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Geliş Tarihi/Received 22.08.2023 Kabul Tarihi/Accepted 13.05.2024 Yayın Tarihi/Publication 09.10.2024 Date

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E-mail: agralicansu9@gmail.com Cite this article: Ünal, E., Ağralı, C., & Kaya Şenol, D. (2024). Determination of the Internet Decision-Making Status of Risky and Non-Risky Pregnant Women. Journal of Midwifery and Health Sciences, 7(3), 403-412.



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# **Determination of the Internet Decision-Making Status of Risky and Non-Risky Pregnant Women**

# Riskli Olan ve Olmayan Gebelerin İnternet Yoluyla Karar Alma Durumlarının Belirlenmesi

#### **ABSTRACT**

**Objective:** This study was conducted to evaluate the Internet decision-making status of risky and non-risky pregnant women.

**Method:** The research employed an analytical and case-control design. The sample of the study consisted of 214 pregnant women, including 107 in the risky group and 107 in the non-risky group, who applied to the Obstetrics and Gynecology Outpatient Clinic. In the study, the data were collected using The Introductory Information Form and The Internet Decision-Making Scale in Pregnancy (IDMSP) through face-to-face interviews. In the evaluation of the data, Chi-square test, Independent Samples t-Test and Mann Whitney U test were used in addition to descriptive statistics.

**Results:** The mean age of the pregnant women participating in the study was  $28.08\pm6.37$  years. It was determined that 56.1% of the pregnant women who participated in the study met their need for information on the Internet, 46.7% checked the blog pages of the doctors while searching on the Internet to receive information about pregnancy, and 49.1% mostly used the Internet for searching about the prenatal development and health of the baby. The overall mean score of the pregnant women at risk obtained from the IDMSP was significantly higher compared to those in the non-risky group (p=.002).

**Conclusion:** The Internet decision-making status of risky pregnant women has been found to be higher compared to non-risky pregnant women. Accordingly, midwives and nurses should inform pregnant women that information on the Internet is not always safe, and it is important to consult healthcare professionals when making a decision regarding pregnancy.

**Keywords:** Risky pregnancy, internet, decision making, midwifery care

#### ÖZ

**Amaç:** Bu çalışma, riskli olan ve olmayan gebelerin internet yoluyla karar alma durumlarını değerlendirmek amacıyla yapılmıştır.

Yöntem: Araştırma analitik, vaka kontrol tiptedir. Çalışmanın örneklemini, Kadın Doğum Polikliniğine başvuran 107 riskli, 107 risksiz olmak üzere toplamda 214 gebe kadın oluşturmuştur. Araştırmada veriler yüz yüze görüşme tekniği ile Tanıtıcı Bilgi Formu, Gebelikte İnternet Yoluyla Karar Alma Ölçeği (GİYKAÖ) kullanılarak toplanmıştır. Verilerin değerlendirilmesinde tanımlayıcı istatistiklerin yanı sıra Ki kare testi, Independent Samples t Testi ve Mann Whitney U testi ile değerlendirildi.

**Bulgular:** Çalışmaya katılan gebelerin yaş ortalaması  $28.08 \pm 6.37$ 'dir. Çalışmaya katılan gebelerin %56.1'inin gebelikteki bilgi ihtiyacını internetten karşıladığı, %46.7'sinin gebelikle ilgili bilgi almak için internet sitelerine bakarken özellikle doktor sitelerine baktığı ve %49.1'inin gebelikle ilgili en fazla bebeğin gelişimi ve sağlığı konusu için interneti kullandığı belirlenmiştir. Riskli gebelerin risksiz gruptaki gebelere göre GİYKAÖ toplam puan ortalaması anlamlı düzeyde daha yüksektir (p=.002).

**Sonuç:** Riskli gebelerin internet yoluyla karar alma durumu risksiz olan gebelere göre daha yüksektir. Bu doğrultuda ebe ve hemşirelerin; gebelere internette yer alan bilgilerin her zaman güvenli olmadığı açıklanmalıdır. Gebelik sürecine ilişkin karar alırken, mutlaka sağlık personellerine danışılması önem arz etmektedir.

Anahtar Kelimeler: Riskli gebelik, internet, karar alma, ebelik bakımı

#### Introduction

Today, the Internet has become one of the important resources used to obtain information to improve one's health. It has been reported that 94.1% of households in Türkiye have access to the Internet in 2022, and 80.9% of women aged between 16-74 are active internet users (Turkish Statistical Institute, 2022). The Internet use among women is influenced by many factors such as financial educational level and sociodemographic status, characteristics. In addition to these factors, the life cycles of women may also affect this situation (Taştekin & İnfal, 2021). In previous studies, it is stated that women in pregnancy have a greater need to obtain information from the Internet compared to other periods in their lives, and they often use the Internet as the primary source of information (Bjelke et al., 2016; Conrad, 2022). Psychological and physiological changes and problems arising during this period lead to an increase in women's need for information (Musaei, 2022). The access to Internet has become a practical source for pregnant women to search for information about pre- and post-natal process (Bjelke et al., 2016). When the literature is examined, it is reported that pregnant women mostly search on the Internet about the development of the fetus, the physiology of pregnancy, healthy lifestyle behaviors during pregnancy, childbirth, postpartum pain and breastfeeding (Conrad, 2022; Serçekuş et al., 2021; Scaioli et al., 2015). Women use the Internet to obtain information; however, it is known that the majority of the information on the Internet is not accurate (Conrad, 2022). It is also emphasized in the literature that the websites and personal blogs providing information about pregnancy include misleading content (Taştekin & İnfal, 2021; Conrad, 2022) This situation affects health behaviors and decision-making processes of women during pregnancy (Conrad, 2022).

