test and Post-Test Scores of Syrian Refugee Women in The Control Group

	Pre-test	Post-test	t, p value
	Mean ± SD	Mean ± SD	
Total FP knowledge score	15.44 ± 3.12	14.76 ± 2.92	t=1.869, p=0.067
Total FP attitude score	104.00 ± 9.20	103.44 ± 9.46	t=1.244, p=0.219
Community's attitude towards FP	46.96 ± 6.48	46.30 ± 6.16	t=1.999, p=0.051
Attitude towards FP methods	32.98 ± 2.83	32.69 ± 3.15	t=1.202, p=0.235
Attitude towards pregnancy	24.05 ± 4.10	24.44 ± 4.34	t=-1.806, p=0.77

When the FP knowledge and attitude pre-test scores of the intervention and control groups were examined, no statistically significant difference was found between the two groups ($p>0.05$), but a statistically significant difference was found between their post-test scores ($p<0.05$, Table 4).

Table 4. The Mean Pre-Test and Post-Test Scores of Syrian Refugee Women in The Intervention and Control Groups

	Interventional group		Control group			
	Pre-test	Post-test	Pre-test	Post-test		
	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	t, p*	t, p**
Total FP knowledge score	14.63 ± 3.11	17.88 ± 1.96	15.44 ± 3.12	14.76 ± 2.92	t=-1.283, p=0.203	t=5.219, p<0.001
Total FP attitude score	104.53 ± 20.52	138.72 ± 13.69	104.00 ± 9.20	103.44 ± 9.46	t=0.226, p=0.822	t=15.234, p<0.001
Community's attitude towards FP	47.26 ± 10.27	65.50 ± 8.20	46.96 ± 6.48	46.30 ± 6.16	t=0.264, p=0.793	t=14.185, p<0.001
Attitude towards FP methods	32.03 ± 7.61	41.98 ± 4.75	32.98 ± 2.83	32.69 ± 3.15	t=-0.733, p=0.465	t=11.726, p<0.001
Attitude towards pregnancy	25.23 ± 5.82	30.17 ± 6.25	24.05 ± 4.10	24.44 ± 4.34	t=1.141, p=0.257	t=5.394, p<0.001

* The comparison of scores pre-test in the intervention and control groups

**The comparison of scores post-test in the intervention and control groups

4. DISCUSSION

The refugee women's use of health services in the country which they came from, the country's health infrastructure, the attitude of health personnel, access to health services, their socio-economic level and cultural factors all have an effect. Therefore, knowledge of the fertility characteristics of the Syrian women is important for planning reproductive health services for them, and for raising the quality of services. Between 2011 and 2019, approximately 450 000 children have been born in Turkey with the migration from Syria (18). Fertility levels are approximately 5.3 children per woman, and the average ideal number of children for currently married Syrian women between the ages of 15 and 49 is 4.1 (3). Similarly, it was reported in a study by Gümüş Şekerci and Aydın Yıldırım that the average number of pregnancies for each individual was four (4). This is similar to the average number of pregnancies found in our study group.

Researchers have also shown that Syrian women have more children after migrating (19), and that migration does not negatively affect their fertility. It is thought in these studies that refugee women try to increase their fertility in order to gain a place in migrant society (20). Also, other factors affecting fertility levels are social structure, social gender equality, socio-economic structure, education level, traditions, provision of and accessibility to health services, the women's employment status, the use and effectiveness of contraceptives, and knowledge and attitudes concerning contraceptive methods.

The data obtained in this study which shows a positive effect on the level of knowledge of FP of the education given to the Syrian refugee women (Table 2) supports the results of other similar studies (21). Also, it was stated in a study by Eittah and Amer (2019) that education was given on topics including "definition of methods to prevent pregnancy, the use and importance of methods to prevent pregnancy, types of pregnancy prevention methods, classification of methods to prevent pregnancy, their advantages and disadvantages, side effects and warning signs, and instructions for all contraceptive methods", and that there was distinct progress in the post-test scores in comparison with the pre-test. In addition, it was reported in a study by Ali et al. that education given increased the contraceptive knowledge of an intervention group by 30% (21). Studies have shown that education programs significantly increase women's knowledge and awareness of birth control methods. Thus, all women should be informed about the safety and convenience of modern FP methods.

It was shown in this study that the attitudes of the Syrian refugee women in the experimental group to FP services developed after the education. This may mean that the development occurring in the level of a person's knowledge concerning FP services would result in better behavior on the same subject. The increased scores in the post-test and the follow-up test in comparison with the pre-test show that FP education can be a useful means of developing not only a person's knowledge, but also their attitudes. In a study by Tun and Sukartini, a significant difference was found between the knowledge and attitudes regarding FP and health beliefs of married men who had had health education on FP methods and those who had not had health education (22). Encouragement of a more positive attitude to FP by means of health education is of great importance in the acceptance of FP methods.

There is a strong need for the beliefs about the side effects of the use of contraceptives in refugees to be broken, for wrong beliefs concerning the application of FP to be removed (23,24) and for the negative attitude to girl children to be eliminated (4,12). Education campaigns should be conducted to provide information on the correct use and timing of these methods. Also, the participation of husbands should be encouraged in order to improve the health of their wives and children. Correct birth spacing will help to achieve family health.

4.1. Study Limitations

Among the limitations of this study are the non-randomized allocation of participants to the experimental and control groups, and the short observation period. Another limitation is that male

Syrian refugees were not included in the study, and therefore the views of the husbands were not included.

5. CONCLUSION

Education programs should be provided for all women on the safety and convenience of modern, long-term, recyclable contraception methods. Education given concerning people of different cultures can be used to improve the health of men and women. It is necessary for FP services to include all service units which focus on women's health. Health workers can also provide awareness by means of counselling, and can give information during their visits. Also, increasing the awareness of health personnel providing services to this group can support the achievement of success in providing accessibility by supporting language unity.

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