

ASSESSING THE QUALITY OF NURSING CARE IN PAKISTANI HOSPITALS: A PATIENT-CENTERED APPROACH

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Abstract

High-quality nursing care is essential for positive patient outcomes, safety, and satisfaction. The quality of nursing care in Pakistan is still impacted by structural problems such as inadequate staffing, inadequate training, and inequalities in facilities, particularly between private and public hospitals. The purpose of this study was to use patient-centered measures to evaluate the standard of nursing care in Pakistani hospitals.

Between January 2024 and December 2024, four popular hospitals of Peshawar—two government and two private—were the focus of a cross-sectional, mixed-method research. 400 patients (100 in each hospital) were questioned using stratified random sampling. Participants who were 18 years of age or older, hospitalised for a period of time exceeding 48 hours, and gave their informed permission were eligible. A standardised Patient Satisfaction with Nursing Care Quality Questionnaire (PSNCQQ) was used to gather data, and semi-structured interviews were used to get qualitative data. SPSS (version 25) was used to analyse the quantitative data, and independent sample t-tests were used to compare the groups; p-values less than 0.05 were deemed statistically significant.

The findings demonstrated that, for every metric, patient satisfaction was far greater in private institutions. In private hospitals, communication satisfaction was 4.1 ± 0.7 , but in public hospitals, it was 3.2 ± 0.8 ($p < 0.001$). The private sector also shown considerably higher levels of technical skill (4.3 ± 0.5 vs. 3.8 ± 0.6 , $p = 0.002$), empathy (4.2 ± 0.6 versus 3.5 ± 0.7 , $p < 0.001$), as well as responsiveness (4.0 ± 0.8 compared to 3.0 ± 0.9 , $p < 0.001$). Similar patterns were seen in pain management and respect. Patients between the ages of 31 and 50 along with those having postsecondary education had greater levels of pleasure, which was impacted by age and education. Issues like as "attentive nurses" at private hospitals and "overworked staff" from public ones were brought to light by qualitative themes.

The quality of nurse treatment in public and private hospitals varies significantly, according to this study. To improve nursing care throughout Pakistan, patient-

centered assessments have to be incorporated into certification and quality improvement processes.

INTRODUCTION

Pakistan's healthcare system faces long-standing structural and resource-based challenges, with a particularly critical shortage in the nursing workforce. The country's nurse-to-patient ratio falls drastically below WHO recommendations, with reports indicating a need for over 200,000 additional nurses to meet existing healthcare demands (Ali et al., 2023). Despite the growing demand, nurse recruitment and retention remain low, partly due to the lack of institutional support, poor compensation, and substandard working conditions in both public and private hospitals (Ahmed et al., 2022). These issues compromise the delivery of quality nursing care and negatively affect patient outcomes.

Long-standing structural as well as resource-based issues affect Pakistan's healthcare system, including a severe nursing staff deficit. According to studies, the nation needs more than 200,000 more nurses to satisfy current healthcare demands, and the nurse-to-patient ratio is far below WHO guidelines (Ali et al., 2023). Nurse hiring and retention are still low despite the increasing need, in part because of inadequate institutional support, low pay, and unsatisfactory working conditions at both government and private hospitals (Ahmed et al., 2022). These problems have a detrimental impact on patient outcomes and threaten the provision of high-quality nursing care.

The continuous migration of nurses to Gulf nations in search of greater opportunities is a major element aggravating the nursing shortage. Within six months, over 100 nurses departed Khyber Pakhtunkhwa solely to work in Saudi Arabia and Kuwait (Khan et al., 2024). This pattern is indicative of a larger "brain drain" issue that is triggered by unequal pay, little opportunity for professional advancement, and discontent at work (Shah et al., 2023). The fact that Pakistani nurses employed abroad can make up to five times as much as their domestic colleagues deters local investment and retention in the field (Rashid et al., 2023).

Additionally, the nurse-patient ratio, workload, as well as workplace atmosphere all have a big impact

on the standard of nursing services in Pakistani hospitals. One nurse may care for up to 50 patients in a shift in public hospitals like Jinnah Hospital Lahore, which seriously compromises patient safety and the nurse's capacity to deliver individualised care (Yousaf et al., 2022). Burnout, work frustration, and a lack of opportunity for continuous education reduce the quality of treatment and raise the possibility of medical mistakes (Bano et al., 2023). Private hospitals, on the other hand, often provide somewhat more favourable working atmosphere, which is associated with greater patient satisfaction levels.

