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Hala önlenemeyen önemli bir halk sağlığı sorunu: İstenmeyen gebelikler ve epidemiyolojisi**An important public health problem that cannot be prevented still: Unwanted pregnancies and its epidemiology**HASAN ULUBAŞOĞLU¹SAİME ŞAHİNÖZ²TURGUT ŞAHİNÖZ³PINAR ULUBAŞOĞLU⁴ Orcid ID:0000-0001-9157-0612 Orcid ID:0000-0003-0915-9344 Orcid ID:0000-0001-8489-8978 Orcid ID:0000-0001-7008-5028¹ T.C. Sağlık Bakanlığı Ankara Şehir Hastanesi, Kadın Doğum Hastanesi, Kadın Doğum Kliniği, Ankara, Türkiye¹ Ordu Üniversitesi, Tıp Fakültesi, Halk Sağlığı Anabilim Dalı, Ordu, Türkiye¹ Ordu Üniversitesi, Sağlık Bilimleri Fakültesi, Sağlık Yönetimi Bölümü, Ordu, Türkiye¹ T.C. Sağlık Bakanlığı Ankara Şehir Hastanesi, Genel Hastane, İç Hastalıkları Kliniği, Ankara, Türkiye**ÖZ**

Amaç: Bu araştırma, istenmeyen gebelikleri incelemek, risk gruplarına göre sıklığını ve nedenlerini belirlemek amacıyla planlanmıştır.

Gereçler ve Yöntem: Bu araştırma, doğum öncesi bakım almak için hastaneye başvuran 409 gönüllü evli hamile kadın üzerinde yürütülmüş olan kesitsel bir çalışmadır. Verilerin toplanmasında araştırmacılar tarafından geliştirilen anket formu kullanılmıştır. Verilerin değerlendirilmesinde yüzdeler, ortalama ve ki-kare testi kullanılmıştır.

Bulgular: İstenmeyen gebelik oranı %23,2 olarak tespit edilmiştir. İstenmeyen gebelik oranı yaşla birlikte azalmaktadır. Kadınların eğitim düzeyi arttıkça istenmeyen gebelik oranı azalmakta ve bu oran üniversite mezunlarında %18,5'e düşmektedir.

Sonuç: Bu çalışmada, istenmeyen gebelik oranının yüksek olması, kadınların çoğunun aile planlaması yöntemi kullanmıyor olması veya geleneksel aile planlaması yöntemleri kullanıyor olmalarından kaynaklanmaktadır. İstenmeyen gebelik oranının en yüksek olduğu risk grubunun genç kadınlar olduğu tespit edilmiştir. Geri çekme yöntemi özellikle genç kadınlarda yüksek olduğundan ve bu durum istenmeyen gebeliklere yol açabileceğinden çiftlere evlilik öncesi eğitim verilmesi gerekmektedir.

Anahtar kelimeler: Epidemiyoloji, aile planlaması, halk sağlığı, istenmeyen gebelikler

ABSTRACT

Aim: This study was planned to analyse the unwanted pregnancies and to determine the frequency and causes according to risk groups.

Materials and Method: This is a cross-sectional study conducted on 409 married volunteer pregnant women who applied to the hospital for prenatal care. A questionnaire prepared by the researchers was used for data collection. Percentage, mean, and chi-square test were used to evaluate the data.

Results: The rate of unwanted pregnancies was found to be 23.2%. The rate of unwanted pregnancy decreases with age. The unwanted pregnancy rate decreases as the education level of the woman increases and this ratio decreases to 18.5% among university graduates.

Conclusion: In this study, the high rate of unwanted pregnancies was since most of them were not using a family planning method or using traditional family planning methods. It was found that the risk group with the highest unwanted pregnancy rate was among young women. Since the rate of withdrawal method was high especially in young women and this can lead to unwanted pregnancies, it is necessary to give couples premarital education.

Keywords: Epidemiology, family planning, public health, unwanted pregnancies

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INTRODUCTION

Although there have been significant improvements in health services in our country in recent years, the rate of unwanted pregnancies is still high (1).

When the pregnancies that occurred within the last five years in Turkey was examined; 15% of pregnancies were found to be unwanted and 11% were earlier than planned (1). The rate of unwanted pregnancies is 40% worldwide and 13% of these pregnancies result in voluntary abortions (2).

There are many factors that cause unwanted pregnancies. These factors can be listed as follows: Woman being young and illiterate, lack of knowledge and experience about family planning, poverty, high cost of family planning methods, difficulties in access to health services and family planning methods, ineffectiveness of the family planning methods used, widespread use of traditional family planning methods, false beliefs and wrong practices about family planning, cultural characteristics such as preferring boys and wanting to have a son, woman's thought of low risk of conception, misbehaviour of spouses and family elders (such as wanting to have a son) and, most importantly, unmet need for family planning (3-6).

