ORIGINAL PAPER

Diggerence of Health Practces Between Wanted and Unwanded Pregnancy

Ayla Çapik, PhD
Atatürk University, Faculty of Health Sciences, Department of Midwifery, Erzurum, Turkey

Türkan Pasinlioğlu, PhD
Professor, Atatürk University, Faculty of Health Sciences, Department of Obstetric and Gynecologic Nursing, Erzurum, Turkey

Correspondence: Ayla Çapık, Atatürk University, Faculty of Health Sciences, Department of Midwifery, 25240, Erzurum, Turkey. e-mail: aylakanbur28@hotmail.com

Abstract

Background: Health practices during pregnancy are defined as activities that affect the course of pregnancy and its results; these activities extend to monitoring the health of the pregnant woman, the fetus, and the newborn.
Aims: The purpose of this study; assessing the effects wanting a pregnancy has on health practices carried out by pregnant women.
Methodology: A comparative descriptive type research. A questionnaire was used to determine the socio-demographic and obstetric characteristics, and a Health Practices in Pregnancy Questionnaire (HPQ) was used to determine the health practices during pregnancy. This study was conducted in a government hospital in Erzurum, Turkey. The sample group of the research consists of 270 pregnant women (146 wanted pregnancies, 124 unwanted pregnancies) registered at the polyclinics for prenatal controls. The data were evaluated with SPSS program.
Results: Average age of pregnant women who participated in the study is 27.53±5.49. 56.3% of pregnant women are primary school graduates, 90% are unemployed and 77% live in the city center. The mean score of health practices in pregnancy is determined to be higher in intended pregnancies. Educational status, working status, education of the husband, residence, and monthly income of the family affect the mean score of health practices in pregnancy in both intended and unintended pregnancies. While age and number of living children affect the mean score of health practices in pregnancy in unintended pregnancies, they do not have an effect on said practices in intended pregnancies.
Conclusion: Women who want the pregnancy have more positive health practices in pregnancy and the health practices performed throughout pregnancy in both intended and unintended pregnancies are affected by a number of demographic and obstetrical factors.

Keywords: Pregnancy, wanted pregnancy, unwanted pregnancy, health practices.

Introduction

Health practices during pregnancy are defined as activities that affect the course of pregnancy and its results; these activities extend to monitoring the health of the pregnant woman, the fetus, and the newborn (Lindgren, 2005). Women's perception towards pregnancy is one of the most important elements that affect health behaviors during pregnancy (Klerman, 2000).

The health behavior displayed by women during pregnancy is the most important determinant of maternal and infant health during the prenatal, delivery, and postnatal periods (Lindgren, 2005). On average 500,000 mothers die every year, worldwide, due to complications during pregnancy and delivery (T.R. Ministry of Health, 2005). As is the situation worldwide, the majority of maternal mortalities in Turkey, is due to reasons that can be prevented (hemorrhage,

toxemia, infection, etc) (NMMS, 2005). As with all developing countries, the number of maternal mortalities in Turkey is still above the desired level; according to results of the National Maternal Mortality Study (NMMS) 2005, this level is 28.5 in every 100,000 live births. According to the human development report, on the other hand, in 100.000 this rate is 23 in Turkey, 7 in Australia, 3 in Canada, 6 in Japan, and 5 in Italy. In the United States where unwanted pregnancies are reported to be 50%, on the other hand, this rate is 24 in 100.000 (Klugman, 2011).

Healthy pregnancy, which plays an important role in women's health, is subject to knowing the care required during pregnancy period and applying it as much as possible (Çakmakçı & Eser, 2003). The state of wanting the pregnancy is a complex concept that has cognitive, social, cultural, and economic dimensions (Santelli et al., 2003; Speizer et al., 2004). Worldwide 75 million women, experience unwanted pregnancies every year (WHO, 2003). According to data of the Turkey Demographic and Health Survey (TDHS) 2008, in the last five years, 18% of deliveries in Turkey are unwanted, and 11% of deliveries in Turkey are wanted in future, unplanned in terms of timing. Various studies conducted in Turkey indicate that the rate of unwanted pregnancies is between 11% and 38% (Arslan Ozkan & Mete, 2010; Erol et al., 2003; Kılıç et al., 2007; Kitapçıoğlu & Yanıkkerem, 2008). A study conducted by Moos (2003), found that nearly 50% of all pregnancies in America were within the unwanted pregnancy group.

