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EXAMINING THE RELATIONSHIP BETWEEN POSITIVE HEALTH BEHAVIORS AND QUALITY OF LIFE
IN PREGNANT WOMEN*
GEBELERDE OLUMLU SAĞLIK DAVRANIŞLARI VE YAŞAM KALİTESİ ARASINDAKİ İLİŞKİNİN İNCELENMESİ

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ABSTRACT

The aim of this study is to examine the relationship between positive health behaviors and quality of life in pregnant women. This descriptive and cross-sectional study was conducted with 148 pregnant women who came to the maternity outpatient clinic of Harakani State Hospital in Kars City for the control and met the inclusion criteria. The data were collected using a Personal Information Form, the Health Practices in Pregnancy Questionnaire (HPQ-II) and the WHOQOL-BREF (TR) Quality of Life Questionnaire. HPQ-II median score was 118(69-133). Among domains of the WHOQOL-BREF (TR) scale, median scores of the participants were 68.75(25-100) in the General Health domain, 53.57(25-92.86) in the Physical Health domain, 62.50(33.3-87.5) in the Psychological Health domain, 75.0(41.67-100) in the Social Relations domain, and 58.33(33.33-77.78) in the Environmental domain. It was determined that as the HPQ-II total score increased, the General Health, Psychological Health, Social Relations and Environment scores also increased. While education and income level affected the quality of life and HPQ-II total score, planned pregnancy affected the quality of life.

Keywords: Health practices, nursing, pregnancy, quality of life

ÖZ

Bu çalışmanın amacı, gebelerde olumlu sağlık davranışları ile yaşam kalitesi arasındaki ilişkiyi incelemektir. Tanımlayıcı ve kesitsel tipte olan bu araştırma, Kars ili Harakani Devlet Hastanesi gebelik polikliniğine kontrol amacıyla gelen ve dahil edilme kriterlerini karşılayan 148 gebe ile yürütülmüştür. Veriler, Birey Tanıtım Formu, Gebelikte Sağlık Uygulamaları Ölçeği (GSUÖ) ve WHOQOL-BREF (TR) Yaşam Kalitesi Ölçeği kullanılarak toplanmıştır. GSUÖ toplam puan ortancası 118(69-133); WHOQOL-BREF (TR) ölçeği alt boyutunda Genel Sağlık Alanı puanı ortancası 68.75(25-100), Fiziksel Sağlık Alanı puanı ortancası 62.50 (33.3-87.5), Psikolojik Sağlık Alanı puanı ortancası 53.57 (25-92.86), Sosyal İlişkiler Alanı puan ortancası 75.0(41.67-100), Çevre Alanı puanı ortancası 58.33(33.33-77.78)'dür. GSUÖ toplam puanı arttıkça Genel Sağlık Alanı, Psikolojik Sağlık Alanı, Sosyal İlişki Alanı ve Çevre Alanı puanlarının da artacağı belirlenmiştir. Araştırmada eğitim ve gelir düzeyinin yaşam kalitesini ve GSUÖ toplam puanını etkilerken, planlı gebeliğinde yaşam kalitesini etkilediği saptanmıştır.

Anahtar kelimeler: Gebelik, hemşirelik, sağlık uygulamaları, yaşam kalitesi

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INTRODUCTION

About 830 women die every day and 289.000 women die every year in the world due to preventable complications related to pregnancy and childbirth (1,2). 99% of these deaths occur in developing countries, with more than half in Sub-Saharan Africa and almost one-third of them in South Asia (3). Prenatal care (PNC), which refers to the examination of pregnant women by a healthcare professional at least once during the pregnancy period, is one of the important criteria concerning women's health (4). The purpose of PNC is to ensure that women healthfully maintain their pregnancies in better conditions and give birth to healthy infants (5). Health behaviors exhibited by women for maternal and infant health during their pregnancy play an important role after birth. The prenatal period should be well evaluated for pregnant women to obtain accurate pregnancy results (6). Therefore, it is necessary to define the health behaviors exhibited by each pregnant woman during their pregnancy, to determine their relationship with their quality of life, and to plan and apply nursing care based on this for having healthy prenatal, natal, and post-natal periods. It is also essential to increase positive behaviors of postpartum women specific to the pregnancy period and enhance their quality of life by increasing their self-care agency, ensure them to give better care to themselves and their infants and bring public health to a better level (7,8). This study was conducted to investigate the relationship between the positive health behaviors and quality of life in pregnant women.

