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ORIGINAL ARTICLE / ORİJİNAL MAKALE

The Invisible Threat of The Pandemic: Cervical Cancer Screening Change According to Health Belief of Women

Pandeminin Görünmez Tehdidi: Kadınların Sağlık İnançlarına Göre Serviks Kanseri Tarama Değişimi

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Abstract

Background: During the pandemic process, changes were made in cancer screening programs in order to reduce the density of hospitals and prevent the spread of the pandemic.

Objectives: To determine the health beliefs, thoughts and practices of women regarding cervical cancer and pap-smear testing during the COVID-19.

Methods: The cross-sectional study was carried out with 361 women who filled out the questionnaire online through the social media application. Cervical Cancer and Pap Smear Test Health Belief Model Scale was used to collect data.

Results: The women's 81.2% stated that they did not have a pap smear test and 72.6% of them stated that the pap smear test should not be postponed during the pandemic. Their 76.7% stated that they did not want to get a self-swab smear test at home during the pandemic, 49.3% of them stated that they could get Human Papilloma Virus vaccine in the pandemic. Cervical Cancer and Pap Smear Test Health Belief Model Scale sub-dimension mean scores of Pap smear benefits and motivation (15.12 ± 4.96), pap smear barriers (40.09 ± 6.79), cervical cancer care/seriousness (26.21 ± 2.62), cervical cancer sensitivity (12.96 ± 1.88) and cervical cancer health motivation (7.36 ± 2.37).

Conclusion: Although women's perception of pap-tests and their level of cervical cancer sensitivity was found high, most of them did not have pap smear screening in the pandemic period. This may increase the incidence of cervical cancer in the future. In order for women to continue their participation in screening programs during the pandemic, health personnel should take the necessary precautions according to restriction and relaxation processes.

Keywords: Cervical Cancer, COVID-19, Health Belief Model, Pap Smear, Thought

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Öz

Giriş: Pandemi sürecinde gerek hastanelerin yoğunluğunu azaltmak gerekse pandeminin yayılmasını önlemek amacıyla kanser tarama programlarında değişikliklere gidilmiştir.

Amaç: Kadınların COVID-19 sürecinde serviks kanseri ve pap-smear testi ile ilgili sağlık inançlarını, düşüncelerini ve uygulamalarını belirlemektir.

Yöntem: Bu kesitsel çalışma, sosyal medya uygulaması üzerinden online olarak 361 kadın ile gerçekleştirilmiştir. Verilerin toplanmasında Serviks Kanseri ve Pap Smear Testi Sağlık İnanç Modeli Ölçeği kullanılmıştır.

Bulgular: Kadınların %81.2'si pandemide pap smear testi yaptırmadığını ve %72.6'sı pandemi döneminde pap smear testinin ertelenmemesi gerektiğini ifade etti. Kadınların %76.7'si evde smear testini kendi kendine sürüntü alarak yapmak istemediklerini, %49.3'ü pandemide Human Papilloma Virüs aşısı yaptırabileceğini ifade etti. Serviks Kanseri ve Pap Smear Testi Sağlık İnanç Modeli Ölçeği alt boyut puan ortalamaları Pap smear yararları ve motivasyonu 15.12 ± 4.96, pap smear engelleri 40.09 ± 6.79, serviks kanseri bakımı/ciddiliği 26.21 ± 2.62, serviks kanseri duyarlılığı (12.96 ± 1.88) ve serviks kanseri sağlık motivasyonu 7.36 ± 2.37'dir.

Sonuç: Kadınların pap testi algısı ve serviks kanseri duyarlılık düzeyleri yüksek bulunmasına rağmen pandemi döneminde çoğu pap smear taraması yaptırmamıştır. Bu durum serviks kanserinin önümüzdeki yıllarda görülme oranını artırabilir. Kadınların tarama programlarına katılımın devam edebilmesi için sağlık personelinin kısıtlama ve normalleşme süreçlerine göre gerekli önlemleri alması gerekmektedir.

Anahtar Kelimeler: Serviks Kanseri, COVID-19, Sağlık İnanç Modeli, Pap Smear, Düşünce

INTRODUCTION

Cervical cancer (CC) ranks fourth in terms of incidence and deaths from cancer among women in 2020 (Sung et al., 2021). The incidence in women aged 15-44 in Turkey is in the seventh place with 5.31/100.00 (Bebiş et al., 2012). CC tends to occur more in middle-aged women (American Cancer Society, 2020). Polygamy, early initiation of sexual activity due to early marriage, increased smoking, low rate of Pap Smear Test (PST) and low socio-economic status are important risk factors (Bebiş et al., 2012).

