

RESEARCH ARTICLE

AN EXAMINATION OF NURSES' BURNOUT REASONS: DELPHI AND SWARA METHODS

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ABSTRACT

This study aims to determine the factors that cause burnout in nurses, who are critical stakeholders in health service delivery, and to prioritize these factors. For this purpose, Delphi and SWARA methods were used. The research was conducted in a private hospital serving Black Sea Region Türkiye. 10-unit manager nurses who are experts in their fields participated in the Delphi method. As a result of the three-stage Delphi implementation, 16 burnout causes were determined. The 16 identified causes were prioritized with the SWARA method. 47 nurses participated in the SWARA method. As a result of the research, it was determined that the most critical reason for burnout was not being able to get money for the work done/low salary. It was concluded that obscure patient relatives were the least important cause of burnout. It is thought that the financial and moral reward of nurses who work hard will be beneficial. It may be suggested to make satisfactory remuneration for the labor and service provided or to support and increase the raw wage with various contributions. It can be suggested to raise awareness among nurses about burnout and coping.

Keywords: Delphi, SWARA, Burnout, Multiple Attribute Decision Making (MADM), Nurse

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HEMŞİRELERİN TÜKENMİŞLİK NEDENLERİNİN İNCELENMESİ: DELPHİ VE SWARA UYGULAMASI

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ÖZ

Çalışma ile sağlık hizmet sunumunun kilit paydaşlarından olan hemşirelerde tükenmişliğe neden olan faktörlerin belirlenmesi ve bahse konu faktörlerin önceliklendirilmesi amaçlanmıştır. Bu amaç doğrultusunda Delphi ve SWARA yöntemi kullanılmıştır. Araştırma, Türkiye'nin Karadeniz Bölgesinde hizmet veren özel bir hastanede gerçekleştirilmiştir. Delphi yöntemine alanında uzman 10 birim yöneticisi hemşire katılmıştır. Üç aşamalı Delphi uygulaması sonucunda 16 tükenmişlik nedeni belirlenmiştir. Belirlenen 16 neden SWARA yöntemiyle önceliklendirilmiştir. SWARA yöntemine 47 hemşire katılım sağlamıştır. Araştırma sonucunda en önemli tükenmişlik nedeninin yapılan işin maddi olarak karşılığını alamamak/düşük ücret olduğu belirlenmiştir. Anlaşılması güç hasta yakınlarının ise en az önemli tükenmişlik nedeni olduğu sonucuna ulaşılmıştır. Yoğun çalışan hemşirelerin maddi, manevi ödüllendirilmesinin fayda sağlayacağı düşünülmektedir. Verilen emek ve hizmet karşılığında tatmin edici ücretlendirme yapılması ya da çeşitli katkularla ham ücretin desteklenmesi ve artırılması önerilebilir. Hemşirelerin tükenmişlik ve başa çıkma konusunda bilinçlendirilmesi önerilebilir.

Anahtar Kelimeler: Delphi, SWARA, Tükenmişlik, Çok Nitelikli Karar Verme (ÇNKV), Hemşire

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I. INTRODUCTION

In our age, the inherent demands of work, individual sensitivity, and poor work organization contribute to increased stress in healthcare professionals. Long-term job stress can also cause burnout (WHO, 2023). The enormous negative impact of burnout on the work and personal lives of workers, as well as the economy and public health of the most affected countries, has led the World Health Organization (WHO) to include this syndrome in the 11th Revision of the International Classification of Diseases (ICD) (Edú-Valsania et al., 2022). Burnout is defined in ICD-11 as a syndrome resulting from chronic workplace stress that cannot be successfully managed. The most common acceptance of burnout is by Maslach and Jackson's definition. According to the definition, burnout consists of three dimensions: emotional withdrawal and exhaustion from the individual's work, depersonalization, and decreased personal success (Maslach and Jackson, 1981). Similar to the definition by Maslach and Jackson, the WHO categorizes burnout into three dimensions: feelings of energy exhaustion or exhaustion, increased mental distance from one's work, negativity or cynicism about one's work, and reduced professional effectiveness (WHO, 2019). In other words, burnout is defined mainly by its three main components: exhaustion, cynicism, and professional incompetence. Fatigue refers to the exhaustion of one's emotional and physical resources. Cynicism is an adverse, hostile, or overly independent reaction to work, often involving a loss of idealism (Maslach and Leiter, 2016). Moreover, cynicism is a negative attitude toward the organization, comprised of; a belief that the organization lacks integrity, negative affect toward the organization, and disparaging behavior toward the organization that is consistent with these beliefs and affect (Brandes, 1997; Dean et al., 1998). Occupational inadequacy refers to decreased feelings of competence and productivity at work (Maslach and Leiter, 2016). Organizational factors such as excessive workload, emotional labor, lack of autonomy and influence in the workplace, uncertainty, role conflict, perceptions of inadequate supervision and injustice, perceived lack of social support, and long working hours also contribute to burnout (Edú-Valsania et al., 2022).