Pregnant women meeting their informational needs through inaccurate information adversely affects the correct decision-making process about their health. Misinformation obtained during pregnancy may also cause anxiety and fear, leading women to a risky process (Serçekuş et al., 2021). It is considered that reasons such as encountering a risky situation related to pregnancy, the symptoms associated with this risk, and the concerns about the baby's health will increase the need to obtain information from the Internet, which will affect the decisionmaking processes (Lee & Lee, 2021). Accordingly, it is important to adopt a specific approach to pregnant women at risk. Therefore, it is necessary for healthcare professionals to disseminate evidence-based information and to prevent the risks that may occur during pregnancy through eliminating misinformation (Lobo et al., 2020). In the literature, although there are studies evaluating the Internet decision-making status of pregnant women\_ (Conrad, 2022; Polat & Karasu, 2022), no studies have been found comparing the Internet decision-making situations of risky and non-risky pregnant women. This study, which is considered to contribute to the literature in this respect, has been conducted to determine the Internet decision-making status of risky and non-risky pregnant women.

#### Methods

**Research Type:** The research employed an analytical and case-control design.

Place and Time of the Research: The research was conducted between 19.03.2022 and 20.11.2022 with risky and nonrisky pregnant women who applied to the Obstetrics and Gynecology Outpatient Clinic of a public hospital.

The Universe/Sample of the Research: The universe of the research consisted of risky and non-risky pregnant women who applied to the obstetrics and gynecology outpatient clinic of a public hospital. The sample size of the study, which was conducted using an analytical and case control research design, was calculated with G\*Power V3.1.9.4 (Faul et al., 2009). A priori power analysis was carried out for pregnant women with two independent group approach. Accordingly, the sample size to be reached for both groups was found to be 210 pregnant women (each group including 105 women) with Cohen's medium effect size (d = 0.50), a statistical power of 0.95, and a level of significance of a = .05 (Cohen, 1988). Considering data loss, a total of 214 pregnant women were reached in the study, 107 in the risk group and 107 in the non-risk group. Pregnant women who had no communication issues, had not received any psychiatric diagnosis, were aged 18 or over and agreed to participate were included in the study.

**Data Collection Tools:** The data were collected using The Introductory Information Form, and The Internet Decision-Making Scale in Pregnancy (IDMSP).

The Introductory Information Form: The form, prepared based on the literature review (Hadımlı et al., 2018) consists of 24 questions about sociodemographic characteristics (age, educational level, educational level of the spouse, employment status, income level, family type, status of smoking), obstetric characteristics (number of pregnancies, number of children, history of miscarriage and curettage, status of having planned pregnancy, number of follow-up appointments during pregnancy, gestational week and participation in pregnant information classes), and the use of the Internet during pregnancy.

### The Internet Decision-Making Scale in Pregnancy (IDMSP):

The scale, which has been developed by Koyun and Erbektaş aims to measure the impact of the Internet on decision-making in pregnant women (Koyun & Erbektaş. 2018). The scale consists of two subscales. The perceived self-efficacy subscale includes the first five items, while the last 5 items constitute the perceived self-control subscale. The scale is rated on a five-point Likert chart and consists of a total of 10 items, ranging between "1=Strongly disagree, to 5=Strongly agree". There are no reversed items and cut-off points. The scale score is calculated between 10 and 50, and higher scores indicate that the Internet has a higher level of impact on decision-making. The Cronbach's alpha ( $\alpha$ ) coefficient of the original scale is 0.85. In this study, Cronbach's alpha value is .84.

**Data Collection:** The researchers used face-to-face interview technique to collect the data. Women were invited to an environment where they could be comfortable while filling out the survey. The survey lasted an average of 5 minutes to complete.

**Evaluation of the Data:** The results were calculated using IBM SPSS 25 package program. The *Skewness* and *Kurtosis* values were used to evaluate the conformity to normal distribution. The Chi-square test, Independent Samples t-Test and the Mann-Whitney U test were used to compare the differences between the two groups in addition to descriptive statistics. The statistical significance was set at p < .05.

Research Variables: Independent variables of the study consisted of age, educational level, educational level of the spouse, employment status, income level, family type, smoking status, number of pregnancies, number of children, history of miscarriage and curettage, status of having a planned pregnancy, number of follow-up appointments during pregnancy, pregnancy week, participation in pregnant information classes and information on the Internet use during pregnancy. The dependent variables of the research were the scores obtained from the IDMSP.

