ABSTRACT: Covid-19 has spread all over the globe rapidly and has been one of the threats affecting the world thereby organizations. The covid-19 pandemic has still been going on, and institutions have struggled to adapt to the new normal. This study aims to measure organizational resilience perceptions of healthcare professionals towards the institution they work during the Covid-19 pandemic process. The sample of this descriptive study was consisted of 200 healthcare personnel working at a university hospital. Data were collected with a questionnaire including healthcare personnel's sociodemographic characteristics and the Organizational Resilience Scale. The data were interpreted as numbers, means, and percentage distributions, parametric and nonparametric tests. There is a significant difference between the participants' organizational resilience scores who answered the question about being informed about the changes to be made regarding their work organization during the Covid-19 outbreak and the others (p=0.001). Similarly, there is a significant difference between organizational resilience scores of the participants who have requested to be dismissed due to the covid-19 outbreak from their duty from the management and the ones who have not (p=0.005). Healthcare institution offer great support to reduce the severity of the epidemic and improve the process despite the crisis. Accordingly, healthy and resilient healthcare institutions must quickly turn crisis processes into learning opportunities.

Key Words: Covid-19 Virus, Hospital, Health Personnel, Resilience, Organization

Article style: Research

Jel Classification: M10, M12, M14

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1. INTRODUCTION

Today organizations can face internal threats as well as external ones. Natural disasters, epidemics, terrorist attacks, economic recessions, machine-equipment failures, and human errors can disrupt the security and stability of an organization or its environment (Kumbalı, 2018). Covid-19 has spread all over the globe rapidly and has been one of the threats affecting the world thereby organizations. Covid-19 cases were seen on December 31, 2019, in Wuhan, China, and on January 7, 2020, the agent was identified as a new coronavirus (2019-nCoV) which had never been detected in humans before. Subsequently, the name of 2019-nCoV disease was accepted as the Covid-19, and as the virus was very similar to SARS CoV, it was named SARS CoV-2. On January 30 World Health Organization (WHO) classified the Covid-19 outbreak as an "international public health emergency". After the Covid-19 cases were seen in 113 countries apart from China, which was the first country where the cases appeared, due to spread and severity of it the virus was defined as a global epidemic (pandemic) on March 11 (T.R. Ministry of Health, General Directorate of Public Health, 2020).

Covid-19 has two effects on health. Firstly, physical health problems are caused by the virus directly, and secondly, mental health problems such as anxiety and panic are associated with the epidemic. As well as affecting individuals' physical health, infectious diseases affect the psychological health and well-being of the population in general regardless of their being infected or not. Therefore, it is necessary to consider the Covid-19 pandemic as a medical health crisis and a mental health emergency. In outbreaks, healthcare professionals are at high risk due to their coexistence with infected patients. This risk should not only be considered as the physical health of the professionals. Compared to their ordinary working hours, healthcare professionals work more intensely, and due to the risk of getting infected or propagating the virus, they have to distance themselves from their families and their social environment. This situation affects the psychology of the professionals negatively. In studies conducted on healthcare professionals during various epidemic periods, it has been concluded that healthcare professionals experience intense stress and anxiety with the epidemic, show symptoms of depression, insomnia, decrease in endurance, and fear of stigma (Aşkın et al., 2020).

Health institutions survive due to their organizational resilience in the face of unforeseen events such as economic recession, natural disaster, and epidemics. Since health institutions are labor-intensive organizations, the labor force becomes significant here. Organizations are considered open systems, and the strength and durability of the upper systems are related to the subsystems' strength and durability. Therefore, health institutions must strengthen human power, which is the source of resilience, to increase organizational resilience. Resilience also depends on developing individual training, experience, and knowledge of the specialty. Employees develop a sense of competence and efficiency as they gain control over their core task behavior and act with common sense in carrying out these behaviors. As their sense of competence increases, individuals can react effectively to unfamiliar or challenging situations and can resist failures and challenges (Sutcliffe and Vogus, 2003; Leflar and Siegel, 2013).