Burnout syndrome is one of the most important occupational health problems in various occupations involving working with others (Schaufeli et al., 2009). Given the often dynamic work environment, heavy workload, and intense interpersonal relationships they commonly encounter, this situation tends to render nurses more susceptible to developing burnout syndrome (Bakker et al., 2008; Noguiera et al., 2018). Nursing; is a profession that requires dealing with many people, including patients, families, and co-workers. In addition, nurses; are vulnerable to burnout due to difficult-to-manage characteristics such as workload and excessively long working days (Greenglass et al., 2001; Yüksel Kaçan et al., 2016; Gómez-Urquiza et al., 2017; Manzano-Garcia and Ayala, 2017). Possible reasons that make nurses vulnerable to burnout include the inability to allocate the necessary time to meet the wishes of patients and families lack of teamwork and cooperation (Khatatbeh et al., 2022). The consequences of burnout can directly affect the mental, physical, and behavioral health of nurses. In addition, it causes a significant decrease in the quality of life, deterioration of the care given to patients, and a decrease in productivity (De Diego-Cordero et al., 2022). In this context, it can be asserted that burnout emerges as a response to the complex work environments that nurses navigate (Vidotti et al., 2018).

Although burnout has been extensively studied globally in various fields, it continues to retain its significance in the present day. Extraordinary circumstances, such as the recent COVID-19 pandemic, have adversely affected healthcare professionals, particularly vulnerable to burnout. In this context, some studies highlight the negative impact of the Covid-19 pandemic on nurses' burnout. Nurses' exposure to the COVID-19 pandemic has led to them being under extreme and sustained psychological pressure, causing fear for their safety, as well as that of close family members and patients (Joo and Liu, 2021). Under these conditions, nurses may experience severe psychological and mental issues that can lead to burnout, subsequent reduced productivity, errors in clinical settings, and apathy towards patient care (Pappa et al., 2020; Galanis et al., 2021).

II. MATERIAL AND METHOD

2.1. Aim of the Study

This study aims to determine the factors that cause burnout in nurses, who are critical stakeholders in health service delivery, and to prioritize the mentioned factors. For this purpose, Delphi and SWARA methods were used. Although there are many studies on burnout in the literature, it is seen that these studies generally focus on applying scale. It has set out to address the issue of burnout with different methods and presenting a different perspective. In this context, the Delphi method, which is frequently used in the field of health, was preferred for the subject of burnout in order to achieve consensus. In addition, it is seen that multi-criteria decision-making methods are used in problem-solving in many areas. In prioritizing the criteria, the SWARA method, used in the health field as the Multiple Attribute Decision Making (MADM) method, was preferred. Addressing the issue of burnout with these two methods is the original value of the study. After determining the ultimate causes of burnout through a Delphi application, the identified reasons were prioritized using the SWARA method to reveal which factors contribute more significantly to burnout. The SWARA method was preferred for establishing the critical sequence of burnout causes. This study integrated the Delphi and SWARA methods, presenting qualitative and quantitative approaches. This integration constitutes a strength of the study.

2.2. Ethical Statement

The research was conducted in a private hospital serving in the Black Sea Region, Türkiye. In order to carry out the research, ethical permission was obtained from the Social and Human Sciences Ethics Committee of Ondokuz Mayıs University on 25.03.2022 with decision number 2022-196. After obtaining ethical permission, written institutional permission was obtained from the institution where the research would be conducted. The forms were applied only to the volunteer nurses, and consent was obtained from the nurses. The research was conducted in a mixed form, online and face-to-face. “Do you approve of participating in the research?” to the nurses in the online application. Only the nurses who answered yes were provided access to the research questions. In the face-to-face application, verbal consent was obtained from the nurses.