Unwanted pregnancies and reasons for unwanted pregnancies are important issues that need to be assessed in terms of women's health, and the social and economic dimensions (Karaman et al., 2007). These pregnancies may go along with or contribute to inadequate prenatal care, maternal-infant mortalities, low birth weight, and infant-child neglect. Another important outcome of unwanted pregnancies is miscarriage. Nearly half of such pregnancies end with miscarriages, and a miscarriage causes several medical and psychosocial risks (Abbott et al., 2004).

The state of wanting the pregnancy also affects health practices carried out during pregnancy. A study conducted by Cheng et al., (2009) indicated that unwanted pregnancies were associated with adverse health behaviors. In the event of an unwanted pregnancy, the woman does not pay the required attention to their own health or the health of the growing fetus. Smoking and consuming alcohol are seen frequently in these pregnancies, and the rate of in-womb deaths increases (Keskin, 2007). The rate of smoking is higher in unwanted pregnancies than in wanted pregnancies (Cheng et al., 2009; 2007), the rate of nutritious foods consumed is lower in unwanted pregnancies resulting in adequate maternal or fetal weight gain (Eggleston, Tsui & Kotelchuck, 2001). Women may start prenatal care later (Cheng et al., 2009; Eggleston, 2000) and have less prenatal visits (Eggleston et al., 2001; Kılıç et al., 2007; Yeşilçiçek et al., 2007) with an unwanted pregnancy. Additionally, vitamin intake (Cheng et al., 2009) and sleep time/day is less in unwanted pregnancies (Yeşilçiçek et al., 2007).

A pregnancy left to its own course from the start, in which no health behaviors required during the pregnancy are adhered to, puts the mother and baby at various risks right from the start (Çakmakçı & Eser, 2003). Whereas, the prerequisite for healthy communities is the health of mothers (expectant mothers). Healthy mothers mean healthy babies and healthy children. Babies and children are the foundation of future generations (Pasinlioglu, 2004).

Reluctance and negligence during pregnancy put the maternal and infant health at risk. Preventing situations surrounding arise from unwanted pregnancies is extremely important for the health of the mother and baby. The high rate of unwanted pregnancies deems knowing health practices during pregnancy, and the factors that affect these practices extremely important.

The purpose of this study is to examine effect of the state of wanting the pregnancy on health practices carried out during pregnancy.

Methods

Setting and Sample

A comparative descriptive study was undertaken. The sample comprised of pregnant women that register with policlinics of Maternity Hospital, at regional hospital standards, in Erzurum, located in the east of Turkey, within a year, for prenatal controls. Priori power analysis is performed in order to estimate the number of individuals to be

involved in the study. Accordingly, it is determined that at least 102 individuals are required in order to obtain the power of 0.80 at the significance level of 0.05, confidence interval of 95%, and intermediate effect size of (0.5) for the t test, by which the mean score of health practices would be compared according to the state of wanting the pregnancy, which is the key variable of the study. After the study was complete, the post hoc power analysis was determined to be 0.99. As a result of the power analysis, it was calculated that at least 102 pregnant women were required to be included in the sample group. The study was completed with 270 pregnant women, since involving a greater number of pregnant women had neither cost nor work load for the study. Pregnant women that are at least primary school graduates, that are not high risk cases, and those that accepted to participate in the research were included in the study. Data were collected from the hospital's policlinics.

