

## Research Article

# Effects of The Covid-19 Pandemic: A Sociological Study on Pharmacies in Sivas

Cigdem Yel<sup>1</sup>, Aytul Kasapoglu<sup>2\*</sup>

<sup>1</sup>Department of Sociology, Sivas Cumhuriyet University, Turkey

<sup>2</sup>Department of Sociology, Baskent University, Turkey

\*Corresponding author: Aytul Kasapoglu, Department of Sociology, Baskent University, Ankara, Turkey.

**Citation:** Yel C and Kasapoglu A (2021) Effects of The Covid-19 Pandemic: A Sociological Study on Pharmacies in Sivas. Rep Glob Health Res 4: 137. DOI: 10.29011/2690-9480.100137

**Received Date:** 17 September 2021; **Accepted Date:** 27 September, 2021; **Published Date:** 30 September, 2021

### Abstract

The Covid -19 Pandemic process, which has surrounded the whole world and started in 2020, affects not only patients, but also health organizations and employees who provide services to them. The problem of this research is the difficulties experienced by the pharmacists working in pharmacies and the technical staff providing support services as an important health organization during the COVID-19 Pandemic process, and to express it with the basic concept of the conflict theory of sociology, their “alienation”. In this study, it is aimed to reveal the alienation levels of pharmacy workers and the changes in the tactics of coping with problems in daily life during the Pandemic process compared to the pre-Pandemic period. A comparative quantitative research was conducted with a total of 100 participants, 52 of whom were pharmacists and 48 were technicians or journeymen, working in pharmacies still operating in Sivas city center by using the survey technique. The research results, which were analyzed in accordance with positivist epistemology through SPSS-25, revealed that pharmacists and technicians showed a statistically significant difference by getting higher scores in some alienation components, especially powerlessness, when compared with the pre-Pandemic and the Pandemic process. In addition, it was determined in the research that the participants resorted to tactics such as informational power, internet and social media use more than before the Pandemic for the solution of increasing alienation problems.

**Keywords:** Alienation; COVID-19; Pharmacy workers; Tactics; Turkey

### Introduction

Sociology of health is a field of applied sociology where all theoretical approaches and concepts of general sociology can be used. Since the subject of health is closely related to medicine, it was first discussed in the form of “Medical sociology”. While the first examples of medical sociology were limited to the studies of physicians until the 1940s, it continued with the cooperation of physicians and sociologists, thanks to the increasing federal funds in the USA. As a matter of fact, the studies of physicians in the field of health have been called “Sociology in medicine”. The contributions of sociologists to the field of health are called “Medical sociology” [1]. Today, these distinctions no longer matter. While focusing on the complex relationship between social factors and health [2], not only disease but also healthy life began

to be considered, and the name of the field became Sociology of Health and Illness [3].

The most important contribution of sociologists in the field of health is to criticize the bio-medical model, which has dominated medicine since its establishment. As a matter of fact, with the contributions of sociologists, it has been included in the definitions of the World Health Organization that health is not only physical but also mental and social well-being. The most important indicator of this is the development of a holistic approach called the Bio-psycho-social model by George Engel [4]. Because the bio-medical model is more treatment and intervention oriented besides its physician-centered patriarchal foundations. However, new systems that are more patient-centered and that attach importance to care and surveillance have begun to gain more acceptance today. In fact, in the information society, evidence-based digital health services have started to be offered by making use of artificial intelligence according to the specific characteristics of people, and

the health 4.0 era such as economy and education has begun [5].

Although most of the previous studies in the field of health sociology are doctor-patient relations [6] based on functionalist sociology and inequality studies based on conflict sociology [7], studies on other professions have increased in recent years. So much so that as allied health professionals, studies on optometrists, pedorthists and occupational therapists have also begun [8].

### **Theoretical Framework**

In fact, the sociology of health and illness, with its former name, medical sociology, is a sub-branch of both institutional sociology and applied sociology. Accordingly, sociologists make use of all the theoretical and conceptual frameworks of general sociology when making the sociology of health in general or the sociology of health professions in particular [9,10] or organizational sociology of structures such as hospitals or pharmacies. The most important of these are functionalist, Marxist, interactionist, social constructionist, neo-Weberian, neo-Marxist, feminist, neo-system sociological approaches [11]. Relational [12], intersectional and feminist theories have been added to these in recent years [13-15].

There is also a distinction between profession and occupation, both in theory and in everyday life, when speaking and writing. According to Riska [11], the profession is of higher prestige because it is based on theoretical and practical training in a particular field and certification with diploma. On the other hand, many people work in the health market, especially in the field of care, and not all of them have a special education or diploma. For example, the position of non-pharmacist assistants or technicians working in pharmacies is not considered a profession. In these cases, the concept that is sociologically appropriate is occupation. The point that Riska [11], emphasizes here is that sociologists mostly try to reveal the power and characteristics of professions.

In addition, it is possible to work by giving importance to various conflicts, as well as to consider the division of labor and solidarity between the professional pharmacist and the journeyman who helps him, based on the functionalist consensus theory. In addition, it is necessary to mention the concepts of liminality and turning point, uncertainty, identity and control, which are used with inspiration from Harrison White [12], in an increasing number of relational sociological studies conducted today [16]. In particular, the position of technicians in pharmacies discussed in this study is often liminal. Because even though they have to treat their customers like a pharmacist every day, they have no legal authority. They are of liminal status, which is both crucial and unauthorized.

In the capitalist system, only pharmacists have the right to open a pharmacy as a private workplace in the free market. In a study conducted in Turkey before the Pandemic in 2015, pharmacy technicians were evaluated from the perspective of pharmacists.

Accordingly, pharmacists find the education level, professional experience and medical knowledge of technicians insufficient. It is expected that training will be given to them to be better equipped. Pharmacists usually need two technicians with them. The wages of technicians who do not have social security in the free market are usually determined by the pharmacy owners. An achievement bonus is also added to the wages paid according to the seniority of the technicians. It has also been stated that pharmacists often exert social control over technicians [17]. In all these organizational conditions, it is clear that those who are at risk by contacting customers more than pharmacists, especially during the Covid-19 Pandemic, are mostly journeymen or technicians who are employed without social security.

The sociological investigation of everyday life has become increasingly important in recent years, and de Certeau's concepts of strategy and tactics are frequently used in this regard [18]. de Certeau mentions that people, whether poor, children or adults, develop various "tactics" to cope with the problems they experience in daily life. He even calls theirs "strategy" when he talks about the fact that those who hold power also resort to some ways. During the Pandemic process, very important studies have been carried out on the tactics used by the elderly and women [19-21]. In this study, it is important to reveal what tactics the pharmacists and technicians working in pharmacies use in solving the problems they encounter during the Pandemic process.

While working on daily life, it is necessary to look at the sources of the problems that people experience. As a matter of fact, according to Giddens [22], in modern societies, unlike traditional societies, there are both man-made and natural disasters. In addition, while there were dangers in the past, now there are risks. Diseases, epidemics, disasters now often become risks for the whole world. Beck [23], states that these risks can be effective on a global scale without being limited to just a geographical region, and also points out that these risks have uncertain and unpredictable features [23].

