



The world is struggling with COVID-19 uncertainty; What about pregnant women?

Dünya COVID-19 belirsizliğiyle mücadele ediyor; Ya gebe kadınlar?

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ABSTRACT

Aim: This study was conducted to determine the intolerance of pregnant women to uncertainty during the COVID-19 process.

Methods: The sample of the study was conducted with 427 pregnant women who applied to pregnant outpatient clinics of a public hospital. The data were collected using an Introductory Information Form and the Intolerance of Uncertainty Scale (IUS). Data collection tools were applied to pregnant women who agreed to participate in the study by online interview method.

Results: Pregnant women have an IUS mean score of 71.59±13.69. It was found that those who came into contact with an individual with COVID-19 (+) and those with disease symptoms despite the absence of COVID-19 had higher IUS mean scores ($p < .05$). It was determined that there was no significant difference between the sociodemographic and obstetric characteristics of pregnant women and the IUS mean scores ($p > .05$). In the first trimester of pregnancy; getting pregnant for the first time; It was determined that pregnant women expecting a female baby and primigravid had higher IUS scores ($p < .05$). At the same time, it was determined that the COVID-19 epidemic process affected the intolerance of pregnant women to uncertainty, and pregnant women with higher scores experienced more uncertainty, anxiety, and stress ($p < .05$).

Conclusion: The results show that the level of intolerance to uncertainty is affected by risky and unknown processes such as the number of pregnancies, parity, and the gender of the fetus as well as the COVID-19 processes.

Keywords: COVID-19; intolerance of uncertainty; midwifery; pregnancy; uncertainty

ÖZET

Amaç: Bu çalışma, gebe kadınların COVID-19 süreci sırasında belirsizliğe tahammülsüzlüğünü belirlemek amacıyla yapıldı.

Yöntem: Çalışmanın örneklemini bir devlet hastanesinin gebe polikliniklerine başvuran 427 gebe oluşturmuştur. Veriler, Tanıtıcı Bilgi Formu ve Belirsizliğe Tahammülsüzlük Ölçeği (BTÖ) kullanılarak toplanmıştır. Veri toplama araçları, araştırmaya katılmayı kabul eden gebelere çevrimiçi görüşme yöntemi ile uygulanmıştır.

Bulgular: Gebelerin BTÖ ortalama puanı 71.59 ± 13.69'dur. COVID-19 (+) olan bir bireyle temas kuranların ve COVID-19 olmamasına rağmen hastalık semptomları olanların daha yüksek BTÖ ortalama puanlarına sahip oldukları bulundu ($p < .05$). Gebe kadınların sosyodemografik ve obstetrik özellikleri ile BTÖ ortalama puanları arasında anlamlı bir fark olmadığı belirlendi ($p > .05$). Gebeliğin ilk üç ayında; ilk kez gebe kalanların; kız bebek bekleyen gebelerin ve primigravidaların daha yüksek BTÖ skorlarına sahip oldukları belirlendi ($p < .05$). Aynı zamanda COVID-19 salgın sürecinin gebelerin belirsizliğe tahammülsüzlüğünü etkilediği, daha yüksek puana sahip gebelerin ise daha fazla belirsizlik, kaygı ve stres yaşadığı belirlendi ($p < .05$).

Sonuçlar: Sonuçlar, belirsizliğe tahammülsüzlük düzeyinin, gebelik sayısı, parite, fetüsün cinsiyeti ve COVID-19 süreçleri gibi riskli ve bilinmeyen süreçlerden etkilendiğini göstermektedir.

Anahtar kelimeler: COVID-19; belirsizliğe tahammülsüzlük; ebelik; gebelik; belirsizlik

Introduction

The world mystery is struggling with an epidemic disease that cannot be fully solved. COVID-19 (a new type of Coronavirus), called SARS-CoV-2, is a highly contagious epidemic that spreads from Wuhan, China at the end of 2019, causing the deadliest pandemic observed in more than 100 years (Zaigham, & Andersson, 2020). The COVID-19 outbreak has been declared by the World Health Organization (WHO) as an internationally important public health emergency and pandemic (Zhu et al., 2020; Huang et al., 2020). The COVID-19 pandemic, which is characterized by uncertainties, causes psychological problems in individuals such as anxiety, worry, pessimism, and depression in the future (Erdoğan, Koçoğlu, & Sevim, 2020; Dugas, Freeston, & Ladouceur, 1997; Dugas et al., 2005).