Research data was collected between December 18, 2009 and April 15, 2010. 146 wanted pregnancies and 124 unwanted pregnancies were included in the sample group in order to determine the difference between wanted and unwanted pregnancies accurately. Unwanted pregnancies were determined by asking questions to the woman. (Do you want this pregnancy? Those saying "no" were involved into the group of unwanted pregnancies.) Table 1 illustrates the socio-demographic and obstetric characteristics of the pregnant women participating in the study.

Measurements

A *"Personal Information Form"* and *"Health Practice in Pregnancy Questionnaire"* was used to obtain the data for this study. The form consists of totally 13 questions prepared by the researchers in order to determine the demographic and obstetric characteristics of the participants.

Lindgren (2005) developed the Health Practice in Pregnancy Questionnaire (HPQ, Health Practice Questionnaire-II, HPQ-II) used in this study. The validity and reliability study of the Turkish version of the scale was carried out by Er (2006). The Turkish version of the scale contains 33 items. The scale includes two types of ratings. Items 1 to 16 in the scale have a five-point likert-type (Never=1 point, almost never=2 point, Sometimes=3 point, Often=4 point, frequently=5 point) answers. Suitable options are offered for questions from Items 17 to 33, five possible answers are offered, and scored between 1 and 5.

A general score is obtained from all of the items.

A high score indicates that the level of health practices is excellent (Some of the health practices during pregnancy are regular and balanced diet, regular sleep, regular exercise, vitamin intake, not smoking-drinking, regular prenatal care, adequate weight gain, adequate fluid consumption, taking showers, took calcium, eating vegetables-fruit and fibrous food, avoidance sitting down during a bath).

The Cronbach alpha coefficient was 0.74 (Er, 2006). The Cronbach alpha coefficient of this study was 0.89.

Variables and Data Analysis

The data obtained during the study was evaluated using The Statistical Package for Social Sciences (SPSS) 18 package program. When evaluating the data; socio-demographic and obstetric characteristics were expressed as percentages and mean; the T-test, One Way Analysis of Variance (ANOVA), Kruskall Wallis, Mann-Whitney U, and Pearson correlation tests were used to compare HPQ score means.

Ethical Considerations

Ethic approval was obtained from the Ethical Committee of the Clinical Research Department at the Provincial Health Directorate of the Governorship of Erzurum, governed by the Ministry of Health, formal approval was obtained from Erzurum Nene Hatun Maternity Hospital, and verbal consent was obtained from the participant in order to carry out this study.

Results

Demographics

The study includes pregnant women ages 17-42, average age 27.53 $\pm$ 5.49. Most pregnant women were primary school graduates (56.3%), and 90% did not have a job. Most pregnant women resided in the city center (77%), and 64.4% had a nuclear family structure. Most husbands were high school and above (54.1%), and 44.4% were workers. Many (50.7%) pregnant women had experienced 3 and above pregnancies. In terms of number of living children; 30.7% did not have living

children, and 19% had 3 and above children (see Table 1).

Health Practices In Pregnancy

The HPQ score mean was 138.18 ± 9.09 for wanted pregnancies, and 109.84 ± 12.0 for unwanted pregnancies; the difference between the two was found to be statistically significant ($p < 0.001$). The scale score mean of wanted pregnancies is higher (see Table 2).

Table 3 illustrates the comparison of HPQ score means for wanted and unwanted pregnancies according to socio-demographic characteristics. As a result of statistical analyses conducted between wanted and unwanted pregnancies it was determined that HPQ scores of wanted pregnancies in terms of all socio-demographic characteristics were higher compared to unwanted pregnancies and difference between them was significant ($p < 0.001$).

Moreover, each of wanted and unwanted pregnancies was compared in itself, as well. HPQ mean scores vary in women who wanted and do unwanted the pregnancy, according to educational status ($p < 0.001$). As a result of the advanced analysis, it is determined that among the women who wanted the pregnancy, the mean scores of women having high school and above education are higher compared to primary school graduates; and among the women who do unwanted their pregnancy, the mean scores of women who are primary school graduates are lower compared to those who are secondary, high school and above education graduates. Mean scores of working women are higher in women who wanted and do unwanted the pregnancy ($p < 0.05$).