2.3. Data

Before applying the Delphi method, an interview was held with the nursing services officer working in the selected hospital, and the appropriate participant group for the study was determined. There are ten medical units in the hospital where the research was carried out. It was decided that it would be appropriate to carry out the Delphi implementation with the nurses in charge of the medical unit. The selection of participants in a Delphi study should be objective and relevant to the problem being studied (Nasa et al., 2021). The Delphi implementation was completed in 3 stages with ten specialist nurses in this direction. The implementation stages were carried out anonymously. The causes of burnout determined after the Delphi method were prioritized with the SWARA method. The SWARA method was conducted with 47 nurses who volunteered to participate in the research. All face-to-face/online forms used within the scope of the research were created and applied by the researchers. A total of 47 nurses were sampled for the research. The selection of this sample size was determined based on the number of units in the hospital and the inclusion of nurses serving as “charge nurses” in these units. The research was conducted in November 2022.

2.4. Delphi Method

The Delphi method was used in the research to determine the causes of burnout in nurses. The Delphi method was developed by RAND Corporation and presented to the literature. The main aim of the method is to reach a reliable consensus of a group of experts through controlled feedback and an iterative survey process (Dalkey and Halmer, 1963). In other words, the Delphi method aims to achieve consensus (Keeney et al., 2011). In the Delphi method, it is recommended to include experts with

appropriate field knowledge, to participate in the participation of 5 to 20 experts and to continue the practice until the answers show stability (Grime and Wright, 2016). In general, three structured rounds are considered sufficient (Trevelyan and Robinson, 2015; Grime and Wright, 2016). Experts are involved with the mutual aim of bolstering the qualitative potency of recommendations or consensus. In addition, repeated and interactive survey rounds help collect qualitative information, improving the framework of statements for experts and reaching a consensus (Nasa et al., 2021).

The Delphi method of systematically collecting input from relevant experts on a subject is very suitable for the healthcare field. It is also widely applied in health-related researches. It allows for best practice guideline information and insights to be obtained from a relatively small group of experts on many important health issues (de Meyrick, 2003). The Delphi method has become increasingly popular in healthcare in recent years (Keeney et al., 2001; Keeney et al., 2011). This method is extensively employed in healthcare to foster group consensus, devise qualitative implementation strategies, or pinpoint areas for future research (Nasa et al., 2021).

In the Delphi method, the first round begins with the participants' requests for opinions and comments. After the feedback, a structured questionnaire is created. The structured form is prepared by combining the feedback received from each participant after the first round. After the structured forms are analyzed, they are returned to the participants for evaluation. In the second round, the feedback and the ideas obtained are sent to the participants again, and they are asked whether they agree with the items. In addition, they are asked to indicate the degree of importance of the items. Significance levels are evaluated with a Likert-type scale. Decisions are analyzed in the third or fourth rounds to reach a consensus on structured questionnaires (Turoff and Linstone, 2002; Hsu and Sandford, 2007; Keeney et al., 2011; Trevelyan and Robinson, 2015).

Keeney et al. (2001) state that correctly applying the Delphi technique can significantly contribute to expanding knowledge in the nursing profession. In this context, from the past to the present, the Delphi method has been used in dealing with various issues in nursing. Grant and Kinney (1992) used the Delphi method to examine the content validity of nursing diagnoses. Lynn et al. (1998), Moreno-Casbas et al. (2001), Browne et al. (2002), Mcilpatrick and Keeney (2003), and Cohen et al. (2004) used the Delphi method to reveal research priorities related to various fields of nursing. In addition, many Delphi studies are in the literature to determine the research priorities in the nursing field. Schell (2006) evaluated innovative teaching techniques in nursing education with the Delphi method. Davis et al. (2014) used the three-stage Delphi method to identify the characteristics and essential elements of lifelong learning. Van Houwelingen et al. (2016) preferred the Delphi method to determine the necessary competencies regarding telehealth activities in nursing. Cooper et al. (2017) used the Delphi method to create a consensus on nurses' care and professional development needs in UK nursing homes. Bjorkman et al. (2017) revealed the obstacles in the work environment of Tele nurses with the Delphi technique. Sim et al. (2018) applied the four-stage Delphi technique to measure the quality and safety of nursing practices. It is seen that the Delphi method is also preferred in dealing with the issue of burnout. Manzano-Garcia and Ayala (2017) conducted a three-stage Delphi study with 40 European experts and evaluated the factors in the emergence of burnout in nursing. Jones (2019) applied the Delphi method to reveal nurses' experiences and perceptions of burnout. Shahzad et al. (2019) discussed nurses' burnout antecedents with a focus group interview and adapted the Delphi method. Choudhary et al. (2020) preferred the adapted Delphi method for the content validity of the burnout syndrome rating scale. Foote et al. (2022) used the Delphi method to identify and classify the institutional factors in the burnout of resident physicians.