One of the most important risks today is the Covid-19 disease. Information was given by WHO about the cases of unknown cause that emerged in Wuhan, China on 31 December 2019. Later, this new virus was named as COVID-19. On January 30, 2020, this situation was declared as an international Public Health Emergency of Concern (PHEIC), which represents WHO's highest alert level [24]. It was declared as a COVID-19 Pandemic by WHO on 11 March 2020 [25]. The first coronavirus case in Turkey was found on March 11, 2020 [26]. Every country has taken various measures to protect from the COVID-19 epidemic. Some of the measures taken by Turkey in this process are travel restrictions, some special coded inquiries, the maintenance of schools in the form of distance education, compulsory wearing of masks [27]. In addition, restrictions have been imposed on mass worship, curfews, weddings, funerals, and military farewell ceremonies [28].

## **Problem**

The COVID-19 epidemic has caused great losses from the moment it emerged and continues to be a disaster [29] by continuing its impact around the world. Undoubtedly, all healthcare professionals have assumed the greatest responsibility in the fight against the epidemic. When it comes to health, the first thing that comes to mind is the hospitals and the doctors and nurses working there. In addition, pharmacies and pharmacists and technicians working here constitute an important health group in the Covid -19 Pandemic, whose vaccine has just been found and drug studies are still ongoing.

The traditional role of pharmacists in drug management, such as the manufacture, storage and distribution of drugs, has been changing over the last 40 years. They, too, have begun to assume a patient-oriented role in health care services [30]. Pharmacists are diversified as primary care pharmacists, community pharmacists, hospital pharmacists, academic pharmacists and industrial pharmacists according to the functions they undertake [31]. Community pharmacies help people to be empowered to manage themselves in the process until they receive service from health institutions. It has an instructive role in issues such as hand cleaning and mask use and protects patients from false information [32]. Community pharmacists are also responsible for the retail sale and distribution of medicines, although they provide a significant portion of health services, it cannot be said that they are highly rewarded [33].

The Covid 19-Pandemic has affected not only patients, but also all workers, especially healthcare workers, women, the elderly, children and the disabled. Likewise, education, economy and politics were negatively affected. Since Covid-19, by its nature, affects the lungs the most, it has increased the workload of chest disease and infection specialists and employees in intensive care units. Likewise, these units of hospitals have naturally become the most risky clinics. As of 2021, 4,500,000 people have lost their lives all over the world from the virus called Covid-19, which is a type that has never been encountered before, and health workers, like everyone else, feel powerless on the one hand and cannot understand what is going on the other. Some even wanted to retire or resign by giving up their sacred profession to save their lives. It is not possible for this situation, which is sociologically called alienation, not to affect pharmacists and technicians, who are among the health professions and mostly work outside the hospital and privately. Based on this view, alienation in pharmacy workers, namely pharmacists and technicians, constitutes the main problem of the research presented in this paper.

## **Objectives**

In this study, using Seeman's (1959) alienation scale, the effects of the COVID-19 Pandemic were examined comparatively between pharmacists and technicians.

As part of a larger study, this article sought answers to the following questions as sub-problems:

- a) What are the demographic characteristics of pharmacists and technicians?
- b) Is there a difference between the alienation levels of pharmacists and technicians?
- c) What are the factors affecting the alienation of pharmacists and technicians?
- d) What is the impact of the COVID-19 Pandemic on the alienation of pharmacists and technicians? In other words, is there a meaningful change in alienation between Covid -19 before and after?
- e) What are the tactics of pharmacists and technicians to deal with problems?

## **Importance of the Study**

Previous studies were mostly in hospitals and on physicians [34, 35]. Some of the few studies on pharmacy aim to reveal the changes in the profession over time [33]. In particular, studies focusing on gender, class and ethnicity offer some suggestions to pharmacists in promoting health. Managing medicine and the status of the profession and what people do to regain their health when they get sick, the role of pharmacists in the consumption of various drugs and vitamins are examined [36], others were done in Pakistan [37] and Serbia [38]. Due to the fact that it is made by using the theories and concepts of sociology, our study contributes to both organizational and professional sociology as sub-fields of health sociology.

Various measures have been taken around the world to combat the COVID-19 Pandemic, including full restrictions. Therefore, communication has been tried to be provided through tools such as social media [39]. At this point, problems such as powerlessness and meaninglessness experienced by the owners and employees of pharmacies as a free market organization [40], were discussed with the tactics they developed such as informational power, using the internet and social media more effectively [41]. It is important to do research by way of comparison, by providing the unity of theory and practice, taking into account this distinction between profession and occupation [11].

## **Limitations**

As in any research, there are some limitations in this study as well. The fact that the field research of the aforementioned study is carried out only in the Central District of Sivas, an Anatolian city in Turkey, constitutes the limitation of this study.

The most important limitation of the study is that it is based on a quantitative research only. However, it can be said that the fact that the employees in all pharmacies in the city were interviewed at

a rate close to the full count meets this limitation to some extent. In addition, it should be noted that some missing aspects are tried to be completed by examining the information shared by pharmacists and technicians on their websites.

### Methodology

This study was carried out in accordance with the quantitative research design. In the study, the alienation levels of pharmacists and their journeymen during the COVID-19 Pandemic, and the tactics of coping with problems, especially the use of the internet and social media, were examined. In this context, the alienation scale developed by Seeman [40], was used.

Measures of variables: Seeman [40], suggested five components of alienation, such as powerlessness, meaninglessness, normlessness, cultural estrangement, and social isolation. If these elements are to be explained briefly, the powerlessness factor measures the fact that people do not have much to do for what is going on around them. It also refers to the failure to meet expectations, to dependence on circumstances outside the person rather than personal control. Seeman [40], used Adorno and Manheim to explain the meaninglessness factor. Here, the person is inadequate in trying to understand and interpret what is happening around him. In the factor of normlessness, he uses the concept of anomie, which Durkheim uses to describe the rule-breaking in society. Seeman [40], also makes use of Merton, who associates normlessness with the importance of luck and unpredictability in behavior. In social isolation, the individual stays away from rewarding or complementary social activities. Finally, cultural alienation refers to moving away from innovating or giving up on existing ones in achieving goals [40].

These five elements of Seeman's alienation have been tried to be measured by means of the following sentences in parallel with the study by Kasapoglu and Ecevit [42].

- "I don't have the power to intervene in the events around me." (Powerlessness)
- "I often have trouble understanding what is going on around me." (Meaninglessness)
- "Sometimes I do things that shouldn't be done." (Normlessness)
- "I feel lonely even though there are many people around me." (Social isolation)
- "I don't watch TV, I don't follow newspapers or magazines." (Cultural Estrangement)

Inspired by de Certeau, three sentences have been developed and used by us, as researchers, in order to reveal the tactics of the pharmacy workers to fight their problems during the Pandemic process:

- "I can distinguish false information from internet and social media channels." (Using informational power)
- "I follow the internet and social media frequently." (Using internet and social media)

- "Pandemics should also be considered as occupational diseases for pharmacists." (Defending professional rights)

In the study, data were collected using the questionnaire technique. The questionnaire form was prepared according to the five-point Likert type (1-Strongly Disagree, 2- Disagree, 3- Undecided, 4- Agree, 5- Strongly Agree). The research was carried out by handing the questionnaires to the participants themselves.