The Health Belief Model (HBM) is used to understand the factors that influence an individual's health and medical behavior and symptom management (Rohleder, 2012). The HBM states that individuals' beliefs, values, and attitudes will affect their health behaviors. Inappropriate health behaviors can be transformed into positive health behaviors with health education or treatment methods (Champion et al., 2008). If an individual has a sensitivity that a health problem will harm them, they think that appropriate health behavior will reduce the harm that will come to them. They believe that if they do not take action to solve the health problem, their behavior may lead to more serious consequences. For example, someone who is afraid of getting cancer will prefer to have health screenings by overcoming barriers such as lack of time and financial situation, not being able to reach a doctor and health institution, rather than being exposed to the bad consequences of cancer (Öz, 2004).

With the rapid spread of the coronavirus

infection that emerged in China in December 2019, patients were primarily directed to family physicians and go to hospitals were limited in order to ensure the planned use of health services in worldwide (Aykanat & Demirkıran, 2020). During the epidemic, professional opinions recommended delaying cancer patients' operations and screening programs as much as feasible (Ling et al., 2021). In Turkey, it is recommended that examinations and treatments be postponed in the management of preinvasive cervical disease during the pandemic (Aykanat & Demirkıran, 2020). The National Cervical Cancer Screening Program in Australia has not been discontinued, because it requires women to visit the hospital for the screening, the number of women who participated in the screening has decreased. To increase screening, implementations such as telehealth systems and self-testing for HPV are advised (Feletto et al., 2020). In a study conducted in California, it was found that compared to 2019, the rate of cervical cytology in women aged 21–29 decreased by 78% in 2020, and the rate of HPV testing in women aged 30–65 decreased by 82% in 2020 (Miller et al., 2021). These decreases in cervical cancer screening will result in further accumulation and increase in the number of CC-related cases and deaths. For this reason, to increase CC screening and prevent deaths, a home swab-screening test can be used without going to a health institution. Additionally, mobile and digital applications will increase CC screening during the pandemic process in terms of recording the screening results and presenting them to healthcare professionals (Ling et al., 2021). The Royal College of Obstetricians and Gynaecologists recommends the use of virtual consultations and hotlines to answer questions and alleviate fears from women with persistent HPV who have low-grade or minor cytological abnormalities and will not undergo diagnostic colposcopy during the current COVID-19 pandemic situation to reduce face-to-face meetings (Royal College of Obstetricians & Gynaecologists (RCOG), 2020). In our country, population-based cervical cancer screening is carried out free of charge for women between the ages of 30 and 65, including HPV DNA testing, every 5 years by the Cancer Early Diagnosis, Screening and Education Centers [KETEM] within the Family Health Centers and Community Health Centers (TC Sağlık Bakanlığı Halk Sağlığı Genel Müdürlüğü, 2016). Also, there is no self-swab/ pap-smear kit using at home and mobile applications related to cervical cancer screening in our country.Since there is no study on the beliefs of women in PST screening during the COVID-19 process in Turkey, it is anticipated that this study will contribute to the literature. In this context, the study aims to determine the thoughts and practices of women regarding the PST during the COVID-19 process and their health beliefs about CC and pap-smear test.

METHODS

Research Type

This research was designed as a descriptive and cross-sectional study.

Research Place

The data of this research were collected by sending an online questionnaire to the groups named "Women Confess" (Kadınlar İtiraf Ediyor) (https://www.facebook.com/sevgisevgi2727) and Flying Broom Association (https://www.facebook.com/ucansupurgeder) on Facebook.

Universe/Sample of the Research

The "Women Confess" Facebook group was followed by 6276 people. The sample size was calculated on the basis of a sample determination formula (95% confidence interval, with 0.05 alpha) with a known number in the universe and it was found to be 363. The exact number

were included in the study, but two women were excluded due to incomplete information. The research was completed with 361 women who were at least primary school graduates, older than 21 years old, had social media accounts and actively used them, had an active sexual life at present or in the past, had not been diagnosed with gynecological cancer before. Women who had vision problem were excluded.

Data Collection Tools

The Introduction Form and the Cervical Cancer and Pap Smear Test Health Belief Model Scale were used for data collection.