HPQ mean scores vary in wanted and unwanted pregnancies according to the educational status of the husband. As a result of the advanced analysis, it is determined that among the women who wanted the pregnancy, mean scores of those whose husbands have primary school education and below are lower than those whose husbands are high school and above education graduates ($p < 0.01$). Regarding the women who do unwanted their pregnancy, on the other hand, it is determined that mean scores of those whose husbands have primary school education and below are lower than those whose husbands are secondary, high school and above education graduates ($p < 0.01$) (Table 3).

HPQ mean scores do not vary in wanted pregnancies according to the occupation of the husband (p = NS). In unwanted pregnancies, on the other hand, HPQ mean scores vary according to the occupation of the husband. After further analysis the source of the difference was determined as the unemployed and civil servant spouse ($p < 0.01$) (Table 3).

In both groups, HPQ mean scores are different according to the residence ($p < 0.05$). After further analysis, the source of the difference was determined as expectant mothers living in the city centers and villages. HPQ mean scores do not change according to the family type (p = NS) (Table 3).

As is illustrated in Table 4, upon comparisons made between groups, it was found out that HPQ scores of wanted pregnancies according to their obstetrical characteristics were higher compared to unwanted pregnancies and difference between them was significant ($p < 0.001$).

Moreover, each of wanted and unwanted pregnancies was compared in itself, as well. As is illustrated in Table 4, HPQ mean scores remain unchanged according to the number of pregnancies and trimesters in both groups (p = NS). While the HPQ mean score does not change in wanted pregnancies according to the number of living children (p = NS), HPQ mean score decreases as the number of living children increases in unwanted pregnancies ($p < 0.001$).

As is illustrated in Table 5, while there is no relation between age and HPQ score in women who wanted the pregnancy, a negative low-level relation is determined between age and HPQ score in women who did not want the pregnancy ($p < 0.05$). A positive low-level relation is determined between the monthly income of the family and HPQ score in women who wanted and do unwanted the pregnancy ($p < 0.05$).Composed of wanted and unwanted pregnancies for each items of “Health Practice in Pregnancy Questionnaire”, there are significantly different at $p < 0.001$, except for two items (“How often do you drink more than 2 caffeinated beverages per day?” and “How often do you receive regular dental care?”). Items of the questionnaire are showed table 6.

Table 1. The Socio-Demographic and Obstetric Characteristics of Participants

	Wanted		Unwanted	
Characteristics (n=270)	$\overline{X}$ ± SD		$\overline{X}$ ± SD	
Age (years)	26.11 ± 4.84		29.19 ± 5.75	
Monthly Income of Families (TL)	1268.90 ± 943.99		894.60 ± 797.40	
	n	**%**	**n**	**%**
Education				
Primary school	68	46.6	84	67.7
Middle school	26	17.8	19	15.3
High school and above	52	35.6	21	16.9
Employment status				
Employed	20	13.7	7	5.6
Unemployed	126	86.3	117	94.4
Spouse Education				
Primary school or lower	28	19.2	53	42.7
Middle school	23	15.8	20	16.1
High school and above	95	65.0	51	41.1
Spouse Occupation				
Unemployed	6	4.1	12	9.7
Officer	27	18.5	15	12.1
Worker	75	51.4	45	36.3
Self-employed	9	6.2	14	11.3
Artisan	15	10.3	26	21.0
Other	14	9.6	12	9.7
Location				
City	112	76.7	96	77.4
District	18	12.3	10	8.1
Village	16	11.0	18	14.5
Family Type				
Nuclear family	92	63.0	82	66.1
Extended family	54	37.0	42	33.9
Number of pregnancy				
1	60	41.1	10	8.1
2	41	28.1	22	17.7
3 and above	45	30.8	92	74.2
Number of Children Living				
No	71	48.6	12	9.7
1	49	33.6	27	21.8
2	23	15.8	37	29.8
3 and above	3	2.1	48	38.7
Trimester				
1. Trimester	43	29.5	33	26.6
2. Trimester	48	32.9	42	33.9
3. Trimester	55	37.7	49	39.5

