# Original Article

# Patients' Satisfaction with the Community Pharmacy Services in Iran

*Ali Saffaei¹,², Azadeh Moghaddas³, Ali Mohammad Sabzghabaee⁴*

¹Skull Base Research Center, Loghman Hakim Hospital, Shahid Beheshti University of Medical Sciences, Tehran, Iran

²Students' Research Committee, Department of Clinical Pharmacy, Shahid Beheshti University of Medical Sciences, Tehran, Iran

³Department of Clinical Pharmacy and Pharmacy Practice, Isfahan University of Medical Sciences, Isfahan, Iran

⁴Isfahan Clinical Toxicology Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

**ABSTRACT**

**Objective:** This study aimed to measure patient satisfaction with community pharmacy in Isfahan, Iran, in 2019. **Methods:** In this cross-sectional study (2019), we selected 104 pharmacies located in the second largest city of Iran (Isfahan) based on systematic random sampling and at least five clients at different times of a day who finished the process of obtaining medications from the pharmacies were randomly selected for a short and structured interview using the Persian version of the MacKeigan and Larson questionnaire for measuring patients' satisfaction with pharmacy services. **Findings:** The reliability of the questionnaire was confirmed after distributing 520 among the patients ($r = 0.958$). No significant difference was observed between sex, marital status, housing status, and total satisfaction score based on the results. In addition, there was a significant difference between educational levels, location, job status, insurance status, real income, and total score of satisfaction ($P < 0.05$). Our results revealed acceptable satisfaction in some aspects, such as paying attention to pharmacists, the general condition of the pharmacy, and their technical competence. On the other hand, the patients were not satisfied enough in different aspects, for example, counseling, accessibility to their needed drugs, and expenses. **Conclusion:** Patient satisfaction needs to be improved and enhanced in the case of counseling the patients on their medications, and drug accessibility and expenses remain the primary source of dissatisfaction in the studied population, which should be noted by the Iranian Food and Drug Organization and other related authorities.

**KEYWORDS:** *Community pharmacy, patients' satisfaction, pharmacy, questionnaire*

## INTRODUCTION

During the last decades, the duties of the pharmacist have increased considerably. They are now involved in delivering pharmaceutical care services instead of dispensing drugs.[1] Recently, pharmaceutical care has been defined as the pharmacists' task to get the maximum advantage from the pharmacological treatments in the patients. Hence, they are responsible for monitoring their pharmacotherapy. Pharmacists deal with patients directly and play an essential role in enhancing patients' health-related quality of life and reaching positive clinical outcomes within the limited cost. A change from a traditional to a novel role is slow, but it is a continuing process.[2,3] However, it is necessary to evaluate these novel services. Humanistic outcomes are now used in all evaluative efforts as they show the value of a pharmaceutical service beyond the traditional clinical-based outcomes and are patient rather than provider centered.[4] Patient satisfaction has become a useful measured index in health care. The Institute of Medicine in 2001 is credited with explaining an idealistic goal for US medical physicians in which our medical care would be "patient centered."[5] Patient satisfaction is a crucial indicator of the quality of service delivered and is essential for checking continuously and enhancing quality in health-care delivery systems.[6] Patient satisfaction is a multifaceted perception, but it is relatively easy to determine and can be a helpful instrument for increasing quality. Patient satisfaction is increasingly becoming vital due to the

*Address for correspondence:*
Dr. Ali Mohammad Sabzghabaee,
E-mail: sabzghaba@pharm.mui.ac.ir

**Access this article online**

**Quick Response Code:**

**Website:** www.jrpp.net

**DOI:** 10.4103/jrpp.JRPP_21_21

changes in the organization of professional health care.[7] Isfahan city (the second large metropolitan of Iran) is located in the central part of Iran with near 450 active pharmacies and is a good representative for measuring patients' satisfaction status in the case of community pharmacy services in Iran.[8,9] The present study aimed to measure patient satisfaction with community pharmacies in Isfahan city as a good representative of an Iranian town in 2019.

