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Evaluation of practices to prevent covid-19 in barbershops and hairdressing salons: a descriptive study

Ayşe MEYDANLIOĞLU[a*], Azime Özlem ARICAN[b]

[a]Akdeniz University, Faculty of Nursing, Department of Public Health Nursing, Antalya, Türkiye.

[b]Akdeniz University, Institute of Health Sciences, Public Health Nursing Graduate Program, Antalya, Türkiye.

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[a]https://orcid.org/0000-0002-9799-937X

[b]https://orcid.org/0000-0001-6876-5729

*Correspondence: Ayşe Meydanlıoğlu

Akdeniz University, Faculty of Nursing, Campus, Antalya, Türkiye.

E-mail: ayseuslu@akdeniz.edu.tr

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ABSTRACT

Objectives: This study was conducted in order to determine the practices of barbers and hairdressers working in Antalya to prevent COVID-19.

Method: The sample of this descriptive study comprised 135 barbers and hairdressers aged 21-56 and working in Antalya. In the study, a questionnaire prepared by the researchers was administered online. Ethics committee approval, institutional permission, and participants' informed consent for the study were obtained.

Results: The mean age of participants was 35.8±7.65, and 73.3% of them were barbers, 26.7% were hairdressers, 83% were men, 74.1% were married, and 48.9% were secondary school graduates. It was determined that attention was paid to social distancing, ventilation of the environment, disinfection of frequently touched surfaces and materials, and disinfection/ sterilization of jointly used tools and equipment. It was determined that all of the employees in the businesses wore masks, and that most of them paid attention to hand hygiene and had access to personal protective equipment. On the other hand, it was revealed that the rate of measuring customers' and employees' body temperature in the businesses was low, some practices not recommended in the guidelines were continued, 5.2% of the businesses had employees who were in contact with an infected person, and 25.9% of enterprises had employees who had suffered from COVID-19.

Conclusion: As a result of this study, it was determined that barbers and hairdressers in Antalya implemented the recommended measures to prevent COVID-19 to a large extent, but that there were relaxations in some practices.

Key Words: Barber, COVID-19, hairdresser, practices

INTRODUCTION

Novel coronavirus disease (COVID-19), which was first seen in China's Wuhan Province in December 2019 and is caused by the SARS-CoV2 coronavirus, still causes people to die in many countries (1, 2). Currently, around 425 million people worldwide have been infected with this virus and about 6 million people have died (3). In Türkiye, the number of people who have been infected with COVID-19, which was identified for the first time on March 11, 2020, is approximately 13 million, and around 90 thousand people have lost their lives. Recent evidence shows that the most common mode of transmission of SARS-CoV2 is probably by droplet, aerosol, or direct contact in a person-to-person encounter (4). Moreover, it has been reported that the virus can be transmitted by touching a surface or object with the virus on it, and then touching the face, eyes, nose or mouth with the hands without washing them (5, 6). Considering the modes of transmission of COVID-19, the easiest and most economical methods known to prevent its spread are hand washing, use of masks, avoiding contact with frequently touched surfaces, and maintaining

social distance (7, 8). However, due to the nature of the work done in some businesses, such as hairdressing salons and barbershops, it is not always possible to implement some of these measures, because in these businesses, it is the case that employees serve customers within arm's length, are in close contact with many people, and come into contact with contaminated surfaces or objects. Furthermore, factors such as customers removing their masks during some practices carried out on people's faces (such as moustache-beard shaving, and make-up), and the joint use of materials increase the risk of COVID-19 transmission (9).