Table 2. Difference of The HPQ Score Means Between Wanted and Unwanted Pregnancies

Pregnancy Status	The Lower and Upper Values of the Scale	$\overline{X}$	SD	Test and Significance
Wanted	33-165	138.18	9.09	Independent t-test = 21.568
Unwanted	33-165	109.84	12.00	**p = 0.000**

Table 3. A Comparison of The HPQ Score Means According to Socio-Demographic Characteristics of Pregnant Women

Socio-Demographic Characteristics	Wanted Pregnancy (n=146)		Unwanted Pregnancy (n=124)		Test and Significance**
	n	HPQ $\overline{X}$ ± SD	n	HPQ $\overline{X}$ ± SD	
Education					
Primary school	68	135.16±9.67	84	106.90±10.89	t=16.712, **p=0.000**
Middle school	26	139.42±7.46	19	114.63±10.58	t=9.226, **p=0.000**
High school and above	52	141.50±7.77	21	117.23±13.28	t=7.844, **p=0.000**
Test and Significance*		KW= 13.191		KW= 14.690	
		p=0.001		**p=0.001**	
Employment status					
Employed	20	142.20±7.70	7	120.28±13.53	t=5.285, **p=0.000**
Unemployed	126	137.53±9.15	117	109.21±11.66	t=20.947, **p=0.000**
Test and Significance*		MWU= 887.500		MWU= 215.000	
		p=0.034		**p=0.035**	
Spouse Education					
Primary school or lower	28	133.92±11.1	53	105.43±11.24	t=10.892, **p=0.000**
Middle school	23	136.47±8.27	20	111.55±10.84	t=8.534, **p=0.000**
High school and above	95	139.84±8.19	51	113.74±11.85	t=14.028, **p=0.000**
Test and Significance*		KW = 7.617		KW= 10.671	
		p=0.022		**p=0.005**	
Spouse Occupation					
Unemployed	6	138.50±4.03	12	101.58±11.13	t=10.216, **p=0.000**
Officer	27	142.00±8.43	15	115.66±10.74	t=8.785, **p=0.000**
Worker	75	137.16±9.20	45	111.02±11.03	t=13.967, **p=0.000**
Self-employed	9	136.11±7.99	14	106.28±11.06	t=6.975, **p=0.000**
Artisan	15	139.13±6.92	26	113.42±11.07	t=8.097, **p=0.000**
Other	14	136.42±12.5	12	102.75±14.13	t=6.449, **p=0.000**
Test and Significance*		KW = 6.555		KW= 16.131	
		p=0.256		**p=0.006**	
Location					
City	112	139.02±8.84	96	110.81±11.79	t=19.244, **p=0.000**
District	18	137.77±8.80	10	114.60±10.69	t=6.185, **p=0.000**
Village	16	132.68±9.66	18	102.00±10.90	t=8.635, **p=0.000**
Test and Significance*		KW= 6.035		KW= 8.796	
		p=0.049		**p=0.012**	
Family Type					
Nuclear family	92	138.86±9.00	82	109.84±11.86	t=18.011, **p=0.000**
Extended family	54	137.00±9.19	42	109.83±12.39	t=12.328, **p=0.000**
Test and Significance*		t= 1.202		t= 0.004	
		p=0.231		p=0.997	

* Intra-group comparison
** Comparison between groups

Table 4. A Comparison of The HPQ Score Means According to Obstetric Characteristics of Pregnant Women