The Delphi steps of the research are as follows:

- (1) It was decided to conduct the research with nurses working in a private hospital. Participants were determined by interviewing the nursing services manager of the private hospital, who volunteered to carry out the research. Necessary permissions were obtained from the institution in order to carry out the research.

(2) Interviews were held with ten unit-responsible nurses working in a private hospital, and they were asked to list the factors that they thought would cause burnout. (**Round 1**)

(3) After the returns are completed, “dissatisfaction of the patients and their relatives”, “the whole process/process proceeds through the nurse”, “disrespect of people”, “inequality in the working system”, “rights are not protected”, “defense mechanisms do not work”, “the workload is high”.”, “delivery of jobs that are not within the scope of the job description”, “difficult to understand patient relatives”, “decreased patience”, “dull emotions”, “not being able to get paid for the work done/Low salary”, “heavy working tempo”, “too much in a short time” 17 factors were determined, namely, “desired to complete several jobs”, “financial concerns”, “working conditions” and “broad job description”. (**Round 1**)

(4) Nurses participating in the study were asked to score 17 factors on a “1: Strongly Disagree-5: Strongly Agree” scale. (**Round 2**)

(5) The questionnaires have been statistically analyzed with Excel. After the answers, quartile (Q1), median (MD), third quartile (Q3), and range (R) values were calculated. The first quartile (Q1) refers to 25% agreement between the experts, and the third quartile (Q3) refers to 75% agreement. The median is the range in which the middle 50% of the provided evaluations are located. Range (R) is the difference between the third and first quartile (Q3-Q1) (Ramos et al., 2016). The width value limit in the research was determined as 1.2. If the width value exceeds 1.2, there is no consensus on the item. An interquartile range of < 1.2 indicates consensus on an item. Items with $R < 1.2$ indicate consensus, while items with $R \geq 1.2$ indicate no consensus. Furthermore, zero indicates that R is a perfect consensus among participants. (**Round 2**)

(6) The nurses were asked to evaluate and review their answers to the second questionnaire and the statistics presented for each item, and it was asked whether their answers were determined. It was determined whether changes were made in the answers. Factors and values of Q1, MD, Q3, and R are given in Table 1. (**Round 3**)

(7) As a result of the third Delphi implementation, Q1, MD, Q3, and R values were recalculated. It was observed that a consensus was reached on the majority of the factors. As a result of the calculations, it was determined that a consensus could not be reached only on the factor of “dullness of emotions.” The M11 coded “dimming of emotions” factor was omitted due to an R-value of 1.75. As a result of the Delphi phase, 16 burnout causes were determined. The values obtained and the final state of the factors are given in Table 2. (**Round 3**)

2.5. SWARA Method

In order to prioritize the 16 burnout causes obtained as a result of the Delphi method, SWARA, one of the Multiple Attribute Decision Making (MADM) methods, was preferred. The new Step-wise Weight Assessment Ratio Analysis (SWARA) was developed by Keršuliene et al. (2010) and presented to the literature. One of the main features of the SWARA method is that it resorts to expert judgment in determining item weights or importance ratios. The method is preferred for solving various problems related to the field of health. Liu et al. (2020), occupational health and safety risk assessment; Mardani et al. (2020), key challenges of adopting digital health interventions during Covid-19; Meidute-Kavaliauskiene and Ghorbani (2021), supply chain contract selection in the healthcare industry; Ghasemi et al. (2021), sustainable medical tourism destinations; Hosseini Sarkhosh (2022), the readiness of hospitals against Covid 19; Balali et al. (2022), cost overrun factors in hospital construction projects; Kumar et al. (2023), critical success factors for managing the health supply chain through artificial intelligence, and Debnath et al. (2023) preferred the SWARA method for the solution of sustainable supplier selection problems in health services. The SWARA method consists of 5 steps, as indicated below (Keršuliene et al., 2010).