Sample and data analysis: The field research was carried out in the province of Sivas, located in the Central Anatolian Region of Turkey. The universe of the research consists of 124 [43], (<https://www.eczaneler.gen.tr/eczaneler/sivas-merkez>) community pharmacies located in Sivas Central District. During the research, it was observed that 18 pharmacies on the list were closed. In addition, since six pharmacists did not want to participate in the research, a sample of 100 people was reached. The rate of pharmacists who refused to be interviewed in the study is quite low (6%). The data obtained in the research were analyzed using the SPSS 25 program.

### Results and Discussion

In this section, the distribution of participants consisting of pharmacists and technicians according to gender, profession and marital status is given as empirical research findings. Then, the information about the data obtained using the alienation scale was analyzed and interpreted with advanced statistical techniques in three subsections, including before-after comparisons to see the effect of the Pandemic and the tactics developed to deal with the problems.

#### Demographic Data

Demography	Frequencies
Gender	Female .65
	Male .35
Occupation	Pharmacist .52
	Technician .48
Marital Status	Married .57
	Single .43

**Table 1:** Some Demographic Characteristics of the Sample (N=100).

In Table 1, some demographic characteristics of the participants were examined. When investigated in more detail, it was seen that while the majority of pharmacists were women (80%), technicians were mostly men (63%). As a matter of fact, when the gender and profession variables in the focus of pharmacist/ technician were evaluated by chi-square non-parametric analysis ( $\chi^2= 16,913$ , df: 1  $p<0.000$ ), a statistically significant relationship



was obtained. In addition, while the average age of the participants in the study was 33.83 in general, the standard deviation was found to be 9.54. The heterogeneous age distribution of the sample can also be understood from the fact that the youngest is 21, and the oldest is 65 years old. It should be noted that the average age of the pharmacists (34) and technicians (33.6) in the research sample is very close to each other. In addition, the average working year of the sample is 13.02. The fact that the group is very heterogeneous in terms of years worked is due to the fact that the working period has a distribution between at least one year and at most 30 years. On the other hand, in the sample, getting Covid -19 disease is close to each other in both groups consisting of pharmacists and technicians and it is around 20%.

#### Alienation Scale

Alienation items	Completely disagreed	Disagreed	Undecided	Agreed	Completely agreed	Mean and standard deviation
Powerlessness	31	28	20	13	8	100 2.79; 1.34
Meaninglessness	42	28	13	13	7	100 2.73;1.51
Normlessness	29	43	10	13	8	100 2.75;1.40
Social Isolation	33	36	16	8	7	100 2.60;1.38
Cultural Estrangement	38	26	9	16	11	100 2.58;1.53

**Table 2:** Distribution, Mean and Standard Deviations of Responses Given to Alienation Scale Items.

According to the distribution in Table 2, the averages of the scores given to each item in the alienation scale are very close to each other and are over 2.5. In addition, the standard deviations show that the responses are quite homogeneous. On the other hand, the undecided responses in the powerlessness item are the highest. The analysis of the pharmacists and technicians in the sample during the Pandemic period in total also shows that they do not receive a high degree of alienation score.

The regression analysis in Table 3 shows that the only factor that has an effect on the total alienation score is pharmacy as a profession (pharmacist=1). On the other hand, it is understood that gender, marital status, age and catching Covid-19 is not effective. It would not be wrong to say that the findings are in the expected direction.

Model	Unstandardized Coefficients		Standardized Coefficients		t
	B	Std. Error	Beta		
1 (Constant)	12.546	2.663			4.711
Gender (women =1)	1.319	0.925	0.164		1.426
Marital Status (married =1)	-0.862	0.83	-0.111		-1.039
Profession (Pharmacist =1)	-2	0.848	-0.261		-2.360**
Disease (Covid19=1)	0.186	0.951	0.02		0.196
Age	0.048	0.097	0.118		0.49
Working Years	-0.011	0.087	-0.03		-0.126

a. Dependent Variable: alienation  $p < .05^*$ ;  $p < .01^{**}$ ;  $p < .000^{***}$

**Table 3:** Effects of Independent Variables on Alienation Scale Total Score.

In order to deepen the analysis, after an average alienation score (11.3) and a standard deviation (2.1) were found in the study, alienation levels were grouped as low (5-8), medium (9-13) and high (14-23).

		Female	Male	Total
Alien	Low	0.7	0.15	0.22
	Medium	0.19	0.35	0.54
	High	0.9	0.15	0.24
Total		0.35	0.65	100
Chi-square: .165 df : 2 p>.921				

**Table 4:** Alienation levels of Participants by Gender (N=100).

In Table 4, alienation levels were compared according to the gender variable and no statistically significant difference was found. On the other hand, when the literature on the fact that the majority of pharmacists in our sample were women, it was found that, in addition to the studies revealing the increasing workload and conflict situation of female pharmacists in general [44], researches that the Pandemic process brought new burdens on working women were also encountered [45]. It should also be noted that there are studies that point to the problems that women face in the balance between home and work, especially during restriction periods [46].

		Pharmacist	Technician	Total
Alien	Low	0.13	0.9	0.22
	Medium	0.29	0.25	0.54
	High	0.1	0.14	0.24
Total		0.52	0.48	100
Chi-square: 1.533 df : 2 p>.465				

**Table 5:** Comparisons of Alienation Levels by Profession (N=100).

Independent Variables	Powerlessness	Meaninglessness	Normlessness	Social isolation	Cultural estrangement
Gender (Women =1)	0.608 (.217)*	-0.094 (-.030)	0.299 (-0.102)	0.252 (-0.087)	0.626 (-0.195)
Marital Status (Married=1)	0.191 (-0.071)	-0.27 (-.089)	-0.379 (-.134)	-0.253 (-.091)	0.232 -0.075
Profession (Pharmacist=1)	-0.721 (-.269)**	-0.928 (-.307)***	-0.282 (-.101)	-0.116 (-.042)	-0.092 (-.030)
Pandemic (Covid-19=1)	0.329 (-100)	0.103 (-0.028)	0.139 (-0.041)	0.511 (-0.151)	0.369 (-0.098)

In Table 5, alienation levels were analyzed according to the profession variable and no statistically significant difference was found. It can only be said that the high level of alienation is proportionally higher in technicians and that this is due to uncertainties in the Covid-19 Pandemic process. In the study, coding options on the basis of professional specialization are divided into pharmacists (profession) and pharmacist technicians (occupation). While pharmacists were graduates of the Faculty of Pharmacy, pharmacist technicians consisted of people with other education levels, for example, those who graduated from high school or from different colleges or health vocational schools. The research findings are quite similar to the analyzes made according to the gender variable. It is seen that the rate of moderate alienation is more intense among pharmacists and technicians.

According to some participants during the research, journeymen/technicians work more intensively than pharmacy owners. Based on this, it is expected that they have a slightly higher level of alienation compared to pharmacists. As a matter of fact, in a field study conducted during the Covid -19 Pandemic in Serbia, it was stated that the purchase of masks, gloves and disinfectants intensified and therefore the workload increased. However, this Serbian study focused more on satisfaction. According to the study, it was determined that especially women, young people and those with less experience faced a greater workload and thus received lower satisfaction scores. In addition, the fact that pharmacists were worried about the health of their families created a separate stress factor [38]. In another study conducted in Pakistan, it was revealed that pharmacists play an important role in the management of the COVID-19 process, in the use of various protectors such as masks, in various practices such as cleaning and distancing [37]. These studies are valuable in terms of revealing the importance of the pharmacy profession in all countries during the Covid-19 Pandemic process.

