

A Meta-Synthesis Of Indian Nurses' Perspectives On Internet-Based Nursing Services: A Narrative Review

Dr. Melisa Leo Fernandes¹, Dr. R Manohari Sivakumar², Dr. Lithiya Jose³, Dr. Rajendra Kumar Sharma⁴, Deepesh Swami⁵, Nagarjuna Pitty⁶, Dr. Shabana Anjum⁷

¹Professor, SMT, Institute of Nursing, Dhamangaon, Nashik, Maharashtra, India

²Principal Cum Professor, Saraswathi College of Nursing, Hapur, Uttar Pradesh, India

³Associate Professor, Government College of Nursing, Kanpur, India

⁴Principal, Ganga Sheel School of Nursing, Bareilly, Uttar Pradesh, India

⁵Senior Nursing Officer, AIIMS, Rishikesh, Uttarakhand, India

⁶Principal/Research Scientist, Indian Institute of Science, Bengaluru, Karnataka, India

⁷Principal, Jabalpur Institute of Health Science, Madhya Pradesh, India

Abstract

India's healthcare system is rapidly digitalizing, with internet-based health services emerging as a crucial strategy for closing healthcare access gaps, particularly in rural and disadvantaged areas. This narrative study looks at Indian nurses' perceptions on internet-based nursing services such tele-nursing, virtual consultations, and digital health education. Drawing on previous research, the study summarizes the perceived benefits, obstacles, flexibility, and policy implications of incorporating digital platforms into nursing practice. The findings show that Indian nurses are more aware of the potential of internet-based services to increase access to care, workflow efficiency, and professional growth. Widespread adoption of these technologies is hampered by a number of obstacles, including digital literacy gaps, infrastructure restrictions, ethical and legal issues, and a lack of standardized training. While younger and urban-based nurses are more adaptable, those in rural or resource-constrained locations face enormous structural hurdles. The assessment emphasizes the need for comprehensive policy support, such as nurse-specific telehealth recommendations, the incorporation of digital health capabilities into nursing education, and equitable infrastructure development across regions. By addressing these structural and educational gaps, internet-based nursing services can become a long-term and empowering tool for the Indian nursing workforce, resulting in more inclusive and efficient healthcare delivery throughout the country.

Keywords: Internet-based nursing, tele-nursing, digital health, Indian nurses, nursing informatics, healthcare access, digital literacy, telehealth policy, rural healthcare, nursing education

INTRODUCTION

With the increasing integration of digital technologies, India's healthcare sector is undergoing a dramatic transition, resulting in significant changes to service delivery paradigms. The government's push for digital health efforts, particularly through programs like the Ayushman Bharat Digital Mission, has highlighted the potential of internet-based healthcare to close long-standing gaps in access and continuity of care (Sharma et al., 2022). This digital revolution includes a wide range of interventions, such as telemedicine, remote patient monitoring, mHealth applications, and e-health education. This framework's primary pillar is internet-based nursing services, which include tele-nursing, virtual consultations, digital health education, and home-based care coordination made possible by online resources. Given that over 65% of India's population lives in rural areas with limited access to healthcare facilities, internet-based nursing services have enormous potential for improving health outcomes (Qadir, 2022). These services allow nurses to provide care to geographically isolated and marginalized regions, assuring timely follow-ups, chronic illness management, and health education. The COVID-19 pandemic emphasized the necessity of digital solutions, hastening the introduction of tele-nursing and compelling nurses to deliver remote care even in high-pressure situations (Poreddi et al., 2021).

Nurses, the largest and most accessible group of healthcare workers in India, are perfectly positioned to help with this transformation. Their work includes not only clinical care but also education and psychosocial support, which is consistent with the comprehensive character of digital health delivery. However, the efficacy of these interventions is primarily dependent on nurses' willingness, technological competency, and perceptions of such services. While some nurses, particularly in urban and private

healthcare settings, have easily adapted to digital modalities, others, particularly in rural or government-run facilities, face numerous barriers such as low digital literacy, a lack of training, and infrastructure constraints (Sharma et al., 2022; Qadir, 2022). In addition to technological and logistical challenges, nurses have raised worry about data privacy, confidentiality, and legal uncertainties in tele-nursing practice. In virtual care settings, consent rules, documentation requirements, and medicolegal accountability are frequently unclear (Poreddi et al., 2021). Furthermore, systemic concerns like as the caste-based digital divide intensify disparities, limiting patients' access to services and nurses' ability to provide them effectively (Vaidehi et al., 2021).