The covid-19 pandemic has still been going on, and institutions have been struggled to adapt to new life conditions. Administrators and policymakers have been working to find ways to reduce the effects of the pandemic and survive. Facing a new, destructive, global, and critical situation that the Covid-19 has caused created a powerful panic. Therefore, the concepts of resilience, trust, and support have gained more importance than ever (Huang et
al., 2020). While spreading uneasiness and many other negative feelings, Covid-19 has paved the way to developing individual and collective resources and strengths. Organizations that have difficulty adapting to the conditions of the pandemic may either disappear or regress. Nevertheless, organizations can adapt and overcome this difficult period and grow despite the trauma. Furthermore, some organizations will learn a lesson from this pandemic, resist it and become more powerful. One of the critical factors that enable organizations to adapt and maintain their development is organizational resilience (Salanova, 2020).

Along with rapidly changing circumstances, technological advancements, threats brought by competition, and globalization have been emphasizing the significance of ‘resilience’ for organizations. The concepts of organizational resilience and psychological resilience are closely related. The rapid change of work-life and social life brings the concepts of employee psychology and psychological resilience to the fore. Psychological resilience is a feature that helps the professionals to successfully adapt to highly risky or challenging situations (Benard, 1991). While individuals that have a high level of resilience overcome difficult and adverse situations with an attitude they have towards ordinary situations (Yaşayanlar, 2018), the ones that have a lower level of resilience tend to avoid problems and run away from them (Şahin, 2015).

The organizational resilience concept is addressed in organizational, industrial, and regional fields as well as explained from two different perspectives. According to the first perspective, organizational resilience is the capability to jump up and resume after sudden, stressful, and negative situations (Mallak, 1998a). At the same time, most writers define organizational resilience as the ability to cope with internal or external changes, risks, or traumas (Ruiz-Martin et al., 2018). As for the second perspective, organizational resilience is defined as an organization’s using its resources and capabilities to overcome unexpected, stressful, and formidable situations and by getting more powerful and more capable becoming immune to such situations (Jamrog et al., 2006; Lengnick-Hall et al., 2011). A resilient organization plans actions that will enable the organization to improve and increase the probability of survival and puts those plans into practice. Furthermore, the resilient organization members make less effort to absorb organizational change; therefore, they have a greater potential to improve productivity and quality (Mallak, 1998a). Knowing the current and anticipated situation of the environment in which the organization operates, determining the resources that the organization owns, evaluating requests, expectations, and shortcomings of all the stakeholders, predicting the negative or positive consequences of different types of crises increase organizational resilience (Ahiauzu & Ololube, 2016). Moreover, organizations make plans to improve themselves in how to deal with a crisis or an unexpected situation. This planning behavior contributes to organizational resilience (Sahebjamnia et al., 2018).

Because organizational resilience and social resilience are interdependent and resilient organizations have an advantage of competence, organizational resilience is significant (Kumbalı, 2018). Organizational resilience has a positive effect on socio-economic sustainability. If the organization is resilient, it seems likely that the economy’s social values will be maintained, resources will be preserved, and investments for sustainable productivity will increase (Rai et al., 2021). Besides, organizational resilience enables organizations to stand firm in the face of adverse situations they encounter, continue their functioning, and make more robust decisions (Özbudak & İşik, 2020). At that point, health care professionals take part in various processes of the institution before the crisis occurs (predicting outer threats and using information and technology to do this), during the crisis (such as flexibility,
Organizational Resilience Perception Of Health Care Personnel During The Covid-19 Pandemic

The subject of this study is to measure perceptions of healthcare professionals regarding the organizational resilience of the institutions they work together with the Covid-19 pandemic. The fact that there is a rapid emergence of new information makes embedded information invalid, and therefore, the spread of false-incomplete information harms the healthcare system's flexibility. As a result, it is significant to measure the severity of the current impact (Jovanović et al., 2020).

There are a limited number of studies about organizational resilience which look into organizational resilience from different angles. As a result of this, organizational resilience dimensions differ (Gültekin, 2019). Some of these dimensions discussed in the literature are; in his study Mallak (1998b), with which he developed a measurement tool that measures the resilience of health institutions, he indicated dimensions of organizational resilience as seeking targeted solutions, avoidance, critical approach, role dependence, resource dependence, and resource access. Bruneau et al. (2003) stated that it is possible to address organizational resilience in four dimensions: durability, redundancy, resourcefulness, and promptness. As a result of a scale development study conducted by Lee et al. (2013), organizational resilience was considered in two dimensions: adaptation capacity and planning. Akgün and Keskin (2014) considered organizational resilience in three dimensions: cognitive, behavioral, and contextual. Pal et al. (2014) considered organizational resilience in various dimensions, which they defined as properties, resources, dynamic competence power, learning, and culture. In the study which worked on organizational resilience, Kantur and İşeri-Say (2015) have developed a measurement tool for measure organizational resilience. In this measurement tool, organizational resilience consists of three dimensions as durability, agility, and integrity.