To prevent COVID-19, it is particularly important to avoid confined spaces, crowded places and environments that require close contact (10). However, due to the reasons mentioned above, it is not possible to completely avoid these in hairdressing salons or barbershops. For this reason, guidelines have been developed that include measures such as face shields, social distancing, hand and environmental hygiene, and health education aimed at reducing the risk of infection for employees and customers in this sector (9, 11). In our country, too, guidelines for measures that need to be taken to prevent COVID-19 in these businesses have been published (12, 13). In the fight against this infection, it is very important to determine whether barbers and hairdressers working in our country act in line with these guidelines, which include precautions specific to their own work areas, since the studies conducted in our country before the pandemic showed that the general hygiene practices of hairdressers regarding infectious diseases were not adequate (14–17). Public health nurses assess the health needs of individuals, families and the wider community in order to protect health and prevent disease (18). Furthermore, occupational health nurses, a sub-branch of public health nursing, are experts in the healthcare and wellbeing of people in the workplace and evaluate workplaces to identify potential workplace hazards. After making these evaluations, nurses can recommend various ways to make workplaces safer and can provide training (19). Therefore, this study was planned by public health nurses in order to determine the practices carried out for the environment, customers and employees by barbers and hairdressers working in the City Centre of Antalya to prevent COVID-19.

2. MATERIALS AND METHODS

2.1. Study design

This study was conducted as a descriptive study aimed at determining the practices of hairdressers and barbers working in Antalya for the environment, customers and employees to prevent COVID-19.

2.2. Sample and setting

Approximately 2500 barbers and hairdressers provide service in the central districts of Antalya. Since there was no previous study on hairdressers' practices during the pandemic process, in the calculation of the sample size of the study, p=0.73 was taken by using the results of the study conducted by Ataei et al. (2013), and the sample size was determined as 123 with 80% power and a 95% confidence interval (20). However, considering the possibility of data loss, 135 people were included in the sample.

2.3. Data Collection

In the study, a questionnaire prepared by the researchers was used. In the preparation of the questionnaire, the guidelines prepared by the Ministry of Health (2020) and the Ministry of Family, Labor and Social Services (2020) for the prevention of COVID-19 in hairdressing salons and barbershops were utilized (12, 13). This questionnaire consists of 76 questions and can be answered in about 10-15 minutes. The prepared questionnaire was converted into a Google Form and the link was sent to the business owners' mobile phones in the form of a message. The data of the study were collected in March-April 2021.

2.4. Statistical analysis

The Statistical Package for Social Sciences (SPSS) program was used to evaluate the data obtained in the research. Descriptive statistics (number, percentage, arithmetic mean, and standard deviation) were used in the evaluation of the data, and $p<0.05$ was accepted as significant.

3. RESULT

The participants' mean age was 35.8±7.65, and 73.3% of them were barbers, 26.7% were hairdressers, 83% were men, 74.1% were married and 48.9% were secondary school graduates. In addition, 56.3% of participants were smokers and 11.1% of them had a chronic disease. It was determined that the participants' average length of time in the profession was 17.9±9.87 years and that in approximately half of the businesses, only the owner of the business was employed (51.1%). An average of 11.1±1.14 hours of service was provided per day in the businesses, and it was determined that the most frequently provided service was hair/ beard trimming at a rate of 37.4% (Table 1).

Table 1. Some Introductory Information About Employers and Workplaces (n=135)

Characteristics	**n**	**%**
Gender		
Female	23	17.0
Male	112	83.0
Marital status		
Married	100	74.1
Single	35	25.9
Educational status		
Primary	29	21.5
Secondary	66	48.9
High School or higher	40	29.6
Tobacco consumption		
Yes	76	56.3
No	59	43.7
The state of having a chronic illness		
Yes	15	11.1
No	120	88.9
Type of workplace		
Barber	99	73.3
Hairdresser	36	26.7
Number of employees		
1	69	51.1
2	35	25.9
3	17	12.6
4 or more	14	10.4
Implemented activity (n=358) *		
Hair/beard trimming	134	37.4
Hair removal/waxing	51	14.3
Skin care	43	12.0
Eyebrow/moustache plucking	33	9.2
Manicure. pedicure	25	7.1
Hair styling	25	7.0
Hair coloring	25	7.0
Make-up	22	6.1
Age	35.8 ± 7.65 (21-56)	
Length of time in the profession	17.9 ± 9.87 (0-45) years	
Length of time the workplace provides daily service	11.1 ± 1.14 (8-13) hours	

** "n" is overestimated because more than one option was selected*

The main activities not carried out during the pandemic were eyebrow plucking/moustache removal (28.4%) and make-up (20.5%). In addition, it was revealed that during the pandemic, preference for blow drying was left to the customer in 45.8% of businesses, while manicure-pedicure sets were disinfected after use in 44.8% of businesses. It was determined that in the enterprises, alcohol was used the most (40.7%) for disinfection, UV sterilizers were used the most (42.8%) for sterilization, and customers paid mostly in cash (72.3%) (Table 2).