Introduction Form

The form prepared by the researchers in line with the literature consisted of three parts (Bebiş et al., 2012; Miller et al., 2021; Royal College of Obstetricians & Gynaecologists (RCOG), 2020). It comprised 31 questions, nine of which are about the socio-demographic characteristics of women (age, education level, employment status, place of residence, marital status, family type, etc.), thirteen questions about their obstetric and gynecological characteristics (pregnancy, miscarriage, menopause, family history of cervical cancer, pap-test status, presence of abnormal findings, etc.), and nine about the Pap-test during the pandemic process (pap-testing in a pandemic, postponing pap-testing, gynecological examination in a pandemic, preventive practices for cervical cancer, requesting telehealth services in a pandemic, HPV vaccination status, etc.).

Cervical Cancer and Pap Smear Test Health Belief Model Scale: This scale was developed by Güvenç, Akyüz, and Açıkel in 2011 (Güvenç et al., 2011). The scale consists of 35 items and five main dimensions: sensitivity (3 items), seriousness (7 items), Pap Smear benefit and health motivation (8 items), health motivation (3 items), Pap Smear barriers (14 items). Güvenç et al. (2011) found the cronbach's alpha reliability coefficients for the five subscales ranged from 0.62 to 0.86, and test-retest reliability coefficients ranged from 0.79 to 0.87 for the subscales. In the evaluation of the scale, 5-point Likert-type scaling ranging from 1 to 5 "strongly disagree" (1), "disagree" (2), "undecided" (3), "agree" (4), "strongly agree" (5) methods were used. Each sub-dimension of the scale is evaluated separately and a total score is not obtained. High scores obtained from the sub-dimensions indicate that sensitivity, seriousness and motivation are increased, while benefits are perceived to be high for the perception of benefit, and barriers are perceived to be high for the perception of barriers. Subscales, except for the barriers perception subscale, are positively associated with Pap Smear screening behavior. The cronbach alpha values of the sub-dimensions of 'Pap Smear Benefit and Motivation', 'Pap Smear Barriers', 'Seriousness', 'Sensitivity' and 'Health Motivation' in this study were 0.755, 0.720, 0.566, 0.714, and 0.561, respectively.

The Google form was used to collect the data and link created was sent to the participants via social media platforms between July and December 2021.

Since the study was be conducted online, the informed consent text was prepared in Google form instead of signature, and the informed consent of the woman was obtained with the statement 'I have read, understood and I agree to participate in the study.' so that the identities of the persons remained anonymous. In this section, the criteria for inclusion in the study are explained in a way that women can understand.

Data Analysis

The data were analyzed using the IBM SPSS Statistics software V24. The descriptive characteristics and scale scores of the women

were evaluated using descriptive statistics such as number, percentage, mean and standard deviation.

Dependent Variables of the Study: The health beliefs, thoughts and practices of women regarding cervical cancer and pap-smear testing

Independent Variable of the Study: COVID-19 process

Ethical Considerations

For the Cervical Cancer and Pap Smear Test Health Belief Model Scale used in the study, permission was obtained from the scale owner Akyüz. The study was approved by the Non-Intervention Research Assessment Commission of the University (Date: 30/06/2021 - Decision Number: 2021/20-46). To conduct the study, research and publication ethics were followed. In this study Declaration of Helsinki Principles were followed, the women were informed about the study and they gave informed consent. To conduct the study, research and publication ethics were followed.

RESULTS

The mean age of the women participating in the study was 38.70 ± 9.65. 51.5% of women are college/faculty graduates, 15% of unemployed women, and 20.2% of employed women are nurses/midwives. 68.7% women stated that they lived in the Aegean Region and 80.1% were married (Table 1).

While the average number of pregnancies of the women participating in our study was 1.49 ± 1.32, the number of births was 1.13 ± 0.94. It was determined that 81.4% participants were not in menopause, women who were in menopause entered menopause 6.98 ± 5.72 years ago, 7.8% had a family history of cervical cancer. Women with no abnormal findings in the PST constituted 60.1% participants (Table 2).

