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ОЦЕНКА ФАКТОРОВ, ВЛИЯЮЩИХ НА ИМИДЖ ФАРМАЦЕВТИЧЕСКИХ ОРГАНИЗАЦИЙ СИРИИ СРЕДИ ПОТРЕБИТЕЛЕЙ

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В условиях нестабильных систем здравоохранения общественный имидж фармацевтических организаций является ключевым фактором, влияющим на доверие пациентов и формирование их лояльности. Несмотря на важную роль имиджа организаций, исследования восприятия фармацевтических организаций потребителями в постконфликтных регионах, таких как Сирия, остаются ограниченными. Понимание этих факторов позволяет повысить качество и доверие к фармацевтическим услугам.

Цель — оценить основные факторы, влияющие на общественный имидж фармацевтических организаций в Сирии, на основе мнений потребителей и пациентов.

Исследование проведено с использованием анкетного метода. Анкета была разработана авторами и включала оценку внешних и внутренних факторов, влияющих на имидж организации, таких как качество обслуживания, доступность лекарственных средств, коммуникация, ценовая политика и прозрачность деятельности. Опрос распространялся онлайн среди пациентов и потребителей из различных регионов Сирии. Было получено 417 валидных ответов. Анализ данных включал изучение различий восприятия в зависимости от демографических характеристик: пола, возраста и уровня дохода.

Установлено, что респонденты высоко оценивают практические аспекты деятельности фармацевтических организаций, такие как доступность лекарственных средств (87%), справедливость цен (72%) и качество обслуживания (73%), как основные факторы формирования имиджа. Существенную роль также играли коммуникация с фармацевтами и прозрачность деятельности организаций. Интерес к программам лояльности и социальной активности различался в зависимости от возраста, пола и уровня дохода. Женщины придавали большее значение межличностному взаимодействию, тогда как лица старшего возраста акцентировали внимание на прозрачности. Респонденты с низким уровнем дохода были более чувствительны к ценовой политике и ожидали большей открытости со стороны организаций.

Полученные результаты подчеркивают значимость качества обслуживания, доступности лекарственных средств и ценовой политики как ключевых факторов формирования общественного доверия и создают основу для разработки целевых стратегий по улучшению имиджа фармацевтических организаций в Сирии.

К л ю ч е в ы е с л о в а : удовлетворенность пациентов; фармацевтические услуги; потребительское поведение; фармацевты; Сирия

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THE ASSESSMENT OF FACTORS AFFECTING IMAGE OF PHARMACEUTICAL ORGANIZATIONS OF SYRIA AMONG CONSUMERS

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In conditions of unstable health care systems, public image of pharmaceutical organizations is key factor affecting patients trust and development of their loyalty. Despite important role of image of organizations, studies of perception of pharmaceutical organizations by consumers in such post-conflict regions like Syria are limited. The understanding of these factors permits to increase quality and trust to pharmaceutical services.

The purpose of the study is to evaluate main factors affecting public image of pharmaceutical organizations in Syria on the basis on opinions of consumers and patients.

The study was carried out using questionnaire method. The questionnaire was originally designed and included evaluation of external and internal factors affecting organization image, such as service quality, medication accessibility, communication, pricing policy and transparency of functioning. The questionnaire distributed online among patients and consumers from various regions of Syria. The survey gave 417 valid responses in total. The data analysis included examination of differences in perception depending on such demographic characteristics as gender, age and income level.

It is established that respondents estimate highly such practical aspects of pharmaceutical organizations functioning as medications accessibility (87%), pricing fairness (72%) and service quality (73%) as main factors that form image. The communication with pharmacists and transparency of organizations functioning also played significant role. The interest to programs of loyalty programs and social activity differed depending on age, gender and income level. The females attached more importance to interpersonal interaction, while elderly persons emphasized functioning transparency. The respondents with lower income were more sensitive to pricing policy and expected from organizations more openness.

The study results emphasize significance of service quality, medications accessibility and pricing policy as key factors of development of public trust and create foundation for development of target strategies improving image of pharmaceutical organizations in Syria.

К e y w o r d s : patient satisfaction; pharmaceutical services; consumer behavior; pharmacists; Syria.

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Introduction

In modern healthcare systems, pharmaceutical organizations play a dual role: they serve as providers of essential medicines and as critical actors in building public trust in the health infrastructure. Among these organizations, pharmacies are particularly significant because the main task of the pharmacy is the providing of the pharmaceutical care and that's why they have high accessibility and frequent contact with patients. According to the World Health Organization, the evolving role of pharmacies extends far beyond dispensing medications; it now encompasses the provision of pharmaceutical care as a patient-centered practice aimed at improving health outcomes and fostering trust between patients and healthcare providers [1].

