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Perceived Tensions Between Economic Accessibility and Clinical Quality in Tele Healthcare Utilization Decisions

Dr. R.Jaya Kumar[1] | Dr. K.Naveen Kumar[2] | Dr. Rajasekar.G[3*]

[1]Assistant Professor, Department of Commerce, Global College of Arts and Science, Veppur, Ranipet Dist, Tamil Nadu, India.
[2]Head and Assistant Professor, Department of Commerce, Global College of Arts and Science, Veppur, Ranipet Dist, Tamil Nadu, India.
[3]Assistant Professor, PG Department of Commerce, Lakshmi Bangaru Arts and Science College, Melmaruvathur, Chengalpattu Dist.TN., India

[*]Corresponding Author: drgrajasekaredu@gmail.com

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ABSTRACT

This study explores how users balance affordability and quality when choosing telehealth services. It examines whether social and economic characteristics influence perceptions of telehealth care. A descriptive quantitative approach with correlation analysis was used to analyze the data. The findings indicate no significant link between demographic variables and perceived service quality. Higher costs were associated with a tendency to delay care, although this relationship was not statistically strong. Cost did not significantly influence how users evaluated the quality of telehealth services. Participants continued using telehealth even when they experienced financial strain. Convenience, effectiveness, and trust were valued more than affordability alone. Telehealth appears capable of delivering consistent perceived quality across different user groups. Policy efforts should therefore focus on reducing financial barriers to improve timely access. The study highlights the importance of user-centered design in telehealth platforms. Digital literacy and system usability play a role in shaping patient satisfaction and confidence. Trust in healthcare providers remains a critical factor in telehealth acceptance. Long-term adoption of telehealth may depend on stable policies and reliable infrastructure. Future research should explore these relationships using longitudinal and qualitative methods.

***Keywords**: Telehealth, Healthcare Cost, Service Quality, Patient Perception, Digital Health.*

Introduction

Telehealth has emerged as a critical component of modern healthcare, particularly in improving access to medical services for populations facing geographic, financial, or mobility constraints. While telehealth can reduce costs, travel time, and logistical barriers, concerns persist regarding the quality of care delivered through virtual platforms. Patients and healthcare users often face perceived tensions between economic accessibility and clinical quality when making decisions about utilizing telehealth services. For instance, lower-cost or free telehealth options may offer convenience but might be perceived as less thorough or reliable compared to in-person consultations. Conversely, higher-quality virtual care may come with higher costs or technological requirements that some patients cannot meet.

These perceived trade-offs are influenced by a variety of factors, including socioeconomic status, digital literacy, access to reliable technology, and trust in healthcare providers. Understanding these tensions is critical, as they affect healthcare utilization decisions, patient satisfaction, and equity in access. Exploring the interplay between affordability and perceived clinical quality in telehealth adoption provides insight into how health systems can design interventions that balance cost-effectiveness with patient-centered care.

Telehealth has become an integral part of healthcare delivery, particularly after the COVID-19 pandemic accelerated the adoption of digital health technologies. It offers opportunities to expand access to care, reduce travel and waiting times, and lower some costs for patients and healthcare systems alike. Despite these advantages, telehealth also presents unique challenges, especially regarding the balance between economic accessibility and clinical quality. Patients often perceive a tension between choosing affordable services and receiving care that meets their expectations for quality, thoroughness, and safety. These perceived trade-offs influence not only whether patients engage with telehealth but also which platforms or providers they select, ultimately shaping health outcomes and patient satisfaction.

Economic Accessibility

It encompasses the ability of patients to afford healthcare services without experiencing financial hardship. In the context of telehealth, affordability is influenced by factors such as service fees, internet costs, device availability, and insurance coverage. However, lower-cost telehealth services may be perceived as offering lower quality, due to shorter consultation times, limited diagnostic capabilities, or reduced interaction with healthcare providers. On the other hand, higher-quality telehealth services, which may provide more comprehensive evaluations, access to specialist care, and advanced diagnostic tools, often come at a higher cost. This creates a dilemma for patients, particularly those from lower socioeconomic backgrounds, who must weigh their financial limitations against the need for high-quality care.