METHODS

This study was conducted in Kars City in Turkey in accordance with the descriptive research design. The population of the study consisted of 3263 pregnant women who applied to the Kars Harakani State Hospital maternity outpatient clinic between September and December 2018. The sample size was calculated as minimum of 130 pregnant women at a confidence interval of 95% and a test power of 99% in Power Analysis And Sample Size Software (PASS) program according to the result of single correlation power analysis with the correlation contribution of 0.503 in "Health Practices in Pregnancy Questionnaire" based on the study by Çapık et al. (2016) titled "The Relationship Between Health Practices in Pregnancy and Emotional Intelligence". Considering that there may be those who want to withdraw from the study and answer the data forms incompletely or incorrectly, it is aimed to reach 10%-15% more of the sample number. The sample of the study was composed of 148 pregnant women who applied to the pregnant outpatient clinic of Kars Harakani State Hospital and met the inclusion criteria. The inclusion criteria of the study for pregnant women were determined as follows; being 18 years old and over, being at least literate, having a single pregnancy, having the gestational age of more than 25 weeks, having no risky pregnancy, and being willing to participate in the study. The pregnant women diagnosed with psychiatric and/or neurological diseases were excluded from the study.

Data Collection Tools

A Personal Information Form, the HPQ-II, and the WHOQOL-BREF (TR) were used as data collection tools. The

researcher collected the data from the pregnant women by using face-to-face interview technique. It took approximately 20-30 minutes for pregnant women to answer the questions.

Personal Information Form

A Personal Information Form, developed by the researcher in line with the relevant literature, was used to collect the data (5-10). This form is composed of a total of 40 questions including 10 questions about the socio-demographic characteristics of the participants such as age, education, occupation, and marital status, 21 questions about the overall health status of pregnant women and their past and current pregnancies, and 9 questions about their prenatal care features.

Health Practices in Pregnancy Questionnaire (HPQ-II)

HPQ-II was developed by Lindgreen in 2005 and its Turkish validity and reliability study was conducted by Er in 2006 (6,8). The scale is composed of 33 items that are rated over a five-point Likert type scale ranging from one (never) to five (always). The items measure the qualification of health practices in six subscales. These subscales are balance of rest and exercise, safety measures, nutrition, avoiding the use of harmful substances, obtaining health care, and obtaining information. In the questionnaire; the items 6, 7, 21, 22, 23, 24, 25, 26, 32, and 33 are coded reversely from 5 to 1. Total score is obtained from the sum of all items. While the lowest score is 33, the highest score is 165. High scores indicate a good level of health practices. Lindgreen found the Cronbach's alpha coefficient as 0.81; on the other hand, Er conducted its Turkish validity and reliability study and found the Cronbach's alpha coefficient as 0.74 (8). In the present study, Cronbach's alpha coefficient was found as 0.68.

WHO Quality of Life Questionnaire Brief Form (WHOQOL-BREF TR)

WHOQOL-BREF TR's validity and reliability study was conducted by Eser et al., in 1999 (10). WHOQOL-BREF TR is composed of 27 items and six domains (General Health, Physical Health, Psychological Health, Environment, Social Relations, and National Environment). The scale does not have a total score. The scores of each domain are calculated separately. When its Turkish version (27th item is a national question) was used, the environment domain score is called as Environment-TR. In this case, the Environment-TR domain score is used instead of the environment score. Each domain evaluates the quality of life within that domain independently from each other. As the score of each domain increases, quality of life in that domain gets enhanced (10-12).