Obstetric Characteristics	Wanted Pregnancy (n=146)		Unwanted Pregnancy (n=124)		Test and Significance**
	n	HPQ $\overline{X} \pm$ SD	n	HPQ $\overline{X} \pm$ SD	
Number of pregnancy					
1	60	140.01±8.76	10	110.10±11.02	t=9.624, **p=0.000**
2	41	137.21±8.83	22	113.81±7.87	t=10.102, **p=0.000**
3 and above	45	136.60±9.49	92	108.85±12.78	t=12.910, **p=0.000**
Test and Significance*		F= 2.168 p=0.118		KW= 3.894 p=0.143	
Number of Children Living					
No	71	139.92±8.57	12	110.33±10.04	t=10.790, **p=0.000**
1	49	136.85±9.30	273	115.22±9.66	t=9.569, **p=0.000**
2	23	135.08±9.66	7	114.40±11.59	t=7.145, **p=0.000**
3 and above	3	142.00±5.29	48	103.16±10.94	t=6.057, **p=0.000**
Test and Significance*		KW= 6.159 p=0.104		KW=22.897 **p=0.000**	
Trimester					
1. Trimester	43	136.60±8.37	334	113.66±10.84	t=10.407, **p=0.000**
2. Trimester	48	139.20±8.72	249	109.16±12.57	t=12.983, **p=0.000**
3. Trimester	55	138.50±9.89		107.83±11.85	t=14.372, **p=0.000**
Test and Significance*		F= 0.989 p=0.374		F= 2.487 p=0.087	

* Intra-group comparison
** Comparison between groups

Table 5. An Assessment of The Relationship Between the HPQ Score Mean and the Age and Monthly Income of Expectant Mothers.

	Wanted Pregnancy	Unwanted Pregnancy
	HPQ Score	HPQ Score
Age	r = 0.137 p = 0.163	r= -0.206 **p = 0.026**
Monthly Income of Families	r = 0.323 **p = 0.000**	r= 0.294 **p = 0.001**

Table 6. Items of the Scale Which were Significant Between Wanted and Unwanted pregnancies

How often do you practice a healthy lifestyle?
How often do you get at least 8 hours of sleep a night?
How often do you exercise at least 3 times per week?
How often do you use a seat belt?
How often do you drink more than 2 caffeinated beverages per day?
How often do you engage in risky sexual practices?
How often do you report your concerns to your prenatal care provider?
When you have questions, how often do you ask your prenatal care provider?
How often do you use herbs that are not recommended?
How often do you read food labels?
How often do you douche?
How often do you avoid excessively hot baths?
How often do you avoid exposure to dangerous substances?
How often do you take recommended vitamins?
How often do you consume adequate amounts of calcium?
How often do you consume at least five fruits/ vegetables a day?
How often do you consume adequate amounts of fiber?
How often do you smoke cigarettes?
How long had you been pregnant when you started prenatal care?
Have often do you miss your prenatal care visits?
How often do you receive regular dental care?
How often do you engage in activities to learn about pregnancy/birth?
How often do you discuss your pregnancy/birth with others?
How often do you engage in relaxing activities?
How often do you seek to gain an appropriate amount of weight?
How often do you drink adequate amounts of fluid?
How often do you avoid the risks of toxoplasmosis? I have been using gloves in the garden since I became pregnant. I do not eat uncooked or rare-cooked meat. I avoid to contact with cat excrement.
When suggested, how often do you attend a childbirth class?

Discussion

Pregnant women's perception towards pregnancy is one of the most important elements that affect health behaviors during pregnancy (Lindgren, 2005). In particular, an unwanted pregnancy has an adverse effect on health practices carried out during the pregnancy. This study is important since data were collected from women who wanted and did unwanted the pregnancy separately and both groups are compared in terms of the same variables. A study conducted by Cheng et al. (2009) indicated that adverse health behavior was related to unwanted pregnancies. In the event of an unwanted pregnancy, the woman

does not pay the required attention to her own health and the baby's health.