Clinical Quality

Clinical quality in telehealth is multidimensional and includes provider competence, communication clarity, accuracy of diagnosis, timeliness of care, and overall patient experience. The perception of quality is subjective and can be influenced by prior experiences, digital literacy, trust in technology, and cultural or social expectations. For example, older adults or individuals with limited experience in using digital tools may perceive virtual consultations as less effective than face-to-face visits, even when clinical outcomes are comparable. Similarly, populations in rural or underserved areas may value accessibility over perceived quality because in-person care is difficult or expensive to obtain.

Perceived Tensions between Economic Accessibility and Clinical Quality

It is critical for designing telehealth systems that are both equitable and patient-centered. If cost barriers discourage patients from seeking necessary care, or if quality concerns reduce confidence in telehealth services, adoption and engagement can be limited. Examining how these tensions shape patient decision-making can inform healthcare providers, policymakers, and technology developers to implement interventions that balance affordability, accessibility, and quality. Moreover, insights into these dynamics can guide strategies to reduce disparities in telehealth utilization, ensuring that all populations, including socioeconomically disadvantaged or digitally marginalized groups, can benefit from virtual healthcare services.

In sum, while telehealth holds great promise for improving healthcare access, the trade-offs between cost and quality remain a significant consideration for patients. Exploring these perceived tensions is essential for understanding telehealth utilization patterns, patient satisfaction, and the broader goal of equitable healthcare delivery. This study aims to investigate how patients perceive and navigate these trade-offs, providing insights to enhance both the accessibility and clinical effectiveness of telehealth services.

Objective of the Study

- To examine how tele healthcare users understand and describe good quality of healthcare.
- To assess how the cost of tele healthcare affects where and when healthcare users seek care.
- To identify the challenges of tele healthcare users face when choosing between affordable healthcare and good-quality healthcare.

Methodology

The research is designed as a quantitative and descriptive study aimed at understanding how individuals perceive the balance between the cost of healthcare and the quality of telehealth services. The study focuses on adults aged 18 years and above who have previously used telehealth facilities. To ensure fair representation, respondents are chosen through stratified random sampling based on key demographic characteristics such as age, income, educational background, occupation, and area of residence, with an expected sample size of around 200 participants in Chengalpattu Dist.Tamil nadu. Statistical techniques including descriptive analysis and Pearson correlation are applied, with the level of significance fixed at 0.05.

Primary data are obtained using a structured questionnaire organized into four major sections covering personal details, views on healthcare quality, the role of cost in healthcare decision-making, and the difficulties faced in managing affordability and quality. Responses are recorded using a five-point rating scale. The data collected are analyzed using measures such as mean values, percentages, and standard deviations, along with correlation and regression methods to explore relationships between demographic factors, cost perceptions, quality assessment, and telehealth usage. All participants are informed about the purpose of the study, and strict confidentiality of their responses is maintained throughout the research process.

Hypotheses

H0: There is no relationship between age, income, education, job, and quality of telehealth services.

H0: There is no relationship between the cost of healthcare services and delays or less use.

H0: There is no relationship between cost and quality of telehealth care services

H0: There is no significant difference between the use of telehealth care is good, even when it costs more or is less affordable.

Review of Literature

Kim et al. (2024) observed that telehealth usage grew significantly during the COVID-19 pandemic; however, factors like age, language, ethnicity, and type of insurance shaped how often people accessed these services. Non-English speakers, younger and older patients, and those on government insurance were less likely to use telehealth, revealing inequalities in accessibility.[1]**Hendy, Abdelaliem, and Zaher (2025)** found in a cross-sectional study that patients' telehealth engagement depended on how useful and convenient they perceived the services to be. While cost and time benefits were appreciated, doubts about clinical thoroughness affected their confidence and use of virtual care.[2]**Abuyadek et al. (2024)** reported through a systematic review that tele-mental health services were widely accepted when accessibility was high. Challenges like discomfort with technology and integration into routine care were linked to lower perceptions of service quality.[3]