Data Assessment

Data were analyzed in the IBM SPSS Statistics 22.0 (IBM Corp., Amonk, New York, USA) statistical program. Number, percentage, arithmetic mean and standard deviation and median (min-max) values were used in descriptive statistics for the data analysis. Whether or not numerical data were normally distributed was tested by Kolmogorov-Smirnov and Skewness-Kurtosis (+1 and -1). While the independent samples t test was used for the variables in which the data in which two independent groups were compared were normally distributed, the Mann-Whitney U test was used for the

variables that did not show normal distribution. In order to compare more than two groups, One Way Analysis of Variance (ANOVA) was used for normally distributed variables, and Kruskal-Wallis test was used for non-normally distributed variables. Homogeneity of variances was determined by Levene's test. As a multiple comparison test, LSD Post Hoc test was used if variances were equal. Dunnett T3 Post Hoc test was used if variances were not equal. The value of $p < 0.05$ was considered as statistically significant in the study. The results were evaluated at the confidence interval of 95%.

Ethical Considerations

The study was conducted based on ethical principles. Ethics committee approval was obtained from the Erciyes University Clinical Trials Ethics Committee (numbered 2018/365 and dated 18.07.2018). A written permission was obtained from the maternity outpatient clinic of Kars Harakani State Hospital. Written consents were obtained from the women who agreed to participate in the study.

RESULTS

Table I shows distribution of socio-demographic characteristics of the participants included in the study.

Table I. Distribution of socio-demographic characteristics of the participants ($n=148$).

Characteristics	<i>n</i>	%
Age		
18-25 years	51	34.5
26-30 years	62	41.9
31 years and over	35	23.6
Educational Level		
Primary school/literate	41	27.7
Secondary school	41	27.7
High school	39	26.4
University	20	13.5
Postgraduate	7	4.7
Occupation		
Housewife	120	87.8
Civil servant	11	7.5
Worker / self-employed	7	4.7
Marital Status		
Married	148	100.0
Affinity status of the partner		
Yes	107	72.3
No	41	27.7
Partner's age		
18-24 years	12	8.1
25-30 years	67	45.3
31 years and older	69	46.6
Partner's educational level		
Illiterate	2	1.4
Literate	19	12.8
Primary School	37	25.0
Secondary school	28	18.9
High school	43	29.1
University	19	12.8
Income level		
Income less than expenses	50	33.8
Income equal to expenses	83	56.1
Income more than expenses	15	10.1
The longest place of residence		
City	59	39.8
District	26	17.6
Village	63	42.6
Family type		
Nuclear family	75	50.7
Extended family	73	49.3

n: number; %: percent.

Table II shows distribution of past and current pregnancy characteristics and prenatal care practices of the participants.

When Table III was examined, it was observed that their median scores were 118(69-133) in HPQ-II, 68.75 (25-100) in the General Health domain, 53.57 (25-92.86) in the Physical Health domain, 62.50 (33.3-87.5) in the Psychological Health domain, 75.0(41.67-100) in the Social Relations domain, and 58.33(33.33-77.78) in the Environmental domain.

In this study, HPQ-II median score of the participants was 118(69-133). Considering that the maximum score to be obtained from the scale is 133, it can be asserted that the HPQ-II median score obtained in the present study was above the median based on the maximum score.

Table IV shows the correlation analysis between the participants' HPQ-II total score and General Health Domain, Psychological Health Domain, Social Relations Domain, and Environment Domain scores. It was determined that there was a weak positive low correlation between HPQ-II total score of the pregnant women and their General Health Domain and Environment Domain scores (r and p values, respectively, $r= 0.365$, $p<0.001$;

Table II. Distribution of past and current pregnancy characteristics and prenatal care practices of the pregnant women (n=148).

