Patient-Centered Communication in Pharmacy Practice*

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Abstract: It was planned to determine the opinions of the patients and their relatives receiving treatment in Izmir, about their communication with their pharmacists, to determine their expectations and wishes and to raise awareness and contribute to the communication of the pharmacists with this research. The research is cross-sectional and consists of 20 questions. Data were collected by face-to-face interview technique and 330 patients were included in the study. The obtained data were evaluated in the 95% statistical confidence interval, using the SPSS 16 package program, frequency and percentage distribution were evaluated with evaluated with chi-square tests. 330 people participated and 80.9% of them stated that they always choose the same pharmacy, 86.4% of the participants stated that they trusted the knowledge of their pharmacist; 90% of them stated that they received clear answers to their questions, 81.2% of them stated that information about their treatment was explained to them in a way they could understand. Besides, 48.5% of the patients stated that they could express themselves more easily if their pharmacist is of the same gender. It has been determined that the rate of being able to talk about any subject with their pharmacist without hesitation is higher than compared to other groups with low education level. In this study, it was stated that as the education level decreased, the behavior of the patients to prefer the same pharmacy and the level of trust in the pharmacist increased. More than 75% of the participants were satisfied the time and the words pharmacists used during the explanation and counseling. However, in order to increase the quality of care and communication with patient, some issues need to be reviewed and regulated. It is thought that the inclusion of the "Communication in Pharmacy" course in curriculum and postgraduate training may increase the quality of the consultancy.

INTRODUCTION

Health communication is defined as communication methods and strategies used to inform individuals about health care facts and best practices, with the aim of improving patient health outcomes and enriching personal and community behaviors and public health practices regardless of their level of health needs, through public policies and health professionals. It is possible to talk about health and health communication in every field where people are, and its importance is increasing day by day.

Pharmacists, who are an integral part of the health sector within the scope of changing pharmacy services and interact intensively with the public; they have turned into a professional who not only provide the prescribed drugs, but also provide counseling services to patients and closely monitors their treatment. According to Chandra et al., counseling is one of the most important components of pharmacy and it is a service offered free of charge by the pharmacist, contributing to the improvement of health status and value-added by intervening or monitoring the treatment process. Identifying medicines side effects at the beginning of the treatment, which can increase costs and even cause death if not detected early, is an example of the role of pharmacists in promoting health.

According to the Good Pharmaceutical Practices Guide, the pharmacist ensures that medicines and other products are supplied in a way that does not cause patient unjust treatment. Pharmacists explain in detail the use of the medicines offered to the patient, confirm that they are understood by the patient, and monitor their treatment and give information and counseling so that the patient can benefit from the medicines in the best way. Effective communication ways must be known in order to perform professional roles effectively. It is known that ineffective communication causes an increase in medical errors, it causes stress in patients and their relatives, prevents the achievement of treatment goals, a barrier between the patient and the pharmacist and reduces the quality of care provided.

Today, patients are in an effort to be very controlling and knowledgeable about their diseases and treatments. As the concept of health communication became widespread, the concept of "good patient" - who did not dare to question the suggestions and decisions about treatment in the past - has been replaced by the patient who awaits answers with definitions that he/she can understand.

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cared about own participation in decisions about own health care, wants to get detailed information about the treatment process and has high communication skills.6,9

Gade stated that although pharmacists are considered to be the last contact point of patients with the health system in the health management system, they actually constitute the first contact point of the society with the health system. Thus, the communication between the patient and the pharmacist has a great importance on the health of the society as well as the health of the individual.10

Patient-centered communication has been defined as “understanding the patient's point of view, concerns, thoughts, expectations, needs and feelings, identifying their problems in psychosocial and cultural terms, and planning the treatment process most appropriate to their value judgments together with the patient” by Epstein and Street.11 In patient-centered health care, the treatment is carried out in cooperation, taking into account the wishes, needs and priorities of the patient. The patient's participation in the treatment process is ensured, the information patient needs to make the right decision is shared, the counseling and the support patients needs about disease are provided.12,13