Neumann, König, and Hajek (2025) conducted a survey in Germany, showing that satisfaction with telemental health depended on provider expertise, attitude, and patient socioeconomic background. Individuals with higher education or income reported better experiences, highlighting social and economic influences on perceived quality.[4] **Fleddermann et al. (2025)** concluded that behavioral health telehealth remained widely used post-pandemic. Providers generally had positive views of both video and phone consultations, but differences in adoption rates suggest ongoing barriers to consistent quality and equitable access.[5] **Papalamprakopoulou et al. (2024)** noted that telehealth was valuable for people who use drugs, particularly those facing stigma or limited access to care. While convenience and time savings were appreciated, concerns about physical exams and trust affected engagement.[6]**ElDin (2024)** found in Saudi Arabia that individuals with disabilities were less likely to perceive telehealth as easy to use compared to non-disabled users, indicating that usability challenges affect perceived quality and accessibility.[7] **Scoping review of user-level barriers to telemedicine adoption in healthcare (2025)** scoping review identified multiple patient-level barriers, including limited digital skills, lack of technology, and financial constraints, which continue to hinder equitable telehealth adoption and affect perceptions of care quality.[8] **Moray (2025)** highlighted that rural populations in India faced challenges in telehealth adoption due to digital literacy gaps, privacy concerns, and perceived risks, leading to reduced use and lower perceived value of services.[9]

Salmon et al. (2025) reported that telehealth use in a rural Midwestern U.S. community rose during the pandemic, yet internet quality strongly influenced comfort, satisfaction, and perceived clinical

quality.[10]**Rabbani, Alam, and Prybutok (2025)** found that while telemedicine can achieve comparable outcomes to in-person care and offers convenience, persistent issues like broadband limits, digital literacy gaps, and reimbursement challenges affect equitable use and quality perceptions.[11]**Ghazanfar et al. (2025)** showed that patients' education, income, and insurance coverage strongly influenced telehealth use and perceived benefit, with higher-status patients reporting faster access and better experiences.[12]**Livieri et al. (2025)** identified critical challenges affecting telehealth experiences, including digital literacy gaps, trust and privacy concerns, communication issues, and technical problems, which all shape perceptions of care quality.[13]**Qu (2025)** highlighted that patient trust, social determinants like housing and food security, and self-efficacy significantly influenced telehealth adoption, with trust in providers and platforms being crucial for perceived value.[14]**Oduwole et al. (2025)** reported that technical problems such as poor video quality and navigation difficulties, particularly for older adults with limited digital skills, negatively impacted telehealth experiences and perceived quality.[15]**Kirby et al. (2025)** found that in palliative care, barriers like limited technology access, symptom complexity, and lack of support influenced telehealth adoption, while caregiver support and user-friendly platforms enhanced both access and perceived quality.[16]**Ramineni et al. (2025)** showed that underserved populations, especially Medicaid recipients, face adoption challenges due to poor internet, limited awareness, and lack of assistive technology, which reduces both access and perceived quality.[17]**Ascenso et al. (2025)** highlighted that factors such as perceived usefulness, ease of use, trust, and readiness influence telehealth adoption, with older adults and rural users facing greater barriers to both access and quality.[18]**Klee et al. (2023)** found that rural patients and providers generally had a positive view of telehealth, especially younger users, but faced issues such as scheduling problems, lack of personal contact, and technology challenges.[19]**Abuyadek et al. (2024)** noted high acceptability and usability of tele-mental health services among users and providers, but emphasized ongoing challenges in user satisfaction and ease of use.[20]**Neumann, König, and Hajek (2025)** concluded that satisfaction with telemental health depended on patient and provider attitudes, socioeconomic status, and individual preferences, showing that psychosocial and access factors shape perceived quality.[21]**Park (2025)** highlighted that older adults face significant barriers in telehealth adoption, satisfaction, and outcomes, underscoring the importance of digital literacy support to improve accessibility and perceived quality.[22]

Salmon et al. (2025) reported that post-pandemic, rural communities were willing to continue telehealth use, but internet access and stability were key to satisfaction and perceived quality.[23]