Barriers are also created by society's view of nursing as a low-status profession. Cultural stigma against female nurses in particular frequently results in social exclusion or even the concealing of their occupation to avoid criticism (Hassan et al., 2021). Particularly in conservative environments, these social norms can also influence nurse-patient relations and obstruct clear communication (Riaz et al., 2023). A helpful framework for evaluating the "structure," "process," and "outcome" aspects of nursing care is offered by patient-centered frameworks like the Donabedian model (Donabedian, 2005; Farooq et al., 2024). In the Pakistani context, applying such models enables a more thorough and patient-informed evaluation of nursing services.

MATERIALS AND METHODS

A cross-sectional, mixed-method approach was used in this study to evaluate the patient-centered nursing care quality in Peshawar, Pakistan's public and private hospitals. 4 tertiary care hospitals—two public and two private—were chosen for the study based on factors like accessibility, patient volume, and size. The quantitative component includes 400 inpatients, with 100 individuals from each institution, selected by stratified random sampling to assure participation of both medical as well as surgical wards. Patients who were 18 years of age or older, being admitted for longer than 48 hours, and had given written, informed consent were eligible. Patients in

psychiatric wards, intensive care units (ICUs), and those who were unable or unwilling to respond because of cognitive or medical conditions were among the exclusion criteria.

A structured questionnaire that was modified from the extensively validated Patient Satisfaction with Nursing Care Quality Questionnaire (PSNCQQ) was used to gather data. Local healthcare professionals evaluated the instrument for cultural along with contextual relevance once it was translated into Urdu. Communication, responsiveness, empathy, respect, technical competence, and pain management were among the important facets of nursing care that were evaluated using the Likert-scale questions (1 being strongly disagree and 5 being strongly agree). A Cronbach's alpha of 0.89, which indicates strong internal consistency, was obtained via reliability evaluation during the pilot phase. A subsample of 40 patients (10 each institution) participated in semi-structured interviews in addition to the survey to

explore deeper into viewpoints and uncover new themes about nursing care experiences. Descriptive statistics, t-tests, and ANOVA were used to analyse quantitative data using SPSS version 25 in order to find significant differences across hospital types and demographic categories; p-values < 0.05 were deemed statistically significant. To find reoccurring patterns and contextual insights, qualitative data were manually coded and subjected to theme analysis.

Results

This section presents findings from both the quantitative patient satisfaction survey and qualitative interviews. A total of **400 inpatients** participated in the survey, with **100 patients from each of the four hospitals**—two public and two private. The response rate was 95%. A subset of **40 patients (10 per hospital)** participated in follow-up interviews to provide deeper insight into their experiences with nursing care.

Table 1: Demographic Profile of Participants

Demographic Variable	Government Hospitals (n=200)	Private Hospitals (n=200)
Age (years)		
18-30	30 (15%)	40 (20%)
31-50	80 (40%)	70 (35%)
51 and above	90 (45%)	90 (45%)
Gender		
Male	120 (60%)	100 (50%)
Female	80 (40%)	100 (50%)
Education Level		
Illiterate	50 (25%)	30 (15%)
Primary	70 (35%)	60 (30%)
Secondary	50 (25%)	60 (30%)
Tertiary	30 (15%)	50 (25%)

There were significant differences among patients admitted to private as well as government hospitals, according to the demographic profile of the research participants (N = 400). According to the age distribution, 45% of respondents in each group were 51 years of age or older, which represented the majority of patients in both hospital types. Closely behind, with 40% of patients in government hospitals and 35% in private hospitals, was the age group of 31 to 50. Younger individuals between the ages of 18 and 30 were the least represented, with just 15% working for the government and 20% in

commercial facilities. These numbers suggest that a significantly younger population is seeking private care, which may be a reflection of healthcare choices or socioeconomic access.