Some of the health practices during pregnancy are regular and balanced diet, regular sleep, regular exercise, vitamin intake, not smoking-drinking, regular prenatal care, adequate weight gain, adequate fluid consumption, and taking showers. Smoking and consuming alcohol is seen frequently in unwanted pregnancies, and the rate of in-womb deaths increase (Keskin, 2007). Studies conducted by Arslan and Mete (2010), Cheng et al. (2009) and D'Angelo et al. (2004) indicate that the rate of smoking in unwanted pregnancies is higher; Arslan and Mete (2010), and Hellerstedt et al. (1998) indicate that caffeine consumption is higher and vitamin intake is lower in unwanted pregnancies. Arslan and Mete (2010) also state that in unwanted pregnancies, no attention is paid to diet, the adequate weight is not gained, and the number of expectant mothers applying prenatal care is lower. A study conducted by Cheng et al. (2009) indicated that the rate of prenatal care in wanted pregnancies was higher. These findings prove that wanting a pregnancy is an important factor that increases utilization of prenatal care services that are critical in maternal-infant health. The frequency of prenatal care displays that the woman has accepted the pregnancy, wants to have a healthy pregnancy, and wants to have a healthy baby. In unwanted pregnancies, the woman's negative approach to the pregnancy may affect to take prenatal care.

In this study determined that wanted pregnancies better attention health practices positively than unwanted pregnancies. Some of these applications are as follows; a wanted pregnancy slept more regularly, did more regular exercise, consulted their doctor or midwife more often regarding any concern or question with their baby or pregnancy, showered instead of taking a bath, avoided sitting down during a bath, took daily vitamins or took 5-6 vitamins a week, took calcium, ate vegetables-fruit and fibrous food, gained adequate weight, and drank more than 8 glasses of water in comparison to those experiencing an unwanted pregnancy.

Other conclusions of the study were that the number of pregnant women receiving prenatal care within the first three months was higher in wanted pregnancies, appointments were missed by those experiencing unwanted pregnancies, the rate of smoking was higher in unwanted pregnancies, and that the difference for all the groups regarding health practices was statistically significant ($p < 0.001$).

A statistically significant difference ($p < 0.001$) (Independent t-test=21.568, Table 2) was determined for the HPQ score means of wanted and unwanted pregnancies. A study conducted by Altıparmak et al.(2009) indicated that the HPQ score means was higher in the case of wanted pregnancies. These results prove that women experiencing an unwanted pregnancy pay less attention to health practices during their pregnancy.

Comparing HPQ mean scores of women having wanted and unwanted pregnancy in terms of socio-demographic and obstetrical characteristics; it was determined that HPQ scores of wanted pregnancies were higher than unwanted pregnancies in all aspects and the difference between them was significant ($p < 0.001$). Regardless of variable of wanted pregnancies, they pointed out health practices more compared to unwanted pregnancies having the same variable. The fact that the pregnancy is intended affects positively health practices, which is an expected result. A study conducted by Cheng et al. (2009) indicated that adverse health behavior was related to unwanted pregnancies. In the event of an unwanted pregnancy, the woman does not pay the required attention to her own health and the baby's health.

In this study, for both groups, the HPQ score mean increased together with the education level, and the difference was statistically significant ($p < 0.001$) (Table 3). A study conducted by Altıparmak et al. (2009) indicates that the HPQ score mean increased with the increase in the level of education. Çakmakçı and Eser (2003) found that positive behavior index scores were higher in expectant mothers that had attended high school and higher education. These findings are parallel to the results of this study. We can safely say that education, as in any field, is a factor that directly affects the health practices of individuals.

The HPQ score mean was higher for working expectant mothers in both wanted and unwanted pregnancies in comparison to unemployed expectant mothers and the difference was statistically significant ($p < 0.05$) (Table 3).

Similar to the findings of this study, Altıparmak et al. (2009) indicated that working in wanted pregnancies had a positive effect on the HPQ score mean. A study conducted by Çakmakçı and Eser (2003) indicated that the positive behavior index scores were higher in working expectant mother than unemployed expectant mothers. The reason behind these results can be explained as the positive effect higher education has on health behavior during pregnancy.