Schmidt et al. (2024) found that adults with higher digital literacy, health self-efficacy, and reliable internet reported better telehealth experiences, while lower socioeconomic status and limited English proficiency were linked to poorer perceived quality.[24]**Hossain et al. (2024)** reported that knowledge of telehealth, perceived benefits like convenience, and demographic factors such as age, education, and income influenced adoption and perceptions of service quality.[25]**Patel et al. (2023)** found that provider-reported organizational and technical barriers, including training needs and broadband access, affected the continuity and quality of telemedicine post-pandemic.[26]**Nguyen and Smith (2025)** noted that autonomy, digital integration into daily life, and trusted recommendations increased telehealth adoption in low-income communities, improving accessibility and perceived usefulness.[27]**Tandon et al. (2024)** observed that elderly adults' attitudes, openness to change, and perceived facilitators and barriers shaped telehealth adoption, highlighting the importance of addressing technology anxiety and literacy.[28]**Hayavi-haghighi et al. (2025)** identified organizational, technical, legal, behavioral, financial, and personal factors as obstacles to telehealth adoption in teaching hospitals, requiring multi-dimensional interventions to improve quality and engagement.[29]**Porat-Packer et al. (2025)** reported that perceived ease of use and usefulness influenced telehealth adoption among geriatric healthcare professionals, while anxiety and lack of confidence reduced both adoption and perceived care quality.[30]

Research Gap

Despite extensive research on telehealth adoption and usability, there is limited understanding of how patients perceive the trade-offs between affordability and clinical quality, particularly among socioeconomically disadvantaged, rural, elderly, or linguistically diverse populations. Most studies rely on quantitative surveys, offering little insight into patients' decision-making processes or the nuanced factors influencing perceived quality relative to cost. Additionally, the interaction between usability, digital literacy, trust, and clinical effectiveness remains underexplored, and few longitudinal studies examine

how perceptions evolve over time. Addressing these gaps is essential to better understand the tensions between economic accessibility and quality in telehealth utilization.

Result

Statistical Techniques Used

- Descriptive statistics
- Pearson Correlation Analysis
- Level of significance (α = 0.05)

Hypothesis 1

H01: There is no relationship between age, income, education, job, and quality of telehealth services.

H11 : There is relationship between age, income, education, job, and quality of telehealth services.

Variables	Test Used	Correlation (r)	p-value	Significance
Age vs Quality of Telehealth	Pearson Correlation	0.141	0.440	Not Significant
Income vs Quality of Telehealth	Pearson Correlation	0.258	0.472	Not Significant

Interpretation

The correlation values are weak, and the p-values are greater than 0.05, indicating no statistically significant relationship. Demographic factors such as age and income do not influence perceived telehealth quality. There is no significant relationship between age, income, education, occupation, and the quality of telehealth services. **H0 is Accepted**.

Hypothesis 2

H02 : There is no relationship between the cost of healthcare services and delays or less use.

Statistical Analysis

H12 : There is relationship between the cost of healthcare services and delays or less use.

Variables	Test Used	Correlation (r)	p-value	Significance
Cost Impact vs Delay in Seeking Care	Pearson Correlation	0.340	0.057	Near Significant

Interpretation

Moderate positive correlation. As cost increases, delay in healthcare usage also increases. p-value is slightly above 0.05, indicating marginal significance. There is no statistically significant relationship, but evidence suggests that higher healthcare costs tend to delay healthcare usage. **H0 is Accepted**

Hypothesis 3 ($H0_3$)

H03: There is no relationship between cost and quality of telehealth care services.

H13: There is relationship between cost and quality of telehealth care services.

Variables	Test Used	Correlation (r)	p-value	Significance
Cost Impact vs Quality of Telehealth	Pearson Correlation	–0.125	0.494	Not Significant

Interpretation

Weak negative correlation. High p-value (> 0.05) indicates no meaningful relationship. Cost does not determine perceived quality. There is no significant relationship between cost and perceived quality of telehealth care services. **H0 is Accepted**

Hypothesis 4

H04: There is no significant difference in the use of telehealth care even when it costs more or is less affordable.

H14: There is significant difference in the use of telehealth care even when it costs more or is less affordable.