Ethical Considerations: Prior to the conduct of the study, the Ethics Committee Decision (2021/6/4) was obtained from the Scientific Research and Publication Ethics Board of a Osmaniye Korkut Ata University, and the written institutional permission was obtained from the Health Directorate of the province where the research was conducted (14.03.2022 / E-81451303-774.99-59509).

The pregnant women participating in the study were provided with the information about the purpose of the research, the principles of confidentiality and privacy, that they could withdraw from the study at any time, and their verbal consents were obtained. The principles of the Helsinki Declaration were followed throughout the research.

#### Results

Findings on the sociodemographic and obstetric characteristics of pregnant women were given in Table 1.

The mean age of the pregnant women participating in the study was  $28.08 \pm 6.37$  years. 74.3% of the pregnant women were aged between 20-35, 91.1% were unemployed, 66.8% had an income equal to expense, 82.7% had a nuclear family, and 88.3% were nonsmokers. 62.1% of the participants had 2 to 4 pregnancies, 66.8% had 1 to 3 living children, 73.8% had no history of miscarriage and 83.2% had no history of curettage, and 57.9% of the pregnancies were planned. In addition, 74.3% of the pregnant women had more than four follow-up appointments during pregnancy, 92.5% were in the gestational week between 27 and 42, and 85.5% did not attend the pregnant information classes.

The distribution of pregnant women's Internet use characteristics according to their risk status was given in Table 2. It was determined that 56.1% of the pregnant women participating in the study met their information needs on the Internet, 46.7% checked blog pages of doctors particularly when searching on the Internet sites to obtain information on pregnancy, and 49.1% mostly used the Internet for searching information on the development and health of the baby. It was found that 60.7% of the pregnant women stated that the information on the Internet did not cause anxiety during pregnancy, 60.3% said their average Internet use frequency was 0-2 hours before pregnancy, while 58.9% stated that it was also 0-2 hours after pregnancy.

It was determined that 56.5% of the pregnant women did not believe in the accuracy of the information on the Internet, 62.6% consulted a healthcare professional about the accuracy of the information on the Internet, and 36.9% said that the most used keyword was infant health/development in their searching comparison of the overall mean and subscale scores of the pregnant women according to their risk status was given in Table 3. The overall mean score of those in the risky group was significantly higher compared to the non-risky pregnant women (p=.002). When the subscales of the IDMSP were evaluated according to the risk status during pregnancy, the mean subscale score that obtained by the pregnant women in the risky group from the Perceived Self-Efficacy was significantly higher compared to those in the non-risky group (p=.000). The overall mean score of the Perceived Self-Control subscale showed no significant difference according to the risk status during pregnancy (p>.05).