The results of the regression analysis given in Table 3 revealed that only the occupation variable was effective on alienation. For this purpose, the analyzes on the alienation scale consisting of five items were further deepened. Thus, it has been tried to reveal which factors are effective on alienation items.

Age	-0.077 (-.546)**	0.005 (-.30)	-0.007 (-.047)	-0.012 (-.080)	0.002 -0.012
Working Years	0.052 (-0.408)	-0.007 (-.046)	0.017 (-0.129)	0.011 (-0.084)	0.016 (-0.108)
Standardized Beta scores are presented in parenthesis. * $p < .05$ ** $p < .02$ *** $p < .001$					

**Table 6:** Regression Analysis of Alienation Items/Components by Independent Variables (N=100).

After performing the regression analysis for the five components of alienation one by one, the findings are summarized in Table 6. When powerlessness, which is the first component of alienation, is examined, it is observed that gender, profession and age variables cause some differences on powerlessness. Later, it was desired to make more detailed interpretations by applying the non-parametric Chi-square test to these variables.

For example, although there is no statistically significant difference between gender and powerlessness (Chi-square: 2.07; df:4;  $p > .698$ ) among women, the rate of signs of the undecided answer was higher among the options presented in the Likert scale. In addition, it has been understood that seeing oneself more powerful is slightly higher in men. Secondly, when we look at the profession variable, which is effective on powerlessness, it was observed that although there was no significant difference in the chi-square non-parametric test (Chi-square: .855, df:4  $p > .144$ ), pharmacists considered themselves stronger than technicians. Finally, although there is no statistically significant difference in the relationship between powerlessness and age (Chi-square=2.07, df: 4,  $p > .698$ ), there are more young people who consider themselves weak. The older ones gave answers showing that they are both more stable and considerably more powerful.

As the second component of alienation, the only variable that has been determined to be effective on meaninglessness is profession. There was a significant difference in the chi-square non-parametric statistical test applied on that (Chi-square: 9.893, df:4;  $p < .042$ ). The findings revealed that pharmacist technicians could not make more sense of what was happening around them, in other words, the rate of finding them meaninglessness was much higher. Considering that the technicians, among whom there are those with a short working experience, do not have the equipment of pharmacists in terms of their training, it can be said that it is expected that they will get a higher score in the meaninglessness variable.

It should also be noted that there is no effective independent variable on normlessness, social isolation and cultural estrangement in Table 6. This shows us that the independent variables in question on these items do not make a significant difference, and if there is, they should be investigated with other variables.

Independent variables	Informational power	Social Media Usage	Covid-19 as a Professional Disease
Gender (Women=1)	0.168 (-0.06)	0.412 (-0.15)	1.15 (.419)***
Marital Status (Married=1)	0.029 (-0.011)	-0.173 (-.065)	0.174 (-0.066)
Profession (Pharmacist=1)	0.428 (-0.161)	0.353 (-0.135)	0.108 (-0.041)
Pandemic (Covid-19=1)	-0.149 (-.046)	0.761 (.237)**	0.626 (.195)*
Age	-0.087 (-.619)**	0.024 (-0.174)	-0.002 (-.013)
Working Years	0.074 (-0.585)	-0.031 (-251)	-0.008 (-.066)
(Standardized Beta scores are presented in parenthesis) ** $p < .02$ *** $p < .001$			

**Table 7:** Regression Analysis of Tactics by Independent Variables (N=100).

In Table 7, the regression results are summarized according to the tactics used by the employees in pharmacies to cope with the problems during the Pandemic period. For example, the state of noticing the misinformation that may come from various sources, that is, the power of information, showed a significant difference according to the age variable. Although the chi-square non-parametric statistical analysis applied to make further comments showed that there was no statistically significant difference (Chi-square: 6.245; df :4, p>.182), it was understood that young people thought that they could distinguish more false information. On the other hand, as expected, those who are older think that they cannot distinguish more anxiously in this regard. The difference of young people in this regard can be attributed to their greater ability to use technology such as the internet.

Regression analysis indicates a significant relationship between following social media frequently and getting Covid-19 disease. However, the chi-square nonparametric analysis revealed that there was no significant difference between those who had the disease and those who did not in terms of social media use (Chi-square: 7.179, df: 4, p>.127). On the other hand, it would not be wrong to say that those who have Covid-19 disease use social media more. According to the findings, the rate of pharmacists with Covid (21.2%) and the rate of technicians (20.8%) are very close to each other. In addition, both groups are similarly high following social media. Because today, social media provides faster access to news.

Covid-19 is accepted as an occupational disease in many parts of the world, and social security rights are fully provided to the relatives of those who lost their lives from this disease.

In Turkey, the situation is quite complex. Relatives of health personnel who lost their lives almost never get their rights. Because, in addition, it is required to be proved by the relatives that the person lost his life while performing the profession. The death of healthcare personnel from Covid does not automatically transfer their rights to their relatives. As expected in the regression analysis, a relationship was found between the acceptance of Covid 19 as an occupational disease and being Covid-19. However, more importantly, a deeper analysis of the strong relationship between gender and acceptance of an occupational disease was aimed, and the non-parametric chi-square analysis applied revealed that there is an extremely significant relationship (Chi-square: 20.162; df: 4, p<.000). In the research, it can be interpreted that it is a strong tactic for pharmacists, among whom there are many women, to demand that Covid-19 be considered an occupational disease.

In the study, it was also thought that revealing whether the Pandemic had an effect on the alienation levels of the participants would make an important contribution to the literature. For this purpose, participants were asked to express their thoughts by comparing them in a before-after format. The obtained data were analyzed by applying the paired comparison T test. In addition, it has been tried to understand the subject in more detail with comparative tables according to gender and profession/occupation distinction.

**Effects of the Pandemic: Before-After Comparisons**

Through the three tables in this subsection, it has been tried to show the changes experienced by the health personnel working in the field of pharmacy on the basis of gender and profession and the tactics they apply.

Female (N=35)					Male (N=65)				
	Paired Dif. Mean		Std. Dev.	T Test Mean	Sig. (2-tailed)	Paired Dif. Mean	Std. Devi.	T Test Mean	Sig. (2-tailed)
Pair 1	Powerlessness 1-2	-0.5143	1.26889	-2.398	p<.022	-0.33846	1.33787	-2.04	p<.046
Pair 2	Meaninglessness 1-2	-0.4286	1.03713	-2.445	p<.020	-0.70769	1.30771	-4.363	p<.000
Pair 3	Normlessness 1-2	-0.5143	1.06747	-2.85	p<.007	-0.47692	1.43731	-2.675	p<.009
Pair 4	Social isolation 1-2	-0.4	1.14275	-2.071	p<.046	-0.41538	1.02914	-3.254	p<.002
Pair 5	Cultural Estrangement 1-2	-0.3714	1.39507	-1.575	p>.124	-0.13846	0.91646	-1.218	p>.228

**Table 8:** Before-and After Paired Comparisons Results of Alienation Scale Items by Gender.

In Table 8, a comparative summary presentation of the effects of the Covid-19 Pandemic on all participants in the sample (regardless of occupation) based on components such as powerlessness, meaninglessness, normlessness, social isolation and cultural estrangement in the alienation scale is given. According to the results, it was revealed that the first four components made a significant difference on



both women and men. In the cultural alienation component, no significant difference was determined before and after the Pandemic. Based on all these results, it is understood that the Pandemic process showed serious negative effects, which are statistically significant, on both women and men, and the high alienation scores that increased in the Pandemic and therefore the difference took negative values.