## METHODS

In this cross-sectional study (2019), we selected 104 pharmacies located in the second largest city of Iran (Isfahan) based on systematic random sampling and at least five clients at different times of a day who finished the process of obtaining medications from the pharmacies were randomly selected for a short and structured interview using the Persian version of the MacKeigan and Larson questionnaire for measuring patients' satisfaction with pharmacy services. Content validity, face validity, and the internal consistency assessment for the modified Persian version of this questionnaire were previously reported by Yaghoubifard *et al*. (2016)[10] The questionnaire covers 27 questions related to pharmacy services such as patient's counseling, financial affordability, accessibility, technical competence, and other general aspects for the pharmacy. Further, it includes some questions about the demographic information of the pharmacists. The responses on the patient satisfaction scale were measured on a five-point Likert scale (1: strongly disagree, 2: disagree, 3: neutral, 4: agree, and 5: strongly agree). The sum points of each questionnaire were considered the total score of satisfaction which was calculated based on 100 points. After obtaining written permission for use from its

authors, this questionnaire was distributed among five patients or clients who had a filled prescription and came out of the randomly selected pharmacies. The inclusion criteria were adult patients or clients (>18 years) who could read and speak Persian and received prescription or nonprescription services from the pharmacy. Those who declined to participate in the study or could not provide informed consent were not interviewed, and all of the participants contributed to the study voluntarily. The questionnaire was self-administered after a short introductory interview to avoid or minimize the potential bias of the researcher's presence. The Ethics Committee of Isfahan University of Medical Sciences approved the study protocol (#295041). The data were analyzed using SPSS® 22.0 for Windows (IBM Corporation, Armonk, NY, USA). Independent *t*-test and one-way analysis of variance were used for data analysis. $P < 0.05$ was considered significant.

## RESULTS

In this study, 104 pharmacies were randomly selected from 450 community pharmacies located in the Isfahan district. Figure 1 shows the distribution pattern of the chosen pharmacies in Isfahan.

In this regard, 520 questionnaires were distributed among patients. The reliability of the questionnaire was acceptable (Cronbach's alpha = 0.958). Table 1 indicates the result of the reliability assessment of each aspect of the questionnaire.

The results of the demographic information about the patients showed a normal distribution among the participants. The demographic characteristics of the studied participants such as gender, educational level, location, year, marital status, job status, payment, and
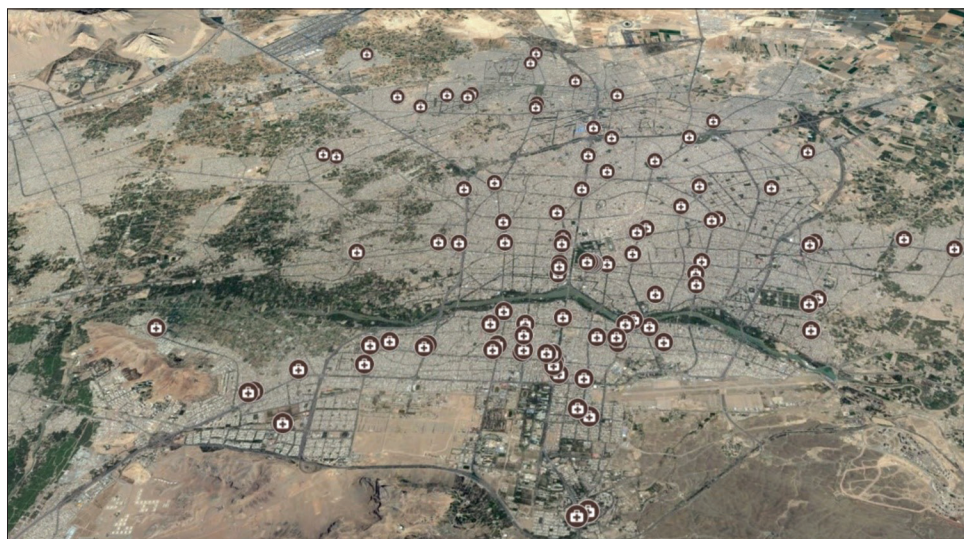


**Figure 1:** The distribution pattern of the randomly selected community pharmacies in the Isfahan district

insurance status, number of drugs, housing status, and total income are summarized in Table 2.

The total score of satisfaction in this study was 57 out of 100. Based on the results, a significant difference was observed between educational levels, location, job status, medical insurance status, total income, and total score of satisfaction ($P < 0.05$). However, there was no significant difference between gender, marital status, housing status, and the total satisfaction score. Table 2 indicates the details. Satisfaction scores with community pharmacy revealed satisfaction in some aspects, such as considering pharmacists, general aspects, and technical competence. However, the patients were not satisfied in other aspects such as explaining pharmacists, other aspects, financial aspects, and accessibility [Table 3].