	Risky group	Non-risky group	Total	Analysis and statistics
	n(%)	n(%)	n(%)	Analysis and statistics
*Age	(/5/	(,0)	11(73)	
19 and under	16 (15)ª	O (O)b	16 (7.5)	
20-35	52 (48.6) <sup>a</sup>	107 (100)b	159 (74.3)	χ2 =74.025
35 and over	39 (36.4) <sup>a</sup>	0 (0) <sup>b</sup>	39 (18.2)	p=.000
Educational level	33 (30.1)	0 (0)	33 (10.2)	p .eee
Literate	12 (11.2) <sup>a</sup>	6 (5.6) <sup>a</sup>	18 (8.4)	
Primary school	19 (17.8) <sup>a</sup>	11 (10.3) <sup>a</sup>	30 (14)	
Secondary school	32 (29.9) <sup>a</sup>	23 (21.5) <sup>a</sup>	55 (25.7)	
High school	29 (27.1) <sup>a</sup>	40 (37.4) <sup>a</sup>	69 (32.2)	χ2 =10.788
Jniversity and higher degree	15 (14) <sup>a</sup>	27 (25.2) <sup>b</sup>	42 (19.6)	p=.029
Educational level of the spouse	13 (11)	27 (23.2)	12 (13.0)	p .023
iterate	7 (6.5)	3 (2.8)	10 (4.7)	
Primary school	13 (12.1)	15 (14)	28 (13.1)	
secondary school	33 (30.8)	23 (21.5)	56 (26.2)	
High school	39 (36.4)	37 (34.6)	76 (35.5)	χ2 =8.036
Jniversity and higher degree	15 (14)	29 (27.1)	44 (20.6)	p=.090
Employment status	15 (17)	25 (21.1)	17 (20.0)	ρ050
Employed	12 (11.2)	7 (6.5)	19 (8.9)	χ2 =1.444
Jnemployed	95 (88.8)	100 (93.5)	195 (91.1)	ρ=.229
ncome level	33 (00.0)	100 (33.3)	155 (51.1)	ρ223
ncome lower than expense	27 (25.2)	26 (24.3)	53 (24.8)	
ncome equal to expense	74 (69.2)	69 (64.5)	143 (66.8)	χ2 =2.194
ncome higher than expense	6 (5.6)	12 (11.2)	18 (8.4)	p=.334
Family type	0 (3.0)	12 (11.2)	10 (0.4)	p=.554
Nuclear family	90 (84.1)	87 (81.3)	177 (82.7)	χ2 =0.294
Extended family	17 (15.9)	20 (18.7)	37 (17.3)	χ2 -0.294 p=.588
Smoking status	17 (15.5)	20 (10.7)	37 (17.3)	ρ566
Ion-smoker	92 (86)	97 (90.7)	189 (88.3)	χ2 =1.132
moker	15 (14)	10 (9.3)		χ2 -1.132 p=.287
lumber of pregnancies	13 (14)	10 (9.5)	25 (11.7)	μ267
	25 (23.4) <sup>a</sup>	27 (25.2) <sup>a</sup>	52 (24.3)	
irst pregnancy 2 to 4 pregnancies	55 (51.4) <sup>a</sup>	78 (72.9) <sup>b</sup>	133 (62.1)	χ2 =25.606
• 4 pregnancies	27 (25.2) <sup>a</sup>	2 (1.9) <sup>b</sup>	29 (13.6)	χ2 =25.606 p=.000
he number of living children	27 (25.2)	2 (1.9)	29 (15.0)	<i>ρ</i> =.000
-	20 (27 1)a	27 /25 2\a	FC (2C 2)	
)	29 (27.1) <sup>a</sup>	27 (25.2) <sup>a</sup>	56 (26.2)	12.042
L-3	64 (59.8) <sup>a</sup>	79 (73.8) <sup>b</sup>	143 (66.8)	χ2 =12.912
land above	14 (13.1) <sup>a</sup>	1 (0.9) <sup>b</sup>	15 (7)	p=.002
History of miscarriage	25 (22 7)2	21 /10 C\h	E6 (2C 2)	wa = 4 744
/es No	35 (32.7) <sup>a</sup>	21 (19.6) <sup>b</sup> 86 (80.4) <sup>b</sup>	56 (26.2)	χ2 =4.741 p=.029
NO History of curettage	72 (67.3) <sup>a</sup>	80 (8U.4)°	158 (73.8)	p=.029
	25 (23.4) <sup>a</sup>	11 /10 2\h	26 (16 0)	v2 =€ E4€
/es	25 (23.4) <sup>a</sup> 82 (76.6) <sup>a</sup>	11 (10.3) <sup>b</sup> 96 (89.7) <sup>b</sup>	36 (16.8)	χ2 =6.546
No	ŏZ (/b.b)°	90 (89.7)°	178 (83.2)	p=.011
he status of planned pregnancy	C1 /E7\	63 (58.9)	124 (57.0)	χ2 =0.077
'es	61 (57)		124 (57.9)	
lo	46 (43)	44 (41.1)	90 (42.1)	p=.782
lumber of follow-ups during pregnancy		27 /25 21	EE /2E 3	2 2 2 2 2 2
0-4	28 (26.2)	27 (25.2)	55 (25.7)	χ2 =0.024
4	79 (73.8)	80 (74.8)	159 (74.3)	p=.876
Current week of pregnancy	44 (10.0)	5 (A =)	46 (7.5)	
.4 to 26	11 (10.3)	5 (4.7)	16 (7.5)	χ2 =2.432
27 to 42	96 (89.7)	102 (95.3)	198 (92.5)	p=.119
Status of participating in the pregnant in				·
es	15 (14)	16 (15)	31 (14.5)	χ2 =0.038
No	92 (86)	91 (85)	183 (85.5)	p=.846