As suggested in previous studies, their image defined as the public's perception of their values, professionalism, and social responsibility and has become a key component of organizational success [2].

While the concept of organization image has been extensively explored in business and healthcare literature, most of the research has focused on high-income, stable markets. Key dimensions such as staff behavior, the physical environment, ethical standards, and communication practices have all been identified as influential factors [3]. In Russia, for example, studies have shown that alignment between internal organizational values and outward-facing strategies significantly strengthens organization reputation.[4].

However, in low-resource or post-conflict environments, where health systems are under strain, the dynamics of public perception may differ considerably. In these contexts, consumer expectations are often shaped by pressing concerns such as accessibility, affordability, and trust in the reliability of services — factors that are not always captured by traditional marketing models. Despite the relevance of these issues, the image of pharmaceutical organizations in fragile contexts remains largely underexplored. Syria presents a particularly relevant case. After years of ongoing conflict and economic instability, pharmacies have continued to function as essential access points for medical care, often filling gaps left by overwhelmed public institutions [5]. Yet, there is a noticeable lack of research addressing how Syrian consumers perceive these organizations, or what factors they associate with trustworthiness and professionalism in the pharmacy sector.

To address this gap, the present study examines the elements that shape the image of pharmaceutical organ-

izations in Syria from the perspective of patients and consumers. Drawing on data collected from a structured, nationwide survey involving 417 respondents across various Syrian regions, the study identifies both internal and external factors that influence public perception. The survey was designed and conducted by the authors and distributed online to ensure broad regional representation across the country.

Materials and Methods

We conducted the study based on a survey that we designed specifically for this research and which was distributed online to people in different regions of Syria. The survey targeted patients and consumers who had previously visited or interacted with pharmacies. There were no restrictions on age, gender, or education level, in order to collect a wide range of opinions.

The questionnaire included a mix of multiple-choice and Likert-scale questions. These questions were designed to explore what people think about both the external aspects of pharmacies (like cleanliness, appearance, and staff behavior) and the internal aspects (like transparency, ethical values, and whether the pharmacy supports the community).

The data was collected during 2025, and a total of 417 people answered the survey [6]. Efforts were made to reach participants from all over Syria, including cities and rural areas, to make sure the results reflect different parts of the country.

To analyze the survey data, frequencies and percentages were calculated to summarize the distribution of responses. Comparative analysis was conducted to explore differences in perception across demographic groups such as gender, age, and income level. The 95% confidence intervals (CI) for proportions were calculated using the Wilson score method, which is appropriate for binomial data and moderate sample sizes. Error bars in all figures represent the 95% CI of the reported proportions. Pearson's chi-square test was used to assess statistical differences between groups, and a p-value < 0.05 was considered statistically significant. All data processing and graphical representations were performed using Microsoft Excel 2019.

The goal was to find out which factors are most important for building a positive image of pharmaceutical organizations in Syria.

Results

We identified, depending on the survey that we did, eight key factors that influence how the public perceives

the image of pharmaceutical organizations: service quality, medicine availability, pharmacist communication, pricing fairness, loyalty programs, transparency of information, community engagement, and trust in local pharmaceutical products.

Based on the responses of 417 participants from various Syrian regions, the most valued factor was medicine availability, with 87% of respondents identifying it as essential. This was followed by proximity to home or work 82%, and fairness of pricing 72%. Additionally, 73% emphasized the importance of overall service quality, while 54% pointed to the pharmacist's ability to communicate clearly and offer appropriate advice as a critical component of trust in the organization. Although loyalty and discount programs remain relatively uncommon in Syria, 39% of participants said they would significantly increase their trust in the pharmaceutical organization if such initiatives were adopted. Transparency of information also emerged as a key issue, with 79% agreeing that clearer communication from pharmaceutical companies would positively affect their image. Similarly, 54% highlighted the importance of community engagement and social support efforts (Fig. 1).

We made further analysis to explore how these perceptions varied across demographic groups, including gender, age, and income level.

As shown in Fig. 2, male respondents showed greater interest in proximity and loyalty programs, whereas female participants placed higher importance on transparency, pharmacist communication skills, and overall service quality.