## DISCUSSION

The present study aimed to measure patient satisfaction with community pharmacy in Isfahan, Iran. To the best of our knowledge, no study has been conducted in Isfahan in this regard. The reliability of the questionnaire indicated that Cronbach's alpha was similar to the amount in the previous studies, which was 0.95 for the whole questionnaire (27 questions), which confirms its acceptable internal consistency. Regarding the Persian version of the questionnaire, the amount was 0.91 in Tehran.[10] In this study, gender, marital status, and housing status failed to influence the satisfaction condition. The satisfaction index was equal between men and women. The result is consistent with that of Mináriková *et al.,* who demonstrated that gender affects patients' satisfaction with pharmaceutical care in Slovakia.[11] However, the study of Khudair and Raza reported that gender and marital status enhance satisfaction levels.[12] The inconsistency in results is related to the different patterns of samples. Further, no relationship was reported between housing status and satisfaction. Educational levels, job status, location of houses, insurance status, and amount of income played a significant role in the satisfaction levels. It is necessary to provide special services to improve the satisfaction level among patients with low socioeconomic variables. Thus, the effect of these variables can be more negligible. Based on the results, most of the patients were satisfied with the consideration of their pharmacist. The results are similar to the findings of Marquez-Peiro *et al.*, which reported a high level of satisfaction among the patients.[13] Most of the patients were not satisfied with receiving the warnings about their medications and sufficiency of descriptions about the treatment period. Adverse drug reactions are significant causes of morbidity and mortality among the patients,[14] and it is

**Table 1: The results of reliability assessment for each aspect in the questionnaire**

| Aspect | Cronbach's alpha |
|---|---|
| Consideration | 0.92 |
| Explanation | 0.86 |
| General | 0.88 |
| Technical competence | 0.79 |
| Financial aspects | 0.94 |
| Accessibility | 0.65 |
| Other aspects | 0.84 |

**Table 2: Demographic characteristics of the studied participants and the significance of the difference between their subclassifications and participants' satisfaction scores**

| | Frequency (%) | P |
|---|---|---|
| Gender | | |
| Male | 49.2 | 0.484 |
| Female | 50.8 | |
| Education | | |
| >High school diploma | 2.4 | <0.001 |
| High school diploma | 48.8 | |
| Bachelor of science | 38.5 | |
| Master of science | 8.2 | |
| Doctor of philosophy | 2 | |
| Geographical residence location in Isfahan | | |
| North East | 29.4 | 0.011 |
| North West | 22.9 | |
| South East | 16.7 | |
| South West | 22.9 | |
| Marital status | | |
| Single | 20.7 | 0.126 |
| Married | 79.3 | |
| Employment | | |
| Unemployed | 5.1 | 0.03 |
| Self-Employment | 32.3 | |
| Employee | 33.2 | |
| Housewife | 24.3 | |
| Retired | 5.1 | |
| Medical insurance status | | |
| Governmental | 80.6 | >0.001 |
| Nongovernmental | 19.4 | |
| House property status | | |
| Tenant | 37.6 | 0.108 |
| Owner | 62.4 | |
| Payment per prescription | | |
| Average (USD) | 13 | - |
| Median (USD) | 9.4 | |
| The average number of drugs (per prescription) | 4.6±2.1 | - |
| Total monthly income | | |
| Less than 250 USD | 9.8 | >0.001 |
| Between 250 USD and 750 USD, 67.0% | 67 | |
| Between 750 USD and 10,000 USD, 17.6% | 17.6 | |
| Higher than 10,000 USD, 5.6% | 5.6 | |