Distribution of the Internet Use Characteristics of Pregnal	nt Women Accord	ding to Their Ri	isk Status	
,		Non-risky		
	Risky group	group	Total	Analysis and statistics
From them. (them information is continued diving warmans)	n(%)	n(%)	n(%)	
From whom/where information is acquired during pregnancy	40 (45 0)	45 (42.1)	04 (43 0)	2 0 204
Healthcare professionals	49 (45.8)	45 (42.1)	94 (43.9)	χ2 =0.304
The Internet	58 (54.2)	62 (57.9)	120 (56.1)	p=.582
Websites used to obtain information about pregnancy	46 (42)	[ [ ] ( [ ] [ ] )	100 (46.7)	
Doctors' blogs	46 (43)	54 (50.5)	100 (46.7)	
Freelance midwife/doula websites The most followed and commented websites	7 (6.5)	4 (3.7)	11 (5.1)	2 1 702
	12 (11.2)	11 (10.3)	23 (10.7)	χ2 =1.702
Every website that interests me	42 (39.3)	38 (35.5)	80 (37.4)	p=.637
The most researched topic about pregnancy	14/12 1)3	17 (15 0)3	21 /14 5)	
Changes in the body during pregnancy and things to do	14 (13.1) <sup>a</sup>	17 (15.9) <sup>a</sup>	31 (14.5)	
The development and health of the baby	60 (56.1) <sup>a</sup>	45 (42.1) <sup>b</sup>	105 (49.1)	
Problems /diseases that occur during pregnancy (Nause		20 /27 1\h	42 (20 1)	
vomiting, edema, diabetes, hypertension, etc.)	14 (13.1) <sup>a</sup>	29 (27.1) <sup>b</sup>	43 (20.1)	
Vaginal/cesarean delivery videos	9 (8.4) <sup>a</sup>	14 (13.1) <sup>a</sup>	23 (10.7)	χ2 =14.086
Baby care/breastfeeding videos	10 (9.3) <sup>a</sup>	2 (1.9) <sup>b</sup>	12 (5.6)	<i>p</i> =.007
The status of the information on the Internet causing anxiety			_	T
Yes	48 (44.9)	36 (33.6)	84 (39.3)	χ2 =2.822
No	59 (55.1)	71 (66.4)	130 (60.7)	p=.093
The average daily Internet use before pregnancy			1	
0-2 hours	66 (61.7)	63 (58.9)	129 (60.3)	
2-4 hours	29 (27.1)	32 (29.9)	61 (28.5)	χ2 =0.217
4-6 hours	12 (11.2)	12 (11.2)	24 (11.2)	p=.897
The average duration of Internet use after pregnancy			1	
0-2 hours	65 (60.7)	61 (57)	126 (58.9)	
2-4 hours	29 (27.1)	33 (30.8)	62 (29)	χ2 =0.385
4-6 hours	13 (12.1)	13 (12.1)	26 (12.1)	p=.825
The status of believing the accuracy of the information on the	Internet	_		
Strongly believe	36 (33.6)	32 (29.9)	68 (31.8)	
Partially believe	13 (12.1)	12 (11.2)	25 (11.7)	χ2 =0.482
Strongly disbelieve	58 (54.2)	63 (58.9)	121 (56.5)	p=.786
The status of consulting to a health professional about the acc	curacy of the inforn	nation on the In	ternet	
Yes, I consult to a health professional	68 (63.6)	66 (61.7)	134 (62.6)	
I partially consult to a health professional	17 (15.9)	26 (24.3)	43 (20.1)	χ2 =3.238
I don't consult to a health professional	22 (20.6)	15 (14)	37 (17.3)	p=.198
The most used keyword on the Internet during pregnancy				
Pregnancy complaints	15 (14) <sup>a</sup>	37 (34.6) <sup>b</sup>	52 (24.3)	
Delivery (normal/cesarean section)	16 (15) <sup>a</sup>	15 (14) <sup>a</sup>	31 (14.5)	
Pregnancy (weekly progress of pregnancy/nutrition/risks su	ch			
as blood incompatibility, etc.)	24 (22.4) <sup>a</sup>	15 (14) <sup>a</sup>	39 (18.2)	
Infant health/development	41 (38.3) <sup>a</sup>	38 (35.5) <sup>a</sup>	79 (36.9)	χ2 =17.762
Other	11 (10.3) <sup>a</sup>	2 (1.9) <sup>b</sup>	13 (6.1)	p=.001
<sup>a-b</sup> : There is no difference between the groups with the same	initials for each ro	w. χ2: Chi-squai	re test	<del></del>

#### Discussion

The use of the Internet and social media is increasing gradually worldwide and in Türkiye, and it is stated that Türkiye is above the global average for social media and Internet usage (Datareportal, 2023). While health information is searched on the Internet and social media due to different factors such as privacy, effortlessness, and immediate access, it is also stated that the use rate is higher among women compared to men. During pregnancy, which is one of the periods that increases the need for information, the Internet and social media are used extremely often (Değirmenciler et al., 2022).

In this study, it was stated that more than half of pregnant women met the need for information on the Internet, about half of them checked the websites to receive information about pregnancy, doctors' blogs in particular, and the Internet was most used for searching on the development and health of the baby (Table 2). In a similar review study, the frequency of the Internet use of pregnant women was reported as at least 45.7% and at most 97%, while the most searched topics were found to be the stages of childbirth, the development of the fetus by

months, tests performed during pregnancy, nutrition, exercise, breastfeeding and the care of the mother and baby after childbirth (Cirban & Özsoy, 2020). In a similar study conducted in Türkiye, 42.3% of pregnant women stated that they used the Internet to receive information about pregnancy (Bayrak & Kanbur, 2022). When other studies were examined, it was determined that pregnant women used the Internet to search about the guestions and suggestions related to fetal development, nutrition during pregnancy (Zhu et al., 2019), pregnancy and parenthood (Baker & Yang, 2018). In another study conducted in Türkiye, it was stated that more than half of pregnant women used social media to receive information about childbirth (Serçekuş et al., 2021). It was determined that the Internet had an impact on the decision-making processes of pregnant women, and they searched online about the topics such as prenatal tests, intrauterine development of the baby, nutrition, and signs of danger during pregnancy (Hadımlı et al., 2018). In a previous study, it was reported that the information obtained from the Internet influenced the preferences of pregnant women regarding the tests performed during pregnancy and the type of delivery (Ferraz et al., 2016).