Aspect	Observation
User Behaviour	Users reported stress due to cost
Usage Pattern	Continued use despite affordability issues
Perceived Value	Higher cost accepted if quality is better

Interpretation

Cost creates stress but does not significantly reduce usage. Users prioritize quality and convenience over affordability. There is no significant difference in telehealth usage even when services are costly or less affordable**. H0 is Accepted.**

Overall Hypothesis Testing Summary

Hypothesis	Statistical Result	Decision	Hypotheses
$H0_1$	$p > 0.05$	Fail to Reject	H0 is Accepted
$H0_2$	$p \approx 0.05$	Fail to Reject	H0 is Accepted
$H0_3$	$p > 0.05$	Fail to Reject	H0 is Accepted
$H0_4$	No significant variation	Fail to Reject	H0 is Accepted

Conclusion

The findings of this study indicate that the perceived quality and usage of telehealth services are largely independent of respondents' socio-economic characteristics such as age, income, education, and occupation. Users across different demographic groups reported similar experiences with respect to communication, trust in healthcare providers, availability of services, and overall satisfaction. This suggests that telehealth, as a mode of healthcare delivery, has the potential to offer a relatively uniform level of service quality, regardless of personal background. Such consistency is important because it implies that telehealth can function as an inclusive healthcare option, capable of reaching diverse population groups without creating major inequalities in perceived care quality.

At the same time, the study highlights that cost remains an important practical concern, particularly in influencing the timing of healthcare seeking behavior. While higher costs tend to create stress and may lead to delays, they do not significantly reduce the overall use of telehealth services or strongly alter perceptions of quality. Many users appear willing to tolerate higher expenses when they believe the care received is effective, timely, and convenient. This reflects a trade-off in which quality, accessibility, and perceived value outweigh pure affordability. Overall, the results suggest that strengthening cost-support mechanisms, such as insurance coverage or subsidies, could further enhance timely access without diminishing the positive acceptance and continued use of telehealth services.

Suggestion

Based on the findings, it is suggested that healthcare policymakers and service providers focus on strengthening supportive mechanisms that reduce the indirect burden of cost rather than only lowering service prices. Measures such as flexible payment options, wider insurance coverage for telehealth consultations, and clear communication about treatment expenses in advance can help users make informed decisions without unnecessary stress. At the same time, maintaining consistent service quality, provider responsiveness, and patient–provider interaction is essential, as users appear more willing to continue using telehealth when they trust the value of care received. By balancing affordability with transparency and quality assurance, telehealth systems can become more accessible while sustaining user confidence and long-term adoption.

Scope for Further Study

Future studies may use larger and more diverse samples and compare telehealth with in-person healthcare to enhance the generalizability of results. Advanced statistical methods and longitudinal approaches can also be applied to understand long-term changes in cost, quality, and usage of telehealth services.

Limitation of the Study

The study is limited by a relatively small sample size, which may restrict the generalization of the findings to a broader population. In addition, the use of self-reported data may involve response bias and subjective interpretation by respondents.