Characteristics	n	%
Duration of Marriage		
1 year	21	14.2
2-5 years	55	37.2
6-10 years	41	27.6
11-15 years	17	11.5
16-24 years	14	9.5
Marriage age		
Less than 18	30	20.3
18-24 years	90	60.8
25-30 years	25	16.9
31 years and over	3	2.0
First pregnancy age		
Less than 18	16	10.8
18-24 years	97	65.5
25-30 years	32	21.6
31 years and over	3	2.0
Number of living children		
None	45	30.4
1 child	40	27.0
2-3 children	46	31.1
4 and more	17	11.5
Status of Planned Pregnancy		
Unintended	44	29.7
Intended	104	70.3
Gestational week		
25-30 weeks	45	30.4
31-35 weeks	35	23.6
36-41 weeks	68	45.9
Status of using contraceptive method		
Yes	56	37.8
No	92	62.2
Method used		
IUD	26	44.0
Pill	9	15.3
Condom	19	32.2
Other	5	8.5
Status of having health problems during pregnancy		
Yes	41	27.7
No	107	72.3
Status of obtaining information about pregnancy care		
Yes	123	83.1
No	25	16.9
The source of the information		
Television	24	16.2
Health institution	91	61.5
Magazine	2	1.4
Friend, relative	4	2.7
Other	5	3.4
Several sources	22	14.9

n: number; %: percent

Table III. Arithmetic median and min-max values related to HPPQ and WHOQOL-BREF (TR) scores of pregnant women (n=148).

Scales	Median	min.-max.
HPPQ	118,00	69-133
General Health Domain	68,75	25-100
Physical Health Domain	53,57	25-92.86
Psychological Health Domain	62,50	33.33-87.50
Social Relations Domain	75,00	41.67-100
Environment Domain	58,33	33.33-77.78

Note: WHOQOL Scale was calculated according to the percentage system.

Median; min-mak; minimum, maximum.

$r=0.353$, $p<0.001$). There was a very weak and positive correlation between their HPQ-II total score and Psychological Health Domain and Social Relations Domain scores (r and p values, respectively, $r=0.267$, $p=0.001$;

$r=0.170$, $p= 0.039$). In addition, no significant correlation was found between their HPQ-II total score and their Physical Health Domain score ($r=0.140$; $p=0.091$). It can be asserted that as the HPQ-II total score in-

Table IV. Correlation values between the HPQ-II scores and WHOQOL- BREF (TR) scores of the pregnant women.

Scales	WHOQOL-BREF (TR) Quality of Life Questionnaire				
	General Health Domain	Physical Health Domain	Psychological Health Domain	Social Relations Domain	Environment Domain
HPQ-II Total Score	<i>r</i> .365	.140	.267	.170*	.353
	<i>p</i> <0.001	.091	.001	.039	<0.001

creased, the General Health Domain, Psychological Health Domain, Social Relations Domain and Environment Domain scores also increased.

Tables V, VI, and VII show distribution of "HPQ-II" and "WHOQOL- BREF (TR)" scores of the participants according to some of their socio-demographic and pregnancy-related characteristics.

DISCUSSION AND CONCLUSION

Consequently, it was detected that HPQ-II median score of the participants was 118 (69-133) in HPQ-II, 68.75 (25-100) in the General Health domain, 53.57 (25-92.86) in the Physical Health domain, 62.50 (33.3-87.5) in the Psychological Health domain, 75.0 (41.67-100) in the Social Relations domain, and 58.33 (33.33-77.78) in the Environmental domain.

While all the correlation values between HPQ-II total score and scores of General Health Domain ($r=0.365$, $p<0.000$), Psychological Health Domain ($r=0.267$, $p=0.001$), Social Relations Domain ($r=0.170$, $p=0.039$) and Environment Domain ($r=0.353$, $p<0.001$) were positively significant, the correlation value between HPQ-II total score and the Physical Health Domain score ($r=-0.140$, $p=0.091$) was statistically insignificant. As HPQ-II total scores increased, scores of General Health Domain, Psychological Health Domain, Social Relations Domain and Environment Domain increased. While a high HPQ-II score shows that the health practices are in good level, a high WHOQOL-BREF (TR) score shows that people have a good quality of life. Accordingly, it can be asserted that as HPQ-II total score increases, scores of the domains will increase except for physical domain. This study revealed that pregnant mothers tended to change their behaviors positively in life and

score and scores of General Health Domain ($r=0.365$, $p<0.000$), Psychological Health Domain ($r=0.267$, $p=0.001$), Social Relations Domain ($r=0.170$, $p=0.039$) and Environment Domain ($r=0.353$, $p<0.001$) were positively significant, the correlation value between HPQ-II total score and the Physical Health Domain score ($r=-0.140$, $p=0.091$) was statistically insignificant. As HPQ-II total scores increased, scores of General Health Domain, Psychological Health Domain, Social Relations Domain and Environment Domain increased. While a high HPQ-II score shows that the health practices are in good level, a high WHOQOL-BREF (TR) score shows that people have a good quality of life. Accordingly, it can be asserted that as HPQ-II total score increases, scores of the domains will increase except for physical domain. This study revealed that pregnant mothers tended to change their behaviors positively in life and