This study aims to measure organizational resilience perceptions of health care professionals towards the institution they work during the Covid-19 pandemic process. In this context, it reveals the important factors that can increase resilience in times of crisis in health institutions.

2. MATERIAL AND METHODS

This study, which was carried out with a quantitative method, is cross-sectional and was conducted in a hospital in the middle black sea region between December 30, 2020, and January 31, 2021. The study was conducted with the health professionals at the institution. The population of the study consists of 3069 healthcare professionals. The sample required for the study was calculated, and it was determined as 342 people with 95% reliability and a 5% margin of error. In the study, in which 200 healthcare professionals were reached, 9-item the Organizational Resilience Scale developed by Kantur and İşeri-Say (2015) for organizations was used as a data collection tool. The scale includes questions such as; “... is successful in generating diverse solutions, is agile in taking required action when needed.”

To implement the study, the required permission for the use of the scale was obtained from the authors, and necessary institutional permissions and the Ondokuz Mayıs University Ethics Committee permissions were also obtained (2020/631). Since it is suitable to evaluate resilience in its original and basic form, this scale was preferred. The Cronbach alpha value of the organizational resilience scale consists of 3 dimensions (durability, agility, and integrity) and nine items are 0.85. “Durability dimension of the scale measures resistance capacity of institutions; agility dimension measures how easily and quickly institutions adapt to changing conditions; integrity dimension measures how employees merge and unite with each other.
within the organization.” It was used as a single factor in this study. The scores of the scale dimensions are determined as between 1.00 and 1.79 is “very low”; between 1.80 and 2.59 is “low”; between 2.60 and 3.39 is “medium” between 3.40 and 4.19 is “high” and between 4.20-5.00 is “very high”. The scale is five-point Likert style which is composed of five points that are Strongly Disagree (1), Disagree (2), Undecided (3), Agree (4), Strongly Agree (5). A questionnaire containing the employees’ demographic information and the statements about the pandemic process (TMA, 2020) was used together with the organizational resilience scale. The data obtained were analyzed with the SPSS 20 package program. The data were interpreted as numbers, means, and percentage distributions, parametric and nonparametric tests.

3. FINDINGS

The demographic findings of the research are presented below.

Table 1. Frequency distribution

| Gender            | N   | %  |
|-------------------|-----|----|
| Female            | 141 | 70.5 |
| Male              | 59  | 29.5 |
| Total             | 200 | 100 |
| Marital status    |     |    |
| Married           | 114 | 57  |
| Single            | 86  | 43  |
| Total             | 200 | 100 |
| Age               |     |    |
| 20-29             | 73  | 36.5 |
| 30-39             | 60  | 30  |
| 40 and above      | 67  | 33.5 |
| Total             | 200 | 100 |
| Education         |     |    |
| High school       | 11  | 5.5 |
| Associate degree  | 22  | 11  |
| Undergraduate     | 119 | 59.5 |
| Master/specialist | 33  | 16.5 |
| PhD               | 9   | 4.5 |
| Other (primary education) | 6 | 3 |
| Total             | 200 | 100 |
| Occupation        |     |    |
| Nurse             | 119 | 59.5 |
| Health technician | 24  | 12  |
| Specialist        | 22  | 11  |
| Assistant Physician | 10 | 5  |
| Caregivers        | 9   | 4.5 |
| Other (Biologist, Chemist, Dietitian etc.) | 16 | 8 |
| Total             | 200 | 100 |
| Time served in the institution | N | % |
70.5 % (n=141) of the participants are female and 29.5 % (n=59) are male. 57 % (n=114) are married, 43% (n=86) are single. 36% (n=73) of the participants are between the ages of 20-29, 30% (n=60) are between the ages of 30-39, 33.5% (n=67) are 40 and over. 5.5% (n=11) of the participants are high school graduates, 11% (n=22) have an associate degree, 59.5% (n=119) have a degree, 16.5 % (n=33) have a Masters or are specialists, 4.5% (n=9) have a PhD and 3% (n=6) are primary school graduates. Approximately 60% of the participants are nurses, 16% are physicians and 12% are health technicians. Most of the participants (24% of them) served 17 years or more in their institution. As for the time served in their department 31% of the participants served less than 1 year, 27% served 1 to 5 years, 18.5% served 6 to 10 years, 23.5% served 11 years or so.