The World Health Organization (WHO) prepared a report on "Preparing the Future Pharmacist" in Vancouver in 1997. In this document on good pharmacy education practice, seven tasks have been determined for the pharmacist and the concept of a seven-star pharmacist has been created, taking into account the expectations of the health systems in the world. Recently, this concept has been expanded and defined as nine stars. Accordingly, the characteristics that pharmacists should have are determined as "manager", "entrepreneur", "life-long learner", "teacher", "care-giver", "leader", "researcher", "decision maker" and "communicator". The communicator role, which is among the characteristics, is remarkable. According to the Circular No. 2019/10 on the Cascading of Health Service Providers14 and the Regulation on the Cascading of Health Service Providers15 published by the General Directorate of Health Services of the Ministry of Health, community pharmacies operating within the scope of Law No. 6197 are defined as primary health care institutions. In this context, the communication of pharmacists with patients directly affects the treatment process. This research has been planned in order to determine the opinions and thoughts of the patients and their relatives receiving treatment in İzmir, about their communication with their pharmacists, to determine their expectations and wishes, and to raise awareness and contribute to the communication of pharmacists who will graduate with their patients by taking these into account in their professional lives.

MATERIALS and METHODS

This research is cross-sectional and the population of the research consists of patients and their relatives who were treated at Ege University Medical Faculty Hospital and went to pharmacies to get their medicines and accepted to participate in the study. In the study, a questionnaire was conducted to all patients who were randomly selected between 18.12.2017 and 28.02.2018 without sampling and accepted to participate. As a data collection tool, a questionnaire form prepared by the researchers was used after the relevant literature was searched. The questionnaire form consists of two parts. In the first part, there are 7 questions to determine the age, gender, education level, employment status, social security, place of residence of the participants and whether they regularly get their medicines from the same pharmacy. In the second part, there is a 3-point Likert consisting of 13 statements developed by the researchers to determine the thoughts of the patients about their communication with their pharmacists. Ethics committee approval was obtained for the research from Ege University Scientific Research and Publication Ethics Committee (EGEBAYEK) with the date of 23.11.2017 and protocol number 340-2017. The data obtained were evaluated in terms of frequency and percentage distributions using the SPSS 16 package program, at a statistical confidence interval of 95%, and the factors affecting the satisfaction and communication of the patients were examined. Statistical analyzes were carried out with Chi-square tests to determine whether there is a significant relationship between the parameters.

FINDINGS

45.8% of the participants are men and 54.2% are women. The ages of the participants ranged from 18 to 85, with an average age of 40. In addition, it was determined that 50.9% of the participants were university graduates, 56.1% were actually working, and 96.1% had social security. While the majority of the participants (80.9%) preferred to take their medicines from the same pharmacy regularly, 19.1% of them did not have a specific pharmacy preference. Table 1 contains data on some other characteristics of the participants, such as education, employment and place of residence.

86.4% of the patients participating in the study used their medicines in consultation with their pharmacist and they trusted their pharmacist; 90% of them stated that they received clear answers to the questions they asked, 81.2% of them stated that all information about their medicines and treatment process was explained to them by their pharmacist in a way they could understand, and 75.5% of them stated that they could easily ask their pharmacist again about the points they did not understand. 70.6% of them determined that their pharmacist took enough time for them and 60.3% of them want to ask their questions to the pharmacist instead of the pharmacy technician. The opinions and thoughts of the participants about the pharmacist-patient communication are given in Table 2.

Table 1. Sociodemographic Characteristics of the Participants

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>n (330)</th>
<th>Percentage (%)</th>
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<tbody>
<tr>
<td>Iiterate</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>Literate</td>
<td>5</td>
<td>1.5</td>
</tr>
<tr>
<td>Primary school</td>
<td>38</td>
<td>11.5</td>
</tr>
<tr>
<td>Secondary school</td>
<td>34</td>
<td>10.3</td>
</tr>
<tr>
<td>High school</td>
<td>79</td>
<td>23.9</td>
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<tr>
<td>College/Faculty</td>
<td>168</td>
<td>50.9</td>
</tr>
<tr>
<td>Unidentified</td>
<td>1</td>
<td>0.4</td>
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<tr>
<td>Total</td>
<td>330</td>
<td>100</td>
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</table>