As shown from Fig. 3 age also played a significant role in shaping responses. Younger respondents aged 18 to 30 gave the highest scores for medicine availability, pricing fairness, and proximity to home. Those in the 31–45 age group placed greater emphasis on loyalty programs and community involvement. Respondents aged 46–60 demonstrated appreciation for pharmacist communication and medicine availability. Participants over 60 years of age scored highest in transparency and pharmacist communication.

As shown from Fig. 4, participants with above-average income gave higher ratings for medicine availability, pharmacist communication, and loyalty programs. Those with below-average income were more critical of pricing fairness, yet they placed more value on transparency and commu-

nity support. Respondents with average income reported the highest appreciation for pricing fairness and transparency.

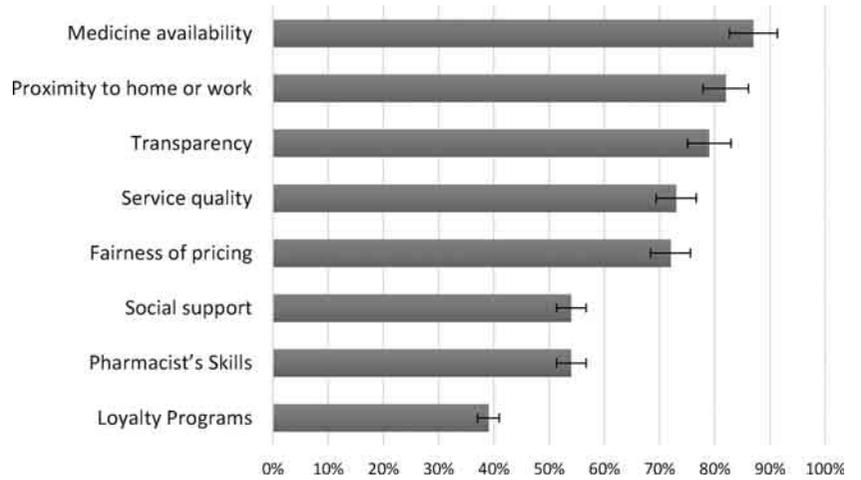


Fig. 1. Factors that influence how the public perceives the image of pharmaceutical organizations.

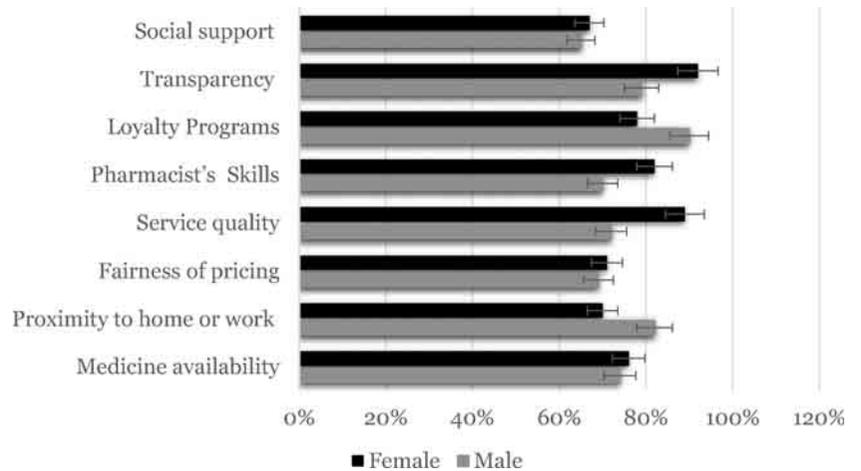


Fig. 2. Comparison of Male and Female responses about factors that influence on the image of pharmaceutical organizations.

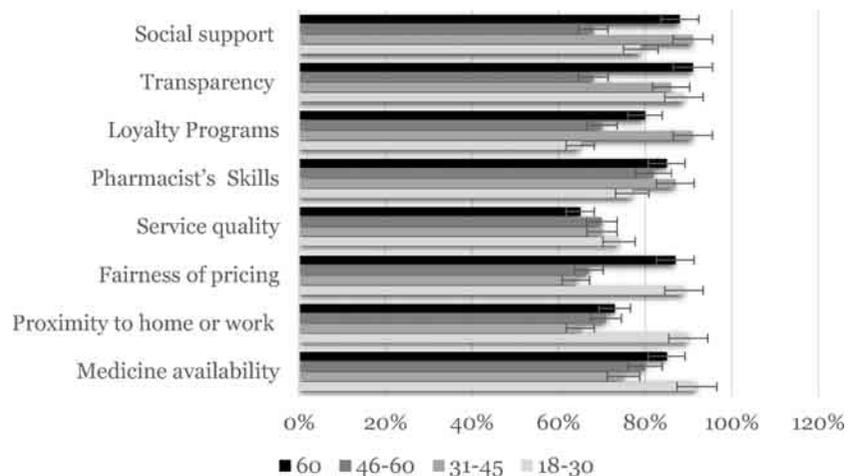


Fig. 3. Comparison on age for responses about factors that influence on the image of pharmaceutical organizations.