### Table 3: The frequency distribution of answers to each item of the patients' satisfaction questionnaire

| Questions | Strongly disagree (%) | Disagree (%) | Neutral (%) | Agree (%) | Strongly agree (%) |
|---|---|---|---|---|---|
| **Consideration** | | | | | |
| The pharmacist spends enough time with me to provide pharmacy services | 4.01 | 13.36 | 6.01 | 50.33 | 26.28 |
| I'm satisfied with the waiting time my prescriptions are filled | 12.69 | 25.84 | 4.01 | 38.31 | 19.15 |
| I'm satisfied with the behavior and attitude of the pharmacy staff | 3.56 | 13.36 | 8.69 | 48.55 | 25.84 |
| The pharmacist has respectful behavior with me | 4.90 | 9.80 | 10.02 | 46.67 | 25.61 |
| The pharmacist tries to make sure that I don't get into trouble using my medications | 2.90 | 10.91 | 16.70 | 46.10 | 23.39 |
| All in all, I have a positive judgment about the services I receive from the pharmacy | 4.45 | 10.91 | 9.80 | 50.78 | 24.05 |
| **Explanation** | | | | | |
| The pharmacist provides an adequate explanation when I get a prescription filled (especially for a prescription filled for the first time) | 4.40 | 14.25 | 21.16 | 40.36 | 19.82 |
| The pharmacist provides necessary warnings about my medications (side effects, drug–drug interactions, and food and drug interactions), especially for medicines received for the first time | 14.25 | 33.41 | 23.61 | 19.82 | 8.91 |
| The pharmacist explains sufficiently about the treatment period (especially when I receive medication for the first time) | 18.26 | 32.07 | 21.16 | 19.82 | 8.69 |
| The pharmacist tries to make sure you understand how to take your medications properly | 6.68 | 16.26 | 17.82 | 42.76 | 16.48 |
| The pharmacist answers to my questions about other medications I take | 4.68 | 11.36 | 32.52 | 34.97 | 16.48 |
| **General** | | | | | |
| The pharmacist is available to answer questions that I have about my medications | 4.66 | 11.80 | 32.54 | 33.63 | 17.37 |
| The pharmacist can explain things to me in a way that I can understand | 4.45 | 11.36 | 13.59 | 49.89 | 20.71 |
| I receive the medications from the pharmacy precisely according to the prescription | 2.90 | 8.24 | 18.26 | 50.56 | 20.04 |
| **Technical competence** | | | | | |
| There is enough labeling on my medications | 3.12 | 6.46 | 18.26 | 51.89 | 20.27 |
| The instructions on my medications are easily readable | 8.69 | 23.83 | 10.02 | 39.64 | 17.82 |
| I'm satisfied that imported medications are replaced with domestically produced medications (Iranian medications) in my prescriptions | 39.42 | 26.06 | 8.91 | 16.70 | 8.91 |
| The pharmacy services provided to me are perfect | 6.68 | 14.25 | 8.02 | 52.12 | 18.93 |
| **Other aspects** | | | | | |
| I'm happy that the pharmacy provides cosmetic products | 5.12 | 21.16 | 44.77 | 19.15 | 9.80 |
| I'm satisfied with the services provided by pharmacists about herbal medicines | 7.13 | 22.94 | 45.66 | 15.81 | 8.46 |
| When necessary, the pharmacist consults and cooperates with the physician | 5.57 | 17.15 | 35.86 | 30.29 | 11.14 |
| **Financial** | | | | | |
| I am satisfied with the amount of out-of-pocket payments for my medicines | 20.71 | 30.07 | 8.91 | 25.39 | 14.92 |
| I'm satisfied with medication costs compared to other household expenses | 25.84 | 28.51 | 6.68 | 23.16 | 15.81 |
| I'm satisfied with insurance coverage for my prescription medicines | 29.84 | 27.62 | 6.24 | 20.71 | 15.59 |
| **Accessibility** | | | | | |
| I'm satisfied with the time needed to get to the pharmacy where I fill my prescriptions | 15.14 | 18.04 | 4.45 | 40.98 | 21.38 |
| In an emergency, I can easily find a pharmacy to receive pharmacy services | 30.73 | 36.30 | 3.79 | 18.26 | 10.91 |
| My prescription medications are available in the pharmacy | 10.90 | 21.83 | 4.68 | 42.76 | 19.82 |

necessary to warn the pharmacists about this problem. In addition, patients' awareness about treatment leads to effective therapy with minor complications. The results indicated that most of the patients were not satisfied with Iranian medication productions. Further, it is necessary to evaluate patients' drug adherence among Iranian populations to find the actual adherence pattern. Hence, this problem can be solved by adopting appropriate policies. Financial shortages were considered another factor the patients were not satisfied with, the results of which are consistent with most previous studies. Financial problems have a negative effect on

the satisfaction of all services provided by pharmacies. [15,16] However, some studies indicated a high level of satisfaction with financial problems, [17] which may be related to different population patterns in this regard. Furthermore, patients were not satisfied with insurance services. Insufficient health financing can result in excessive out-of-pocket spending for health care by the patients, which limits the application of health care and indirectly affects the health and productivity of people. Thus, policymakers are recommended to pay special attention to the proposal of health insurance for those community members with no insurance.[18]

Hence, it is necessary to revise the insurance policies to minimize this unsatisfactory. In addition, most patients were dissatisfied with accessibility to pharmacies and stated that it is difficult to access a 24-h pharmacy in an emergency, which should be solved by establishing these pharmacies. In summary, patient satisfaction is considered a helpful index for evaluating the level of pharmacy services. In this study, most of the patients were dissatisfied with explanation, technical comments, financial issues, and accessibility aspects. These unsatisfactory problems can be solved by using new and effective policies by the Drug and Food Organization.

