

THE RELATIONSHIP BETWEEN FEAR, OBSESSION AND QUALITY OF LIFE IN CHRONIC PATIENTS DUE TO COVID-19 PANDEMIC

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ABSTRACT

Aim: Excessive fear and repetitive negative thoughts about COVID-19 in individuals with chronic diseases, who are among high risk group in COVID-19 pandemic may cause psychological disorders such as obsession and affect the quality of life negatively. This study was conducted to examine the relationship between fear, obsessive behaviors and quality of life in chronic patients due to COVID-19 pandemic.

Subjects and methods: This descriptive and cross-sectional study was carried out between October 5 and 31, 2020. The survey form was sent online to individuals with a chronic disease who were 18 and older. 255 individuals who responded to surveys were included in the study. The data were collected with Personal Information Form, Fear of COVID-19 Scale (FCV-19S), Obsession with COVID-19 Scale (OCS) and World Health Organization Quality of Life Brief Form (WHOQOL-BREF-TR).

Results: Fear of COVID-19 Scale mean score was found as 21.99 ± 7.28 , OCS mean score was found as 4.78 ± 3.62 , WHOQOL-BREF-TR physical subdomain mean score was found as 13.58 ± 3.35 , psychological subdomain mean score was found as 14.19 ± 3.29 , social subdomain mean score was found as 14.13 ± 3.66 , environmental subdomain mean score was found as 14.16 ± 3.36 , and national environmental subdomain mean score was found as 13.83 ± 2.82 . A positive and moderate significant correlation was found between FCV-19S and OCS ($r=0.571$, $p=0.000$). A positive and very weak significant correlation was found between OCS and WHOQOL-BREF-TR physical subdomain ($r=0.166$, $p=0.00$).

Conclusion: The participants were found to have high levels of fear of COVID-19 and low levels of obsession with COVID-19. It was found that individuals' fears increased obsessive thoughts and obsessive thoughts positively affected quality of life.

Key Words: COVID-19, Fear, Obsession, Quality of Life, Chronic Disease.

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INTRODUCTION

Coronavirus (COVID-19), which emerged in the Wuhan city in China on December 31, 2019, was declared as a pandemic by WHO on March 11, 2020 due to the rapid spread of the coronavirus cases and the fact that it affected the whole world (World Health Organisation (WHO) 2020). While this pandemic still continues to increase in the whole world, the increasing number of deaths, uncertainties regarding definitive treatment or vaccination, job losses and situations such as COVID-19 related social isolation have caused the lives of many individuals to worsen (Lee 2020a). For this reason, it has been stated that a great majority of people have begun to experience moderate to high level

of psychological problems worldwide during this pandemic (Ahorsu et al. 2020, Kim & Su 2020, Lee 2020b, Lin 2020, Taylor 2019, Thakur & Jain 2020, Wang et al. 2020, Zhai & Du 2020). Anxiety, depression, worry, somatization, insomnia, psychoticism and fear are some of the psychological problems experienced by individuals during this pandemic (Tian et al. 2020, Zhang et al. 2020). Fear is defined as an unpleasant emotional state against a real or perceptual danger that appears suddenly in unexpected and unforeseen situations (Goyal et al. 2020). During this pandemic process, negative thoughts in individuals such as death or losing the loved ones, not being able to access health institutions, experiencing food shortage, getting infected at any moment (Biçer et

al. 2020) or passing the virus on someone else and being unemployed cause individuals to experience fear (Gencer 2020). Studies conducted have found that fear causes psychological problems to increase (Ahorsu et al. 2020, Lee 2020a, Wang et al. 2020). In a study by Pan et al. (2021), general population was found to have high levels of COVID-19-related fear. However, it was found that individuals with depression, anxiety or obsessive-compulsive disorder (OCB) had higher levels of COVID-19-related fear when compared with healthy individuals (Pan et al. 2021). In a systematic review conducted, it was reported that general population experienced high levels of anxiety, depression and fear during COVID-19 pandemic and these symptoms were a significant predictor of the presence of chronic/psychiatric diseases (Xiong et al. 2020). Other studies conducted have found that pandemic related fear is associated with suicide cases (Goyal et al. 2020, Mamun & Griffiths 2020) and it triggers various psychological problems such as obsession (Choi et al. 202).