### Table 2. Scale reliability and average

| Organizational Resilience | n  | Av. (min-max) | s.d. | Cronbach alpha |
|---------------------------|----|---------------|------|----------------|
|                           | 200| 3.20 (1-5)    | 1.08 | 0.96           |

According to Table 2, the Cronbach alpha coefficient of the scale was 0.96 and the average score of the participants' organizational resilience attitude was 3.20.

### Table 3. Comparisons according to organizational resilience attitude scores

| Gender              | n (%) | Av. (min-max) | Test Statistic | p    |
|---------------------|-------|---------------|----------------|------|
| Female              | 141 (70.5) | 3.17 (1-5) | t= 2.023 | 0.572 |
| Male                | 59 (29.5) | 3.26 (1-5) |               |      |
| Marital status      | n (%) | Av. (min-max) | Test Statistic | p    |
| Married             | 114 (57) | 3.16 (1-5) | t= 1.075 | 0.600 |
| Single              | 86 (43) | 3.24 (1-5) |               |      |
| Age                 | n (%) | Av. (min-max) | Test Statistic | p    |
| 20-29               | 73 (36.5) | 3.22 (1-5) | F= 1.174 | 0.311 |
| 30-39               | 60 (30) | 3.02 (1-5) |               |      |
| 40 and above        | 67 (33.5) | 3.32 (1-5) |               |      |
| Education           | n (%) | Med. (min-max) | Test Statistic | p    |
| High school         | 11 (5.5) | 3.88 (2.22-4.89) | $\chi^2 = 2.903$ | 0.715 |
| Associate degree    | 22 (11) | 3.22 (1-5) |               |      |
An average score of organizational resilience attitude of the participants indicates no difference according to gender, marital status, age, education level, occupation, or time served at the institution (p>0.050). An average score of organizational resilience attitude indicates a difference according to time served in the department (p=0.021). According to Tamhane's T2 test results, there is a significant difference between the average score of organizational resilience attitude of those who work in the unit for 6 to 10 years and those who work for 11 years or more.

**Table 4. Comparisons according to organizational resilience attitude scores II**

| Have you directly given care to a confirmed Covid-19 patient? | n (%) | Av. (min-max) | Test Statistic | p     |
|-------------------------------------------------------------|-------|---------------|----------------|-------|
| Yes                                                         | 107 (53.5) | 3.20 (1-5)    | t=0.067        | 0.947 |
| No                                                          | 93 (46.5)  | 3.19 (1-5)    |                |       |

| In your institution, have you been informed about the changes to be made regarding your work organization during the Covid-19 outbreak? | n (%) | Av. (min-max) | Test Statistic | p     |
|------------------------------------------------------------------------------------------------------------------|-------|---------------|----------------|-------|
| Yes                                                                                                              | 159 (79.5) | 3.41 (1-5)    | t=6.173        | 0.001 |

F: Anova; t: independent sample t-statistic; $\chi^2 =$ Kruskal Wallis test statistic
According to Table 4, while 53.5% (n=107) of the participants have directly given care to a confirmed Covid-19 patient, 46.5% (n=93) of the participants have not directly given care to a confirmed Covid-19 patient. While 79.5% (n=159) of the participants said that they have been informed about the changes to be made regarding their work organization during the Covid-19 outbreak in their institution, 20.5% (n=41) of them stated that they have not been informed about the changes to be made regarding their work organization during the Covid-19 outbreak in their institution. 4.5% (n=9) of the participants have requested to be dismissed due to the Covid-19 outbreak, whereas 95.5% (n=191) of them have not requested to be dismissed due to the Covid-19 outbreak. 26% of the participants (n=52) have been diagnosed with Covid-19, whereas 74% (n=148) have not been diagnosed with Covid-19. There is a significant difference between the participants' organizational resilience scores who answered the question about being informed about the changes to be made regarding their work organization during the Covid-19 outbreak and the others (p=0.001). Similarly, there is a significant difference between organizational resilience scores of the participants who have requested to be dismissed due to the Covid-19 outbreak from their duty from the management and the ones who have not (p=0.005). There is no significant difference between the average score of organizational resilience attitudes and other variables (p>0.050).