The pandemic process the world is in has brought along a process that poses a risk to pregnant women, increases stress levels and causes uneasiness during pregnancy. Despite increasing international experience with COVID-19, little is

known about the impact of the disease on pregnancy (Özcan, Elkoca, & Yalçın, 2020).

Uncertainty is inherent in human experience but is even more important in the context of illness. Uncertainty in illness has been defined as "being unable to determine the meaning of events related to the illness". During COVID-19, the uncertainty that awaits pregnant women may cause intolerance to uncertainty. Intolerance to uncertainty is a predisposition to ambiguous situations and events that cause negative reactions in emotional, cognitive, and behavioral terms (Dugas et al., 2005; Saccone et al., 2020). It has also been stated that people with a high intolerance to uncertainty are prone to seeing uncertainty situations as annoying and stressful situations, avoiding uncertainty, and experiencing difficulties in their functionality in situations involving uncertainty (Buhr & Dugas, 2002; Buhr & Dugas, 2012). On the other hand, Freeston (1994) associated intolerance to uncertainty with anxiety, anxiety, and depression. Pregnancy experienced in uncertainties during the COVID-19 process causes anxiety and

stress in women, and may negatively affect well-being and psychosocial health during pregnancy (Copoglu, Kokacya, & Demircan, 2015; Haakstad, Torset, & Kari, 2016). More importantly, it can cause bad birth results in the short or long term. Since pregnancy is a period where psychological, physiological and emotional changes are experienced, it is also important to determine the intolerance of pregnant women during the COVID-19 pandemic. Given the relationship between low psychological well-being and poor perinatal outcomes, more studies are needed on the prevalence of uncertainty in the COVID-19 pandemic.

There is a need for more information about the effects of the COVID-19 epidemic on pregnant women, which affects all countries of the world, but remains uncertain. In this study, it was aimed to examine the intolerance levels of pregnant women during the COVID-19 epidemic and to contribute to the relevant literature.

Methods

The cross-sectional study was conducted in the September 2020. The research data were collected from pregnant women online via the Google form platform. OpenEpi, version 3, publicly available statistical software was used to calculate the sample size (<http://www.openepi.com>). When the power analysis is done, the sample size is at least 383 pregnant women with 5% error level, 95% confidence interval at two-tailed significance level, and 80% representation power. However, 427 pregnant women who voluntarily participated in the study were included in the study. The researcher stated that the data obtained from pregnant women will be published for scientific purposes without using names and that they can leave the study at any time. Pregnant women who did not agree to participate in the study were not included in the study. The research was evaluated by the Health Sciences Scientific Research and Publication Ethics Committee and approved by the scientific committee (Decision no: 2020/1112).

Data Collection Tools

The data were collected with an Introductory Information Form and the Intolerance of Uncertainty Scale (IUS). Questionnaires were filled in personally by pregnant women online.

Introductory Information Form

This form, which was created by the researcher to determine the sociodemographic characteristics of the pregnant women, some obstetric characteristics and the COVID-19 process, consists of 16 questions.

Intolerance of Uncertainty Scale

The original form of the intolerance to uncertainty scale was created by Freeston, Rheaume, Letarte, Dugas, and Ladouceur (1994) to evaluate cognitive, emotional and behavioral responses to uncertain situations. This scale, which was used by Freeston et al. (1994) to examine the relationship between intolerance to uncertainty, anxiety, anxiety and depression, consists of 27 items. The scale was adapted to Turkish by Sarı and Dağ (2009). As a result of the factor analysis, 4 factors were reached. "Uncertainty is stressful and sad", "negative self-evaluations about uncertainty", "not knowing the future is disturbing" and "uncertainty prevents taking action" reflect four of the obtained factors. The new version of the scale consists of 26 items. The higher the scores obtained from the scale, the higher the intolerance to uncertainty. The reliability of the scale (Cronbach's alpha) was

0.79 for the scale (Sarı & Dağ, 2009), and this value was found to be 0.81 for this study.