Despite these hurdles, Indian nurses are increasingly recognizing that digital health is more than a passing fad and will be an essential component of future healthcare. Many people see internet-based nursing as a way to advance their careers, provide better care continuity, and empower patients. However, to fully realize the potential of these services, targeted legislative reform, digital infrastructure development, and ongoing professional education are required. This narrative study summarizes Indian nurses' perspectives on internet-based nursing services, delving into the facilitators, constraints, and consequences of digital health in nursing practice. It seeks to provide insights into how India's nursing workforce might be better prepared, supported, and integrated into the rapidly changing digital healthcare sector.

BENEFITS PERCEIVED BY INDIAN NURSES

Indian nurses are increasingly recognizing internet-based nursing services as a feasible model for enhancing healthcare delivery, particularly in areas with infrastructural shortages and gaps in access. While the transition to digital care presents unique obstacles, some reported benefits have appeared frequently in the literature, reflecting nurses' changing attitudes and experiences with this new method of service delivery.

Expanding Access to Care

One of the most major advantages mentioned by Indian nurses is the increased access to treatment that internet-based services provide, especially for patients living in remote or rural locations. In many parts of India, healthcare facilities are concentrated in cities, leaving rural communities underserved. Telenursing platforms enable nurses to provide patient education, follow-up consultations, and mental health care via mobile apps or voice/video chats. This accessibility reduces the need for patients to travel large distances for basic care, saving them time and money.

Poreddi et al. (2021) discovered that nursing interns who took part in telehealth programs throughout their clinical training saw telenursing as a critical link between primary healthcare centers and patients in remote places. They noted how such services improved their ability to provide ongoing care, notably for chronic illness management, maternal health counseling, and postoperative care. Similarly, Sharma et al. (2022) stated that telenursing was critical during the COVID-19 pandemic since in-person visits were limited, allowing for continuous care delivery and follow-up services for vulnerable people.

As one nurse reported in a qualitative study, "With online services, even patients in distant villages can receive guidance. They no longer have to travel hours to ask a small health question." This statement reflects a broader narrative found across multiple studies that digital interventions have begun to reduce geographical inequities in healthcare access.

Flexibility and Work Efficiency

In addition to increasing patient access, internet-based services have enabled nurses to improve workflow efficiency and time management. Digital tools have enabled greater flexibility in scheduling, recordkeeping, and patient communication. Nurses can reply to patient inquiries asynchronously, monitor medication adherence, and save health records online, all of which streamline clinical operations and reduce administrative workload.

According to Qadir (2022), nurses who provided telehealth services indicated more satisfaction with their capacity to manage caseloads effectively. Digital interfaces improved patient prioritization and triaging, particularly in high-volume environments like government hospitals or community outreach initiatives. This efficiency translated into higher patient satisfaction, as nurses were able to respond to health problems more quickly and consistently.

One study participant stated, "Online care saves time. I can react to inquiries swiftly and provide better follow-up advice, particularly in chronic cases. This reflects the tangible benefits that nurses see in terms of task management and service quality.

Opportunities For Professional Development

Another common element that emerged from the studies was the impact of digital platforms in improving professional development possibilities for nurses. The digital transformation has boosted skill development in fields such as information and communication technology (ICT), digital documentation, virtual communication, and electronic health records (EHR) management. These qualities are viewed as critical for career success in the rapidly changing healthcare landscape by younger nurses and nursing students.

Poreddi et al. (2021) found that nursing interns exposed to digital care models had higher self-efficacy and expressed a desire to pursue specialized training in telehealth and nursing informatics. Furthermore, Sharma et al. (2022) believe that internet-based services allow nurses to expand their roles beyond traditional bedside care to include care coordination, virtual counseling, and digital health education.

One participant stated, "After learning how to use the telehealth system, I feel more confident." "I even applied for an online nursing informatics course." This remark reflects the general enthusiasm of nurses for digital technologies as a means of lifelong learning and professional development.

Overall, the perceived benefits of internet-based nursing services, which include improved access to care, greater work flexibility, and opportunities for upskilling, indicate that Indian nurses are increasingly willing to embrace digital transformation, provided they are adequately supported with training and infrastructure.