За рубежом

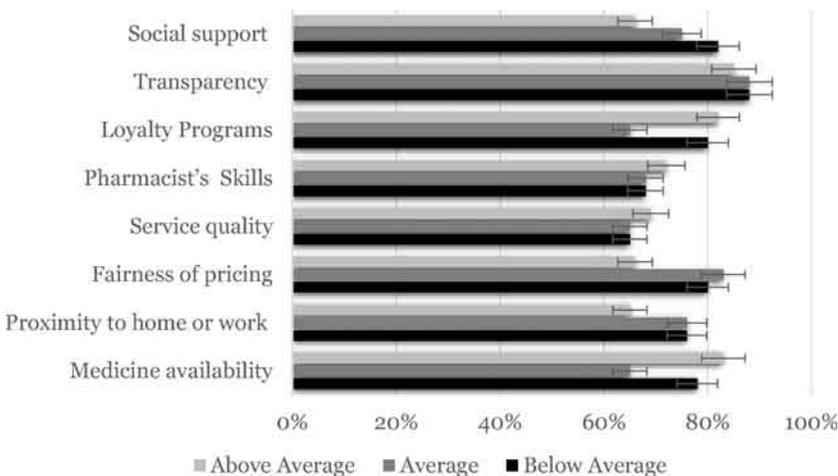


Fig. 4. Comparison on income for responses about factors that influence on the image of pharmaceutical organizations.

Table above presents the statistical results related to the main survey findings. Each proportion is shown with its corresponding absolute number and 95% CI, which reflects the reliability of the estimate. We also used Pearson's chi-square test to check for statistically significant differences between groups based on gender, age, and income. A p-value less than 0.05 was considered statistically significant.

Discussion and Recommendations

Through analyzing the collected data, we observed that the public perception of pharmaceutical organizations in Syria is primarily shaped by essential service-related factors. The majority of participants placed strong emphasis on medicine availability and pricing fairness. This finding led us to conclude that, in the current Syrian context — marked by economic hardship and health-care limitations — consumers prioritize accessibility and affordability above other organizational attributes such as branding or formal image-building.

We also observed that communication with pharmacists and the professional conduct of pharmacy staff significantly affect the image of the organization. Female participants in particular gave higher ratings in this area, which suggested to us that interpersonal interaction remains a key component of public trust.

One particularly interesting result we found was the positive perception of loyalty and discount programs, even though such initiatives are not yet common in Syria. A considerable proportion of respondents, especially among males and those aged 31–45, indicated that implementing such systems would improve their trust in pharmacies. This made it clear to us that the public is receptive to strategies that focus on customer and offer tangible value and reinforce fairness.

When studying age-related differences, we found that participants aged 60 and above showed a greater need for transparency and clear pharmacist communication. We believe this reflects a general expectation of directness and personal reliability, especially in matters related to health. Therefore, we recommend that pharmaceutical organizations adapt their communication

strategies to be inclusive of older populations, who may rely more heavily on trusted treatments.

Income level also influenced perception. Participants with lower income were more interested in pricing policies, and we observed that they gave high importance to transparency and social engagement. This suggests that ethical behavior and visible public responsibility can partially help during economic challenges in shaping a positive image.

Based on these observations, we recommend that pharmaceutical organizations in Syria focus on strengthening direct service quality — particularly in ensuring medicine availability, fair pricing, and respectful pharmacist communication. Furthermore, integrating basic loyalty programs and promoting community support initiatives may provide additional value and help foster stronger, long-term relationships with the public. These steps, represent practical and achievable approaches to improving the image of pharmaceutical organizations.

Conclusion

The results of this study confirmed that the image of pharmaceutical organizations in Syria is shaped mainly by how people experience their services in everyday life. Key factors such as medicine availability, fair pricing, respectful pharmacist interaction, and transparency were found to directly influence the image of pharmaceutical organization. These findings demonstrate that improving the quality and accessibility of pharmacy services can have a meaningful impact on how organizations are perceived.