Data analysis

SPSS 25.0 for Windows software (SPSS, Chicago, IL, USA) was used for statistical analysis of the obtained data. Numbers, percentages, mean scores, standard deviations, independent samples t tests, one way analysis of variance were used in the statistical analysis of the data. The results were evaluated in a confidence interval of 95% and at a significance level of $p < .05$.

Results

Baseline sociodemographic and obstetric characteristics

The distribution of pregnant women according to their introductory characteristics is given in Table 1. The average age of the women included in the study is 27.66 ± 4.76 , their gestational week is 22.52 ± 9.67 , the number of pregnancies is 1.79 ± 1.10 and the number of surviving children is 1.57 ± 0.49 . While it was determined that 51.5% of the women are university graduates, 68.4% do not work, 92.5% of the women work, 93.7% do not smoke, 90.4% do not have a chronic disease. It was determined that 39.1% of them were in the second trimester of their pregnancy, 52.5% of them were primigravid, 85.2% of them were planned, 36.8% of them were expecting a girl fetus. It was determined that 73.3% of the pregnant women had no contact with an individual with COVID-19 and 86.9% did not experience any COVID-19 symptoms (Table 1).

IUS Scores

The mean scores of the pregnant women included in the study were 71.59 ± 13.69 (range 36-106) for the total scale, 25.35 ± 5.96 for F1, 21.00 ± 4.77 for F2, 10.91 ± 2.91 for F3, and 14.33 ± 4.12 for F4, respectively (Table 2).

Univariate analysis with sociodemographic and obstetric characteristics

The comparison of the mean scores obtained from the total and sub-dimensions of the IUS according to their sociodemographic and obstetric characteristics is given in Table 3. When the mean scores of the pregnant women in IUS total and sub-dimensions were compared according to the education level, employment status, working status of their spouse, smoking status, and the planned pregnancy, it was found that there was no statistically significant difference between the groups ($p > .05$). It was determined that the difference between the "negative self-evaluations about uncertainty" sub-dimension and the trimesters of pregnant women were statistically significant ($p < .05$). It was determined that pregnant women in the I. trimester of their pregnancy had higher IUS score averages than those in their II. and III. Trimesters ($p < .05$). Likewise, with the number of pregnancies; except for the "Not knowing the future is disturbing" sub-dimension, it was determined that there was no statistically significant difference between IUS total and sub-dimensions ($p > .05$). While it was determined that there is a significant difference between the gender of the fetus and the "Uncertainty prevents taking action" sub-dimension ($p < .05$). Pregnant women with COVID-19 symptoms (fever, cough, sore throat, etc) and "Uncertainty is stressful and sad", "Negative self-evaluations", there was a significant difference between the about uncertainty sub-dimensions and the IUS total score ($p < .05$). However, it was determined that there was a

statistically significant difference between the state of being in contact with an individual diagnosed with COVID-19 and the IUS total score ($p < .05$) (Table 3).

Table 1. Characteristics of the pregnant women (n=427)

Variables	n	%
Age, y (Mean±SD)	27.66±4.76	
Gestational week (Mean±SD)	22.52±9.67	
Number of pregnancies (Mean±SD)	1.79±1.10	
Number of living children (Mean±SD)	1.57±0.49	
Educational level		
Primary school	44	10.3
Secondary school	77	18.0
High school	86	20.2
University	220	51.5
Employment status		
Yes	135	31.6
No	292	68.4
Job		
Officer	101	23.7
Self-employment	34	8.0
Unemployed	292	68.3
Spouse's employment status		
Employed	395	92.5
Unemployed	32	7.5
Smoking		
Yes	27	6.3
No	400	93.7
Chronic illness status		
Yes	41	9.6
No	386	90.4
Trimester		
1	96	22.5
2	197	39.1
3	164	38.4
Parity		
Primigravid	224	52.5
Multigravid	203	47.5
Number of pregnancies		
1	224	52.5
2	121	28.3
≥ 3	82	19.2
Planned pregnancy		
Yes	364	85.2
No	63	14.8
Gender of fetus		
Girl	157	36.7
Boy	136	31.9
Unknown	134	31.4
Presence COVID-19 symptoms		
Yes	114	26.7
No	313	73.3
Presence of COVID-19 contact		
Yes	56	13.1
No	371	86.9