Comparison of the Mean IDMSP Scores According to The Risk Status of Pregnant Women								
	Risky group	Non-risky group	Total	Analysis and statistics				
	Mean ±SD	Mean ±SD	Mean ±SD					
IDMSP-Total	36.1 ± 6.4	33.3 ± 6.7	34.7 ± 6.7	t=3.126 ; p=.002				
Perceived Self-Efficacy	17.3 ± 3.9	15.5 ± 3.8	16.4 ± 3.9	t=3.542 ; p=.000				
	Median(Min-Max)	Median(Min-Max)	Median(Min-Max)					
Perceived Self-Control	19 (10 - 25)	19 (5 - 25)	19 (5 - 25)	U= 4900.000 ; p=.066				

In another similar study, it was stated that pregnant women in the last trimester regularly followed Internet sites to decide the place where they would give birth (Hinton et al., 2018). The current results are like the literature, and it may be concluded that the Internet may cause pregnant women to make decisions that will affect the decision-making process related to pregnancy, childbirth and postpartum, as well as affecting maternal and newborn health.

It is an important issue for pregnant women to receive the accurate information from the right sources on the Internet and social media during pregnancy, and to use this information in decision-making processes since it will also influence maternal and fetal health (Batman, 2018). In the current study, when the pregnant women's belief in the accuracy of the information on the Internet was evaluated, almost half of them responded as "yes" or "partially". In addition, when the status of consulting to a healthcare

professional to evaluate the accuracy of the information found on the Internet, nearly half of the pregnant women responded as "I don't consult" or "I partially consult" (Table 2). In a study, it was determined that pregnant women suggested the information they learned from the Internet to each other instead of consulting the healthcare team (Hadımlı et al., 2018). In another study, nearly half of pregnant women stated that they believed in the information on the Internet or considered even when they did not believe it (Bayrak & Kanbur, 2022). The current findings are consistent with the literature.

Pregnant women are influenced by the information on the Internet. In this study, it was determined that the Internet decision making score of pregnant women was above the mean, and the Internet had a significant effect on the decision-making process of pregnant women with obstetric risk compared to those in the non-risky group. In a study by

Polat and Karasu evaluating the use of the Internet among pregnant women, it was stated that internet use did not vary according to the risk situation (Polat & Karasu, 2022). Inaccurate information that women access from the Internet may affect decision-making processes, leading to increased risks related to pregnancy and childbirth as well as negative consequences (Wallwiener et al., 2016). In addition, it is very important to access evidence-based and accurate information that will affect maternal and newborn health and decision-making process during pregnancy, in addition to the selection of resources (Conrad, 2022; Narasimhulu et al., 2016). In a study conducted in Türkiye, it was stated that there was a positive correlation between the Internet decision-making status of pregnant women and their opinion on their health and their baby's health (Polat & Karasu, 2022). In another study, it was determined that the Internet had an impact on the decision-making process during pregnancy (Hadımlı et al., 2018). In similar studies, it was stated that health information on the Internet was useful to practice self-care and encourage breastfeeding (Alianmoghaddam et al., 2019), In a study, was reported that the practices about nutrition and physical activity adopted using the Internet increased the level of self-confidence of pregnant women (Huberty et al., 2013). Inaccurate, incomplete, or excessive information during pregnancy may adversely affect pregnancy, childbirth and the postpartum process (Serçekuş & Okumus, 2009). In a study, it was found that information on childbirth obtained from the Internet increased related fear in some women (Serçekuş et al., 2021). The fact that pregnant women encounter an abnormal situation related to the pregnancy and childbirth, sharing their negative experiences and coping strategies with other pregnant women on the Internet is an important factor in adapting to pregnancy and the role of motherhood (Slomian et al., 2017). The current findings show that accurate information obtained from the right source on the Internet will positively affect the decision-making process and the health status of the mother and the infant.

Limitations of the Research: The fact that the study was conducted in a single center and the results could not be generalized to all pregnant women constituted the limitation of the research.

Strengths of the Research: The lack of studies evaluating the effect of the Internet on decision-making in pregnant women by including risky and non-risky pregnant women in equal numbers, and the current results indicating that the Internet has a greater impact on the decision-making process of risky pregnant women contributes to the literature.

## **Conclusions and Implications**

According to the results of the study, pregnant women use the Internet and social media for information purposes, which is more prevalent in risky pregnancies. It is important to eliminate the pregnant women's lack of information about the risks during pregnancy and to provide accurate information. Most of the information on the Internet and social media is not accurate, and people do not consult to a health professional in most cases. The use of such inaccurate information, on the other hand, causes risky behaviors during pregnancy and poses a danger for the health of the mother and the newborn. Accordingly, midwives /nurses providing information for pregnant women on pregnancy, childbirth and newborn care can contribute to the improvement and protection of their health, in addition to influencing whether they will use the information they receive from the Internet and social media in decision-making. Online trainings structured in accordance with the current literature can be planned to provide information for pregnant women. In the training planning process, it is important to primarily identify the groups among which the Internet has a high level of impact on decision-making; and to ensure that midwives/nurses provide pregnant women with the information they demand and need; and reach them through their role as educators in prenatal care.

**Ethics Committee Approval**: Ethical approval was obtained from the Ethics Committee of a Osmaniye Korkut Ata University for this study (2021/6/4).