<table>
<thead>
<tr>
<th>Employment Status</th>
<th>n (330)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee</td>
<td>185</td>
<td>56.1</td>
</tr>
<tr>
<td>Retired</td>
<td>43</td>
<td>13.0</td>
</tr>
<tr>
<td>Unemployed</td>
<td>93</td>
<td>28.2</td>
</tr>
<tr>
<td>Unidentified</td>
<td>9</td>
<td>2.7</td>
</tr>
<tr>
<td>Total</td>
<td>330</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Place of Residence</th>
<th>n (330)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>İzmir Central District</td>
<td>185</td>
<td>56.1</td>
</tr>
<tr>
<td>İzmir Periphery District</td>
<td>45</td>
<td>13.6</td>
</tr>
<tr>
<td>Other cities</td>
<td>89</td>
<td>27.0</td>
</tr>
<tr>
<td>Unidentified</td>
<td>11</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>330</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Presence of a Pharmacy that is Visited Regularly</th>
<th>n (330)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>267</td>
<td>80.9</td>
</tr>
<tr>
<td>No</td>
<td>63</td>
<td>19.1</td>
</tr>
<tr>
<td>Total</td>
<td>330</td>
<td>100</td>
</tr>
</tbody>
</table>
A significant relationship was found between education level and patients' taking their medicines from the same pharmacy. (chi square, $X^2=13.849, p=0.031$) As the education level decreases, patients' commitment to pharmacy increases. It has been observed that people with low education level tend to buy their medicines from the same pharmacy.

While 36.7% of the patients stated that they did not visit the pharmacy often, 34.8% stated that they frequently visited and consulted. A statistically significant difference was found between education status (Pearson Chi-square, $X^2=15.519, p=0.017$) and employment status (Pearson Chi-square, $X^2=25.032, p=0.000$) with this parameter. It has been determined that those who have primary school and below education level and retired group visit the pharmacy more frequently than others.

The majority of the patients (86.4%) stated that they consulted their pharmacist and trusted, 9.7% stated that they were indecisive while 3.9% stated that they did not trust. According to the results of the chi-square test, it was determined that patients who take their medicines from the same pharmacy, visit the pharmacy more frequently than other patients (Pearson Chi-square, $X^2=16.960, p=0.000$) and they trust the knowledge of their pharmacists more (Pearson Chi-square, $X^2=8.088, p=0.018$).

While 62.1% of the patients stated that they could talk to their pharmacists about any subject, 5.2% stated that they could not talk about every subject, 32.4% stated that they were indecisive. According to the results of the chi-square test, there is a statistically significant difference between the education level of the patients and the ability to communicate with the pharmacist without hesitation. (Pearson Chi-square, $X^2=24.800, p=0.003$). It has been determined that the rate of being able to talk about any subject without hesitation is higher in those who are primary school graduates and have lower education levels compared to other groups.

While 90.3% of the patients stated that their pharmacist respected the opinions and thoughts of the patients, 1.5% stated that they did not respect the views and opinions of their pharmacists, and 8.2% were indecisive. Patients who constantly take their medicines from the same pharmacy think that their pharmacists respect the patient's views and opinions more than other patients (Pearson Chi-square, $X^2=7.799, p=0.020$).

81.5% of the patients stated that their pharmacists helped to solve their problems and made an effort. There is a statistically significant relationship between this parameter and social security (Pearson Chi-square, $X^2=30.229, p=0.000$), employment status (Pearson Chi-square, $X^2=14.926, p=0.021$) and education status (Pearson Chi-square, $X^2=19.400, p=0.004$). Accordingly, patients without social security, primary school graduates and those with a lower education level and the retired group have higher levels of expressing that their pharmacist understands their concerns better and that they strive for a solution together with them, compared to other groups. 91.2% of the patients stated that they respected the privacy of their pharmacists. According to the results of the chi-square test, there is a statistically significant relationship between the working status of the patients and the pharmacists' respect for patient privacy (Pearson Chi-square $X^2=16.660, p=0.011$). Compared to other groups. The unemployed group is more likely to think that they respect their privacy in private matters.