The need for unmet family planning and the resulting unwanted pregnancies are quite high in developing countries and a major public health problem (7).

The need unmet of family planning is the proportion of women (among women who can give birth) who do not use any contraceptive methods even though they want to prolong the time between births or terminate their fertility (8).

The usage of family planning methods worldwide is 64% and modern family planning methods usage rate is 57%. However, there are significant differences between countries. The family planning methods usage rate is 75% in North America, but it is as low as 33% in Africa (9, 10).

22% of married women want to prolong the time between births and 60% demand family planning because they no longer want children. The ratio of those who use family planning methods for these purposes is as follows; 18% and 52%. These data show that 12% of married women (4% want to prolong the time between births, 8% who no longer want children) do not use any family planning method because their family planning demand is not met (1).

In our country, the ratio of unmet need for family planning declined continuously and decreased to 6%. After 2013, it started

to increase again and reached to 12% in 2018 (1). In much research, it is stated that unmet need for family planning and unwanted pregnancies is still a major public health problem for Turkey (11-13).

Unmet family planning need is 18% worldwide but it rises to 50% in underdeveloped countries (4). Unmet need for family planning means unwanted pregnancies and voluntary miscarriages. This situation adversely affects both social welfare and demographic structure of societies.

This study was planned to analyse the unwanted pregnancies and to determine the frequency and causes according to risk groups.

MATERIALS AND METHODS

This is a cross-sectional study conducted on 409 married volunteer pregnant women who applied to the hospital for prenatal care. All married pregnant women who applied to Gümüşhane State Hospital and Samsun Training and Research Hospital between 01.11.2018-31.12.2018 and who accepted to participate in the study were included in the study and a sample was not selected. Before starting the research, the ethics committee approval dated 30.10.2018 and numbered 2018/8 was obtained from Gümüşhane University Scientific Research and Publication Ethics Committee and had been performed in accordance with the ethical standards described in an appropriate version of the 1975 Declaration of Helsinki, as revised in 2000. Informed consent of the participants was obtained (14). Before starting the research, institutional permission was obtained from both hospitals.

A questionnaire prepared by the researchers was used for data collection. The research data were obtained by the researchers by filling in the "pregnant questionnaire" to pregnant women who applied to Gümüşhane State Hospital and Samsun Education and Research Hospital to receive prenatal care between the dates 01.11.2018 and 31.12.2018 by face-to-face interview technique. Before filling out the questionnaire, pregnant women who accepted to take part in the research were informed about the purpose of the study.

Statistical package for social sciences was used in the analysis of the data. Percentage, mean, and chi-square test were used to evaluate the data. P value ≤ 0.05 (95% confidence interval) was considered significant.

RESULTS

The socio-demographic characteristics of pregnant women in the research group is shown in Table 1.

Table 1. The Socio-demographic Characteristics of Pregnant Women in the Research Group

Characteristic	N	%
Age groups	<20 years	10 2.3
	20–29 years	209 51.4
	30–39 years	160 39.1
	≥40 years	30 7.2
Educational Status	Illiterate	16 3.9
	Primary School	91 22.4
	Secondary School	94 22.9
	High School	132 32.3
	University Associate Degree +	76 18.5
Residential Place	Rural	58 14.2
	Urban	351 85.8
Family Type	Nuclear	382 93.4
	Extended	25 6.1
	Shattered	2 0.5
Economic Status of the Family	Bad	26 6.4
	Medium	358 87.5
	Good	25 6.1
Total	409	100.0

While 76.8% of the pregnant women stated that they became pregnant willingly in their last pregnancy, 23.2% of them stated that they became pregnant unwillingly.

It was determined that 99.8% of the women had heard about a contraceptive method, 62.6% of them had already used one of the methods before pregnancy and only 21.8% of them used an effective contraceptive method. When the pregnant women were asked about the family planning methods they knew, 27.2% of the pregnant women stated that they knew oral contraceptives, 19.2% knew condoms, 16.1% knew intrauterine devices, 13.0% knew withdraw, 5.7% knew injectables, 3.4% knew breast feeding, 3.1% knew implants, and 2.7% knew calendar method respectively.

53.5% of the pregnant women said that they were planning not to use any family planning method, 11.2% were planning to use condoms, 8.3% were planning to use oral contraceptives, 6.8% were planning to use intrauterine devices and 20.0% were planning to use other methods (withdraw, breast feeding, calendar method) as family planning method after pregnancy.

Characteristics of attitude to fertility and family planning implementations is shown in Table 2.