Table 1. Sociodemographic Characteristics of the Women (n = 361)

	Min - Max	x̄±SD
Age	23-66	38.70±9.65
	n	**%**
Educational Status		
Primary education	15	4.2
High school	42	11.6
Faculty/College	186	51.5
Postgraduate	118	32.7
Employment Status		
Employed	289	80.1
Unemployed	72	19.9
Income status		
Income Less Than Expenses	129	35.7
Income Equal to Expense	197	54.6
Income More Than Expenses	35	9.7
Marital status		
Married	289	80.1
Single	72	19.9
If she is married, duration of marriage		
1-4 years	59	29.1
5-9 years	48	23.6
10-14 years	21	10.3
15-19 years	18	8.9
20 years and above	57	28.1
Region of residence		
Aegean Region	248	68.7
Marmara Region	58	16.1
Black Sea Region	13	3.6
Central Anatolia Region	16	4.4
Southeast Anatolia Region	16	4.4
Eastern Anatolia Region	7	1.9
The Mediterranean Region	2	0.6
Abroad (England)	1	0.3
Family Type		
Nuclear family	307	85.0
Extended family	30	8.3
Broken family	24	6.6

Table 2. Obstetric and Gynecological Characteristics of the Woman

Descriptive features	n	%	Min -Max	x̄±SD
Number of Pregnancy	361		0-8	1.49±1.32
Number of Births	361		0-4	1.13±0.94
Menopause Status				
Being in menopause	67	18.6		
Not being in menopause	294	81.4		
How many years ago she entered menopause	67		1-20	6.98±5.72
Family history of cervical cancer				
Yes	28	7.8		
No	333	92.2		
Abnormal finding in the Pap smear test				
Yes	14	3.9		
No	217	60.1		
I didn't get tested	130	36.0		

The Cervical Cancer and Pap Smear Test Health Belief Model Scale sub-dimension scores of the women are given in Table 3. Pap smear benefit and motivation, Pap smear barriers, CC seriousness, sensitivity, health motivation sub-dimension mean scores were 15.12 ± 4.96, 40.09 ± 6.79, 26.21 ± 2.62, 12.96 ± 1.88, 7.36 ± 2.37, respectively (Table 3). Considering the scores that can be obtained from the sub-dimensions of the scale; it was found that women's Pap smear benefits and motivation were low, barriers, health motivation and seriousness perceptions were above average, and CC sensitivity was high.

Table 3. Distribution of Women's Cervical Cancer and Pap Smear Test Health Belief Model Scale Sub-Dimension Scores

Cervical Cancer and Pap Smear Test Health Belief Model Scale Sub-Dimensions	n	Min -Max	x̄ ± SD
Cervical cancer sensitivity	361	3 - 15	12.96 ± 1.88
Cervical cancer care/ seriousness	361	9 - 33	26.21 ± 2.62
Pap smear benefit and motivation	361	8 - 30	15.12 ± 4.96
Cervical cancer health motivation	361	3 - 14	7.36 ± 2.37
Pap smear barriers	361	20 - 60	40.09 ± 6.79

The practices and thoughts of women regarding the PST during the pandemic process are given in Table 4. 81.2% women stated that they did not have a PST during the pandemic, 27.6% women without the test stated that they did not consider it necessary, and 25.9% of them did not have the test because the hospitals were crowded. While 72.6% women thought that the PST should not be postponed during the pandemic, 57.6% of them emphasized that the PST should be postponed until the cases decrease. It was determined that 36.8% participants underwent a gynecological examination during the pandemic. While 33.8% of women stated that they do nothing to prevent CC, 39.3% of women were found to have a healthy diet, vaccinated and pay attention to their hygiene to be protected from cervical cancer. It was found that 55.1% women participating in our study wanted to receive telehealth services during the pandemic, and 76.7% of them could not do the smear test themselves at home. 49.3% participants stated that they would get HPV (Human papillomavirus) vaccine during the pandemic.

Table 4. Women's Thoughts and Practices on Pap Smear Test in Pandemic

Pap smear status in the pandemic	n	%
Yes	68	18.8
No	293	81.2
The reason for not having a pap smear test in the pandemic		
The previous pap smear test is negative	5	1.7
The previous pap smear test is not expired	23	7.8
Not fulfilling the criteria	28	9.6