It is determined that HPQ mean scores of women whose husbands have primary school education or below are lower in wanted and unwanted pregnancies. A study conducted by Er (2006) also indicated that the HPQ score mean increased together with increase in the spouse's level of education. Çakmakçı and Eser (2003) indicated that the positive behavior index scores for expectant mothers with high school (and higher) graduate spouses were higher than those with primary school graduate spouses. The low education level causes the inadequate work situation in spouses, which has an adverse effect on health practices.

In unwanted pregnancies, the HPQ score mean of expectant mothers with unemployed spouses is lower than those with employed spouses, and the difference between score means is statistically significant ($p < 0.01$) (Table 3). The reason being that unemployed spouses are unable to provide adequate food, adequate prenatal care, and experience difficulty in accessing health sources, which all have an adverse effect on health practices during pregnancy.

The HPQ score means for expectant mothers residing in the city center, in both wanted and unwanted pregnancies, is higher than those that reside in villages, and the difference between HPQ score means of these groups is statistically significant ($p < 0.05$) (Table 3). The reason being that expectant mothers residing in villages cannot make health care decisions on their own (required to consult spouses/mother-in-laws) makes it difficult to access health sources.

In wanted pregnancies, no statistically difference was found between the number of living children and the HPQ score means ($p > 0.05$) (Table 4). It is thought that the low number of wanted pregnancies and number of living children has an effect on the stated conclusion. Green et al. (2002) expressed that 75.9% of women experiencing a wanted pregnancies did not have living children. In unwanted pregnancies, the HPQ score mean decreased as the number of living children increased ($p < 0.001$) (Table 4). The reason being that adequate attention is not paid to the health of the mother-to-be as number of individuals who the mother has to provide the care increases with the increased number of living children. Arslan and Mete (2010), Ergin et al. (2005), D'Angelo et al. (2004) stated that rate of unwanted pregnancies increased with the increase in the number of living children. Kitapçıoğlu and Yanıkkerem (2008) indicated that 86.7% of expectant mothers with four or more living children were experiencing unwanted pregnancies. Er (2006) determined that the HPQ score mean decreased with the increase in living children. Çakmakçı and Eser (2003) determined that the positive behavior index score during pregnancy was higher in first-time pregnant women in comparison to those experiencing their second (or above) pregnancy.

Altıparmak et al. (2009) indicated that the HPQ score mean was higher for the group who meet their expenditures with their income. Similarly, it is determined in this study that HPQ score increases as the monthly income of pregnant women increases in wanted and unwanted pregnancies. Gharaibeh et al. (2005) stated that socio-economic status affected the level of nutrition; pregnant women with a low socio-economic status experienced some problems like anemia, and adequate nutrition had a positive effect on the maternal and infant health. The reason is that those with a higher income probably have a higher level of education, and acknowledge the importance of health practices.

In unwanted pregnancies, the relationship between the age of the expectant mother and the HPQ score is negative; the HPQ score decreases with the increase in age ($p < 0.05$) (Table 5). The reason for this can be that the average age in the unwanted pregnancy in sample group is higher than that of the wanted pregnancy, or the fact that older expectant mothers have probably more children and hence have less time to pay attention to their pregnancy. Arslan and Mete (2010) discovered that the number of unwanted pregnancies increased with age. Ergin et al. (2005) indicated that 75.8% of women aged 30 and over during their last pregnancy experienced unwanted pregnancies.

Conclusion

State of wanting the pregnancy affects the HPQ mean score. In unwanted pregnancies, women pay less attention to positive health practices. Considering all variables together, the factors affecting health practices in pregnancy are identical in both groups, except for two variables. These factors include the educational level and working status of the pregnant woman, education and occupation of the husband, residence and monthly income of the family. While only the number of living children and age of the pregnant woman are related with health practices in unwanted pregnancies, they are not related factors in wanted pregnancies.

Acknowledgements

The authors are grateful to all the women who agreed to participate in this study. The authors would like to thank the personnel and administrators at the Turkish Ministry of Health, Erzurum Nene Hatun Maternity Hospital, who provided an appropriate location for data collection.

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