**Informed Consent:** We offer our thanks to all pregnant women who agreed to participate in the study.

**Peer-review:** Externally peer-reviewed.

**Author Contributions:** Conceptualization: EÜ, CA, Methodology: EÜ, CA, DKŞ, Supervision: EÜ, Formal Analysis: EÜ, CA, Data Curation: EÜ, CA, Analysis and Interpretation: EU, CA Literature Review: EÜ, CA, DKŞ Writing: EÜ, CA, DKŞ, Critical Review: DKŞ, EÜ.

**Conflict of Interest:** It has been declared by the authors that there is no conflict of interest.

Financial Support: The authors have received no financial support.

**Etik Komite Onayı:** Bu çalışma için Osmaniye Korkut Ata Üniversitenin Etik Kurulundan (2021/6/4) etik onay alınmıştır.

**Hasta Onamı:** Araştırmaya katılmayı kabul eden tüm gebelere teşekkürlerimizi sunarız.

Hakem Değerlendirmesi: Dış bağımsız.

Yazar Katkıları: Kavramsallaştırma: EÜ, CA, Metodoloji: EÜ, CA, DKŞ, Denetim: EÜ, Biçimsel Analiz: EÜ, CA, Veri Düzenleme: EÜ, CA, Analiz ve Yorumlama: EU, CA Literatür Taraması: EÜ, CA, DKŞ Yazan: EÜ, CA, DKŞ, Eleştirel İnceleme: DKŞ, EÜ.

**Çıkar Çatışması:** Yazarlar tarafından çıkar çatışması olmadığı beyan edilmiştir.

Finansal Destek: Yazarlar herhangi bir finansal destek almamıştır.