SD: Standard Deviation

Discussion

In this study, which was conducted to determine the intolerance of uncertainty during the COVID-19 pandemic process, the total score that pregnant women got from the Intolerance to Uncertainty scale was found to be 71.59 ± 13.69 . The average scores obtained from the sub-dimensions "Uncertainty is stressful and sad", "Negative self-evaluations about uncertainty", "Not knowing the future is disturbing" and "Uncertainty prevents taking action" were determined as 25.35 ± 5.96 , 21.00 ± 4.77 , 10.91 ± 2.91 and 14.33 ± 4.12 , respectively. In the literature, there is no study examining the intolerance of uncertainty levels of pregnant women during the

COVID-19 process. However, in a study conducted by Degirmenci et al. before COVID-19 with 310 pregnant women and examining the levels of intolerance to uncertainty, the mean IUS score was determined as 40.37 ± 9.17 (Degirmenci et al., 2020). This finding of the study is not parallel to the findings of Degirmenci et al. This is because Degirmenci used the short form of the IUS scale. However, both studies show that pregnant women live at medium levels of uncertainty with their average score. In another study in which pregnant women with and without recurrent spontaneous abortion were included before the COVID-19 pandemic, the mean score of those with recurrent spontaneous abortion from IUS was determined as 71.03 ± 22.76 . In the same study, this means score for pregnant women without recurrent spontaneous abortion was reported as 40.66 ± 11.96 (Adib-Rad, Basirat, Faramarzi, Mostafazadeh, & Bijani 2019). It is thought that this difference is due to the differences in social support received during pregnancy, whether the pregnancy is risk and the existence of a process such as a pandemic whose progress and effects are uncertain. The study, which has parallel findings with this study, shows that pregnant women who have an unhealthy period or gestational period have higher IUS scores.

It was determined that the sociodemographic and obstetric characteristics of pregnant women did not have any significance between the total and sub-dimensions of the IUS scale, with their educational level, employment status, profession, working status of their spouses, smoking status, having a chronic disease and planning pregnancy ($p > .05$). In studies conducted before the COVID-19 pandemic period, it was stated that there was no significant difference between its introductory features and IUS (Schmuke, 2019; Çevik & Yağmur, 2018). These results are in line with this study.

When the IUS score averages of the pregnant women were evaluated according to their obstetric characteristics; when the significance between trimester and IUS is evaluated; it was determined that there is a statistically significant difference between the "negative self-evaluations about uncertainty" sub-dimension ($p < .05$). "Negative self-evaluations about uncertainty" sub-dimension expresses the evaluations about the person's inability to be sure that she may be an irregular, unwell, insecure person. In this study, it was determined that women with a first pregnancy had higher levels of uncertainty. However, studies in different fields have indicated that women experience higher levels of uncertainty, anxiety, and stress during the first trimester of pregnancy (Preis, Mahaffey, Heiselman, & Lobel, 2020; Berthelot et al., 2020). It is thought that this finding is due to the inability to accept pregnancy in the first trimester, pregnancy difficulties, and the uncertainty of the pandemic process added to the uncertainties about pregnancy.

Considering the difference between parity and IUS of pregnant women; except for the "Not knowing the future is disturbing" sub-dimension, there is a statistically significant difference between IUS total and all sub-dimensions; it was determined that the mean score of primiparas was higher and the difference between them was statistically significant ($p < .05$). This finding indicates that people with a high intolerance to uncertainty react emotionally to uncertain situations, find uncertain situations distressing and stressful, and may perceive them as dangerous and negatively affect the person's undertaking a job (Dugas et al., 2005).