It was determined that 48.5% of the patients expressed themselves more easily if their pharmacist was of the same gender, 26.7% stated that whether their pharmacist was of the same gender or not did not affect the consultation process, and 24.2% were indecisive. There is a statistically significant relationship between education level (Pearson Chi-square, $X^2=33.772, p=0.000$) and place of residence (Pearson Chi-square, $X^2=21.079, p=0.012$) and the pharmacist's feeling more comfortable if they are of the same gender. The rate of feeling comfortable in communicating when their pharmacist is of the same gender is higher for those with a secondary education level and below, and for patients living outside of Izmir compared to other groups.

While 16.7% of the patients stated that they could ask their questions to pharmacy technician instead of the pharmacist, 23% were indecisive and 60.3% of them stated that they wanted to ask their questions to the pharmacist rather than the technician. There is a statistically significant relationship between this parameter and gender (Pearson Chi-square, $X^2=6.174, p=0.046$), education level (Pearson Chi-square, $X^2=16.446, p=0.012$), employment status (Pearson Chi-square, $X^2=17.178, p=0.009$) and place of residence (Chi-square, $X^2=14.779, p=0.022$). It was determined that women compared to men and employees compared to other groups wanted to ask their questions to the pharmacist rather than the technician. It has been observed that as the education level increases, the rate of patients' willingness to ask their questions to the pharmacist increases. It has been determined that college/faculty graduates want to direct their questions to pharmacists rather than pharmacy technician at a higher rate compared to other groups. It has been determined that the patients living in the central districts of Izmir have a higher willingness to ask their questions to the pharmacist instead of the pharmacy technician, compared to the other groups.

**DISCUSSION**
There are studies similar to this research that we conducted in order to determine the opinions and thoughts of the patients and their relatives about the communication with their pharmacists, to determine their expectations, to raise awareness and suggestions for increasing the patient-pharmacist communication.

In the study carried out in Saudi Arabia in 2012, in which 1,699 patients were included, 38.5% of the patients received counseling from the pharmacist even though they did not ask questions, 44.66% stated that they considered pharmacists as an integral part of health care and 51.2% stated that the time allotted to themselves was sufficient.17 In a study that included 385 patients in 2013 in the United Arab Emirates, 20% of the patients stated that they could easily consult their pharmacist, 42.5% were informed and supported about their treatment, and 36% stated that the time allotted to themselves was sufficient. The patients reported factors such as the inadequacy of a special area where they can meet with their pharmacist in the pharmacy, the workload of the pharmacists, the difficulty of reaching the pharmacist, and the reluctance to ask questions to the pharmacist among the barriers to communication with their pharmacists.18 In the study conducted in Lebanon in 2016 and including 565 patients, it was determined that the patients were generally satisfied with the service they received. The patients stated that the reasons for dissatisfaction were the rude behavior of their pharmacists during communication, pharmacists' lack of knowledge, distrust of the pharmacist and that the pharmacist did not have time for counseling.19 In a study carried out in South Africa in 2016, 67 patients aged 65 and over were asked about their communication with their pharmacists. 89.6% of participants have at least one chronic disease and 66% of the them did not understand the terminology used, 61% of them said that their pharmacists did not make any explanation about their medicines and treatment, 39% said that there was no room, cabin, etc. where they could talk to their pharmacist privately, while stating that a field does not exist; 22% thought that their pharmacist did not play an active role in their treatment.20 Although the results of the study differ from our research, they shed light on the pharmacy practices and satisfaction in different countries. In our research, it is understood that the approach of pharmacists in İzmir, Turkey towards their patients is more positive than the opinions of patients, and most of the words they use while explaining are at a level that patients can easily understand. In our study, it was determined that the retired group visited the pharmacy more frequently and received consultancy services. It is thought that the reason for this is the increase in the use of multiple medicines as a result of the increase in chronic diseases seen with advanced age, and therefore, they visit pharmacies more often both for the take their medicines and get pharmaceutical counseling. In addition, it has been determined that patients with primary school and lower education level visit the pharmacy more frequently and receive counseling services. This is thought to be due to the fact that pharmacists are easily accessible and offer free consultancy services in our country.21,22