Table V. Distribution of HPPQ and WHOQOL- BREF (TR) scores of the pregnant women according to some of their socio-demographic and pregnancies characteristics.

Characteristics	WHOQOL- BREF (TR)					HPPQ	
	General Health Domain	Physical Health Domain	Psychological Health Domain	Social Relations Domain	Environment Domain		
	Median (Min-Max)	Median (Min-Max)	Median (Min-Max)	Median (Min-Max)	Median (Min-Max)		
Educational status	Illiterate/ Primary School	7,00 (4-10) ^a	22,00 (14-39) ^a	21,00 (15-24)	12,00 (8-15)	28,00 (21-33) ^a	115,00 (84-130) ^a
	Secondary School	8,00 (5-9) ^{ab}	23,50 (17-33) ^a	22,00 (14-26)	12,00 (8-15)	30,00 (24-37) ^b	118,00 (98-136) ^a
	High school and equivalent	7,00 (5-9) ^{ab}	22,00 (17-30) ^a	21,00 (14-27)	10,00 (8-15)	30,00 (23-35) ^b	118,00 (80-178) ^c
	University	8,00 (6-10) ^b	22,00 (18-28) ^b	22,00 (19-25)	12,00 (10-15)	33,00 (28-36) ^c	129,00 (93-151) ^d
	Postgraduate	8,00 (7-9) ^b	23,00 (20-26) ^b	24,00 (19-26)	12,00 (10-13)	32,50 (26-36) ^c	125,00 (105-137) ^e
<i>p</i>	.044	.418	.003	.510	.001	<0.001	
Income Level	Income less than expenses	8,00 (4-10)	23,00 (14-33)	21,00 (14-26)	12,00 (8-15)	29,00 (21-34)	116,00 (84-137) ^a
	Income equal to expenses	8,00 (5-10)	23,00 (17-32)	21,00 (14-27)	12,00 (8-15)	30,00 (24-36)	118,00 (80-178) ^{ab}
	Income more than expenses	7,00 (5-9)	20,00 (18-33)	22,00 (17-26)	12,00 (8-15)	32,00 (25-37)	119,00 (84-179) ^b
	<i>p</i>	.619	.129	.358	.734	.125	.030
	P=,619	P=,129	P=,358	P=,734		P=,030	
Partner's educational status	Illiterate	7,00 (6-8) ^{ac}	24,00 (20-28) ^{ac}	22,50 (22-23) ^{ab}	13,00 (12-14)	28,50 (26-31) ^{ab}	115,00 (93-124) ^{ab}
	Literate	8,00 (5-8) ^{ab}	26,00 (17-32) ^b	22,00 (17-25) ^a	12,00 (8-15)	31,00 (24-36) ^{ab}	119,00 (84-134) ^a
	Primary school	8,00 (4-10) ^{ac}	24,00 (14-33) ^{ac}	21,00 (15-26) ^b	12,00 (8-15)	30,00 (21-36) ^{bc}	116,00 (91-135) ^{ab}
	Secondary school	7,00 (5-9) ^c	21,00 (17-31) ^c	20,50 (14-26) ^b	11,00 (8-15)	28,50 (24-36) ^{cd}	112,50 (84-178) ^{ab}
	High school	7,00 (5-9) ^{ac}	22,00 (17-30) ^c	21,00 (14-25) ^b	11,00 (8-15)	30,00 (24-37) ^{ad}	125,00 (80-137) ^b
	University and higher	8,00 (6-10) ^{ab}	21,00 (19-28) ^c	23,00 (19-27) ^{ab}	12,00 (10-14)	33,00 (26-36) ^a	132,50 (93-151) ^c
<i>p</i>	.013	.031	.004	.066	.007	<0.001	

(KW Dunnet's T3 Hoc) (Problems experienced before pregnancy: Abdominal pain, cramps, severe nausea and vomiting, diabetes mellitus, risk of preterm labor, hyperemesis gravidarum, hypoglycaemia, urinary tract infection, edema, diarrhea-constipation, back pain, varicose vein problems). There is no difference between the groups in which the letters a, b, c are similar.