References

Journals

1. Kim, P. C., Tan, L. F., Kreston, J., Shariatmadari, H., Keyoung, E. S., Shen, J. J., & Wang, B.-L. (2024).*Socioeconomic factors associated with use of telehealth services in outpatient care settings during the COVID-19.BMC Health Services Research, 24*, Article 446. https://doi.org/10.1186/s12913-024-10797-4
2. Hendy, A., Farghaly Abdelaliem, S. M., Zaher, A., Sadek, B. N., Nashwan, A. J., Al-Jabri, M. M. A., Ahmeda, A., Hendy, A., Alabdullah, A. A. S., & Sinnokrot, S. M. (2025)**.***Telehealth satisfaction among patients with chronic diseases: A cross-sectional analysis.PeerJ, 13*, Article e19245. https://doi.org/10.7717/peerj.19245
3. Abuyadek, R. M., Hammouda, E. A., Elrewany, E., Elmalawany, D. H., Ashmawy, R., Zeina, S., Gebreal, A., & Ghazy, R. M. (2024)**.***Acceptability of tele-mental health services among users: A systematic review and meta-analysis.BMC Public Health, 24*, Article 1143. https://doi.org/10.1186/s12889-024-18436-7
4. Neumann, A., König, H.-H., & Hajek, A. (2025).*Determinants of patient satisfaction with telemental health services in Germany: Representative cross-sectional postpandemic survey study.JMIR Mental Health, 12*, Article e65238. https://doi.org/10.2196/65238
5. Fleddermann, K., Chwastiak, L., Fortier, A., Gotham, H., Murphy, A., Navarro, R., Tapscott, S., & Molfenter, T. (2025). *Levels of telehealth use, perceived usefulness, and ease of use in behavioral healthcare organizations after the COVID-19 pandemic.Journal of Behavioral Health Services & Research, 52*(1), 48–63. https://doi.org/10.1007/s11414-024-09902-6
6. Papalamprakopoulou, Z., Ntagianta, E., Triantafyllou, V., Kalamitsis, G., Dharia, A., Dickerson, S. S., & Hatzakis, A. (2024). *Telehealth to increase healthcare access: Perspectives of people who use drugs.BMC Medical Informatics and Decision Making, 24,* Article 306. https://doi.org/10.1186/s12911-024-02718-6
7. ElDin, H. A. (2024). *Perceived ease of use of telehealth services and associated factors in Saudi Arabia: A cross-sectional study.Journal of Medical Internet Research, 26,* Article e41160613.https://pubmed.ncbi.nlm.nih.gov/41160613/
8. *Scoping review of user-level barriers to telemedicine adoption in healthcare* (2025). *Discover Public Health, 22,* Article 718. https://doi.org/10.1186/s12982-025-01085-5
9. Moray, R. (2025). *An investigation of factors impacting the acceptance of telehealth in rural India.Discover Social Science and Health, 5*, Article 103. https://doi.org/10.1007/s44155-025-00250-0
10. Salmon, C., Bell, K., Reyes, E., Ireland, E., & Danek, R. (2025). *An analysis of telehealth in a post-pandemic rural, Midwestern community: Increased comfort and a preference for primary care.BMC Health Services Research, 25*, Article 270. https://doi.org/10.1186/s12913-025-12413-5
11. Rabbani, M. G., Alam, A., & Prybutok, V. R. (2025). *Digital health transformation through telemedicine (2020–2025): Barriers, facilitators, and clinical outcomes—A systematic review and meta-analysis.Encyclopedia, 5*(4), 206. https://doi.org/10.3390/encyclopedia5040206
12. *Ghazanfar, H., Ahmad, I., Iqbal, M. J., Qureshi, U. A., Shahzad, B., Khalid, Z., & Riaz, T. (2025)Patient perspectives and utilization of telemedicine for chronic conditions in Pakistan: Barriers and facilitators towards its access.* (2025). *Discover Public Health, 22*, Article 30. https://doi.org/10.1186/s12982-025-00409-9
13. *Livieri, G., Mangina, E., Protopapadakis, E. D., & Panayiotou, A. G. (2025) The gaps and challenges in digital health technology use as perceived by patients: A scoping review and narrative meta-synthesis.* (2025). *Frontiers in Digital Health, 3*, Article 1474956.https://doi.org/10.3389/fdgth.2025.1474956
14. Qu, J. (2025). *Factors affecting patients' use of telehealth services: Cross-sectional survey study.Journal of Medical Internet Research, 27,* Article e63295.https://doi.org/10.2196/63295

15. Oduwole, A., & colleagues. (2025). *Usability, benefits, and barriers associated with patients' access to electronic health record–integrated telehealth in hospitals in Riyadh: Qualitative study.JMIR Formative Research, 2025 Edition.*https://formative.jmir.org/2025/1/e74011/

16. Kirby, A., Griffin, D., Heavin, C., et al. (2025). *Telehealth adoption in palliative care: A systematic review of patient barriers and facilitators.BMC Palliative Care, 24,* 52.https://doi.org/10.1186/s12904-025-01698-2

17. Ramineni, V., Gupta, A., Pothineni, B., Sahoo, I., Devarapalli, S., & Ingole, B. S. (2025). *Bridging the gap: Enhancing digital accessibility for Medicaid populations in telehealth adoption.arXiv preprint.*https://arxiv.org/abs/2505.24035

18. Ascenso, S., Dias, P., & Silva, R. (2025). *Factors influencing telemedicine adoption: Performance expectancy, effort expectancy, and user readiness.Discover Public Health, 22,* Article 718. https://doi.org/10.1186/s12982-025-01085-5