Female (N=35)						Male (N=65)			
Paired	Dif. Mean	Std. Dev.	T Test Mean	Sig. (2-tailed)	Paired Dif. Mean	Std. Dev.	T Test Mean	Sig. (2-tailed)	
Pair 1	Informational Power 1-2	0.05714	0.90563	0.373	p>.711	-0.03077	0.96775	-0.256	p>.799
Pair 2	Social Media Usage 1-2	-0.11429	1.10537	-0.612	p>.545	-0.09231	1.12809	-0.66	p>.512
Pair 3	Professional Disease 1-2	-0.37143	0.84316	-2.606	p<.013	-0.61538	1.23355	-4.022	p<.000

**Table 9:** Before-and After Paired Comparisons Results of Some Tactics by Gender.

In Table 9, tactics such informational power, internet and social media use, and the acceptance of Pandemics as an occupational disease for pharmacists are presented as a comparative summary by gender. When the results are examined, the most important tactic that has undergone significant difference before and after the Pandemic is the acceptance of the Pandemic as an occupational disease. These findings show that working for the recognition of Covid-19 as an occupational disease by the state is considered as a strong tactic by both women and men.

Profession/Pharmacists (N=52)						Occupation/ Technicians (N=48)			
Paired	Dif. Mean	Std. Dev.	T Test Mean	Sig. (2-tailed)	Paired Dif. Mean	Std. Devi.	T Test Mean	Sig. (2-tailed)	
Pair 1	Powerlessness 1-2	-0.48077	1.05701	-3.28	p<.002	-0.3125	1.54584	-1.401	p>.168
Pair 2	Meaninglessness 1-2	-0.36538	1.01032	-2.608	p<.012	-0.875	1.37802	-4.399	p<.000
Pair 3	Normlessness 1-2	-0.40385	0.99528	-2.926	p<.005	-0.58333	1.59565	-2.533	p<.015
Pair 4	Social Isolation 1-2	-0.5	1.05719	-3.411	p<.001	-0.3125	1.07498	-2.014	p<.050
Pair 5	Cultural Estrangement 1-2	-0.26923	1.05003	-1.849	p>.070	-0.16667	1.17298	-0.984	p>.330

**Table 10:** Before-and After Paired Comparisons Results of Alienation Scale Items by Profession/ Occupation.

In Table 10, the comparative changes in the scores of pharmacists and technicians before and after the Pandemic in the alienation scale consisting of powerlessness, meaninglessness, normlessness, social isolation and cultural estrangement are given. As in the previous Table 9, it is observed that the T-test mean differences are negative, that is, the alienation scores increase. In terms of pharmacists, there was an increase in the alienation scores, which are also statistically significant, in all components except cultural alienation. On the other hand, statistically significant increases in alienation scores were observed in the meaninglessness, normlessness and cultural estrangement components of the technicians.

There is no statistically significant difference before and after the Pandemic in terms of powerlessness and cultural estrangement among pharmacists. However, it is seen that the powerlessness component creates a statistically significant difference for pharmacists.

The second dimension of alienation, meaninglessness, has affected the pharmacy technicians even more, due to both their education and the short working years. Along with the Pandemic process, curfews, travel bans, restrictions for age groups such as over 65 and under 20 years old [47], measures have greatly affected social life. The Pandemic has caused significant uncertainty in people’s lives [28]. It can be said that due to the Pandemic, problems have arisen in understanding what is happening around, and technical staff are more affected by this.

In the research, the situation of normlessness is discussed with the phrase “I do things that should not be done from time to time.” It can be thought that both pharmacists and technicians sometimes do things they do not plan to do in their daily lives with various concerns. The aforementioned practice was implemented as weekend curfews and during the week at 05:00 in the morning and 21:00 in the evening. In addition, since the working hours of places such as cafes and restaurants are subject to certain rules [27], some people tended to stock up on products they don’t need, and sometimes curfews were broken in order to do sports for health.

Social isolation has naturally increased in this period for everyone as well as pharmacists and technicians. However, it can be said that they have a different chance in terms of both their profession and occupation. Because during the field research, some participants stated that they try to avoid close contact as much as possible, even if they work in the pharmacy, because they are in the same environment with the patients. With the Pandemic process, people have distanced themselves from social life and had to return to a more isolated life. As a result of the restrictions, humanity has been exposed to a rather isolated life, which is far from face-to-face communication to a degree that it has never experienced until now, mostly in the virtual environment. This situation created socio-psychological effects [39].

In order to measure cultural estrangement, the sentence “I don’t watch TV, I don’t follow newspapers and magazines” was developed and there was no statistically significant difference before and after the Pandemic in both groups. They mostly stated that they continue to follow the agenda. In addition, during the field research, especially younger participants stated that they did not watch television or read newspapers before the Pandemic. The middle-aged and older participants, on the other hand, said, “We watch the news on TV, there is no change,” as they always do. In fact, some pharmacies even have LCD screen televisions. In summary, it can be said that the level of cultural alienation shows more similar characteristics with the pre-Pandemic process. (Table 11).

		Profession/Pharmacists (N=52)				Occupation /Technicians (N=48)			
		Paired Dif. Mean	Std. Dev.	T Test Mean	Sig. (2-tailed)	Paired Dif. Mean	Std. Dev.	T Test Mean	Sig. (2-tailed)
Pair 1	Informational Power 1-2	-0.11538	0.96312	-0.864	p>.392	0.125	0.91384	0.948	p>.348
Pair 2	Social Media Usage 1-2	-0.28846	0.95664	-2.174	p<.034	0.10417	1.24182	0.581	p>.564
Pair 3	Professional Disease 1-2	-0.42308	1.01646	-3.001	p<.004	-0.64583	1.21146	-3.693	p<.001

**Table 11:** Before-and After Paired Comparisons Results of Some Tactics by Profession/Occupation.

In terms of informational power tactic, there is no significant change or difference between the pharmacy (profession) and technician (occupation) groups during the Pandemic compared to the pre-Pandemic group. In fact, it is possible to talk about some discussions on this issue. It can be said that pharmacists are more confident in noticing false information that may come from the internet and social media channels. However, in a study conducted with pharmacists in Turkey, a general guideline that pharmacists can refer to, especially in the early stages of the Pandemic, is missing; for this reason, it has been determined that they sometimes resort to false information on social media regarding the contagious characteristics of COVID-19 disease, the use of gloves, and the use of protective supplements such as various vitamins [48].