Table VI. Distribution of HPPQ and WHOQOL- BREF (TR) scores of the pregnant women according to some of their socio-demographic and pregnancies characteristics. (Cont.).

Characteristics		WHOQOL- BREF (TR)					HPPQ
		General Health Domain	Physical Health Domain	Psychological Health Domain	Social Relations Domain	Environment domain	Median (Min-Max)
		Median (Min-Max)	Median (Min-Max)	Median (Min-Max)	Median (Min-Max)	Median (Min-Max)	Median (Min-Max)
Marriage age	Under 18 ^a	8,00 (4-10) ^a	23,50 (14-33)	21,00 (14-26) ^a	12,00 (8-15)	30,00 (21-36)	113,00 (80-134)
	18-24 years ^a	7,00 (5-9) ^a	21,50 (17-32)	21,00 (16-26) ^a	12,00 (8-15)	29,00 (23-37)	118,00 (91-178)
	25-30 years ^b	8,00 (6-10) ^a	23,00 (17-33)	23,00 (17-27) ^b	12,00 (8-15)	32,00 (24-36)	123,00 (88-145)
	31 years and over	8,00 (7-9) ^{ab}	22,00 (21-26)	21,00 (19-25) ^{ab}	12,00 (10-14)	31,00 (29-33)	129,00 (113-129)
	<i>p</i>	.002	.484	.002	.399	.058	.121
First pregnancy age	Under 18	8,00 (4-9) ^a	21,50 (14-32)	21,00 (14-26) ^a	12,00 (8-15)	30,00 (21-36) ^a	113,00 (80-134)
	18-24 years	7,00 (5-9) ^a	22,00 (17-33)	21,00 (6-26) ^a	12,00 (8-15)	2900 (23-37) ^a	116,00 (84-178)
	25-30 years	8,00 (6-10) ^b	23,00 (17-33)	23,00 (17-27) ^b	12,00 (8-15)	32,00 (24-36) ^b	123,00 (88-145)
	31 years and over	8,00 (7-9) ^{ab}	22,00 (21-26)	21,00 (19-25) ^{ab}	12,00 (10-14)	31,00 (29-33) ^{ab}	129,00 (113-129)
	<i>p</i>	.001	.052	.006	.217	.017	.322
Family type	Nuclear family	7.51±.964	22.79±3.768	21.48±2.344	11.84±1.569	29.28±3.087	93.60±13.132
	Extended family	7.15±1.076	23.30±4.490	20.67±2.630	11.73±2.175	27.38±3.307	88.34±8.032
	<i>p</i>	.036	.451	.050	.715	<0.001	.004
Status of having problem during pregnancy	Yes	7.56±.940	24.64±4.428	21.79±2.462	12.49±1.790	29.10±3.523	88.72±8.153
	No	7.24±1.063	22.48±3.920	20.81±2.492	11.52±1.875	28.07±3.254	91.96±12.075
	<i>p</i>	.098	.005	.036	.006	.098	.123

(KW Dunnet's T3 Hoc) There is no difference between the groups in which the letters a, b, c are similar.

Table VII. Distribution of HPPQ and WHOQOL- BREF (TR) scores of the pregnant women according to some of their socio-demographic and pregnancies characteristics.