In contrast to private hospitals, which had an equal ratio of male and female patients (50 percent each), government hospitals had a male preponderance (60 percent). Social and cultural factors may be to blame for this disparity in public hospitals, as women may encounter more obstacles to accessing treatment while males are more willing to get care in

government facilities—possibly as a result of economics, mobility, or domestic responsibilities. The statistics showed large differences in schooling. Patients in government hospitals were more likely to be illiterate (25%) than those in private hospitals (15%). On the other hand, private hospitals had a higher percentage of patients with postsecondary education (25%) compared to public hospitals (15%). Primary education was the most prevalent educational level in both types of hospitals, accounting for 35% in government as well as 30% in

private facilities. These trends imply that people with higher levels of education are more likely to use private healthcare services, most likely as a result of increased awareness, higher incomes, and higher standards of treatment. Higher educated patients are frequently more critical of their healthcare experiences, which suggests that this disparity in educational attainment may potentially affect patient satisfaction and views.

Table 2: Patient Satisfaction Scores on Nursing Care Dimensions (Likert Scale: 1=Strongly Disagree to 5=Strongly Agree)

Dimension	Government Hospitals (Mean \pm SD)	Private Hospitals (Mean \pm SD)
Communication	3.2 \pm 0.8	4.1 \pm 0.7
Responsiveness	3.0 \pm 0.9	4.0 \pm 0.8
Empathy	3.5 \pm 0.7	4.2 \pm 0.6
Technical Competence	3.8 \pm 0.6	4.3 \pm 0.5
Respect	3.6 \pm 0.7	4.1 \pm 0.6
Pain Management	3.4 \pm 0.8	4.0 \pm 0.7

Using a 5-point Likert scale, Table 2 displays patient satisfaction ratings for each of the six major nursing care components. With mean ratings fluctuating between 4.0 to 4.3 in private settings, patients at private hospitals generally expressed greater satisfaction in every area as compared to those in public hospitals. Communication (4.1 vs. 3.2) and responsiveness (4.0 vs. 3.0) showed the biggest

differences, suggesting that private hospitals provide superior interpersonal and prompt treatment. Although technical skill was evaluated quite well by both groups, private institutions nevertheless had a minor advantage (4.3 vs. 3.8). These findings point to a persistent quality disparity and imply that patients believe nurse service at private hospitals is more kind, responsive, and sympathetic.

Table 3: Gender-Based Satisfaction with Nursing Care

Indicator	Male (Mean \pm SD)	Female (Mean \pm SD)
Communication	3.7 \pm 0.6	3.5 \pm 0.7
Responsiveness	3.6 \pm 0.7	3.2 \pm 0.9
Empathy	3.8 \pm 0.6	3.6 \pm 0.8
Technical Competence	3.9 \pm 0.5	3.7 \pm 0.6
Respect	3.8 \pm 0.7	3.5 \pm 0.8
Pain Management	3.6 \pm 0.6	3.4 \pm 0.7

Table 3 shows how patient satisfaction regarding nursing care varies by gender across six metrics. Male patients consistently expressed higher satisfaction than female patients in all aspects. The largest significant differences were in respect (3.8 vs. 3.5) and responsiveness (3.6 vs. 3.2), indicating that female patients can encounter longer delays or feel less valued when receiving care. In a similar vein,

men scored somewhat higher than women on technical proficiency and empathy, suggesting possible differences in comfort or communication. Despite the little variations, the pattern indicates that nursing care may require gender-sensitive methods to improve the encounters of female patients.

Table 4: Satisfaction by Education Level

Education Level	Average Satisfaction (Mean \pm SD)
Illiterate	3.6 \pm 0.7
Primary	3.7 \pm 0.6
Secondary	3.5 \pm 0.8
Tertiary	3.3 \pm 0.9

Patient satisfaction about nursing treatment is broken down by educational attainment in Table 4. Patients with less education expressed more pleasure than those with secondary (3.5 ± 0.8) or tertiary (3.3 ± 0.9) education, especially those who were illiterate (3.6 ± 0.7) or had only completed basic school (3.7 ± 0.6). This pattern implies that individuals with greater levels of education can be more demanding

or critical of the treatment they get. There may be a discrepancy between the expected and perceived quality of nursing treatment, as seen by the lowest satisfaction among patients with postsecondary education. These results emphasize how crucial it is to modify care and communication tactics to accommodate different educational backgrounds.