CHALLENGES AND BARRIERS

Despite the widely recognized promise of internet-based nursing services to improve healthcare delivery in India, their implementation faces significant hurdles. Indian nurses, particularly those in public and rural healthcare systems, have major challenges that limit their ability to provide effective and consistent care via digital platforms. To guarantee fair digital health integration, these hurdles must be addressed on multiple levels, including technological, infrastructural, educational, and legal.

Technological and Digital Literacy Gaps

One of the most significant difficulties nurses encounter is a lack of digital literacy and technological competence. While many urban-based nurses or new graduates may be familiar with digital platforms, a sizable segment of the nursing workforce—particularly those working in government facilities or trained under outdated curricula—has difficulty with fundamental technology functions. Telemedicine programs, video conferencing software, electronic health records (EHRs), and mobile health tools frequently necessitate a level of computer skill that many nurses have not received appropriate training for (Poreddi et al., 2021).

This problem is exacerbated by the fact that digital literacy has not been a major component of most nursing education programs in India. According to Sharma et al. (2022), the absence of formal digital health training in undergraduate and diploma-level nursing courses hinders nurses' confidence in using online platforms. Nurses frequently express anxiety about using new technology, citing concerns about data entry errors, patient communication breakdowns, and gadget misuse.

Nurses are sometimes expected to learn by trial and error, with no formal mentorship or hands-on technical support. As one study member stated, "We didn't learn this in nursing school." Most of us are still adjusting to smartphones, let alone patient applications." This divide not only has an impact on care quality, but it also diminishes nurses' confidence and work satisfaction as they navigate digital transitions.

Infrastructure and Connectivity Issues

Digital health solutions are only as effective as the infrastructure that underpins them. This is a key hurdle in India, especially in rural and distant locations where internet connectivity is unstable, power supply is intermittent, and healthcare facilities frequently lack the requisite devices and software. Nurses working in primary health care (PHC) or sub-centers have reported frequent technical delays that disrupt teleconsultations, hinder data uploads, and discourage long-term usage of digital tools (Qadir, 2022).

Even when digital health platforms are launched, they are typically supported by insufficient IT support, maintenance plans, or training courses. Nurses are left to handle both the clinical and technological

components of telenursing, which increases their effort and can lead to burnout. Furthermore, outmoded gear, such as shared desktop PCs or single Wi-Fi hotspots, makes digital service delivery less practicable. These infrastructural flaws result in a disjointed and frequently frustrating experience for both nurses and patients.

A nurse referenced in a research by Sharma et al. (2022) stated, "Even when we wish to help through online care, the internet does not support us. Sessions are frequently stopped, and patients are unable to connect. These experiences are not unique, and they indicate a systemic impediment that must be addressed by increased financing, public-private partnerships, and focused investment in rural digital infrastructure.

Ethical, Legal, and Regulatory Ambiguities

Aside from technical challenges, a less obvious but equally important impediment to internet-based nursing services in India is the absence of established ethical and regulatory frameworks for virtual care. Nurses are frequently unaware of their responsibilities in digital environments, particularly when it comes to patient confidentiality, informed consent, data handling, and liability in the event of an unfortunate consequence.

Unlike physicians, who have particular telemedicine practice guidelines released by the Medical Council of India (now the National Medical Commission), Indian nurses do not have consistent national standards or regulatory norms for tele-nursing. This vacuum creates a great deal of uncertainty. Nurses are cautious to participate in virtual consultations, fearing legal or disciplinary repercussions for any perceived error in clinical judgment or digital communication (Vaidehi et al., 2021).

Furthermore, concerns about patient data being captured, kept, or exploited have heightened nurses' anxieties, particularly in the absence of adequate cybersecurity measures in public healthcare settings. Many nurses describe feeling exposed in their contacts, unsure of what is legally permitted practice. One participant in a qualitative research stated, "There are no clear instructions." What if a patient's information is leaked or they misinterpret advice? "Who is responsible?"

This legal and ethical ambiguity affects the trust and confidence necessary for responsible and effective digital nursing practice. It also puts undue psychological pressure on nurses, discouraging them from innovating or taking the lead in virtual care delivery.

ADAPTABILITY AND WILLINGNESS TO CHANGE

Despite the numerous institutional and systemic impediments to the adoption of internet-based nursing services, many Indian nurses, particularly those working in urban, tertiary care, and technologically advanced facilities, have demonstrated a significant willingness to adapt to the digital shift. This openness underscores nurses' growing realization that digital health is more than just an emergency reaction, but a long-term change in the delivery of nursing care. As digital healthcare solutions become more integrated into institutional operations, nursing staff adaptability becomes an important enabler of successful deployment.