The study also highlighted how age, gender, and income shape public expectations. Women emphasized interpersonal communication and service quality, while men showed more interest in proximity and loyalty programs. Older adults prioritized transparency, and younger participants focused on availability and affordability. Income also influenced expectations — lower-income groups were more sensitive to pricing and ethical conduct.

This suggests that tailored approaches are needed to meet the diverse needs of the population. Strengthening the relationship between pharmaceutical organizations and the public requires more than commercial presence;

Proportions of participants identifying key factors affecting pharmaceutical organization image, with 95% CI and p-values for demographic comparisons

| Rank | Factor | % | 95% CI | p-value |
|------|------------------------|-----|------------|-------------------------|
| 1 | Loyalty Programs | 39% | 34.6–43.4% | Gender: 0.03, Age: 0.04 |
| 2 | Pharmacist's Skills | 54% | 49.2–58.5% | Gender: 0.02, Age: 0.01 |
| 2 | Social support | 54% | 49.2–58.5% | Income: 0.04 |
| 4 | Fairness of pricing | 72% | 67.7–76.0% | Income: 0.05 |
| 5 | Service quality | 73% | 68.7–76.9% | Gender: 0.03 |
| 6 | Transparency | 79% | 75.1–82.6% | Gender: 0.01, Age: 0.02 |
| 7 | Proximity to home/work | 82% | 78.1–85.3% | Gender: 0.04 |
| 8 | Medicine availability | 87% | 83.8–90.2% | — |

it depends on visible commitment to fairness, communication, and social responsibility.

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Ethics Approval. The study involved anonymous online survey responses and did not require formal ethical committee approval.

ЛИТЕРАТУРА

1. Wiedenmayer K., Summers R. S., Mackie C. A., Gous A. G., Everard M., Tromp D. Developing pharmacy practice: a focus on patient care. Geneva: World Health Organization; 2006.
2. Awad A. I., Al-Rasheedi A., Lemay J. Public perceptions, expectations, and views of community pharmacy practice in Kuwait. *Med. Princ. Pract.* 2017;26:438–46. doi: 10.1159/000481662
3. Nguyen N., Leblanc G. Corporate image and corporate reputation in customers' retention decisions in services. *Corp. Reput. Rev.* 2001;4(3):231–43. doi: 10.1057/palgrave.crr.1540136
4. Петров Г. П., Петров А. Г. Концепции формирования имиджа фармацевтических организаций. *Организация здравоохранения.* 2008;(1):43-7.
5. Ahmed A. A., Nabee O. M. An analytical study of the impact of the war on Syria on pharmaceutical production. *Tishreen Univ. J. Res. Sci. Stud. Econ. Leg. Sci. Ser.* 2022;44(3):735–77. Режим доступа: <https://journal.tishreen.edu.sy/index.php/econlaw/article/view/13238>

6. Krejcie R. V., Morgan D. W. Determining sample size for research activities. *Educ. Psychol. Meas.* 1970;30(3):607–10. doi: 10.1177/001316447003000308

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REFERENCES

1. Wiedenmayer K., Summers R. S., Mackie C. A., Gous A. G., Everard M., Tromp D. Developing pharmacy practice: a focus on patient care. Geneva: World Health Organization; 2006.
2. Awad A. I., Al-Rasheedi A., Lemay J. Public perceptions, expectations, and views of community pharmacy practice in Kuwait. *Med. Princ. Pract.* 2017;26:438–46. doi: 10.1159/000481662
3. Nguyen N., Leblanc G. Corporate image and corporate reputation in customers' retention decisions in services. *Corp. Reput. Rev.* 2001;4(3):231–43. doi: 10.1057/palgrave.crr.1540136
4. Petrov G. P., Petrov A. G. Concepts of image formation in pharmaceutical organizations. *Organizatsiya zdavookhraneniya.* 2008;(1):43–7 (in Russian).
5. Ahmed A. A., Nabee O. M. An analytical study of the impact of the war on Syria on pharmaceutical production. *Tishreen Univ. J. Res. Sci. Stud. Econ. Leg. Sci. Ser.* 2022;44(3):735–77. Available at: <https://journal.tishreen.edu.sy/index.php/econlaw/article/view/13238>
6. Krejcie R. V., Morgan D. W. Determining sample size for research activities. *Educ. Psychol. Meas.* 1970;30(3):607–10. doi: 10.1177/001316447003000308