Table 2. Score distributions of pregnant women intolerance to uncertainty scale (n=427)

	Min-Max that can be taken from the scale	Min-Max taken from scale	Mean±SD
F1 (Uncertainty is stressful and sad)	9-45	12-41	25.35±5.96
F2 (Negative self-evaluations about uncertainty)	8-40	9-35	21.00±4.77
F3 (Not knowing the future is disturbing)	4-20	4-20	10.91±2.91
F4 (Uncertainty prevents taking action)	5-25	5-24	14.33±4.12
IUS (Intolerance to Uncertainty Scale)	25-125	36-106	71.59±13.69

SD: Standard Deviation

Table 3. Comparison of the mean scores of pregnant women from the intolerance to uncertainty scale according to their sociodemographic and obstetric characteristics (n=427)

Variables	F 1		F 2		F 3		F 4		IUS Total	
	Mean±SD	Test	Mean±SD	Test	Mean±SD	Test	Mean±SD	Test	Mean±SD	Test
Educational level										
Primary school	25.27±4.89		20.22±4.45		11.04±2.50		14.02±3.52		70.32±11.29	
Secondary school	25.37±6.07	F=0.897	21.66±4.47	F=1.392	10.97±2.96	F=0.482	14.19±4.27	F=0.336	72.20±14.31	F=1.036
High school	24.46±5.71	p=0.443	20.41±4.76	p=0.245	10.58±3.01	p=0.695	14.13±4.27	p=0.800	69.60±13.47	p=0.376
University	25.70±6.21		21.16±4.92		11.00±2.95		14.52±4.08		72.40±13.97	
Employment status										
Yes	26.17±5.89	t= 1.920	20.83±4.57	t= -0.500	10.83±2.88	t= -0.390	14.71±3.93	t=1.299	72.49±13.72	t=0.917
No	24.97±5.97	p=0.055	21.08±4.87	p=0.618	10.95±2.93	p=0.697	14.16±4.20	p=0.195	71.18±13.68	p=0.360
Job										
Officer	25.74±6.08	F=2.916	20.65±4.91	F=0.420	10.84±2.83	F=0.076	14.48±3.88	F=1.448	71.72±14.14	F=1.069
Self-employment	27.48±5.16	p=0.050	21.38±3.38	p=0.657	10.82±3.04	p=0.927	15.41±4.04	p=0.227	74.84±12.25	p=0.340
Unemployed	24.97±5.57		21.08±4.87		10.95±2.93		14.16±4.20		71.18±13.68	
Spouse's employment status										
Employed	25.28±5.93	t= -0.861	21.05±4.82	t=0.692	10.88±2.94	t= -0.815	14.35±4.15	t=0.316	71.55±13.76	t=-0.416
Unemployed	26.27±6.46	p=0.390	20.41±4.04	p=0.489	11.34±2.60	p=0.390	14.10±3.80	p=0.752	72.13±12.94	p=0.678
Smoking										
Yes	23.92±6.26	t= -1.286	20.62±4.55	t= -0.424	11.03±2.86	t=0.219	14.22±4.29	t=-0.149	69.81±12.89	t=-0.697
No	29.45±5.94	p=0.199	21.03±4.79	p=0.672	10.91±2.92	p=0.827	14.34±4.12	p=0.881	71.71±13.75	p=0.486