Obsession is one of the defence mechanisms used by our brain and it is described as thoughts constantly repeating in the mind that occur when we are mentally stressed, restless and helpless (Bhattacharjee & Acharya 2020). In studies conducted during the pandemic period, it has been reported that individuals' excessive and repetitive negative thoughts about COVID-19 lead to psychological disturbances such as obsession (Lee 2020b, Skalski et al. 2020). In a review conducted, clinical worsening, an increase in transmission obsessions and washing compulsions and avoidance behaviors were reported in OCD patients during the COVID-19 pandemic. It was also found that there were higher referrals to psychiatric emergency service and higher rates of psychiatric emergency consultations were asked for OCD patients during the pandemic when compared with the previous year. When the pre-pandemic and post-pandemic periods were compared, increase in the general severity of obsessions and compulsions ($p < 0.001$), new cases and exacerbations in existing obsessions ($p < 0.005$) and compulsions ($p < 0.001$) were reported (Zaccari et al. 2021). Increase in fear obsession behaviors which were also COVID-19-related (for example, hand washing, hand disinfectant use) was reported (Grant et al. 2021). It is thought that quality of life is also negatively affected when this situation goes too far and becomes extremely stressful and worrying in some individuals.

Quality of life is a summary of areas of living conditions that contribute to subjective satisfaction of individuals and that can be measured subjectively (Ng et al. 2018). In this sense, quality of life focuses on how individuals live and whether life brings good results for people. During COVID-19 pandemic, psychological problems experienced by individuals have caused their life satisfaction to be affected negatively by causing them to experience negative feelings and thoughts

about their future expectations (Karataş & Tagay 2021, Rogowska et al. 2020, Zhang et al. 2020). It was found that health-related quality of life regarding physical and mental health was at the worst level of functionality in individuals who had a psychiatric diagnosis when compared with those who did not during the COVID-19 period (Liu et al. 2020). During the pandemic period, the first negative factor affecting individuals' quality of life is fear that occurs as a result of COVID-19 (Rahme et al. 2021) and fear of COVID-19 has a negative effect on quality of life (Altay & Arsoy 2022). In one study, it was found that stress, COVID-19 fear and OCD affects physical quality of life negatively, while stress and COVID-19 fear affects mental quality of life negatively (Rahme et al. 2021). Fears about disease play an important role as predictors or mediators of quality of life indicators (Alyami et al. 2021).

During the COVID-19 pandemic, chronic patients, who are among high risk groups, have been reported to experience more psychological problems (Joensen et al. 2020). In their study, Sayeed et al. (2020) found that individuals with chronic diseases experienced more stress, anxiety and depression when compared with individuals who did not have chronic diseases. It is very important to examine the effects of COVID-19 pandemic on the life quality of chronic patients in order to understand the psychological effects of the pandemic and to help chronic patients to maintain their psychological well-being. In the light of this information, the aim of the present study is to examine the levels of fear, obsessive behaviors and quality of life experienced in chronic patients due to COVID-19 pandemic and to examine the relationship between these.

SUBJECTS AND METHODS

Type of the study

This descriptive and cross-sectional study was conducted to examine the levels of fear, obsessive behaviors and quality of life experienced in chronic patients due to COVID-19 pandemic and to examine the relationship between these.

Time and population of the study

The study was conducted between October 5 and 31, 2020 by using "snowball sampling method", which is one of the non-random sampling method. In the snowball sampling method, the process of creating sample starts with reaching one of the individuals on whom the study will be conducted. The researcher tries to reach new individuals by asking who else they can reach. As a result of the research carried out by the researcher in a chained manner, data collection phase of the study is completed as soon as data saturation is reached (Şahin 2011). Data collection forms prepared with GoogleDocs program were sent online (e-posta,

whatsapp) to individuals in Turkey who were older than 18 and who had a chronic disease and they were asked to share with individuals around them who had chronic disease. 950 individuals were reached with the online survey form. 255 individuals who met the inclusion criteria and who answered the survey were included in the study. Power analysis of the study was calculated with GPower 3.1 program. According to the results of this study, an effect size of 0.415 (high level) was obtained with 95% power and 0.05 margin of error.