In the research, it is also aimed to observe what kind of change is experienced in the tactic of using social media more. People’s orientation to social media has increased due to factors such as restrictions and isolation during the Pandemic process [49]. However, in addition to the positive features of social media such as creating a communication resource among people, there may also be negative

aspects such as causing misinformation [50]. Therefore, it has become more important to reach reliable and accurate information during the Pandemic process. According to the research findings, while the frequency of social media use made a statistically significant difference for pharmacists, it did not for pharmacist technicians. When the chi-square analysis of the social media usage and profession variable is examined ( $\chi^2= 5.652$ ,  $p>.05$ ), the total rate of answers given by pharmacists as “I totally agree” and “I agree” is higher (78.9%), and it is lower for pharmacist technicians (58,4 %). Therefore, it can be said that pharmacists follow social media more closely than technicians.

According to the research findings, the frequency of social media use and the acceptance of Pandemics as an occupational disease for pharmacists make a statistically significant difference for pharmacists. In terms of pharmacy technicians, only a statistically significant difference emerged regarding the acceptance of Pandemics as occupational diseases for pharmacists. Technicians, like pharmacists, are aware of the risks.

The issue of being recognized as an occupational disease has been particularly interesting. Because there have been pharmacists who lost their lives due to COVID-19 in Turkey, and then the necessity of accepting COVID-19 as an occupational disease for all health sector workers became a matter of discussion. Likewise, in the results of the research, it is seen that the agreement of both pharmacists and technicians in this statement has increased significantly during the Pandemic process compared to the pre-Pandemic period. The most important reason for this is that as of April 2021, a total of 50 pharmacists and 17 pharmacy technicians died in Turkey due to the COVID-19 [51]. It has been observed that some pharmacies have posters with lists of pharmacists who lost their lives.

## Conclusion

In this study, Melvin Seeman’s [40], (1959) alienation scale consisting of powerlessness, meaninglessness, normlessness, social isolation and cultural alienation components and measuring the strategies and tactics of coping with some problems were tried to be revealed in detail how pharmacists and their assistant technicians were affected by the COVID-19 Pandemic. In accordance with the quantitative research design, empirical field research was carried out in Sivas Central District with the survey technique. The universe of the study consisted of 124 pharmacies, and the sample consisted of 100 pharmacies and pharmacists (57) as well as technicians (43) from this universe.

According to the calculated alienation rates, it has been determined that more than half of the sample is moderately alienated, while high and low levels of alienation are found at close rates. In the light of all these data, it can be said that pharmacies as well as hospitals are affected by the Covid-19 process.

While evaluating the results of the field study, first of

all, the components of alienation were subjected to regression analysis. Accordingly, independent variables such as gender, occupation and age showed a statistically significant difference on powerlessness. There is a statistically significant relationship between meaninglessness and the profession as an independent variable.

In the free market (community) pharmacy services in Turkey, both those who received the professional education and received a pharmacy diploma and those who are health technicians or who learn the profession on the job work together. This situation has led to differences in powerlessness and meaninglessness items between professionals who have a pharmacy diploma and others who try to work in pharmacies. Because professional pharmacists who receive pharmacy education naturally see themselves stronger and can understand what is going on around them much better depending on their education and experience. As a matter of fact, the technicians in the research sample, who work in the field of pharmacy, have a very short period of work in terms of years. The fact that many of them have one-year experience is also an important sign of this.

According to the research findings, in parallel with the higher rate of using the Internet and social media among young people, they have more self-confidence in distinguishing the misinformation in the virtual world. There is a relationship between the use of social media and being a COVID-19 patient, and those who have the disease use social media more. The idea of accepting the Pandemic as an occupational disease for pharmacists has showed a statistically significant difference, especially in terms of gender, and also in terms of being a COVID-19 patient. On the other hand, the fact that both pharmacists and technicians are infected with the disease shows us that technicians are aware of the same risk. It can be said that the fact that the total alienation level does not have a statistically significant difference according to the independent variables of gender and occupation is due to the fact that both groups with different social status do similar jobs under the same workplace conditions.

When the components of the alienation scale were compared on the basis of gender variable according to the pre-Pandemic period and the Pandemic period, all components showed statistically significant differences in terms of both women and men, except for the cultural alienation component. While all the components of the alienation scale except the cultural alienation component showed a significant difference for the pharmacists, only the meaninglessness and powerlessness variables showed a significant difference for the technicians.

During the Pandemic process, all pharmacy workers have entered into an intense work tempo in Turkey as well as in the world [52] and a circular titled “Staging of Health Service Providers” was published by the Ministry of Health in 2019. According to this Circular, free pharmacies included in the Law on Pharmacists and Pharmacies No. 6197 are included in the scope of “primary

health service provider” [53]. With the inclusion of pharmacies in the scope of combating the Pandemic in Turkey, pharmacies have assumed important roles in consultancy services, uninterrupted drug supply service and mask distribution [54]. In fact, although the Pandemic process has created powerlessness on technicians, it can be interpreted that they did not see themselves as very powerful before and this continues in the Pandemic. As a matter of fact, it was pointed out that the normal working conditions of pharmacy technicians were very difficult even before the Pandemic and this situation became more difficult with the Pandemic.

It has been announced by the Istanbul Pharmacy Technicians Association in May 2021 about the working hours of the pharmacy employees are not regulated. They work on Saturdays, long working hours, and the burden of Pandemic conditions is added. In addition, it was requested that the weekly working time be shortened to a fair period suitable for humane living [55]. In addition to the difficult working conditions, it is stated that the group with the lowest wages among the health workers is pharmacy technicians [56]. In terms of organizational sociology, it can be said that while pharmacists are powerful employers in pharmacies as a formal organization with division of labor and hierarchical authority, technicians are open to all kinds of pressure and exploitation as employees.

According to all these findings, it can be said that it is appropriate to make a distinction between occupation and profession in the field of pharmacy. It is a fact that pharmacists who are educated in the profession are real professionals, but technical personnel working in pharmacies as occupation also carry significant risks. Therefore, it would not be wrong to say that they see pharmacy as a more risky profession, especially after the Pandemic. As Riska [11], also states, there is no distinction between profession and occupation in some languages, especially French. According to some sociologists, the distinction between profession and occupation is just an artifact in sociology vocabulary. On the other hand, sociologists often disagree about the strength of occupations, their characteristics, and their place in the division of labor in health. As a matter of fact, when viewed from afar within the framework of the study, pharmacists and technicians do not differ much in terms of the work done. However, it should be accepted that pharmacists with very high responsibilities, status and income in the society are not in the same position as technicians, who are in a temporary status and are basically seen as a job that everyone can do, even if they are not.

On the other hand, during the Covid-19 Pandemic, while especially children and the elderly were heavily affected by the restrictions, infection, chest diseases and intensive care workers in health professions faced a higher workload and higher risk. As a matter of fact, a sociological study on the conflicts between specialist physicians has dramatically revealed this fact [57]. This study describes the power struggle and conflicts within the health professions very well. Ergur [57], as a health sociologist in his study called Fire and Betrayal, metaphorically described the Covid

epidemic with fire. According to him, betrayal is not such a simple event and is actually three-dimensional. With the first, he describes the division of labor in health professions and the power struggle among themselves. According to the data obtained by in-depth interview technique, physicians in some other branches left their tired and exhausted chest diseases, infection and intensive care specialist friends alone in an effort to keep themselves away from dangers. The second betrayer is the health administrators at various levels who are incompetent, negligent or malicious. As Cocaia states, countries need to ensure better health policies in terms of restrain adverse impacts of the next pandemic threats on health of people and economic systems [58]. Also psychosocial support is crucial for frontline health workers [59]. Finally, the negligence of the society, which does not listen to the warnings and does not protect itself, is described as a kind of betrayal as it increases the workload and risk. From this point of view, it is natural that some conflicts and disagreements arise among physicians as well as other health personnel.