4. DISCUSSION AND CONCLUSION

With the Covid-19 pandemic, this study aims to measure the perceptions of health professionals regarding the organizational resilience of the institutions they work for. Conclusions of the study are supported by the findings, which indicate that activities such as institutional learning and receiving feedback improve the adaptation capacity of the institution to change and thus affect the resilience of the institution (Duchek, 2019; Heath et al., 2020; Orth & Schuldis, 2021). During the pandemic, employees must be aware of the significance of the information they have and the information that they share (Orth & Schuldis, 2021). A qualitative study conducted in a different field has revealed that frequent communication and interaction between the management and employees is a fundamental element that provides mutual benefit for the organization and the employees. It is an essential factor for organizational resilience to provide feedback about work changes that can contribute to crisis management (Ngoc Su et al., 2021).
According to the findings of the research, 4.5% of the participants requested to be dismissed due to the Covid-19 outbreak, while 95.5% did not request to withdraw due to the Covid-19 outbreak. Contrary to this in the literature, the perceived Covid-19 threat has a significant positive effect on nurses' intentions to resign from their job (Irshad et al., 2020; Moore et al., 2021). Another important finding that comes to the fore in the study is that the perceived organizational resilience score averages of the personnel who work in the same department indicate a difference according to the time they served. Findings show that organizational resilience score averages of the personnel who worked in the same department for eleven years or more are at a medium level. For that reason, it is concluded that after a certain period of time, organizational resilience perception of the healthcare professionals tends to decrease.

It is known that fear of coronavirus in healthcare professionals is directly related to depression, stress and anxiety (Yıldırım et al., 2020). Therefore, psychological capital plays a critical role in building resilient organizations. Pathak and Joshi, (2020) reported that psychological resilience positively affects life satisfaction and suggested that understanding the cause and effect relations between psychological capital, life satisfaction, and organizational resilience is necessary to increase organizational resilience. Similarly, according to the model brought up by Vercio et al., (2021), there is a dynamic interaction between the resilience of the individual and the resilience of the organization. In other words, the resilience of healthcare providers requires a resilient organization that surrounds them. Therefore, it is challenging for the institution to handle different individual needs one by one; organizational resilience will inevitably offer solutions for stressors occurring during crises.

Özbudak and Işık (2020) have concluded that organizational resilience perception affects the perception of risk towards traumatic situations. They concluded that there was no statistical difference between the perceptions of organizational resilience of managers and non-managers. Another finding is that employees regard an epidemic situation as a potentially traumatic event for their organization. At the same time, this finding emphasizes that organizations must consider and evaluate employee perspectives in efforts to increase their resilience.

Hospitals need to take necessary precautions that can improve resilience in the face of potentially traumatic events such as Covid-19. This study aims to draw attention to the significance of the matter by revealing important issues for the administration to improve the resilience of the healthcare system. The conclusions of the study have revealed that institutional communication, informing and experienced staff are important factors that can increase resilience at times of crisis in health institutions. Therefore, it is recommended that institutions prioritize topics such as peer support, peer learning, and crisis communication to strengthen their staff at times of a pandemic or similar situations. At that point, it becomes essential for healthcare institutions to establish crisis support systems such as peer support programs, which encourage senior healthcare staff to guide younger staff about preventive measures against Covid-19 (Irshad et al., 2020), and to support the staff psychosocially by the social service department of the institution.

The limitations of this study are that the study is limited to a single institution, and the data collection period of the study is short. In addition, due to the workload of healthcare professionals during the pandemic, a limited number of participants were reached.
By responding rapidly to changes surrounding them, organizations can become resilient. In particular, healthcare institutions offer great support to reduce the severity of the pandemic and improve the process despite the crisis. Accordingly, healthy and resilient healthcare institutions must acquire the ability to turn crisis processes into learning opportunities. For further studies, it is possible to suggest that psychological resilience and organizational resilience are dealt with together. It is thought that during the process of the Covid-19 pandemic conducting further researches on organizational resilience will contribute to the literature.

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