Stage 1: Ranking the criteria in order of importance

In the first stage, experts or decision-makers rank the criteria in order of decreasing importance. The rankings obtained reflect the individual evaluations of decision-makers or experts. In case there is more than one decision maker, the arithmetic/geometric average of the rankings is taken, and a general ranking is obtained (Zolfani and Saparauskas, 2013).

Stage 2: Determining the importance levels of the criteria

In the second stage, the importance level of each criterion is determined. For x criteria, $x - 1$ comparisons are made. In this context, the g 'th criterion is compared with the $g + 1$ 'th criterion, and it is determined how important it is compared to the $g + 1$ 'th criterion. The resulting value is denoted by f_g , and is defined as the comparative advantage of the mean value.

Stage 3: Calculating the z_g coefficient

$$z_g = \begin{cases} 1 & g = 1 \\ f_g + 1 & g > 1 \end{cases} \quad (1)$$

Stage 4: Determining the variable a_g (a_g : Importance vector)

$$a_g = \begin{cases} 1 & g = 1 \\ \frac{i_g - 1}{z_g} & g > 1 \end{cases} \quad (2)$$

Stage 5: Calculation of the w_g value representing the relative weight of the g criterion

$$w_g = \frac{a_g}{\sum_{i=1}^x a_g} \quad (3)$$

III. FINDINGS

The socio-demographic characteristics of 47 nurses participating in the study are given in Table 1.

Table 1. Socio-Demographical Findings of the Participants

	n	%
Age		
<=25	27	57.4
> 25	20	42.6
Sex		
Female	44	93.6
Male	3	6.4
Marital Status		
Married	19	40.4
Single	28	59.6
Education Status		
Middle School	1	2.1
High School	25	53.2
Associate Degree	14	29.8
Bachelor Degree	7	14.9
Number of Children		
I have no children.	37	78.7
1	9	19.1
2	1	2.1
Place of Residence		
Town Center	41	87.2
Other Districts	6	12.8
Income Rate		
5.000-6200 Turkish Liras (TL)	25	53.2
6201-15000 Turkish Liras (TL)	22	46.8
Working Time		
<=5 year	26	55.3
> 5 year	21	44.7
Total	47	100.0

44 (93.6%) of the participants were female, and 3 (6.4%) were male; 28 of them were single (59.6%), and 19 of them were married (40.4%). 53.2% of the participants are high school graduates, and 78.7% do not have children. Most participants reside in the city center (n=41; 87.2%). It is seen that the income of nurses is mostly between 5.000-6.200 Turkish Liras (TL). The average pay is 6714.89 TL. While the minimum income is 5.000 TL, the maximum income is 15.000 TL. The average age of the participants is 26. The youngest participant is 23, while the oldest is 40 years old. The minimum working time is 1 year, while the maximum working time is 19 years. The average working time is 5.5 years.

Table 2. Result of the Second Delphi Implementation Causes of Burnout and Q1, MD, Q3, and R Values

Causes of Burnout	Q1	MD (Q2)	Q3	R
The dissatisfaction of patients and their relatives (C1)	3.25	4	4.75	1.5
Progress of the whole operation/process through the nurse (C2)	5	5	5	0
People being disrespectful (C3)	3	3.5	5	2
Inequality in the working system (C4)	3.5	5	5	1.5
Failure to protect rights (C5)	3	5	5	2
Failure of defense mechanisms (C6)	3	5	5	2
Too much workload (C7)	4.25	5	5	0.75
Giving jobs that are not within the scope of the job description (C8)	3.5	5	5	1.5
Incomprehensible patient relatives (C9)	5	5	5	0
Decreased patience (C10)	4	5	5	1
Dulling of emotions (C11)	4	4.5	5	1
Not getting financial compensation for the work done/Low salary (C12)	4.25	5	5	0.75
Intense work pace (C13)	4	5	5	1
Desire to complete a large number of jobs in a short time (C14)	3.25	5	5	1.75
Financial concerns (C15)	4.25	5	5	0.75
Working conditions (C16)	4	4	5	1
Broad job description (C17)	4	5	5	1

At the end of the second round of the Delphi technique, the first quartile (Q1), the third quartile (Q3), median (MD/Q2), and range (R) values of 17 causes have been calculated according to the responses of the experts. Calculated range (R) values have demonstrated that a compromise was reached on ten causes in the second round of the Delphi technique.