Nurses are increasingly participating in formal training programs targeted at improving digital capabilities in settings with strong digital infrastructure and institutional support. Several healthcare organizations in India have started to provide in-service training, workshops, and continuing education sessions on tele-nursing protocols, virtual communication, and electronic documentation. These programs have increased nurses' confidence and capability, allowing them to provide care more effectively via virtual platforms (Poreddi et al., 2021; Sharma et al., 2022).

According to studies, nurses who have systematic exposure to digital tools frequently enhance their technical proficiency and attitudes toward technology-mediated care. The incorporation of these technologies into everyday workflows, particularly when supported by institutional encouragement, appears to play an important role in developing long-term adaptability. The experience of successfully delivering patient care using digital platforms strengthens nurses' acceptance of the medium and encourages further learning.

The level of openness to internet-based nursing services varies by generation. Younger nurses, who are more familiar with digital tools from personal and educational experiences, are more enthusiastic about incorporating new technologies into clinical practice. The capacity to quickly learn and incorporate virtual care tools into patient management is frequently highlighted as a strength in the literature. In contrast,

elderly nurses may be hesitant, typically due to limited past exposure to digital technologies or concern with migrating from established, face-to-face clinical practices.

However, the correlation between age and adaptability is not absolute. Evidence demonstrates that with proper training, mentorship, and peer support, nurses of all ages may become good tele-nursing users. Positive institutional cultures that encourage digital involvement at all levels of staff play an important role in reducing generational differences and increasing team acceptance.

Importantly, the perceived professional benefits of digital health—such as increased patient engagement, more efficient care delivery, and prospects for advancement—motivate nurses to participate in digital competency development. When digital proficiency is acknowledged and rewarded through certifications or promotion pathways, there is a greater degree of voluntary participation in digital health programs.

Individual drive, generational orientation, institutional support, and experiential learning all contribute to Indian nurses' adaptability and willingness to change. As healthcare institutions continue to digitize, formal opportunities for digital capacity-building will be critical for fully realizing the potential of tele-nursing in India.

POLICY AND SYSTEM-LEVEL IMPLICATIONS

The acceptance and durability of internet-based nursing services in India are heavily dependent on the availability of supportive legislation, adequate infrastructure, and regulatory clarity. While individual nurses' passion and adaptability are important, greater organizational support is required to establish tele-nursing as a valid, safe, and accessible modality of care delivery. Recent studies have revealed a significant gap in national-level frameworks that drive digital nursing practice, emphasizing the urgent need for coordinated policy initiatives and structural reform.

There is currently no established regulatory framework for tele-nursing in India. While the Medical Council of India (now the National Medical Commission) has developed telemedicine practice guidelines for physicians, there are no analogous procedures expressly for nurses. This absence raises questions about the legal, ethical, and professional constraints within which nurses function in virtual environments (Poreddi et al., 2021). Without clear definitions of scope, responsibility, and documentation requirements, nurses frequently struggle with what they may legally and ethically offer through digital platforms. Developing nurse-specific telehealth guidelines is thus a critical first step in legitimizing internet-based nursing services.

In parallel, including digital health competences into nursing education is critical for long-term capacity development. According to Sharma et al. (2022), digital literacy must be integrated into undergraduate and diploma-level nursing programs. The incorporation of simulation-based tele-nursing practice, exposure to electronic health record systems, and ethical courses on online communication will ensure that future nurses are appropriately equipped for the challenges of virtual care. Additionally, continual professional development programs and in-service training for practicing nurses must be institutionalized, particularly in public health systems where digital exposure is limited.

Another policy consideration is developing standard operating procedures (SOPs) for tele-nursing processes. These SOPs should cover communication procedures, patient consent, data protection, documentation requirements, and referral systems in order to maintain clinical safety and professional accountability. Such procedures would not only speed practice but also reduce service variability, transforming tele-nursing into a more predictable and reproducible component of primary and tertiary care systems (Qadir, 2022).

To accelerate adoption, healthcare systems should investigate ways for rewarding digital participation among nurses. These could include monetary rewards, recognition awards, professional certificates, or possibilities for career advancement based on digital expertise. Such incentives would show the institution's commitment to digital health and increase nursing staff buy-in.