Chronic illness status										
Yes	25.65±6.95	t=0.343	21.73±5.76	t=1.022	10.60±2.99	t= -0.711	14.73±4.18	t=0.643	72.73±16.91	t= 0.559
No	25.32±5.86	p=0.732	20.93±4.66	p=0.307	10.95±2.91	p=0.477	14.29±4.12	p=0.520	71.47±13.32	p=0.576
Trimester										
I. trimester ^a	25.23±6.29	F=0.311	22.08±4.52	F=3.275	10.98±3.12	F=0.324	14.13±4.41	F=1.695	72.44±14.35	F=0.981
II. trimester ^b	25.63±6.12	p=0.733	20.80±5.08	p=0.039	10.01±2.98	p=0.723	14.79±4.20	p=0.185	72.25±14.62	p=0.376
III. trimester ^c	25.13±5.60		20.57±4.51	a>b=c	10.77±2.72		13.99±3.84		70.41±12.23	
Parity										
Primigravida	26.18±6.37	t=3.063	21.59±4.92	t=2.707	11.12±2.90	t=1.542	14.83±4.21	t=2.636	73.74±14.37	t=3.458
Multigravida	24.43±5.34	p=0.002	20.35±4.52	p=0.007	10.68±2.92	p=0.124	13.78±3.96	p=0.009	69.20±12.50	p=0.001
Number of pregnancies										
1 ^a	28.18±6.37	F=4.777	21.59±4.92	F=3.659	21.59±4.92	F=1.186	11.12±2.90	F=3.485	14.83±4.21	F=3.871
2 ^b	24.57±5.45	p=0.009	20.33±4.52	p=0.027	20.33±4.52	p=0.306	10.69±2.86	p=0.032	13.83±3.78	p=0.024
≤ 3 ^c	24.20±5.20	a>b=c	20.39±4.54	a>b=c	20.39±4.54		10.68±3.02	a>b=c	13.71±4.23	a>b=c
Planned pregnancy										
Yes	25.46±5.95	t=0.945	20.94±4.75	t= -0.673	10.99±2.91	t=1.350	14.45±4.14	t=1.399	71.83±13.73	t=0.871
No	24.69±6.07	p=0.345	21.38±4.91	p=0.502	10.46±2.90	p=0.178	13.66±4.00	p=0.163	70.20±13.51	p=0.384
Gender of fetus										
Girl ^a	25.55±5.78	F=0.270	20.55±4.87	F=1.560	11.01±2.75	F=1.147	14.95±4.01	F=3.159	72.08±13.52	F=0.814
Boy ^b	25.05±5.96	p=0.764	21.00±4.52	p=0.211	10.61±2.92	p=0.319	13.77±3.97	p=0.043	70.35±12.77	p=0.444
Unknow ^c	25.42±4.87		21.54±4.87		11.11±3.08		14.18±4.33	a>b=c	72.26±14.77	
Presence of COVID-19 symptoms										
Yes	26.50±6.30	t=2.403	21.88±4.80	t=2.307	10.96±2.88	t=0.200	14.60±4.09	t=0.810	73.88±14.81	t=2.083
No	24.93±5.76	p=0.017	20.68±4.73	p=0.022	10.90±2.93	p=0.841	14.23±4.13	p=0.419	70.76±3.19	p=0.038
Presence of COVID-19 contact										
Yes	25.65±6.20	t=1.883	21.83±4.88	t=1.401	11.14±2.65	t=0.618	15.19±3.40	t=1.675	74.92±14.25	t=2.013
No	25.14±5.91	p=0.060	20.88±4.75	p=0.162	10.88±2.95	p=0.537	14.20±4.21	p=0.095	71.08±13.55	p=0.045