Table 2. Some Practices in Workplaces During the Pandemic (n=135)

Practices	n	%
Activities not implemented (n=215)		
Eyebrow plucking/moustache removal	61	28.4
Make-up	44	20.5
Skin care	36	16.7
Hair/beard trimming	25	11.6
Hair removal/waxing	22	10.2
Manicure. pedicure	16	7.5
All continued	11	5.1
Change in blow-dry implementation (n=131)		
Using according to customer preference	60	45.8
No change. using the same	33	25.2
Using in a separate area	18	13.8
Using low speed	13	9.9
Not using	7	5.3
Type of disinfectant used (n=270)		
Alcohol	111	41.1
Water	42	15.6
Bleach	42	15.6
Zephiran	27	10.0
Other	26	9.6
Detergent	22	8.1
Sterilization method used (n=173)		
UV Sterilizer	74	42.8
Dry heat sterilizer	53	30.6
Boiling	25	14.5
Other	13	7.5
Autoclave	8	4.6
Use of manicure-pedicure set (n=58)		
Washing the sets in the workplace with soap and water and disinfecting them (alcohol etc.)	26	44.8
Using customers' own manicure/pedicure set	21	36.2
Using after sterilization	8	13.8
No manicure-pedicure	3	5.2
How the customer paid (n=177)		
Cash	128	72.3
With contactless POS device	29	16.4
With encrypted POS device	20	11.3

Note: "n" is overestimated because more than one option was selected

The precautions taken by businesses for the environment and customers to prevent COVID-19 and the available facilities are given in Table 3. Accordingly, attention was paid to the distance between seats, the environment was ventilated, and frequently touched surfaces were disinfected with bleach in all the establishments. In the great majority of establishments, there were materials necessary for hand hygiene, and disposable textile materials were used. Moreover, it was determined that businesses mostly worked by appointment, customers who received service were recorded, and there were warning signs about maintaining social distance and hand washing. However, measuring the customers' body temperature (48.9%) and recording their entry and exit times (53.3%) were among the less frequent practices. In addition, it was determined that some practices that were not recommended in the guidelines were continued in businesses. These included using air conditioning (60.7%), using a blow dryer (25%), using a neck brush (18.5%), offering food and beverages to customers (14.1%) or allowing customers to consume food or drink they brought with them (34.8%), and keeping magazines or newspapers in waiting rooms (38.5%) (Table 3).

Table 3. Some Practices for the Environment and Customers in the Workplaces (n=135)

Practices	**n**	**%**
Paying attention to sufficient distance between seats	135	100.0
Providing adequate ventilation	135	100.0
Cleaning frequently touched surfaces with bleach	135	100.0
Wiping the areas where bleach cannot be used with alcohol	134	99.3
Accepting customers according to the number of seat units	134	99.3
Having hand sanitizer	131	97.0
Preferring disposable textile materials	131	97.0
Service by appointment	130	96.3
Paper towel for drying hands	127	94.1
Paying attention to social distancing outside the workplace	126	93.3
Using soap and water for hand washing	122	90.4
Disinfecting materials such as chairs. headboards etc. after use.	118	87.4
Warning sign about maintaining social distancing	110	81.5
Registering customers' name-surname	110	81.5
Warning sign about hand washing	107	79.3
Maintaining social distancing in the waiting area	103	76.3
Using an air conditioner at work	82	60.7
Recording the arrival and departure times of customers	72	53.3
Measuring the body temperature of customers	66	48.9
Keeping magazines and newspapers for customers in the waiting area	52	38.5
Allowing customers to bring and consume their own food or drink	47	34.8
Accepting customers without masks	38	28.1
Using a neck brush after a haircut	25	18.5
Serving food or drink to customers	19	14.1

Note: The number and percentage of the businesses that make the given applications were given.