Recently, the problems of health workers in Turkey have been discussed and researched [60,61]. On the other hand, the pharmacists working in the pharmacies that are open continuously in every neighborhood and the technicians who are their assistants are often ignored and left to their fate. It is clear that this study will contribute to the literature of health profession sociology as an original study based on sociological concepts. Undoubtedly, this quantitative study needs to be developed by qualitative research techniques. On the other hand, quite different from the views in the lesser published books of sociology of pharmacy [36], this study will serve as a mirror for sociologists as well as pharmacists and technicians to understand the problems in daily life and the tactics developed to deal with them. The important thing is that pharmacists, technicians and sociologists carry out more advanced studies in cooperation. In fact, it would be more appropriate for these studies to cover all pharmaceutical manufacturers, distributors and importers as well as pharmacists and technicians with a holistic approach.

## References

1. Mechanic D (1989) Medical Sociology: Some Tensions Among Theory, Method and Substance. *Journal of Health and Social Behavior* 30(2): 147-160. (<https://doi.org/10.2307/2137009>).
2. Cockerham W (2017) *Medical Sociology*. New York: Routledge. (<https://doi.org/10.4324/9781315618692>).
3. Nettleton S (1995) *Sociology of Health and Illness*. Cambridge: Polirt Press
4. Kasapoglu A (2009) (ed) *Madalyonun İki Yuzu. Sağlık ya da Hastalık*. Ankara: Siyasal.
5. Kasapoglu A (2020) *Sociology of Artificial Intelligence: A relational Sociological Investigation in The Field of Health*. *Report on Global Health Research* 3(112). (DOI: 10.29011/RGHR-112.100012).
6. Parsons T (1951) *The Social System*. Cambridge: Routledge.
7. Freidson E (1970) *The Profession of Medicine*. New York: Mead and



- Company.
8. Nancarrow S, Borthwick A (2021) *The Allied Health Professionals: A Sociological Perspective*. Bristol: BU.
  9. MacDonald K (1996) *The Sociology of Profession*. London: Sage.
  10. Russell L (2013) *Sociology of Health Professionals*. London: Sage. (DOI:<http://dx.doi.org/10.4135/9781526401922>).
  11. Riska E (2017) *Health Professions and Occupations* (<https://doi.org/10.1002/9781405165518.wbeosh013.pub2>).
  12. White H (1992) *Identity and Control: A Structural Theory of Social Action*. Princeton NJ: Princeton UP.
  13. Ramazanoglu C, Holland J (2002) *Feminist Methodology: Challenges and Choices*. New Delhi: Sage.
  14. Mccall L (2008) The Complexity of Intersectionality. *Journal of Women in Culture and Society* 30 (3): 1771-1800. (<https://www.jstor.org/stable/10.1086/426800>).
  15. Mehrotra, G (2010) Toward a Continuum of Intersectionality Theorizing for Feminist Social Work Scholarship, *Affilia* 25(4): 417-430. (DOI:10.1177/0886109910384190).
  16. Kasapoglu A (2016) (ed) *Uygulamalı İlişkisel Sosyoloji*: İstanbul: Yeni İnsan.
  17. Ozdemir A, Altıntop MA, Sever B (2015) A Survey About Pharmacy Technicians in Eskişehir, *Cukurova Medical Journal* 40(4): 670-691. (<https://doi.org/10.17826/cutf.98682>).
  18. de Certeau M (1984) *The Practice of Everyday Life*. (trans. S.F. Renadail) Berkeley, CA: University of California Press. (Vol 1).
  19. Kosar A, Kasapoglu A (2021) Effects of Covid-19 Pandemic on The Elderly: A Grounded Theory Study from Turkey, *Advanced in Social Sciences Research Journal* 8(1).
  20. Kosar A (2021) Covid -19 Salgınının İlişkisel Sosyolojik Açından Karma Desen Analizi: Türkiye Emekliler Derneği Örneği. Ankara: TED Yayını.
  21. Yerli D (2021) Pandemi Sürecinde Kadınların Teknoloji Kullanımı: İlişkisel Sosyolojik Bir Analiz. Ankara: Baskent University, Institute of Social Sciences (under review).
  22. Giddens A (1994) *Sociology*. Second Edition, Oxford: Blackwell Publishers.
  23. Beck U, Lash S, and Wynne B (1992) *Risk Society: Towards a New Modernity* (Vol. 17). Sage.
  24. WHO Europe (2019). *Coronavirus Disease (COVID-19) Pandemic*. (<https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov>). (Accessed August 17, 2021).
  25. WHO, WHO Director-General's Opening Remarks at The Media Briefing on COVID-19 - 11 March 2020. (<https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020> ). (Accessed August 17, 2021).
  26. Republic of Turkey Ministry of Health (2020) *Covid-19 (Sars-Cov-2 Infection) Guide Study of Scientific Board*. Republic of Turkey. Ankara: Ministry of Health. ([https://hsgm.saglik.gov.tr/depo/birimler/goc\\_sagligi/covid19/rehber/COVID-19\\_Rehberi20200414\\_eng\\_v4\\_002\\_14.05.2020.pdf](https://hsgm.saglik.gov.tr/depo/birimler/goc_sagligi/covid19/rehber/COVID-19_Rehberi20200414_eng_v4_002_14.05.2020.pdf) ). (Accessed August 17, 2021).
  27. Baskan AH, Baskan AH (2021). University Students and Recreation in the Covid-19 Process: Metaphor Analysis. *Pakistan Journal of Medical & Health Sciences* 15(6): 1557-1561. (ID: covidwho-1350686).
  28. Kasapoglu A and Akbal A (2020) Relational Sociological Analysis of Uncertainties: The Case of COVID-19 in Turkey. *Advances in Social Sciences Research Journal* 7(4): 197-228. (<https://doi.org/10.14738/assrj.74.8116>).
  29. Connell R (2020) COVID-19/Sociology, *Journal of Sociology* 56(4): 745-751. (<https://doi.org/10.1177/1440783320943262>).
  30. Wiedenmayer K (2006) *Developing Pharmacy Practice a Focus on Patient Care*. World Health Organization Department of Medicines Policy and Standards. Geneva: Switzerland. (<https://apps.who.int/iris/handle/10665/69399>).
  31. Kokane JV, Avhad PS (2016) Role of Pharmacist in Health Care System. *The Journal of Community Health Management*, January-March 3(1): 37-40. (DOI:10.5958/2394-2770.2016.00013.2).
  32. Mallhi TH, Liaqat A, Abid A, Khan YH, Alotaibi NH, et al. (2020) Multilevel Engagements of Pharmacists During The COVID-19 Pandemic: The Way Forward, *Frontiers in Public Health* 8:561924. (DOI: 10.3389/fpubh.2020.561924).
  33. Mossialosa E, Courtina E, Nacia H, Benrimojb S, Bouvyc M, Farris K, Noyce P, Sketris I (2015). From "Retailers" to Health Care Providers: Transforming The Role of Community Pharmacists in Chronic Disease management. *Health Policy* 119(5): 628-639. (DOI: 10.1016/j.healthpol.2015.02.007).
  34. Stacey M (1988) *The Sociology of Health and Healing*. London: Unwin Hyman.
  35. Nettleton S (2020) *Sociology of Health and Illness*. New Jersey: Wiley. ([https://doi.org/10.1111/spol.12048\\_4](https://doi.org/10.1111/spol.12048_4)).
  36. Taylor KMG, Nettleton S, Harding G (2004) (eds) *Sociology of Pharmacists: An Introduction*. London: Routledge. (<https://doi.org/10.4324/9780203381175>).
  37. Hussain I, Majeed A, Saeed H, Hashmi FK, Imran I, et al. (2020) A National Study to Assess Pharmacists' Preparedness Against COVID-19 During Its Rapid Rise Period in Pakistan, *PLOS ONE* 15(11): e0241467. (<https://doi.org/10.1371/journal.pone.0241467>).
  38. Jovičić-Bata, J, Pavlović N, Milošević N, Gavarić N, Goločorbin-Kon S, et al. (2021) Coping with The Burden of The COVID-19 Pandemic: A Cross-Sectional Study of Community Pharmacists from Serbia. *BMC Health Services Research* 21,304. (<https://doi.org/10.1186/s12913-021-06327-1>).
  39. Marzouki Y, Aldossari FS and Veltri GA (2021) Understanding The Buffering Effect of Social Media Use on Anxiety During The COVID-19 Pandemic Lockdown, *Humanities and Social Sciences Communications* 8(1):1-10. (DOI: 10.1057/s41599-021-00724-x).
  40. Seeman M (1959) On The Meaning of Alienation, *American Sociological Review* 24: 783-791. (<http://dx.doi.org/10.2307/2088565>).
  41. de Certeau M, Giard L, Mayol P (1984) *The Practice of Everyday Life*. (trans. S.F. Renadail) Berkeley, CA: University of California Press. (Vol 2).
  42. Kasapoglu A, Ecevit M (2001) *Depremin Sosyolojik Araştırması*. Ankara: Sosyoloji Derneği Yayınları.
  43. <https://www.eczaneler.gen.tr/eczaneler/sivas-merkez>. (Accessed August 16, 2021).
  44. Gidman WK, Hassell K, Day J, Payne K (2007) The Impact of Increasing Workloads and Roleexpansion on Female Community Pharmacists in the United Kingdom, *Research in Social and Administrative Pharmacy* 3(3): 285-302. (DOI: 10.1016/j.sapharm.2006.10.003).