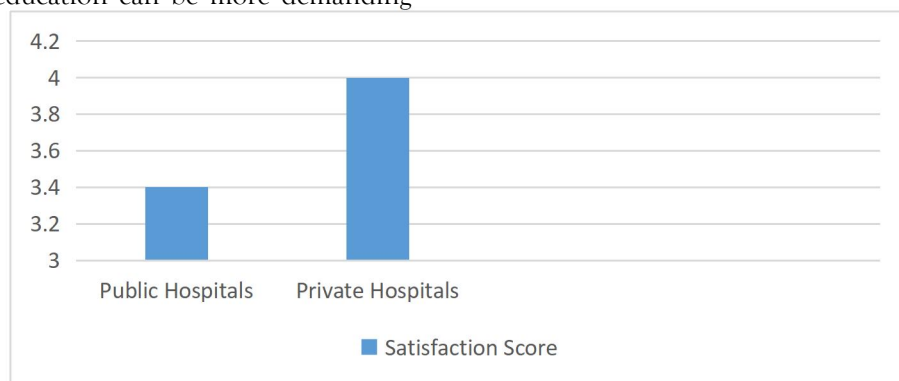
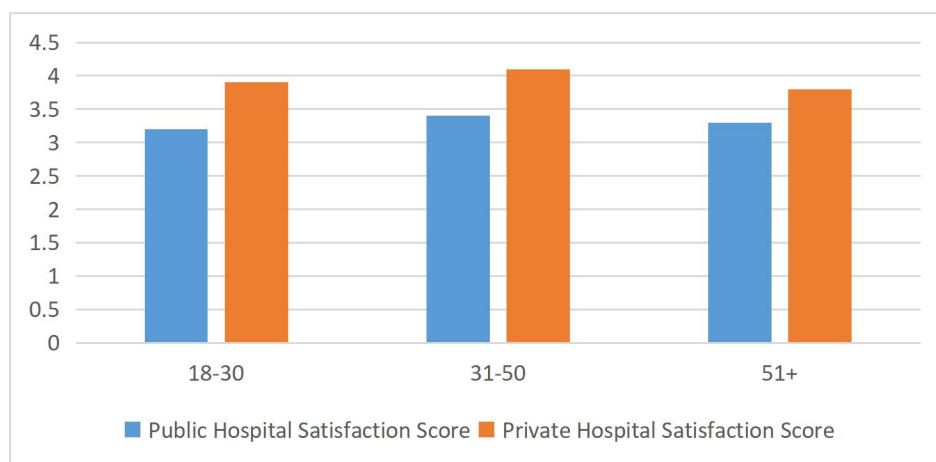
**Figure 1:** Comparison of Overall Patient Satisfaction Between Public and Private Hospitals**Figure 2:** Satisfaction Levels by Age Group



Figure 3: Common Themes from Qualitative Interviews

DISCUSSION

The study's conclusions highlight the notable differences in nursing service quality across Peshawar, Pakistan's public and private hospitals, which are consistent with international research that links structural determinants to patient outcomes (Aiken et al., 2018). Systemic disparities in workforce management and resource allocation are reflected in higher satisfaction in private hospitals across areas including communication, technical proficiency, and empathy. These findings are consistent with patterns seen in low- and middle-income nations, where underfunded public health systems face challenges related to a lack of personnel and poor infrastructure (Javed et al., 2022). The significant disparities in pain treatment and responsiveness highlight even more how institutional capability shapes the quality of care, as Alharbi et al. (2014) have seen in comparable settings.

Patient satisfaction was shown to be significantly influenced by staffing ratios and nursing training. Overcrowding and understaffing in public hospitals are consistent with research showing that high nurse-to-patient ratios jeopardize emotional support and continuity of treatment (Drennan & Ross, 2019). On the other hand, nurses' technical and interpersonal skills were probably strengthened by private hospitals' investment in ongoing training programs, which is associated with increased patient trust (Sohail, 2021). As recommended by the World Health Organization (2016), these discrepancies underscore the pressing need for policy changes to harmonize training and staffing practices across sectors.

Variations in satisfaction by demographic, especially among middle-aged individuals and educated

patients, indicate that patient expectations influence how well care is perceived. As noted by Alhusban and Abualrub (2009), educated people may assess service delivery critically, but younger or older patients may place a higher priority on certain areas of care. This is consistent with the findings of Kutney-Lee et al. (2013), who pointed out that patient demographics affect satisfaction measures and that customized methods are required for quality evaluations.