When the measures taken for the staff in the businesses are examined, it was determined that employees in all the enterprises wore masks, 76.3% paid attention to hand washing or the use of antiseptic solution after each customer, and 48.1% worked in rotation. Also, it was found that 74.8% of establishments had separate face shields or safety glasses for each employee, and that in 71.1% of them, these protectors were wiped with 70% alcohol after each customer. In addition, it was determined that PPE was provided for the employees in the majority of the businesses and that social distancing was observed during rest breaks or meals. Moreover, most of the participants stated that they obtained information about PPE use and COVID-19. However, it was determined that employees' body temperature was measured before starting each shift in only 53.3% of enterprises, sick staff were allowed to rest at home in only 29.6% of businesses, and employees with signs of infection were directed to hospital in 65.2% of them. Furthermore, it was determined that 25.9% of the participants had had COVID-19 (Table 4).

Table 4. Some Practices for Employees in the Workplaces (n=135)

Practices	**n**	**%**
Paying attention to masked work	135	100.0
Providing personal protective equipment (mask. face shield/safety glasses. apron. gloves. etc.) for employees	125	92.6
Social distancing during meals	117	86.7
Recording which personnel serve customers	108	80.0
Social distancing during rest breaks	107	79.2
Enabling employees to wash their hands or to use an antiseptic solution when they cannot wash after each customer	103	76.3
Those who received training on COVID-19 disease. symptoms. transmission routes and protective measures	103	76.3
Having separate face shields/ safety glasses for each employee	101	74.8
Wiping face shield/ safety glasses with alcohol after each client	96	71.1
Those who received training on the correct use of personal protective equipment	94	69.6
Directing employees who complain of fever. cough. or shortness of breath to a health institution	88	65.2
Measuring employees' body temperature every morning	72	53.3
Regulating the working of employees in rotation/shifts	65	48.1
Allowing sick personnel to self-quarantine at home	40	29.6
Employees who have had COVID-19 disease before	35	25.9
Working while in contact with an infected person or while in isolation	7	5.2

Note: The number and percentage of the businesses that make the given applications were given.

4. DISCUSSION

Measures aimed at preventing and controlling COVID-19 in hairdressing salons and barbershops are of critical importance to protect the health of employees, their families and the community (21). In this study, it was determined that the majority of barbers and hairdressers in Antalya carried out the practices specified in the guidelines published by the authorized institutions for the prevention of COVID-19. On the other hand, it was found that they continued with some practices that they were advised not to carry out.

Transmission of viral infections is commonly seen in homes, schools, workplaces and the community. Especially barbershops and hairdressing salons are riskier businesses in terms of infection, as they are closed areas, make joint use of tools and equipment, and provide services that require close distances between people (11). For this reason, it is important that employees and customers in this sector act in accordance with the guidelines prepared to reduce the risk of infection (9, 22). In the literature, it is stated that employees' compliance with hand hygiene, mask wearing and social distancing is higher in workplaces where there are workplace directives and precautions (23). In this study, the fact that more than 75% of barbers and employees working in Antalya implemented the measures specified in the guidelines for the environment, customers and employees to prevent COVID-19 is a pleasing finding. Similarly, in a study conducted in Germany, it was reported that the percentage of hairdressers who complied with the protection standards was 75% of the total (24).

In the pandemic, it is considered that people become infected through contact with contaminated surfaces or objects, but that the risk is generally low (25, 26). Case reports reveal that COVID-19 is transmitted between people by touching surfaces on which a sick person has recently coughed or sneezed (27, 28). Therefore, in this study, the fact that businesses paid attention to the distance between seats, ventilated the environment, and wiped frequently touched surfaces and materials with bleach or alcohol is a pleasing finding. On the other hand, it was determined that some practices that were not recommended in the guidelines because they increase the risk of infection were continued by businesses. These practices include continuing to use a neck brush, blow dryer and air conditioner, offering food and beverages to customers or allowing customers to consume food or drinks that they brought with them, and having magazines or newspapers in waiting rooms. In the study conducted in Germany, too, it was revealed that hairdressers relaxed the rules in some practices. However, it was determined that special attention was paid to ventilation and air conditioning in enterprises, the general distance rule of 1.5 meter was mostly observed between customers although the distance may be less in areas such as the entrance or waiting area, food and beverages were not served, and the non-cash payment method was not widely recommended (24).