Table 2. Characteristics of Attitude to Fertility and Family Planning Implementations

Characteristics About Fertility and Family Planning Implementations	N	%
Unintentional pregnancies	95	23.2
Women who had heard about any contraceptive method	408	99.8
Women who used any contraceptive method before pregnancy	256	62.6
Women who used effective contraceptive method before pregnancy	89	21.8
Those who want to use modern family planning method after birth	108	26.4
Those who became pregnant first time	90	22.0
Those who became pregnant 4+ time	125	30.6
The women whose period between the last two pregnancies is less than two years	83	20.3
Women who have made spontaneous abortion previously	112	27.4
Women who have made medical abortion previously	54	13.2
Women who have 3+ alive children	68	16,6
Those who don't want more children	163	39.9
Those whose husband do not want more children	186	45.5

Proportion of pregnant women with less than two years between the last two pregnancies was 20.3%. The average of the period between the last two pregnancies of the pregnant women was 35.98 ± 19.41 months.

It was also determined that 39.9% of the women did not want any children in the future (Table 2).

Unwanted pregnancy rates according to the identified risk

groups is shown in Table 3.

Table 3. Unwanted pregnancy rates according to the identified risk groups (n = 95)

Risk Groups	N	%	χ^2	p
Women under 20 years of age	4	40.0	1.62	0.251
Those who are unsatisfied with their life	19	35.8	5.44	0.024
Those who declared that their economic situation is bad	9	34.6	1.37	0.349
Those who used traditional family planning methods prior to pregnancy	27	30.3	3.22	0.088
Those who do not want any more children	48	29.4	5.88	0.017
Those who have less than two years between the last two pregnancies	18	28,6	3.13	0.100
Those whose husbands do not want other children	53	28.5	5.31	0.025
Those who have 4+ pregnancy	34	27.2	1.59	0.207
40+ years old women	8	26.7	0.22	0.655
Those who are living in rural places	16	26.6	0.72	0.404
Those who have 3+ living children	20	29.4	1.75	0.208
Those who have had medical abortus	10	18.5	0.77	0.490
Those who are not university graduates	13	18.1	1.41	0.281
Those who did not use family planning methods before pregnancy	42	16.4	17.86	0.001
Those who have become pregnant for the first time	13	14.4	4.99	0.024

The unwanted pregnancy rate decreases as the education level of the woman increases and this ratio decreases to 18.5% among university graduates.

The group with the highest unwanted pregnancy rate is women under 20 years of age. The unwanted pregnancy rate decreases with age.

The group with the highest rate of unwanted pregnancy was the women who were not satisfied with their life.

The other groups with high rates of unwanted pregnancy were respectively; women who declared that they have poor economic status, women using traditional family planning methods before pregnancy, women who do not want another child, women who have less than two years between the last two pregnancies and women whose husband do not want another child.

It was found that the rate of unwanted pregnancy was lowest, and the difference of unwanted pregnancy rate was significant in women who were pregnant for the first time and in women who did not use family planning methods before pregnancy.

Those women whose health was bad or very bad stated that they have become pregnant intentionally.

DISCUSSION

In this study, it was found that the unwanted pregnancy rate

was 23.2%. In a study that examined the pregnancies that occurred within the last five years across the whole country it was found out that is the rate of unwanted pregnancies was 15% (1). In another study conducted on married women aged 18-49 years, the rate of unwanted pregnancies was 26.1% and 26.1% of these women had 2 and 5.8% had 4 or more unwanted pregnancies (15). In a study conducted on women who applied to hospitals, it was found that unwanted pregnancies were 15% and this rate was reported to be higher in women with low educational level and in women whose husbands were unemployed (16). The rate of unwanted pregnancies is 40% worldwide (2).

When compared with these data, it is seen that the rate of unwanted pregnancy in our survey is consistent with the present literature.

According to the results of our study, the risk groups with the highest unwanted pregnancy rates are as follows respectively; young women, unhappy women, women who stated that their economic status was poor, women using traditional family planning methods before pregnancy, women who did not want another child, women who had less than two years between the last two pregnancies and women whose husband did not want another child.

The risk group with the highest rate of unwanted pregnancy

is women under 20 years of age. Unwanted pregnancy rate decreases with age.

In similar research, it was stated that the rate of use of modern family planning methods in young women (15-19 and 20-24 years) was quite low compared to the traditional methods usage (15, 17). Especially in young ages, withdrawal method (63.6%) was highly preferred and effective family planning methods usage increased as the age increases (18).

The highest level of unwanted pregnancy in women under the age of 20 can be attributed to the lack of knowledge and experience. This rate decrease with age can be attributed to the increase of women's knowledge and experience of family planning methods.