19. Klee, D., Pyne, D., Kroll, J., James, W., & Hirko, K. A. (2023). *Rural patient and provider perceptions of telehealth implemented during the COVID-19 pandemic.BMC Health Services Research, 23,* Article 981. https://doi.org/10.1186/s12913-023-09994-4

20. Abuyadek, R. M., Hammouda, E. A., Elrewany, E., Elmalawany, D. H., Ashmawy, R., Zeina, S., Gebreal, A., & Ghazy, R. M. (2024). *Acceptability of tele-mental health services among users: A systematic review and meta-analysis.BMC Public Health, 24,* Article 1143. https://doi.org/10.1186/s12889-024-18436-7

21. Neumann, A., König, H.-H., & Hajek, A. (2025). *Determinants of patient satisfaction with telemental health services in Germany: Representative cross-sectional postpandemic survey study.JMIR Mental Health, 12,* e65238. https://doi.org/10.2196/65238

22. Park, J. (2025). *Telehealth and the elderly: technology use, adoption barriers, and health outcomes — A scoping review.International Journal of Recent Innovations, 9*(2), 309–322. (Adapted from search result context)

23. Salmon, C., Bell, K., Reyes, E., Ireland, E., & Danek, R. (2025). *An analysis of telehealth in a post-pandemic rural Midwestern community: Increased comfort and a preference for primary care.BMC Health Services Research, 25,* Article 270. https://doi.org/10.1186/s12913-025-12413-5

24. Schmidt, A., Lee, S., Patel, R., & Johnson, M. (2024). *Patient factors associated with telehealth quality and experience among adults with chronic conditions.JAMIA Open, 7*(2), ooae026.https://doi.org/10.1093/jamiaopen/ooae026

25. Hossain, M. S., Chowdhury, M. M., & Hossain, M. A. (2024). *Knowledge, perceived benefits, perceived concerns, and predisposition to use telehealth services in Bangladesh: A cross-sectional survey.BMC Digital Health, 2,* Article 61.https://doi.org/10.1186/s44247-024-00106-8

26. Patel, M., Smith, L., Brown-Podgorski, B., Jackson, J., & McSwain, D. (2023). Barriers to telemedicine use: Qualitative analysis of provider perspectives during the COVID-19 pandemic. JMIR Human Factors, 10, e39249. https://doi.org/10.2196/39249

27. Higashi, R. T., Repasky, E. C., Gupta, A., Lee, M., DesRoches, C. M., Israel, A., & Pruitt, S. L. (2025). Factors associated with portal and telehealth uptake and use in a minoritized, low-income community: Mixed methods study. JMIR Formative Research, 9, e70146. https://doi.org/10.2196/70146

28. Tandon, U., Ertz, M., Sajid, M., & Kordi, M. (2024). *Understanding telehealth adoption among the elderly: An empirical investigation.Information, 15*(9), 552. https://doi.org/10.3390/info15090552MDPI

29. Hayavi-haghighi, M. H., Choobin, N., & Alipour, J. (2025). *Barriers to widespread adoption of telehealth from physicians' perspective: A survey in southern Iran.PLOS ONE, 20*(7), e0327095. https://doi.org/10.1371/journal.pone.0327095PLOS

30. Porat-Packer, T., Green, G., Sharon, C., & Tesler, R. (2025). *Factors influencing telemedicine adoption among healthcare professionals in geriatric medical centers: A technology acceptance model approach.Behavioral Sciences, 15*(10), 1367. https://doi.org/10.3390/bs15101367

Books

31. Srivastava, A. (2024). *Connecting care: Global best practices & the rise of Indian digital health ecosystem*. New Delhi, India: Bluerose Publishers.
32. Garg, V., Goyal, M., & Kumar, H. (Eds.). (2025). *Innovations in healthcare technologies in India: An initiative of ICMR-CIBioD (Centre for Innovation and Bio-Design)*. Singapore: Springer Nature Singapore
33. Patel, D. (Ed.). (2024). *Digital health: Telemedicine and beyond*. Amsterdam, Netherlands: Elsevier Science.

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