Participants were asked if they wanted to change their answers in the third Delphi round. They were asked to re-evaluate the items. The questionnaires have been statistically analyzed again with the Microsoft Excel program. The MD/Q2, Q1, Q3, and R values of the data were calculated by the experts' evaluations of the criteria. The results are given in Table 3.

Table 3. Result of the Third Delphi Implementation Causes of Burnout and Q1, MD, Q3, and R Values

Causes of Burnout	Q1	MD (Q2)	Q3	R	Accept / Reject
The dissatisfaction of patients and their relatives (C1)	5	5	5	0	Accept
Progress of the whole operation/process through the nurse (C2)	5	5	5	0	Accept
People being disrespectful (C3)	5	5	5	0	Accept
Inequality in the working system (C4)	5	5	5	0	Accept
Failure to protect rights (C5)	5	5	5	0	Accept
Failure of defense mechanisms (C6)	5	5	5	0	Accept
Too much workload (C7)	5	5	5	0	Accept
Giving jobs that are not within the scope of the job description (C8)	5	5	5	0	Accept
Incomprehensible patient relatives (C9)	5	5	5	0	Accept
Decreased patience (C10)	4.25	5	5	0.75	Accept
Dulling of emotions (C11)	3.25	4.5	5	1.75	Reject
Not getting financial compensation for the work done/Low salary (C12)	5	5	5	0	Accept
Intense work pace (C13)	5	5	5	0	Accept
Desire to complete a large number of jobs in a short time (C14)	4	5	5	1	Accept
Financial concerns (C15)	5	5	5	0	Accept
Working conditions (C16)	5	5	5	0	Accept
Broad job description (C17)	5	5	5	0	Accept

It is seen that only the item “C11 Dulling of emotions” could not be agreed upon as a result of the third Delphi implementation. The 16 agreed items are given in Table 4.

Table 4. An Agreed Upon 16 Causes of Burnout Using the Delphi Technique

Causes Code	Causes of Burnout	Accept / Reject
C1	The dissatisfaction of patients and their relatives	Accept
C2	Progress of the whole operation/process through the nurse	Accept
C3	People being disrespectful	Accept
C4	Inequality in the working system	Accept
C5	Failure to protect rights	Accept
C6	Failure of defense mechanisms	Accept
C7	Too much workload	Accept
C8	Giving jobs that are not within the scope of the job description	Accept
C9	Incomprehensible patient relatives	Accept
C10	Decreased patience	Accept
C11	Not getting financial compensation for the work done/Low salary	Accept
C12	Intense work pace	Accept
C13	Desire to complete a large number of jobs in a short time	Accept
C14	Financial concerns	Accept
C15	Working conditions	Accept
C16	Broad job description	Accept

The SWARA prioritized 16 burnout causes agreed upon after the third Delphi round. Forty-seven nurses participated in the SWARA step of the study. SWARA results are given in Table 5.

Table 5. SWARA Results

Item	Statement	Mean	Rank
C1	The dissatisfaction of patients and their relatives	0.712766	9
C2	Progress of the whole operation/process through the nurse	0.761702	2
C3	People being disrespectful	0.708511	10
C4	Inequality in the working system	0.736170	4
C5	Failure to protect rights	0.740426	3
C6	Failure of defense mechanisms	0.695745	13
C7	Too much workload	0.734043	6
C8	Giving jobs that are not within the scope of the job description	0.735106	5
C9	Incomprehensible patient relatives	0.640426	16
C10	Decreased patience	0.692553	14
C11	Not getting financial compensation for the work done/Low salary	0.837234	1
C12	Intense work pace	0.707447	11
C13	Desire to complete a large number of jobs in a short time	0.734043	7
C14	Financial concerns	0.707447	12
C15	Working conditions	0.725532	8
C16	Broad job description	0.670213	15

According to the SWARA results in Table 5, it is seen that the most critical reasons for burnout are not getting the money for the work done/low salary, the progress of the whole operation/process through the nurse and the failure to protect the rights. Obscure patient relatives, broad job description, decreased patience, failure of defense mechanisms, and financial concerns were determined as the lowest causes of burnout.