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## Genişletilmiş Özet

Günümüzün teknolojik devriminde, yaşamın hemen her alanında köklü değişiklikler yaşanmaktadır. Teknolojinin hız kesmeden getirdiği yenilikler, sadece iletişim ve endüstri alanlarını değil, aynı zamanda bilgiye erişim ve paylaşım biçimlerini de tamamen dönüştürmüştür. Bu devrim niteliğindeki değişimlerin en somut ve etkili yansıması, insanların bilgiye kolayca erişebilmesini sağlayan internetin hayatımıza girmesi olmuştur. Bu yeni bilgi denizinde yüzerek, özellikle sağlıkla ilgili bilgi edinme süreçlerini tamamen dönüştürmüş, internet sağlık konularında da en güçlü ve erişilebilir kaynak haline gelmiştir. Türkiye'nin 2022 istatistikleri, internet erişiminin hızla yaygınlaştığını ve toplumun geniş kesimlerinin bu teknolojiden faydalandığını açıkça göstermektedir. Evlerin %94,1'i internete erişim sağlayabilirken, 16-74 yaş aralığındaki kadın nüfusunun %80,9'unun aktif internet kullanıcısı olduğu belirlenmiştir. Bu istatistikler, internetin sadece genel popülasyon için değil, aynı zamanda özellikle gebelik dönemi gibi kritik bir evrede olan kadınlar için de temel bir kaynak haline geldiğini göstermektedir. İnternet, gebelik sürecinde anne adaylarının ihtiyaç duyduğu sağlık bilgilerine ulaşma konusunda önemli bir role sahiptir. Gebelik, bir kadının hayatında özel ve hassas bir dönemi temsil eder. Fizyolojik, hormonal, duygusal ve sosyal değişikliklerin birleştiği bu dönem, anne adaylarının sağlıkla ilgili bilgi ihtiyacını artırır. Bu ihtiyacı karşılamada internet, hızlı ve kolay erişim imkanı sunarak büyük bir rol oynamaktadır. İnternet, anne adaylarının her an her yerden bilgiye erişim sağlama yeteneklerini genişletmiş, gebelikle ilgili merak edilen konuları araştırmalarına olanak tanımıştır. Özellikle fetüsün gelişimi, gebeliğin fizyolojisi, sağlıklı yaşam tarzı alışkanlıkları, doğum süreci, doğum sonrası bakım ve emzirme gibi konularda internet kullanımı yoğun bir şekilde gözlemlenmektedir. Ancak, internet üzerindeki bilgi akışının güvenilirliği konusu, özellikle gebelik gibi hassas bir dönemde, doğru olmayan veya yanıltıcı bilgilerin ciddi sonuçlara yol açma riskini de beraberinde getirmektedir. Riskli gebelik durumlarında, güvenilir ve doğru bilgiye ulaşmak, anne ve bebek sağlığı açısından hayati bir gereklilik haline gelir. Ancak, internet üzerindeki bilgi kirliliği ve yanıltıcı içerikler, riskli gebelerin doğru bilgiye erişme çabalarını zorlaştırabilir. Bu bağlamda, internet üzerindeki sağlık bilgilerini eleştirel bir şekilde değerlendirmek ve sağlık kararları alırken özenli davranmak büyük bir önem taşır. Riskli gebeliklerde, güvenilir ve doğru bilgiye erişim, sağlık sonuçlarını olumlu yönde etkileyebilir. Ne yazık ki, mevcut literatürde, riskli ve risksiz gebelerin internet kullanım alışkanlıkları ile sağlık kararlarını şekillendirme süreçleri arasındaki ilişkiyi derinlemesine inceleyen kapsamlı çalışmaların eksikliği görülmektedir. Bu eksikliği gidermeye yönelik olarak tasarlanan bu araştırma, riskli ve risksiz gebelerin internet kullanım alışkanlıklarını ve bu kullanımın sağlık kararları üzerindeki etkilerini daha ayrıntılı bir şekilde anlamayı amaçlamaktadır. Araştırma, analitik ve vaka kontrol tipinde bir tasarıma sahiptir ve toplamda 214 gebe kadın örneklemini içermektedir. Bu örneklemin yarısı riskli gebelerden (107) oluşurken, diğer yarısı risksiz gebelerden (107) oluşmaktadır. Veri toplama süreci yüz yüze görüşme tekniği kullanılarak gerçekleştirilmiş, Katılımcı Bilgi Formu ve Gebelikte İnternet Yoluyla Karar Alma Ölçeği (GİYKAÖ) aracılığıyla veriler toplanmıştır. Elde edilen veriler, sadece tanımlayıcı istatistiklerle sınırlı kalmamış, aynı zamanda istatistiksel yöntemlerle ayrıntılı bir şekilde analiz edilmiştir. Araştırmanın sonuçlarına göre, katılımcıların %56,1'i gebelik sürecindeki bilgi ihtiyaçlarını internet yoluyla karşıladıklarını ifade etmektedirler. Özellikle bebeğin sağlığı ve gelişimiyle ilgili konularda internet kullanımının yaygın olduğu görülmüştür. Araştırmaya katılan gebelerin %56,1'inin bilgi ihtiyacını internetten karşıladığı, %46,7'sinin özellikle internet sitelerinde gebelikle ilgili bilgi edinmek için doktorların blog sayfalarını kontrol ettiği, %49,1'inin ise interneti en çok internet üzerinden bebeğin gelişimi ve sağlığı hakkında bilgi aramak için kullandığı belirlendi. Bu, gebelerin bilgiye ulaşma ihtiyaçlarının internetin sunduğu geniş kaynaklarla karşılandığını göstermektedir. İnternet yoluyla karar alma genel puan gebelikteki risk durumuna göre alt ölçekleri değerlendirildiğinde, riskli gruptaki gebelerin Algılanan Öz-Yeterlik'ten aldıkları alt ölçek puan ortalaması, riskli olmayan gruba göre anlamlı derecede yüksekti (p =0,000). Algılanan Kendini Kontrol alt ölçeği genel puan ortalaması gebelikteki risk durumuna göre anlamlı farklılık göstermedi (p>0,05).İlgi çekici bir şekilde, riskli gebelerin, risksiz gebelere göre internet üzerinden sağlık kararları alma eğilimlerinin anlamlı şekilde daha yüksek olduğu belirlenmiştir (p=.002). Bu sonuç, riskli gebelik durumlarında bilgiye erişimin ve doğru kararların hayati önem taşıdığını vurgulamaktadır. Sonuç olarak, gebelik sürecinde internet kullanımının sağlık kararları üzerindeki etkisi büyük bir öneme sahiptir. Özellikle riskli gebelerin güvenilir kaynaklardan doğru bilgiye erişmeleri ve sağlık profesyonelleriyle iletişimde olmaları, sağlık sonuçlarını olumlu yönde etkileyebilir. Bu çalışma, gebelerin internet kullanım alışkanlıklarını daha iyi anlamayı ve riskli gebelerin sağlık kararlarını etkileyen faktörleri belirlemeyi amaçlayarak literatüre önemli bir katkı sunmaktadır. Bu araştırma, gebelik sürecindeki kadınların internet kullanımının sağlık kararlarına etkisini daha ayrıntılı bir şekilde anlamamıza yardımcı olmuştur. Özellikle riskli gebelik durumlarında, internetin sağladığı bilgiye erişim ve kullanımın doğru ve güvenilir sağlık kararları almak açısından kritik bir rol oynadığı görülmüştür. Eğitim planlama sürecinde öncelikle İnternet'in karar vermede yüksek düzeyde etkiye sahip olduğu grupların belirlenmesi önemlidir; ebe ve hemşirelerin gebe kadınlara talep ettikleri ve ihtiyaç duydukları bilgileri vermelerini sağlamak ve doğum öncesi bakımda eğitimci rolleri aracılığıyla onlara ulaşmak önemlidir. Bu sonuçlar, gebelere gebelik, doğum ve yenidoğan bakımı konularında bilgi sağlayan ebe ve hemşirelerin, internet ve sosyal medyadan elde ettikleri bilgileri kullanma eğilimlerini değerlendirmekle birlikte, bu bilgilerin karar verme süreçlerini nasıl etkileyebileceğini anlamak da önemlidir. Ayrıca, bu profesyonellerin bu bilgileri kullanma konusundaki tutumları, gebelerin sağlığını iyileştirme ve koruma açısından önemli bir faktördür.