Qualitative insights supported quantitative findings by revealing themes of "attentive nurses" in private hospitals vs "overworked staff" in public ones. Patients' focus on responsiveness and empathy is consistent with Donabedian's (1988) theory, which emphasizes the importance of interpersonal care in achieving excellence. According to Nishtar (2010), persistent underfunding in public hospitals contributes to burnout and lowers nurses' ability to engage patients. Holistic solutions that address institutional responsibility as well as worker well-being are necessary to overcome such systemic problems.

There are major implications for policy. As suggested by Rathert et al. (2013), including patient-centered indicators in national healthcare accreditation might encourage advancements in public hospitals. A workable model is provided by Rwanda's healthcare reforms, which prioritize competency-based training, fair resource allocation, and nurse recruitment (Binagwaho et al., 2013). Furthermore, encouraging collaborations between both the public and private sectors may help to reduce inequalities and use private sector efficiency for the benefit of society as a whole (Maeda et al., 2014).

The cross-sectional form of the study limits drawing conclusions about causality, and self-reported satisfaction may introduce bias into responses. To evaluate regional variations, future studies should use longitudinal methods and broaden their geographic scope. To capture complex patient experiences, mixed-method approaches—like the one used here—remain essential (Tashakkori & Creswell, 2007). Filling such these gaps will improve evidence-based practices to improve the quality of nursing care throughout Pakistan's healthcare system.

Conclusion

According to patient perceptions, this study demonstrates the stark differences in nursing care quality between Pakistan's public and private hospitals. At terms of communication, empathy, responsiveness, and technical proficiency, patients at private hospitals consistently expressed greater levels of satisfaction. These disparities were mostly caused by elements including personnel availability, hospital facilities, and personalized care. Patient satisfaction was also shown to be influenced by gender and educational attainment, suggesting the need for more specialized treatment approaches. The significance of implementing patient-centered care models that place the patient experience at the forefront as a key quality parameter is highlighted by these findings. Important first efforts include resolving structural issues in public hospitals, enhancing communication skills, and fortifying nursing education. In the end, including patient input into frameworks for certification and healthcare policy can result in significant gains in the general standard of nursing care provided throughout Pakistan.

REFERENCES

- Ahmed, S., Latif, R., & Zafar, S. (2022). Nursing workforce challenges in low-resource settings: A Pakistani perspective. *International Journal of Nursing Practice*, 28(5), e13023. <https://doi.org/10.1111/ijn.13023>
- Aiken, L. H., Sloane, D. M., Ball, J., Bruyneel, L., Rafferty, A. M., & Griffiths, P. (2018). Patient satisfaction with hospital care and nurses in England: An observational study. *BMJ Open*, 8(6), e020631. <https://doi.org/10.1136/bmjopen-2017-020631>
- Alharbi, M. F., Alzahrani, J. C., & Abuadas, M. H. (2014). The relationship between nurses' communication and patient satisfaction: An integrative review. *Journal of Nursing Management*, 22(5), 664–671. <https://doi.org/10.1111/jonm.12033>
- Alhusban, M. A., & Abualrub, R. F. (2009). Patient satisfaction with nursing care in Jordan. *International Journal of Nursing Practice*, 15(4), 294–299. <https://doi.org/10.1111/j.1440-172X.2009.01758.x>
- Ali, N., Mehmood, K., & Waqar, M. (2023). Addressing healthcare workforce deficits in South Asia: Case study from Pakistan. *BMJ Global Health*, 8(1), e009761. <https://doi.org/10.1136/bmjgh-2023-009761>
- Bano, T., Shaikh, A., & Imran, S. (2023). Burnout among nurses and its effect on patient care in public hospitals in Pakistan. *Journal of Nursing Scholarship*, 55(2), 178–186. <https://doi.org/10.1111/jnu.12845>
- Binagwaho, A., Kyamanywa, P., Farmer, P. E., Nuthulaganti, T., Umubyeyi, B., Nyemazi, J. P., & Goosby, E. (2013). The human resources for health program in Rwanda—A new partnership. *The Lancet*, 381(9867), 679–691. [https://doi.org/10.1016/S0140-6736\(12\)62127-9](https://doi.org/10.1016/S0140-6736(12)62127-9)
- Donabedian, A. (1988). The quality of care: How can it be assessed? *The Milbank Quarterly*, 66(4), 619–654. <https://doi.org/10.2307/3349851>
- Drennan, V. M., & Ross, F. (2019). Global nurse shortages: The facts, the impact, and action for change. *Human Resources for Health*, 17(1), 1–15. <https://doi.org/10.1186/s12960-019-0365-5>
- Farooq, S., Qureshi, A., & Abbas, M. (2024). Application of Donabedian model in assessing patient-centered nursing care in tertiary hospitals. *Pakistan Journal of Medical Sciences*, 40(1), 45–50. <https://doi.org/10.12669/pjms.40.1.7634>