## AUTHORS' CONTRIBUTION

Ali Mohammad Sabzghabaee conceptualized the study and Ali Saffaei collected the data. Ali Mohammad Sabzghabaee, Ali Saffaei and Azadeh Moghaddas undertook the literature review. Ali Mohammad Sabzghabaee and Ali Saffaei undertook the initial analysis. All authors prepared the first draft of the paper, and involved in subsequent revisions.

### Acknowledgment

### Financial support and sponsorship

### Conflicts of interest

There are no conflicts of interest.

## REFERENCES

1. Hepler CD, Strand LM. Opportunities and responsibilities in pharmaceutical care. Am J Hosp Pharm 1990;47:533-43.

2. Berenguer B, La Casa C, de la Matta MJ, Martín-Calero MJ. Pharmaceutical care: Past, present and future. Curr Pharm Des 2004;10:3931-46.

3. Iskandar K, Hallit S, Raad EB, Droubi F, Layoun N, Salameh P. Community pharmacy in Lebanon: A societal perspective. Pharm Pract (Granada) 2017;15:893.

4. Naik Panvelkar P, Saini B, Armour C. Measurement of patient satisfaction with community pharmacy services: A review. Pharm World Sci 2009;31:525-37.

5. Institute of Medicine Committee on Quality of Health Care in A. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington (DC): National Academies Press (US) Copyright 2001 by the National Academy of Sciences. All Rights Reserved; 2001.

6. Ford RC, Bach SA, Fottler MD. Methods of measuring patient satisfaction in health care organizations. Health Care Manage Rev 1997;22:74-89.

7. Verbeek J, van Dijk F, Räsänen K, Piirainen H, Kankaanpää E, Hulshof C. Consumer satisfaction with occupational health services: Should it be measured? Occup Environ Med 2001;58:272-8.

8. Safaeian L, Mostafavi SA, Changiz T, Mirzadeh M. Pharmacists' opinions and self-reporting performance regarding the professional tasks and responsibilities in Isfahan, Iran. J Educ Health Promot 2014;3:2.

9. Mostafavi SA, Sabzghabaee AM, Mirmoghtadaee P, Hoseini-Biuki SM. Emergency contraception and the knowledge of community pharmacists in Isfahan, Iran. Int J Prev Med 2011;2:252-5.

10. Yaghoubifard S, Rashidian A, Kebriaeezadeh A, Sheidaei A, Varmaghani M, Hashemi-Meshkini A, et al. Developing a patient satisfaction questionnaire for services provided in Iranian community pharmacies. J Res Pharm Pract 2016;5:106-15.

11. Mináriková D. Level and factors influencing the patient's satisfaction with the pharmaceutical care in Slovakia. Ceska Slov Farm 2015;64:178-83.

12. Khudair IF, Raza SA. Measuring patients' satisfaction with pharmaceutical services at a public hospital in Qatar. Int J Health Care Qual Assur 2013;26:398-419.

13. Marquez-Peiro JF, Perez-Peiro C. Evaluation of patient satisfaction in outpatient pharmacy. Farm Hosp 2008;32:71-6.

14. Kaur M, Kosey S, Mehra N, Kumar R. Knowledge and awareness of adverse drug reactions. Int J Pharm Sci Res 2015;6:4601.

15. Malewski DF, Ream A, Gaither CA. Patient satisfaction with community pharmacy: Comparing urban and suburban chain-pharmacy populations. Res Social Adm Pharm 2015;11:121-8.

16. Hasan S, Sulieman H, Stewart K, Chapman CB, Hasan MY, Kong DC. Assessing patient satisfaction with community pharmacy in the UAE using a newly-validated tool. Res Social Adm Pharm 2013;9:841-50.

17. Antoun RB, Salameh P. Satisfaction of pharmacists in Lebanon and the prospect for clinical pharmacy. East Mediterr Health J 2009;15:1553-63.

18. Nosratnejad S, Rashidian A, Mehrara M, Akbari Sari A, Mahdavi G, Moeini M. Willingness to pay for the social health insurance in Iran. Glob J Health Sci 2014;6:154-63.