Table 4. Women's Thoughts and Practices on Pap Smear Test in Pandemic		
The women has COVID-19 virus or hospital is busy due to pandemic	76	25.9
Lack of information	43	14.7
Not thinking the pap smear test is essential in the pandemic	81	27.6
Shame or fear	11	3.8
Inability to find time	26	8.9
Should the pap smear test be postponed during the pandemic?		
Yes	99	27.4
No	262	72.6
How long should the pap test be delayed in the pandemic?		
Until the antibody develops	25	25.3
Until the vaccine	1	1.0
Until the pandemic is over	16	16.2
Until cases decrease	57	57.6
Status of having gynecological examination in the pandemic		
Yes	131	36.3
No	230	63.7
Things done to protect from cervical cancer during the pandemic process		
Did not do anything	122	33.8
Did not smoke	79	21.9
Payed attention to healthy eating, vaccination, hygiene	142	39.3
Used condom and obeyed genital hygiene rules	18	5.0
The situation of requesting telehealth service in the pandemic		
Wanted	199	55.1
Not wanted	162	44.9
Wanting to get a self-swab at home during the pandemic		
Wanted	84	23.3
Not wanted	277	76.7
The status of getting the HPV vaccine in the pandemic		
Could get HPV vaccination	178	49.3
Did not want to get HPV vaccination	183	50.7

DISCUSSION

This research determined the health beliefs, thoughts, and practices of women regarding CC and pap-smear testing during the pandemic process. The study's main conclusion was that while women's perceptions of barriers, seriousness, and health motivation were above medium, and sensitivity was high, women's benefits and motivation for Pap screening testing were low. The pandemic has revealed the most important disruption in health services seen in recent history. After the declaration of national quarantine in March 2020 and the implementation of social restrictions in most countries, including our country, it was announced that the priority in health services was shifted to emergency and basic medical care, and most clinics, elective surgeries and national screening programs were temporarily suspended. This situation has caused the postponement or delay of the applications of patients with regular follow-up and active complaints to health institutions (Önal & Katırcı, 2022). Our research findings may have been influenced by the fact that women perceived the epidemic as a barrier to testing and believed that visiting hospitals would hurt them as a result of the pandemic. However, the fact that our nation's increasing acceleration in vaccination rates at the time the research data were collected caused the willingness to receive health services again can be used to explain the high level of seriousness perception, sensitivity, and health motivation of women.

In our study, most of the women stated that they did not have a PST due to reasons such as overcrowding in hospitals, lack of information and time, embarrassment and negative test results. Miller et al. (2021) showed that in the state of California, cervical cytology screening rates decreased by 78% per 100 people in 1 month, and HPV test screening rates decreased by 82% per 100 people in women aged 30-65. In our country, no statistical data has been published showing the rate of participation in the screening program over time. However, screenings reduced by more than 90% during the pandemic, according to research done in 2020 with family doctors who provided primary

healthcare services in 75 provinces of Turkey (Türk Tabipleri Derneği, 2020).

Three-quarters of the women included in this study stated that the PST should not be postponed during the pandemic. According to the sub-dimensions of the Cervical Cancer and Pap Smear Test Health Belief Model Scale, it is an expected finding that women with a medium level of seriousness perception and a high level of cervical cancer sensitivity and perception of health motivation should think that the pap-test should not be postponed. During the pandemic, cervical cancer screenings were adversely affected, as with all cancer screening activities. The Centers for Disease Control and Prevention (CDC) reported that cancer screenings reduced during the COVID-19 era, but this reduction continued after the restrictions were lifted. Additionally, the CDC reported a dramatic decrease in CC screenings, reaching 80% (10). The effect of the pandemic on this decreases is great. The allocation of public resources to emergency care has also been associated with secondary conditions such as financial difficulties during the pandemic, maintaining routine health care, changes in health attitudes, and risk perception (Önal & Katırcı, 2022, Villain et al., 2021). Also, issues such as transportation to the hospital, changing working hours, child care, and curfew restrictions during the pandemic are among the factors that can negatively affect participation in the cancer screening program. While it is recommended to postpone cancer screenings for 6–12 months in asymptomatic individuals during the COVID-19, the risk of cancer increases as the pandemic gets longer and the delays in screening increase (Carethers et al., 2020). The international guidelines have published their opinions on CC screening during the pandemic and released a statement on screening programs, positive screening outcomes, and management of preinvasive and invasive lesions of the lower genital area. Accordingly, it has been suggested that high-risk groups and lesions should be evaluated immediately, and low-risk or no-risk groups should be evaluated within a period of 6 to 12 months (Ciavattini et al., 2020). Önal and Katırcı (2022), in their study on cervical cytological examinations during the pandemic, showed that the rate of normal cytology decreased and the diagnosis of ASC-US increased. This study provides a significant finding that cellular changes may increase if the test is postponed. Therefore, it is crucial that women follow the instructions and recommendations provided by the World Health Organization and other international scientific organizations during the pandemia in order to both avoid unnecessary fear, anxiety, and confusion and to detect cervical pathologies on time.Another finding obtained from this study is that 63.7% of women do not have a gynecological examination in the pandemia. Women's already existing gynecological examination fear of the COVID-19 process increases due to the risk of disease contamination, and women's participation in cancer screening programs may be reduced (Feletto et al., 2020).