In this study, the fact that all employees in barbershops and hairdressing salons wore masks is a very important finding, as it was shown in a study conducted with two symptomatic hairdressers with COVID-19 in the USA that wearing a mask prevented infection transmission in the hairdressing salon, and that those who wore face masks did not transmit the virus to their customers (29). However, in some practices, especially those performed at close range, it is recommended to use protective face and eye equipment as well as masks, since it is thought that the ocular surface can act as a gateway for the transmission of the coronavirus (30, 31). In this study, it was determined that about one quarter of the enterprises did not use face shields/ safety goggles. However, due to the prohibition of facial applications such as eyebrow plucking/ moustache removal and make-up during the pandemic, it can be thought that these accessories were not regarded as essential in some businesses. Similarly, in the study conducted in Germany, it was determined that while all of the hairdressers wore masks, they did not use eye or face protection other than masks in procedures performed on the face (25).

Considering the transmission routes of COVID-19 in barbershops and hairdressing salons, the risk of employees interacting with potentially infectious individuals and becoming infected is high (32). It is therefore recommended that employers implement a screening and monitoring strategy for employees to prevent SARS-CoV2 from entering the workplace. This strategy includes practices

such as screening employees for signs and/or symptoms of COVID-19 (high temperature, etc.), keeping sick people away, and determining return-to-work criteria for employees in contact with infected people and recovering employees (9). If a member of staff develops signs or symptoms of COVID-19 at work, the person should be sent home or seek medical attention (22). However, in this study, it was determined that in businesses, the practices of measuring employees' body temperature before starting each shift, resting sick personnel at home, and directing employees with symptoms of infection while working to hospital were not adequately performed, and that more than a quarter of participants had had COVID-19. Under pandemic conditions, it is important to protect the existing staff in enterprises in terms of quantity and quality. Therefore, employees in this sector should be supported in terms of preventing loss of income due to the disease, enabling them to rest enough at home when they become ill, allowing them to access the necessary medical help and up-to-date information about the disease, and taking adequate precautions at their workplace (33). In this study, around one-third of employers stated that they did not receive information about COVID-19, its symptoms, its transmission routes, protective measures and PPE. Furthermore, information pollution, which spreads rapidly among individuals in online environments during the pandemic, still continues (34). For this reason, the fact that employers who state that they have received information may have received false information and applications online should be considered.

Strengths and Limitations of the Study

As the information about COVID-19 changes rapidly during the pandemic process, it was important to obtain the data of this study simultaneously and in a short time via the online data form. At the same time, the preparation of questionnaires by using the guidelines prepared by the authorized institutions (Ministry of Health and Ministry of Family, Labor and Social Services) to prevent COVID-19 in hairdressers and barbers can be considered as a factor that increases the validity. However, given the improbable selected sample that volunteered to participate in the study, access bias cannot be ruled out. In addition, the measures taken by the businesses mentioned in the study to prevent COVID-19 are the practices declared by the business owners, and the fact that no observations were made in the businesses may have caused bias in the answers.

CONCLUSIONS

In workplaces such as barbershops and hairdressing salons, where the risk of encountering COVID-19 is high, it is very important to take the necessary precautions for the environment, customers and employees in order to prevent infection. Moreover, the rapid identification and isolation of potentially infectious individuals is a critical step in protecting employees and customers. In this study, it was determined that in their businesses, barbers and hairdressers working in Antalya implemented most of the precautions that should be observed according to the guidelines. However, in order to increase their awareness of the risks of inadequately performed practices, public health nurses have an important role in their access to up-to-date and accurate information. For this reason, in order to keep employers, customers and the whole of society away from information pollution, it is very important for public health nurses, especially occupational health nurses, to follow the guidelines of international organizations such as the WHO, CDC, and ILO, and national organizations such as the Ministry of Health and Ministry of Labor, and to keep up with current information on the pandemic.

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