The second risk group with the highest rate of unwanted pregnancy was found to be women who were not satisfied with their lives. The rate of women not satisfied with their life who had unwanted pregnancy (%20.0) was also statistically higher than others (%10.8). These results can be explained in two ways; they may have been pregnant for reasons that they could not control in their life (pressure of husband and family elders, cultural reasons, inability to give birth to boys, domestic violence, poverty, unmet need for family planning methods, etc.), or dissatisfaction with life may also be due to unwanted pregnancy.

It was found that the rate of unwanted pregnancy (34.6%) was high in women who stated that their economic status was poor. In a study, it was stated that the unmet need for family planning increased by 2.8 times in women living in low-income households (17).

Ineffective or incorrect use of the family planning method used also causes unwanted pregnancies. As a matter of fact, in our study, 45.8% of women who did not want to get pregnant reported that they became pregnant while using a family planning method.

In our study, it was found that unwanted pregnancy was highest in women (40.6%) who were used withdrawal method.

The usage of traditional methods among married women in Turkey (21.0-31.7%) is still quite common (1, 17). Although the withdrawal method is a traditional method, it is still seen as a modern and effective family planning method and is frequently used. Researchers have shown that withdrawal method (31.0%) is the most widely used method (17).

The high rate (21.8%) of those who stated that they became pregnant while using modern family planning methods can be attributed to the inability to use the methods correctly (such as

not going IUD controls).

In similar research, it was reported that 66.7% of those who have unwanted pregnancies became pregnant while using a family planning method and these pregnancies occurred while using withdrawal method (41.3%), condom (26.1%), oral contraceptives (12.4%) and IUD (4.9%) respectively (15).

Similar studies conducted in Turkey show that modern family planning methods usage is not at the desired level (6-9). According to TDHS-2018 results; 49% of women stated that they used a modern family planning method (1). It is stated that the most used family planning method in Europe is oral contraceptives and sterilization is the most used method in 40+ years of age (19). Our rate of usage of modern family planning methods is low compared to developed countries and higher than less developed countries (10).

In our study, the high rate of unwanted pregnancies (23.2%) was since most of them were not using a family planning method (44.2%) or using traditional family planning methods (27.3%) and it reveals the magnitude of the unmet need for family planning.

In our country, the ratio of unmet need for family planning declined continuously and decreased to 6%. After 2013, it started to increase again and reached to 12% in 2018 (1). While this ratio is 18% worldwide; it rises to 50% in undeveloped countries (20-23).

Unmet need for family planning means unwanted pregnancies and voluntary miscarriages. This situation adversely affects both social welfare and demographic structure of societies.

As expected, it was found that the rate of unwanted pregnancy decreased as the education level of the woman increased, and it decreased to 18.5% in university graduates. According to the TDHS-2018 data; while the unmet need for family planning is 20% for women with low education, it is 9% for women with high school and higher education.

In the study group, 22.1% of pregnant women who did not want to have pregnancy were found to have less than 2 years between the last two pregnancies. This is a risky situation for both the mother and the baby.

In the research group, it was found that 10.5% of the women who did not want to have pregnancy had had an abortion before. In a similar study, the rate of voluntary abortion was reported to be 17.4 % (15). According to TDHS 2018 data; 15% of married women have had abortion at least once and 49% have had an abortion in the first months of pregnancy. 6% of pregnancies

in the last 5 years have ended with an induced abortion (1). Women who experience problems in accessing family planning methods and family planning services or who become pregnant due to failure of the method are willingly resorting to induced abortion (24).

When compared with these data, it is seen that the result of our survey is consistent with the present literature.

CONCLUSION

The rate of unwanted pregnancies was found to be 23.2%.

The risk groups with the highest rate of unwanted pregnancy are respectively; young women, women who are not satisfied with their lives, women who indicate that their economic situation is poor, women considering to use modern family planning methods after birth, women using modern family planning methods before pregnancy, women who do not want another child, women who have less than two years between the last two pregnancies and women whose husbands who do not want child.

It was found that the risk group with the highest unwanted pregnancy rate was among young (under 20 years) women. Since the rate of withdrawal method was high especially in young women and this can lead to unwanted pregnancies, it is necessary to give couples premarital education.

Authorship Contributions

Concept: H.U., S.Ş., T.Ş., P.U., Design: H.U., S.Ş., T.Ş., P.U., Data Collection or

Processing: H.U., S.Ş., T.Ş., P.U., Analysis or Interpretation: H.U., S.Ş., T.Ş., P.U.,

Literature Search: H.U., S.Ş., T.Ş., P.U., Writing: H.U., S.Ş., T.Ş., P.U.

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