Data Collection

The survey form consisting of Personal Information Form, Fear of COVID-19 Scale, Obsession with COVID-19 Scale and World Health Organization Quality of Life Brief Form was prepared with GoogleDocs program. Individuals aged 18 and older with a chronic disease who were living in Turkey were reached through social media (whatsapp, facebook, twitter). The individuals who agreed to participate in the study were sent the survey form which was prepared online and they were asked to fill in the form. The participants' informed consent was obtained electronically before the study. The individuals were also asked to share the survey form with individuals around them who were 18 years old and older and who had chronic disease.

Data Collection Tools

The data were collected online by using Personal Information Form, Fear of COVID-19 Scale (FCV-19S), Obsession with COVID-19 Scale (OCS) and World Health Organization Quality of Life Brief Form (WHOQOL-BREF-TR).

Personal Information Form: The form prepared by the researchers includes questions about the sociodemographic characteristics of the participants and their thoughts about COVID-19.

Fear of COVID-19 Scale (FCV-19S): Turkish adaptation, validity and reliability study of the scale which was developed by Ahorsu et al. (2020) was conducted by Bakioğlu et al. (2021). The scale consists of a single dimension and 7 questions (Ahorsu et al. 2020, Bakioğlu et al. 2021). The questions are scored between 1 and 5 by using a 5 Likert type scale (1-Totally disagree, 5-Totally agree). There are no reversely coded items in the scale. The scale gives a score between 7 and 35. High score means "high" level of COVID-19 fear. In the Turkish validity and reliability study of the scale, Cronbach Alpha value was found as 0.88. In the present study, Cronbach Alpha value of the scale was found as 0.92.

Obsession with COVID-19 Scale (OCS): It was developed by Lee et al. (2020) to describe the effects of persistent and disturbing thoughts about COVID-19 on individuals (Lee 2020b) Turkish validity and reliability study of the scale was conducted by Evren et al. (2022). The scale consists of a single dimension and 4 items.

Each item of OCS evaluates the experiences of the individual within the past two weeks with a 5 Likert type scale from 0 (not at all) to 4 (almost every day). The score of the scale is between 0 and 16. High scores show dysfunctional thinking associated with coronavirus. Cronbach Alpha value was found as 0.83 in Turkish validity and reliability study (Evren et al. 2022). In the present study, Cronbach Alpha value was found as 0.80.

World Health Organization Quality of Life Brief Form (WHOQOL-BREF-TR): It is a scale which evaluates how individuals perceive their quality of life. The scale was developed by World Health Organization and Turkish validity and reliability study of the scale was conducted by Eser et al. (1999). A question was added during Turkish validity study. World Health Organization Quality of Life Brief Form (WHOQOL-BREF-TR) consists of 27 questions and 5 subdomains as physical, psychological, social relationships, environmental and national environmental. The scale has a 5 Likert type assessment as "1=Not pleased at all, 5=Highly pleased". The scale does not have a total score. Each subdomain expresses the quality of life in that domain irrespective of each other. The scores of subdomains are calculated as between 4 and 20 and quality of life increases as scores increase. In the Turkish validity and reliability of the scale, Cronbach alpha values were found as 0.83 in the physical subdomain, as 0.66 in the psychological subdomain, as 0.53 in the social subdomain, as 0.73 in the environmental subdomain and as 0.73 in the national environmental subdomain (Eser et al. 1999). In the present study, Cronbach alpha values were found as 0.88 in the physical subdomain, as 0.86 in the psychological subdomain, as 0.70 in the social subdomain, as 0.92 in the environmental subdomain and as 0.84 in the national environmental subdomain.

Data Assessment

Number, percentage, mean and standard deviation were used in the assessment of data obtained from the study. The relationship between FCV-19S, OCS and WHOQOL-BREF-TR was analysed with Spearman's correlation test. Statistical analyses were made with SPSS 25 program and the data obtained were evaluated within 95% confidence interval and at 5% level of significance.

Ethical considerations of the study

This study was carried out in accordance with the principles of Helsinki Declaration of Human Rights. Permission was taken from the Ethics committee of a foundation university (2020/09 numbered). Before starting the study, the participants' informed consents were taken electronically. Volunteering participants were included in the study and personal identification information was kept confidential.