IV. DISCUSSION AND CONCLUSION

In our age, burnout is a fundamental problem in health services. In order to cope with this problem, it is essential to develop adequate personal and organizational strategies and to be sensitive and aware of the phenomenon (De Hert, 2020). In order to cope with burnout and develop coping strategies, first of all, its causes should be revealed. In this context, it aimed to determine and prioritize the causes of nurses' burnout with Delphi and SWARA methods. The Delphi implementation was conducted with ten specialist nurses in the first stage, and 16 burnout factors were determined. Then, in the second stage, these factors were prioritized by 47 nurses. As a result of the research findings, it was concluded that the wage factor is the most important cause of burnout. In addition to the wage factor, the progress of the whole process through nurses, the lack of protection of nurses' rights, the inequality in the working system, and the fact that nurses take on duties other than their job descriptions were determined as the top causes of burnout. In our age, burnout is a fundamental problem in health services. In order to cope with this problem, it is essential to develop adequate personal and organizational strategies and to be sensitive and aware of the phenomenon (De Hert, 2020). In order to cope with burnout and develop coping strategies, first of all, its causes should be revealed. In this context, it aimed to determine and prioritize the causes of nurses' burnout with Delphi and SWARA methods. The Delphi implementation was conducted with ten specialist nurses in the first stage, and 16 burnout factors were determined. Then, in the second stage, these factors were prioritized by 47 nurses.

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It is indicated that low wages, long working hours, and a high number of patients to care for adversely affect nurses' working conditions and physical/mental health (Demir et al., 2003). Yüksel Kaçan et al. (2016) have concluded that nurses with higher salaries achieve more tremendous personal success. Nurses who are satisfied with their salaries tend to be more engaged in their work and experience higher productivity. A higher salary makes individuals more committed to their jobs and feel more competent (Vidotti et al., 2018). Gómez-Urquiza et al. (2016) found that nurses with higher salaries experience less burnout. Despite being identified as a significant factor in burnout, salary may not be sufficient to compensate for the conditions leading to burnout. Improving working conditions lies at the core of addressing emotional exhaustion (McHugh and Ma, 2014).

Greenglass et al. (2001) found a positive correlation between increased nurses' workload and burnout status. Excessive workload depletes employees' energy and makes recovery challenging (McHugh and Ma, 2014). Bakker et al. (2008) suggest that hospital management can alleviate nurses' burdens by conducting a detailed analysis of their daily tasks, restructuring work schedules, and providing technical support. Furthermore, such interventions are proposed to be beneficial in maintaining a balance between effort and reward and reducing burnout among nurses.

Burnout lies more in the job environment than in the individual. In addition, burnout can be characterized by six factors: excessive work demands, a sense of powerlessness, inadequate recognition, a diminished sense of belonging, perceived unfair treatment, and conflicting principles (Maslach and

Leiter, 1997). Similarly, as a result of the research, it is seen that the causes of burnout are related to the work environment and related factors rather than the individual.

As a result of the findings, it may be suggested to make compensation and reward according to the intensity or working hours. In other words, it is thought that the financial and moral rewards of nurses who work hard will be beneficial. It may be suggested to make satisfactory remuneration for the labor and service provided or to support and increase the raw wage with various contributions. It may be recommended that the scope of nurses' job descriptions is determined clearly by the hospital's senior management. Nurses also stated that it is essential that their rights are not protected. It can be suggested that the hospital management give guarantees to its employees in this regard and make their employees feel safe. It can be proposed to raise awareness among nurses, who are critical in providing health care, about burnout and coping. In order to cope with burnout individually, empowerment activities for employees can be carried out by the institution.

In the future, conducting more extensive research on burnout may be recommended using different techniques. The effects of burnout factors on the quality of service and solution proposals in healthcare professionals can be handled with multi-criteria decision-making tools.

Ethical Approval: Ethical permission was obtained from the Social and Human Sciences Ethics Committee of Ondokuz Mayıs University on 25.03.2022 with decision number 2022-196.

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