Characteristics		WHOQOL- BREF (TR) Quality of Life Questionnaire					Health Practices in Pregnancy Questionnaire
		General Health Domain	Physical Health Domain	Psychological Health Domain	Social Relations Domain	Environment domain	Median (Min-Max)
		Median (Min-Max)	Median (Min-Max)	Median (Min-Max)	Median (Min-Max)	Median (Min-Max)	Median (Min-Max)
Status of obtaining information about pregnancy care	Yes	8,00 (5-10)	23,00 (17-33)	22,00 (14-27)	12,00 (8-15)	30,00 (24-37)	119,500 (80-138)
	No	6,50 (4-9)	20,50 (14-33)	19,00 (14-26)	11,00 (8-14)	27,00 (21-33)	109,00 (84-130)
	<i>p</i>	.002	.050	<0.001	.001	.001	.054
Source of the information	From the health institution	7,00 (5-10)	21,00 (17-32) ^a	21,00 (14-27) ^{ab}	12 (8-15) ^a	30,00 (24-37)	120,00 (80-178)
	Magazine	7,50 (7-8)	31,00 (30-32) ^b	23,00 (21-25) ^{ab}	14,50 (14-15) ^b	30,00 (27-33)	115,00 (107-123)
	Friends	7,50 (6-8)	20,00 (17-20) ^a	20,00 (19-21) ^a	10,50 (8-15) ^a	28,50 (26-31)	114,00 (111-125)
	Other	8,00 (6-9)	21,50 (18-26) ^a	23,50 (20-26) ^{ab}	12,00 (11-13) ^{ab}	33,00 (29-36)	130,00 (109-137)
	From multiple sources	8,00 (6-10)	26,50 (21-33) ^b	22,00 (18-26) ^b	14,00 (8-15) ^b	31,50 (24-36)	118,00 (103-140)
	<i>p</i>	.097	<0.001	.048	<0.001	.222	<0.001

(KW Dunnet's T3 Hoc) There is no difference between the groups in which the letters a, b, c are similar.

they are looking for a safe way to ensure the health of children; therefore, they try to use various sources to obtain necessary information and they expect to benefit from their health care providers.

When the HPQ-II median score in the present study was compared with the results of other studies in literature, it was found that the mean and median score obtained in the present study was lower than the value reported in literature (13-16). It can be thought that the differences in the study were associated with the differences in the region of residence and the sociocultural characteristics of this region. The practice of these health-related behaviors is related to the perception of the threat and sense of threat control, concerning their health status and especially the health of their fetus. These actions and behaviors can be influenced by habits, experiences and environmental culture (17).

When the correlation between the pregnant women's educational level and the median scores of WHOQOL-BREF (TR) domains was examined in the present study, scores of general health domain, psychological health domain and environment domain were found to be statistically significant ($p < 0.05$, Table V). In their studies, Ünver and Aylaz (2017), Rezaei et al., (2013) and Liu et al., (2018) revealed a significant difference between the pregnant women's educational level and their quality of life (18-20). Pregnant women with a postgraduate degree had high mean scores in psychological health domain (18-20). The participants having a bachelor's degree had opportunities to acquire new information and skills and for resting and leisure time activities, were able to access to health services and had a high income level and thus they were believed to have an enhanced quality of life.

When HPQ-II was compared with educational level, the difference between them was statistically significant ($p < 0.05$, Table V). HPQ-II scores of the participants having a bachelor's degree were higher. It is thought that the difference between the present study and the other studies may be caused by the increased awareness and knowledge level about pregnancy follow-up with higher educational levels. It is believed that pregnant women having a bachelor's degree and a high income level are able to reach and use information for developing positive health behaviors.

When WHOQOL-BREF (TR) domain median scores and HPQ-II median scores were compared with educational level of the partners of the participants in the present study, it was found that median scores of general health domain, psychological health domain, psychological health domain, and environment domain and HPQ-II median scores were statistically significant ($p < 0.05$, Table V). While HPQ-II median scores and median scores of general health, psychological health, and environment domains were higher in those whose partners were university graduates, median scores of physical health domain were higher in the participants whose partners were literate. The partners with a bachelor's degree have knowledge about the pregnancy period, help their pregnant partners to sleep and rest well during this period, share the responsibilities of their daily activities, and have the opportunity to spend spare time with their partners are believed to enhance the quality of life of their pregnant partners. These results are com-

patible with the results of studies conducted by some studies (8,15,16,21,22). Thus, it can be concluded that the partner's educational level has a positive effect on enhancing the quality of life of the woman.