F1: Uncertainty is stressful and sad sub-dimension of the IUS

F2: Negative self-evaluations about uncertainty sub-dimension of IUS

F3: Not knowing the future is disturbing sub-dimension of IUS

F4: Uncertainty prevents taking action sub-dimension of IUS

IUS: Intolerance to uncertainty scale

Likewise, when looking at the difference between pregnancy numbers and IUS; except for the "Not knowing the future is disturbing" sub-dimension, there is a statistically significant difference between IUS total and all sub-dimensions; it was determined that women who had the first pregnancy had a higher mean score than those who had 2 or 3 or more pregnancies. This difference between them also means statistically significant ($p < .05$). In this study, the high levels of intolerance to uncertainty in women with first pregnancy; can be explained by the uncertain prognosis of the pandemic process in addition to the pregnancy, birth, and postpartum period. In addition, the negative effect of isolated life and the difficulty in reaching a midwife or a health professional is considered as another reason.

When looking at the level of uncertainty between the gender of the baby and IUS; It was determined that those expecting a baby girl affected the IUS level and there was a statistically significant difference between the sub-dimensions of "Uncertainty prevents taking action" ($p < .05$). It is thought that this situation stems from the idea that girls in our society need more protection and will have difficulty in coping with dangers.

When looking at the level of uncertainty between the variables in the COVID-19 process and IUS in the study; It was determined that those who had contact with an individual with COVID-19 (+) had higher levels of intolerance to uncertainty. It was also determined that the difference between the groups was statistically significant ($p < .05$). Similarly, despite not being COVID-19 (+), looking at the level between having symptoms similar to COVID-19 symptoms and BST; It was determined that those who have COVID-19 symptoms (fever, cough, sore throat, etc.), despite not being COVID-19 (+), have higher levels of intolerance to uncertainty. It was also determined that the difference between the groups was significant ($p < .05$). This finding is thought to be due to the insufficient knowledge of the prognosis of the COVID-19 pandemic process during pregnancy. On the other hand, it is thought that thoughts such as the fact that both the mother and her baby will be left alone to ensure isolation conditions and the difficulty of accessing social support during the birth and postpartum period increase the level of intolerance to uncertainty. Supporting this finding, there are also studies stating that the anxiety, stress, and worry levels of pregnant women increase during the disease process (Dodgson, Tarrant, Chee, & Watkins, 2010; Uğurlu & Vural, 2020; Yue et al., 2020; Saccone et al., 2020).

Study Limitations

This study has certain limitations. Firstly, the cross-sectional form of this study prevents any results from being determined in terms of causality. Prospective cohort studies are more reliable in terms of determining IU and its risk factors. Secondly, the study was conducted in a single city; therefore, the results may not be generalizable to all pregnant. Thirdly, the data were collected through the self-report method. Therefore, future studies may be conducted through alternative methods, such as interviews, employed in a more detailed and complete manner.

Conclusion

In the COVID-19 pandemic, information about pregnancy, birth, and the postpartum period is very limited. While

focusing on the physiological health of the mother, one should not ignore the psychosocial state. Also, the process and effects of each pregnancy are different. The results show that the level of intolerance to uncertainty is affected by risk and unknown processes such as the number of pregnancies, parity, the gender of the fetus as well as the COVID-19 processes. Pregnant women need more information in the presence of COVID-19 or a reason that causes restrictions in their life. Midwives should adopt an appropriate midwifery approach and ensure that the process is well-managed properly. Each pregnant woman should be able to make specific interventions considering her obstetric and sociodemographic characteristics. Midwives should provide supportive care as a healthcare professional, which plays a key role in ensuring that women diagnosed with COVID-19 benefit equally from healthcare services and make all complex information comprehensible.

As a result, it is important for midwives to know what uncertainties await pregnant women during a difficult pregnancy and the factors affecting them.

Conflict of interest

The author declares that there were no potential conflicts of interest with regard to the research, authorship and/or publication of this article.

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Ethics Committee Approval

Ethics committee approval was received for this study from the Health Sciences Scientific Research and Publication Ethics Committee and approved by the scientific committee (Decision no: 2020/1112).

Informed Consent

Informed consent was obtained from women who participated in this study.

Peer-review

Externally peer-reviewed.

Author Contributions

E.S.B.: Conceptualization, Methodology, Data collection, Formal analysis, Methodology, Writing- reviewing and editing.

References

- Adib-Rad, H., Basirat, Z., Faramarzi, M., Mostafazadeh, A., & Bijani, A. (2019). Psychological distress in women with recurrent spontaneous abortion: A case-control study. *Turkish Journal of Obstetrics and Gynecology*, 16(3), 151.
- Berthelot, N., Lemieux, R., Garon-Bissonnette, J., Drouin-Maziade, C., Martel, É., & Maziade, M. (2020). Uptrend in distress and psychiatric symptomatology in pregnant women during the COVID-19 pandemic. *Acta Obstetrica et Gynecologica Scandinavica*, 99(7), 848-55.