Table 1. Findings Related with Socio-Demographic Characteristics of Individuals and COVID-19

		Mean±Sd	Min-Max (Median)
Age		53.57±15.72	18-90 (54)
Gender	Female	118	46.3
	Male	137	53.7
Marital status	Married	207	81.2
	Single	48	18.8
Level of Education	Illiterate	42	16.5
	Literate	18	7.1
	Primary	29	11.4
	Secondary	32	12.5
	High school	51	20.0
	University and higher	81	32.5
Level of income	Income<expense	45	17.6
	Income=expense	149	58.4
	Income>expense	61	23.9
The state of having a regular job	Yes	94	36.9
	No	113	44.3
	Can't work due to Covid-19	48	18.8
The state of thinking that the information given about COVID-19 is sufficient	Yes	165	64.7
	No	40	15.7
	Undecided	50	19.6
The state of thinking that the measures taken for COVID-19 are sufficient	Yes	137	53.7
	No	48	18.8
	Undecided	70	27.5
Knowing an individual diagnosed with COVID-19	Yes	148	58.0
	No	107	42.0
The state of thinking of being excluded due to COVID-19	Yes	87	34.1
	No	137	53.7
	Undecided	31	12.2
Chronic disease	Diabetes	65	14.7
	Heart disease	145	32.9
	Blood pressure	104	23.6
	Asthma and COPD	47	10.7
	Renal Disease	18	4.1
	Neurological diseases	12	2.7
	Rheumatologic diseases	15	3.4
	Other	35	7.9

RESULTS

Mean age of the participants was found as 53.57±15.72; it was found that 53.7% were male, 81.2% were married, 32.5% were university and higher

education graduates, 58.4% had an income equal to expense and 44.3% did not have a regular job. It was found that 64.7% of the participants had sufficient information about COVID-19, 53.7% thought that the measures taken for COVID-19 were sufficient, 58%

Table 2. Mean scores of FCV-19S*, OCS** and WHOQOL-BREF-TR*** Sub-domains

	Mean±Sd	Min-Max (Median)
Fear of COVID-19 Scale	21.99±7.28	7-35 (23)
Obsession with COVID-19 Scale	4.78±3.62	0-14 (4)
WHOQOL-BREF-TR Subscale	13.58±3.35	4-20 (13.71)
WHOQOL-BREF-TR Subscale	14.19±3.29	4.67-20 (14.67)
WHOQOL-BREF-TR Subscale	14.13±3.66	6.67-20 (13.33)
WHOQOL-BREF-TR Subscale	14.16±3.36	6-20 (13.5)
WHOQOL-BREF-TR Subscale	13.83±2.82	6.67-19.56 (13.78)

*FCV-19S: Fear of COVID-19 Scale, **OCS: Obsession with COVID-19 Scale, ***WHOQOL-BREF-TR: World Health Organization Quality of Life Brief Form

Table 3. Correlation Analysis of FCV-19S*, OCS**, WHOQOL-BREF-TR*** Subscales

		Fear of COVID-19 Scale	Obsession with COVID-19 Scale
Fear of COVID-19 Scale	r	1	
	p		
Obsession with COVID-19 Scale	r	0.571	1
	p	0.000****	
WHOQOL-BREF-TR Subscale	r	-0.07	0.166
	p	0.265	0.008****
WHOQOL-BREF-TR Subscale	r	-0.063	0.066
	p	0.316	0.291
WHOQOL-BREF-TR Subscale	r	-0.080	0.108
	p	0.201	0.085
WHOQOL-BREF-TR Subscale	r	-0.032	0.090
	p	0.606	0.15
WHOQOL-BREF-TR Subscale	r	-0.047	0.062
	p	0.453	0.327

*FCV-19S: Fear of COVID-19 Scale, **OCS: Obsession with COVID-19 Scale, ***WHOQOL-BREF-TR: World Health Organization Quality of Life Brief Form, ****p<0.05

knew someone diagnosed with COVID-19, 53.7% thought they were not excluded due to COVID-19 pandemic and 32.9% had a heart disease (Table 1).