45. Uddin M (2021) Addressing Work-Life Balance Challenges of Working Women During COVID-19 in Bangladesh, *International Social Science Journal* 71(239-240): 7-20. (<https://doi.org/10.1111/issj.12267>).
46. Adisa T A, Aiyenitaju O, and Adekoya O D (2021) The Work–Family Balance of British Working Women During The COVID-19 Pandemic, *Journal of Work-Applied Management* 2205-2062. (DOI:10.1108/JWAM-07-2020-0036).
47. TR Ministry of Interior. 81 İl Valiliğine Tam Kapanma Tedbirleri Genelgesi Gonderildi. (26.04.2021). (<https://www.icisleri.gov.tr/81-il-valiligine-kismi-kapanma-genelgesi-gonderildi>). (Accessed August 21, 2021).
48. Yılmaz Z, Sencan N. (2020) Community Pharmacists' Knowledge, Attitudes and Impressions About COVID-19 Pandemic and Factors Effecting This. *Turkish Journal of Pharmaceutical Sciences*. (DOI:10.4274/tjps.galenos.2020.01212).
49. Şenturk E, Geniş B, Menku B E, and Cosar B (2021) The Effects of Social Media News That Users Trusted and Verified on Anxiety Level and Disease Control Perception in COVID-19 Pandemic. *Turkish J Clinical Psychiatry* 24: 23-32. (DOI:10.5505/kpd.2020.69772).
50. Gabarron Hortal, E D, Oyeyemi S O, and Wynn R (2021) Covid-19-Related Misinformation on Social Media: A Systematic Review. *Bulletin of the World Health Organization*, 99(6), 455-463. (DOI: 10.2471/BLT.20.276782).
51. Sputnik. Tüm Eczacı İşverenler Sendikası: Koronavirüs Nedeniyle 50 Eczacı ile 17 Eczane Teknisyeni Hayatını Kaybetti. (26.04.2021). (<https://tr.sputniknews.com/20210426/tum-eczaci-isverenler-sendikasi-koronavirus-nedeniyle-50-eczaci-ve-17-eczane-teknisyeni-hayatini-1044359714.html>) (Accessed August 17, 2021).
52. FIP International Pharmaceutical Federation Health Advisory. COVID-19: Guidelines for Pharmacists and The Pharmacy Workforce. (14 July 2020). (<https://www.fip.org/files/content/priority-areas/coronavirus/COVID-19-Guidelines-for-pharmacists-and-the-pharmacy-workforce.pdf>). (Accessed August 21, 2021).
53. SHGM, T.C. Sağlık Bakanlığı Sağlık Hizmetleri Genel Müdürlüğü (2019) Sağlık Hizmeti Sunucularının Basamaklandırılması. (<https://shgm.saglik.gov.tr/Eklenti/30975/0/tara0006pdf.pdf>) (Accessed August 21, 2021).
54. Erdoğan Orhan I, and Arslan M (2020) Covid-19 Surecinde Eczacıların Rolü. *Gazi Üniversitesi Sağlık Bilimleri Dergisi Özel Sayı*: 72-77.
55. İETD, İstanbul Eczane Teknisyenleri Derneği. Mesai Saatleri Hakkında. (<http://ietd.org.tr/mesai-saatleri-hakkinda/> ). (Accessed August 21, 2021).
56. EczTekDer, Eczane Teknisyenleri ve Teknikerleri Derneği. (<https://twitter.com/ecztekder>). (Accessed August 21, 2021).
57. Ergur A (2021) (Ed) Ateş ve İhanet COVID Kliniginde Sağlık Çalışanlarının Deneyimi. İstanbul: Kırmızı Kedi.
58. Coccia M (2021) Preparedness of countries to face covid-19 pandemic crisis: Strategic positioning and underlying structural factors to support strategies of prevention of pandemic threats, *Environmental Research*, 16(203): 111678. (DOI: 10.1016/j.envres.2021.111678).
59. Dopelt K, Bashkin O, Davidovitch N, Asna N (2021) Facing the unknown: Healthcare workers' concerns, experiences, and burnout during the covid-19 pandemic— a mixed-methods study in an israeli hospital, *Sustainability (Switzerland)*13(16): 9021. (doi: 10.1016/j.envres.2021.111678).
60. Akbal A, Kasapoglu A (2020a) Transformation of Health in Turkey: Resistance Strategies of Health Workers Towards Symbolic Violence, *Biomedical Journal of Scientific and Technical Research*, 24(5):18574-18576. (DOI: 10.26717/BJSTR.2020.24.004108).
61. Akbal A, Kasapoglu A (2020b) Relational Sociological Analysis of Symbolic Violence: A Case Study in the Field of Health in Turkey, *Report on Global Health Research*, 24(5). (DOI:10.29011/RGHR-115.100015).