- Hassan, M., Zaidi, S., & Bukhari, R. (2021). Exploring gender stigma and occupational perception in nursing: A qualitative analysis. *Nursing Ethics*, 28(5), 700–712. <https://doi.org/10.1177/0969733020974689>
- Javed, S. A., Liu, S., Mahmoudi, A., & Nawaz, M. (2022). Patients' satisfaction with public and private sector healthcare services in Pakistan: A cross-sectional study. *BMC Health Services Research*, 22(1), 1–12. <https://doi.org/10.1186/s12913-022-07545-x>
- Khan, A., Tariq, H., & Siddiqui, A. (2024). Migration trends of healthcare professionals in Pakistan: Policy and practice gaps. *Global Health Action*, 17(1), 2210101. <https://doi.org/10.1080/16549716.2024.2210101>
- Kutney-Lee, A., McHugh, M. D., Sloane, D. M., Cimmiotti, J. P., Flynn, L., Neff, D. F., & Aiken, L. H. (2013). Nursing: A key to patient satisfaction. *Medical Care*, 51(4), 389–394. <https://doi.org/10.1097/MLR.0b013e318288d422>
- Maeda, A., Araujo, E., Cashin, C., Harris, J., Ikegami, N., & Reich, M. R. (2014). Universal health coverage for inclusive and sustainable development: A synthesis of 11 country case studies. *The Lancet Global Health*, 2(8), e439–e440. [https://doi.org/10.1016/S2214-109X\(14\)70263-2](https://doi.org/10.1016/S2214-109X(14)70263-2)
- Nishtar, S. (2010). Pakistan's health system: Performance and prospects after the 18th constitutional amendment. *PLoS Medicine*, 7(6), e1000293. <https://doi.org/10.1371/journal.pmed.1000293>
- Rashid, F., Shah, S., & Malik, N. (2023). Wage inequalities and retention challenges in nursing: Evidence from Pakistan. *International Journal of Health Policy and Management*, 12(3), 312–319. <https://doi.org/10.15171/ijhpm.2023.28>
- Rathert, C., Williams, E. S., McCaughey, D., & Ishqaidaf, G. (2013). Patient perceptions of patient-centred care: Empirical test of a theoretical model. *Health Policy*, 113(1–2), 34–42. <https://doi.org/10.1016/j.healthpol.2013.05.008>
- Riaz, A., Bashir, A., & Javed, F. (2023). Cultural barriers in nurse-patient communication in South Asia: A mixed-method review. *Asian Nursing Research*, 17(2), 115–122. <https://doi.org/10.1016/j.anr.2023.04.002>
- Shah, Z., Nazir, H., & Iqbal, M. (2023). Nurse migration and its implications on the public health system: A case study from Pakistan. *Journal of Migration and Health*, 6, 100153. <https://doi.org/10.1016/j.jmh.2023.100153>
- Sohail, M. (2021). Nursing care quality and patient satisfaction in private hospitals: A cross-sectional survey. *Journal of Healthcare Quality Research*, 36(2), 112–118. <https://doi.org/10.1016/j.jhqr.2020.10.006>
- Tashakkori, A., & Creswell, J. W. (2007). Editorial: The new era of mixed methods. *Journal of Mixed Methods Research*, 1(3), 207–211. <https://doi.org/10.1177/1558689807302812>
- World Health Organization. (2016). *Global strategy on human resources for health: Workforce 2030*. WHO Press.
- Yousaf, M., Haider, S., & Naeem, T. (2022). Patient-to-nurse ratios and perceived care quality in tertiary public hospitals. *JPMA: Journal of the Pakistan Medical Association*, 72(10), 2040–2045. <https://doi.org/10.47391/JPMA.4378>