When scores of WHOQOL-BREF (TR) domains were investigated according to the first pregnancy ages of the participants, a statistically significant difference was found between scores of general health, psychological health, and environment domains ($p < 0.05$, Table VI). While the score of general health domain was high in the pregnant women whose first pregnancy age was 31 years and over, scores of psychological health and environment domains were higher in participants who experienced their first pregnancy between the ages of 25-30. Pregnant women at an advanced age feel happier, realize their goals, expectations, and life standards, achieve self-realization and self-esteem and have a good social environment, and thus they are believed to have an enhanced quality of life.

When WHOQOL-BREF (TR) domain median scores of the participants were examined according to the status of experiencing any health problem during pregnancy period, a significant difference was found between median scores of the physical, psychological and social relations domains ($p < 0.05$, Table VI). These results indicated that those who had health problems during their pregnancy had higher scores in physical health, psychological health, and social relations domains than those who did not. Aksoy Derya et al., (2018) conducted a study to explore the impact of complaints during pregnancy on the quality of life and their correlation with psychosocial health level and determined that the physical complaints in pregnant women impaired their quality of life (22). It was thought that the problems experienced by the pregnant women during their pregnancy impaired their quality of sleep, prevented them from doing their household chores, caused them to feel pain and discomfort, affected them psychologically and socially, therefore, their quality of life was negatively affected.

When WHOQOL-BREF (TR) domain median scores of the participants were examined according to the status of obtaining information about pregnancy care, a statistically significant difference was found between median scores of all the domains ($p < 0.05$, Table VII). Obtaining information about pregnancy care is important in the quality of life of pregnant women from the conception to birth and even in the postpartum period. When WHOQOL-BREF (TR) domain median scores of the participants were examined in terms of the source of information about pregnancy care, it was determined that the difference between median scores of physical health, psychological health, social relations domains was statistically significant ($p < 0.05$, Table VII). The quality of life scores of those who used magazines and several other sources were high. Sources of information on pregnancy care are important during the pregnancy process. When pregnant women obtain misinformation, this may change the course of their pregnancy and even cause them and their fetus to die.

In terms of the source of information about pregnancy care, the HPQ-II scores of the pregnant women were found to be statistically significant ($p < 0.05$, Table VII). The pregnant women who obtained information about

pregnancy care from other sources had higher HPQ-II scores compared to those who obtained information from the health institution, magazine, friends and relatives, and several other sources.

Pregnancy is a natural process in which women go through psychological, physiological and emotional changes (23,24). The presence of the fetus causes physiological, hormonal, psychological and social changes in pregnant women. Although this period can be a source of joy and happiness, it can also cause stress, anxiety, and concern. During this period, social support systems and the support from significant others have a positive impact on promoting their health and developing positive health behaviors. Therefore, the pregnant women see the partner support as the basic need; thus, the partner support is believed to contribute to develop positive health behaviors by pregnant women and reduce pregnancy complications. Also, educational and income levels affected the quality of life and HPQ-II total score in the study, it was found that planned pregnancy affected the quality of life. It is believed that pregnant women having a bachelor's degree and a high income level reached and used information in developing positive health behaviors. The present study had a limitation. The sample represented the pregnant population in eastern Turkey in terms of their socio-demographic characteristics. According to these results, it can be recommended to;

Repeat the study in different sample groups and in different regions; provide information that enhance positive health cares and the quality of life of the pregnant women, and for the nurses teach them care and behaviors that will increase health care behaviors about the maternal-infant health in family health centers.

It was found that the quality of life and HPQ-II scores of the pregnant women having a bachelor and higher degree and a high income level were high. All necessary efforts should be made to elevate the educational levels of women and increase the pregnant women's employments. Families should be informed about this issue and related policies should be developed.

70.3% of the participants who had a planned pregnancy were found to have a high quality of life. In this regard, it can be suggested to provide more effective trainings in family planning services and ensure pregnant women to have a healthy pregnancy.

Conflict of Interest: The authors declare that there is no conflict of interest.

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