- Buhr, K. & Dugas, M. J. (2002). The intolerance of uncertainty scale: Psychometric properties of the English version. *Behavior Research and Therapy*, 40(8), 931-45.
- Buhr, K., & Dugas, M. J. (2012). Fear of emotions, experiential avoidance, and intolerance of uncertainty in worry and generalized anxiety disorder. *International Journal of Cognitive Therapy*, 5(1), 1-17.
- Copoglu, U., Kokacya, M., & Demircan, C. (2015). Psychiatric disorders and treatment in pregnancy and lactation period. *Mustafa Kemal Üniversitesi Tıp Dergisi*, 6(24), 43-53.
- Çevik, S., & Yağmur, Y. (2018). Impact of intolerance of uncertainty on psychological well-being in pregnant women with or without miscarriage risk. *Perspectives in Psychiatric Care*, 54(3), 436.
- Dodgson, J. E., Tarrant, M., Chee, Y.-O., & Watkins, A. (2010). New mothers' experiences of social disruption and isolation during the severe acute respiratory syndrome outbreak in Hong Kong. *Nursing & Health Sciences*, 12(2), 198–204.
- Dugas, M. J., Freeston, M. H., & Ladouceur, R. (1997). Intolerance of uncertainty and problem orientation in worry. *Cognitive Therapy and Research*, 21(6), 593-606.
- Dugas M.J., Hedayati M., Karavidas A., Buhr K., Francis K. & Philips, N. A. (2005). Intolerance of uncertainty and information processing: Evidence of biased recall and interpretations. *Cognitive Therapy and Research*, 29(1), 57-70.
- Erdoğan, Y., Koçoğlu, F., & Sevim, C. (2020). An investigation of the psychosocial and demographic determinants of anxiety and hopelessness during COVID-19 pandemic. *Klinik Psikiyatri Dergisi*, 23(1), 24-37.
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., ... & Cheng, Z. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *Lancet*, 395(10223), 497-506.
- Haakstad, A.H.L., Torset, B., & Kari, B. (2016). What is the effect of regular group exercise on maternal psychological outcomes and common pregnancy complaints? An assessor blinded RCT. *Midwifery*, 32(6): 81-6.
- Özcan, H., Elkoca, A., & Yalçın, Ö. (2020). COVID-19 enfeksiyonu ve gebelik üzerindeki etkileri. *Anadolu Kliniği Tıp Bilimleri Dergisi*, 25(1), 43-50.
- Preis, H., Mahaffey, B., Heiselman, C., & Lobel, M. (2020). Pandemic-related pregnancy stress and anxiety among women pregnant during the coronavirus disease 2019 pandemic. *American Journal of Obstetrics & Gynecology*, 2(3), 100155.
- Saccone, G., Florio, A., Aiello, F., Venturella, R., De Angelis, M. C., Locci, M., ... & Sardo, A. D. S. (2020). Psychological impact of coronavirus disease 2019 in pregnant women. *American Journal of Obstetrics & Gynecology*, 223(2), 293-295.
- Sari, S., & Dağ, İ. (2009). Belirsizliğe tahammülsüzlük ölçeği, endişe ile ilgili olumlu inançlar ölçeği ve endişenin sonuçları ölçeği'nin Türkçeye uyarlanması, geçerliliği ve güvenilirliği. *Anadolu Psikiyatri Dergisi*, 10, 261-270.
- Sevil Degirmenci, S., Kosger, F., Altinoz, A. E., Essizoglu, A., & Aksaray, G. (2020). The relationship between separation anxiety and intolerance of uncertainty in pregnant women. *The Journal of Maternal-Fetal & Neonatal Medicine*, 33(17), 2927-2932.
- Schmuke, A. D. (2019). Factors affecting uncertainty in women with high-risk pregnancies. *The American Journal of Maternal/Child Nursing*, 44(6), 317-324.
- Uğurlu, M., & Vural, G. (2020). Pregnancy and COVID-19. *Koç Üniversitesi Hemşirelikte Eğitim ve Araştırma Dergisi*, 17(3), 273-278.
- Yue, C., Liu, C., Wang, J., Zhang, M., Wu, H., Li, C., & Yang, X. (2020). Association between social support and anxiety among pregnant women in the third trimester during the coronavirus disease 2019 (COVID-19) epidemic in Qingdao, China: The mediating effect of risk perception. *International Journal of Social Psychiatry*. doi: 10.1177 / 0020764020941567
- Zaigham, M., & Andersson, O. (2020). Maternal and perinatal outcomes with COVID-19: A systematic review of 108 pregnancies. *Acta Obstetrica et Gynecologica Scandinavica*. 99:823–829.
- Zhu, N., Zhang, D., Wang, W., Li, X., Yang, B., Song, J., ... & Niu, P. (2020). A novel coronavirus from patients with pneumonia in China, 2019. *New England Journal of Medicine*. 382:727-733.