Table 2 shows mean scores of FCV-19S, OCS and WHOQOL-BREF-TR sub-domains. FCV-19S mean score was found as 21.99±7.28, OCS mean score was found as 4.78±3.62, WHOQOL-BREF-TR physical sub-domain mean score was found as 13.58±3.35,

psychological sub-domain mean score was found as 14.19±3.29, social sub-domain mean score was found as 14.13±3.66, environmental sub-domain mean score was found as 14.16±3.36 and national environmental sub-domain mean score was found as 13.83±2.82 (Table 2). Table 3 shows the correlation analysis of FCV-19S, OCS and WHOQOL-BREF-TR subdomains. There is a positive and moderate significant correlation

between FCV-19S and OCS ($r=0.571$, $p=0.000$). There is a positive and very weak significant correlation between OCS and WHOQOL-BREF-TR physical subdomain ($r=0.166$, $p=0.00$).

DISCUSSION

The present study was conducted to examine levels of fear, obsessive behaviors and quality of life experienced due to COVID-19 pandemic in individuals with chronic disease and to examine the relationships between these. The results obtained were discussed in the light of related literature.

In the study, mean FCV-19S scores of the participants were found to be moderate. A large number of studies conducted have reported that individuals experienced moderate level of fear during the pandemic (Cao et al. 2020, Gashi 2020, Kasapoğlu 2020, Moghanibashi-Mansourieh 2020, Srivastava et al. 2020). In different studies conducted, fear of COVID-19 levels were found to be higher in individuals with chronic disease when compared with healthy individuals (Bakioğlu et al. 2021, Wang et al. 2020). In their study, Rajkumar et al. (2020) found that individuals experienced moderate levels of fear, anxiety and stress. Another study conducted found that the participants experienced feelings of fear, panic and worry due to COVID-19 (Tönbül 2020). The results of the study were found to be similar to literature. According to Inter-Agency Standing Committee (IASC) (2020), individuals show specific reactions during the pandemic period. These reactions were grouped as the fear of being infected with the disease and the fear of death, the fear of losing job, the fear of being under quarantine, the fear of losing relatives due to the pandemic, the fear of being separated from relatives due to the pandemic, and feeling desperate and alone due to social isolation. Especially individuals with chronic diseases may experience feelings of contacting with people infected with coronavirus or the fear of catching the disease due to the bad prognosis of COVID-19 (Lin 2020). In addition, during this process, all sources of information emphasized that COVID-19 affected individuals with chronic health problems more. It has been reported that having one or more chronic health problems except COVID-19 increased death rates. Such information may naturally have played an important role in increasing the levels of fear of COVID-19 in individuals with chronic health problems (Bakioğlu et al. 2021). It has also been reported that fear of COVID-19 is natural and it should be used to prevent the disease from spreading (Adibi et al. 2020). In the study, mean OCS scores of patients were found to be low. Studies conducted have reported that healthy individuals have low obsession levels (Andrade et al. 2021, Ashraf et al. 2020, Choi et al. 2022, Srivastava et al. 2020). In cases with obsessive compulsive disorder

(OCD), contamination anxiety caused by the pandemic and the increase in cleaning rituals have been observed to cause aggravation in the course of the disease (Banerjee 2020). It has also been emphasized that the recommended hygiene and physical distance applications to prevent the spread of the disease will aggravate the existing situation in individuals with a diagnosis of OCD and/or in individuals who are thought to be under risk (Fontenelle & Miguel 2020). The difference in literature may be due to the fact that they were conducted on different patient groups. Chronic diseases include challenging processes which affect quality of life and habits fundamentally. Both officials and scientists and individuals who have experienced this process describe the harsh conditions of coronavirus treatment and the difficulties experienced by patients. Therefore, this situation becomes more manageable for individuals who have undergone a serious treatment process and who have a history of chronic disease (Gencer 2020).