Our research findings on women also show similarities with the literature. More than half of the women who participated in this study stated that they wanted to get health care during pandemia. It is assumed that delays in screening and early diagnoses contribute to the increase in advanced diseases and cancer deaths. It is anticipated that the workload caused by advanced disease burden and delayed screening will force the health system in terms of cost, personnel, resources, equipment, time, and many other factors (Önal & Katırcı, 2022). Therefore, the use of screening programs with telehealth services is critical to reduce the burden of the health system.

Studies on the state of telehealth services for CC follow-ups and screenings during the pandemic are not available. However, in a scoping review examining the effectiveness of telemedicine for breast cancer monitoring in the COVID-19, telemedicine services were determined to be an effective method to relieve outpatient services. It has been concluded that these services provide effective use of time, increase access to health services and improve satisfaction levels (Gerçek Öter et al., 2022).

It has been concluded that most women do not want to take a swab at home during the pandemic. In the Netherlands, it has been emphasized that self-sampling is actively used as an alternative to making a clinician appointment from November 2020 (Castanon et al., 2021). With the widespread use of HPV self-sampling, it is anticipated that an effective rescue strategy can be provided to increase the number of women offered screening after restriction, while minimizing the capacity demands required to collect screening samples. It has been reported that self-sampling may increase screening participation in inadequately screened women or women who miss their appointments when going to local health institutions or due of fear of exposure to coronavirus in healthcare facilities (Hawkes et al., 2020).

Half of the women in our study stated that they did not want to get HPV vaccine during the pandemic. This could be due to the women did not want to go to health centers to prevent themselves from covid-19 contamination. Also, the ministry of health, not recommend people to go to health care centers if it's not necessary in pandemic period (Aykanat & Demirkıran, 2020). During a meeting held in 2020, the World Health Assembly set some targets to eliminate cervical cancer. The first is to vaccinate 90% girls until the age of 15. The COVID-19 epidemic has severely affected the routine HPV vaccination program and caused decreases in daily vaccination rates. Secondly, 70% of women between the ages of 35–45 are to apply a high-performance test such as the HPV test at least twice during their lives. The final target is to provide treatment and care in accordance with 90% of women diagnosed with CC (Ginsburg et al., 2021). Therefore, creating informative posters and public service announcements about CC risk factors and vaccination for women, supporting risky groups to participate in screenings, starting the self-PST at home will be effective in improving and protecting women's health. In addition to all, primary health care services such as immunization and screening programs should be organized separately from other health care services and without delaying during pandemic situations.

Limitations

Our research is limited to the results of only sexually active women. The most important limitation of the research that the data were collected by online questionnaire. Also, the cronbach alpha values of Cervical Cancer and Pap Smear Test Health Belief Model Scale 'Seriousness' and 'Health Motivation' subdimensions were found below the 0.70 which shows low reability for research sample. The fact that only researchers are involved in the development of the data form used in the research and the opinions of other experts are not included is the limitation of the research.

IMPLICATION FOR NURSING PRACTICE

The findings of this study; in the process of women's pandemia, the perception of pap-tests was high, and that they have a high level of cervical cancer sensitivity with the perception of seriousness and health motivation above the middle level. The screening of asymptomatic

women using the PAP test for pre-cancer lesions leads to an average decrease of 2.6% per year in CC mortality in countries with effective health systems (Ginsburg, 2017). Therefore, it is critical to maintain and monitor in environments where organized scanning can be provided safely and comprehensively to prevent long-term increases in the CC load due to COVID-19. The findings of this study are important in terms of showing that pandemia can force women's decisions and scanning skills because of the perception of obstacles. Because this perception can disrupt the quality of screening, diagnosis, treatment and follow-up. Health personnel should be aware of their responsibilities to direct women to screening programs in accordance with clinical guides, in accordance with the process of pandemia, to manage women's risk perception. In different countries, studies that determine the perceptions of the pandemia process toward cervical screening are important in terms of shaping the services in the future pandemia.

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