91.2% of the participants think that their pharmacist respects their privacy in private matters in our research. Accordingly, it is seen that pharmacists in Turkey largely fulfill their obligations of "keeping secrets" and "protecting patient privacy" in the pharmacist oath and the Turkish Pharmacists' Association Code of Deontology, and patients can easily share their private issues by trusting their pharmacists.23

Similar studies were examined in our country, and in the study in which 445 people were included in Hitit University, it was found that women were more satisfied with pharmacy services than men, and patients between the ages of 18-30 attach importance to the quality of care in pharmacy services. It has been determined that as the education level of the patient increases, the satisfaction with the quality of pharmaceutical care also increases. A positive relationship was found between income level and general expectation from pharmacy services and it was found that general satisfaction increased by preferred the same pharmacy and as the pharmacist-patient relationship increased, quality of care and general satisfaction increased.24 In the study conducted by Aksu et al. in Istanbul, it was determined that the pharmacists satisfy the expectations of the patients on issues such as the community pharmacist being caring and solution-focuses and trying to understand the patients. However, it has been determined that the main issues of effective communication, such as asking the right questions and receiving feedback, are below the expectations of the patients. It was emphasized, making regulations in pharmacy education in order to improve the effective communication skills of pharmacists and the necessity of organizing in-service training programs for graduate pharmacists in this study, as in our research.25

As a result of a strong communication, patients' adherence to treatment, satisfaction with pharmacist-patient communication, the possibility of consulting their pharmacist when adverse effects occur, and their trust in their pharmacists increase.26,27 In our study, it was determined that patients who constantly take their medicines from the same pharmacy visit the pharmacy more often than other patients, and they trust the knowledge of their pharmacists more. It is thought that patients who trust their pharmacist and are satisfied with the service, they prefer the same pharmacy.

The patient must accurately convey his/her own health status and the information given In order to establish a healthy communication between the patient and the pharmacist.26 The frequency of contact between the patient and the pharmacist is also an effective factor in the quality of communication. It is stated that provide a patient-centered communication with relationships based on trust and asking reciprocal questions and getting answers are important in increasing the quality of the pharmacist-patient relationship.28,29 Strong communication skills enable pharmacists to build a trusting relationship with their patients, while ensuring that patients understand pharmacists correctly and heed their advice.13

Conclusion
As a result of our research, it was observed that as the education level of the patients decreased, the frequency of visiting the pharmacy and the level of trust in pharmacists increased, and as the education level increased, the rate of patients preferring to consult a pharmacist instead of the pharmacy technician increased. While more than 75% of the patients are satisfied with the counseling service they receive from their pharmacist, it is seen that some patients do not understand their pharmacist, leave the pharmacy without asking their question to the pharmacists, cannot easily share their private matters regarding their health that require privacy and can communicate more easily if their pharmacist is of the same gender. It is known that most of the pharmacy faculties in our country have lack compulsory/elective courses in terms of communication courses in their curricula. In this context, it is thought that putting on communication courses to the curricula of pharmacy faculties will increase the quality of patient care and the expected benefit from treatment. Education is not only limited to the graduate level, but after graduation, it is thought that it will be beneficial to support these trainings with case presentations by organizing regular in-service training activities on the subject, not only for pharmacists working in community pharmacists, but also for all pharmacists working in different fields of pharmacy. It has also been determined that patients receive counseling from technician when they feel closer or when the pharmacist is not at the pharmacy. In this regard, communication trainings should be organized for technicians by the Chambers of Pharmacists, and these trainings should be repeated at regular intervals to inform them both theoretically and practically. In addition, pharmacists should follow the knowledge of pharmacy assistant personnel and the consultancy service they provide, and when they notice missing points, they should train their employees and inform them. It is thought that the presence of areas and counseling rooms in pharmacies where the patient and pharmacist can contact privately will positively affect the patient-pharmacist communication, the quality of patient care and the treatment process.

Limitations of the Study
Our study has limitations in that it was conducted only in İzmir and in a single center.
Informed Consent
Consent was obtained from the patients participating in this study.

Conflict of Interest
The authors declared no conflict of interest.

Financial Disclosure
The authors declared that this study has received no financial support.

REFERENCES