In the study, the patients were found to have moderate level of mean WHOQOL-BREF-TR subdomain scores. Studies conducted have reported that individuals have moderate level of quality of life during COVID-19 pandemic (Andrade et al. 2021, Harper et al. 2020, Rabacal et al. 2020). In a study conducted in China, individuals were found to have high levels of quality of life. In the same study, individuals with chronic disease were found to have lower quality of life (Ping et al. 2020). Just as in crises such as disease, earthquake, flood and war, human beings may sometimes consider themselves as weak and helpless. However, in spite of this, individuals always try to understand and make sense of these disasters or crises (Gashi 2020). During the coronavirus pandemic, individuals have reported that they realized the trivial things they worry about and realized the opportunities they missed, their priorities in life changed and they gained self-awareness about finding meaning in life. It is also stated that the process of coronavirus offers individuals the opportunity for self/personal development. During the coronavirus and quarantine process, individuals get to know themselves better, they develop themselves, increase their levels of psychological resilience in the face of stress and experience mental and physical rejuvenation (state of calmness) during this process (Hatun et al. 2020). In a study conducted on elderly individuals with chronic diseases, it has been reported that drug, diet and exercise programs of most of the participants were not affected negatively during the quarantine process. It has been reported that elderly individuals who spent all their time at home during this process spent more time on their diet and exercise programs in the treatment of chronic diseases (Irmak et al. 2020). Although chronic diseases negatively affect the quality of life (Pengpid & Peltzer 2018). It was thought that the quality of life was not affected negatively because individuals paid more

attention to their lives during the pandemic. It was found in the study that individuals' obsession levels increased as their fear of COVID-19 increased. Studies conducted have reported that in COVID-19 pandemic obsession levels increased as individuals' fears increased (Andrade et al. 2021, Ashraf et al. 2020, Choi et al. 2022, Srivastava et al. 2020). It has been reported that fear of COVID-19 led to the development of destructive and obsessive thoughts which caused emotional distress and a serious deterioration in daily functioning in some individuals (Arora et al. 2020). In a study conducted by Satici et al. (2020), a negative correlation was found between fear of COVID-19 and the state of mental well-being. The results of the study were found to be similar to the results of studies in literature. It has been reported that high death rates due to COVID-19 cause anxiety individuals and lead them to focus on negative thoughts (Tönbül 2020). It has been stated that the fear experienced in pandemic can trigger obsession (Gözpınar & Görmez 2020).

In the study, it was found that patients' obsession with COVID-19 had a positive effect and increased physical subdomain of quality of life. It was found that staying away from public areas and public transportation and caring for hand hygiene increased individuals' well-being (Wang et al. 2020). In their study conducted in Turkey, Yıldırım et al. (2021) reported that not using public transportation and washing hands frequently were the most adopted preventive behaviors and participation in preventive behaviors could increase physical health significantly. It has been stated in literature that individuals had to use their obsession with COVID-19 to protect their health (Adibi et al. 2020). Although negative thoughts and obsessions have negative consequences in terms of health, these negative thoughts also motivate a series of behaviors (healthy diet, exercise) that decrease participation in risky behaviors (Harper et al. 2020). In the present study, it can be said that when individuals are faced with stressful or challenging experiences, they can easily adapt to these situations and that their physical quality of life is positively affected.

Limitations of the study

This study has three limitations. The first limitation is the fact that sample bias may have occurred since only individuals who were reached online were included in the study. The second limitation is the fact that reliability of data is limited to the accuracy of responses given by the patients who participated in the study. The third limitation is the fact that the results of the study are valid for individuals who were included in the study; therefore, they cannot be generalized to the whole society.

Practical Implications

The present study reported results regarding fear, obsessive behaviors and quality of life in individuals

with chronic illness and explaining the relationship between fear, obsessive behaviors and quality of life during the pandemic. COVID-19 pandemic and quarantine due to COVID-19 had a significant effect on not only physical health but also mental health of individuals with chronic diseases. COVID-19 pandemic creates a large number of new uncertainties and challenges that may decrease professional health-seeking behaviors. When high psychiatric symptom risks are considered, a special effort should be shown to increase the access of these patients to mental health treatment.

CONCLUSION

The results of the study reflect the potential effects of pandemic period on individuals with chronic disease. According to the results of the study, individuals were found to have high levels of COVID-19 fear and low levels of obsession. It was found that individuals' fears increased obsessive thoughts and obsessive thoughts had a negative effect on the quality of life. The study can contribute to individuals with chronic disease to be protected from the negative effects of the pandemic and to survive the pandemic period with least damage. In outbreaks and during quarantine, it is recommended to develop and apply emergency action plans for individuals with chronic disease by considering biopsychosocial problems.

During the pandemic, nurses can help develop sustainable and effective strategies, especially by early detection of individuals in risk groups, by taking measures against these risks and by addressing health states as a whole.

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Conflict of Interests:

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