Most significantly, policy frameworks should stress equity and inclusivity. Rural and underserved communities continue to fall behind in terms of digital infrastructure, internet connectivity, and human resource capabilities. Without targeted investment in these areas, the digital divide will exacerbate current healthcare disparities. According to Vaidehi et al. (2021), equal access to digital health tools and training is critical for preventing the marginalization of rural healthcare personnel and the populations they serve.

Public-private partnerships, infrastructure funding, and national-level digital health missions must specifically address these gaps in order to preserve regional development balance.

CONCLUSION

The incorporation of internet-based nursing services into India's healthcare system is a game-changing chance to close key gaps in care delivery, particularly in remote and underserved areas. As the most populous part of the healthcare workforce, nurses play a critical role in pushing this change. Their changing views regarding digital tools, influenced by personal motivation, institutional support, and generational patterns, demonstrate both the potential and the challenges of implementing virtual care on a large scale. This evaluation emphasizes that, while nurses see significant benefits in terms of access, flexibility, and professional development, the full potential of internet-based services is limited by institutional obstacles. Digital literacy gaps, infrastructural impediments, and ambiguous regulatory frameworks not only impede service delivery, but also undermine nurses' confidence and engagement in tele-nursing jobs. Importantly, the digital divide between urban and rural areas has exacerbated healthcare disparities for both patients and professionals. To progress the integration of digital nursing, a multifaceted strategy is required. Policymakers must emphasize the creation of nurse-specific telehealth recommendations, the incorporation of tele-nursing competencies into formal curricula, and institutional investment in training and equipment. Incentive mechanisms and recognition for digital competency can help to increase engagement, but equity-focused methods will be required to guarantee that all nurses, regardless of location, are prepared to participate in digital care delivery. Finally, internet-based nursing services should not be considered as a passing fad, but as an essential component of a robust, patient-centered healthcare system. With deliberate investments in capacity training, regulation, and inclusivity, Indian nurses can take the lead in the digital health revolution and define the future of accessible, high-quality care.

REFERENCES

1. Abdel-Aleem Megahed MM. Telenursing perception among nursing students at Port Said University. *IOSR J Nurs Health Sci* 2019; 8: 18-23.
2. Abd-elaziz M. Study relationship of internship clinical rotation and role ambiguity among nursing interns. Unpublished Master thesis. Faculty of Nursing, Tanta University, Tanta 2017; 7-11.
3. Ebrahim RMR, Elsayed KA. Effectiveness of educational program about telenursing for nursing intern on their knowledge and attitude. *Int J Novel Res Healthcare Nurs* 2018; 5: 501-11.
4. Erickson CE, Fauchald S, Ideker M. Integrating telehealth into the graduate nursing curriculum. *J Nurse Pract* 2015; 11: e1-e5. doi: [10.1016/j.nurpra.2014.06.019](https://doi.org/10.1016/j.nurpra.2014.06.019)
5. Ghorbanzadeh K, Fallahi-Khoshknab M, Seyed Bagher Maddah S, Izadi Darghahlo M. Telehealth and telenursing knowledge and attitude among students of nursing in Ardebil University of Medical Sciences. *Iran J Nurs* 2017; 30: 42-52. doi: [10.29252/ijn.30.107.42](https://doi.org/10.29252/ijn.30.107.42)
6. Glinkowski W, Pawłowska K, Kozłowska L. Telehealth and telenursing perception and knowledge among university students of nursing in Poland. *Telemed e-Health* 2013; 19: 523-9. doi: [10.1089/tmj.2012.0217](https://doi.org/10.1089/tmj.2012.0217)
7. Gopi Gajera, Barikar C. Malathesh, Lakshmi Nirisha P., Channaveerachari Naveen Kumar, Narayana Manjunatha, Suchandra H.H., Sujai Ramachandraiah, Chethan Basavarajappa, Rajendra Gowda K.M., Suresh Bada Math, [Tele-Mentoring and Monitoring of the National Mental Health Program: A Bird's-Eye View of Initiatives from India](#), *Telehealth and Medicine Today: Vol. 6 No. 2 (2021)*
8. Grady and Schlachta-Fairchild L. Report of the 2004-2005 international telenursing survey. *Comput Informat Nurs* 2007; 25: 266-72. doi: [10.1097/01.NCN.0000289163.16122.c2](https://doi.org/10.1097/01.NCN.0000289163.16122.c2)
9. Grady J. CE. Telehealth: a case study in disruptive innovation. *Am J Nurs* 2014; 114: 38-45. doi: [10.1097/01.NAJ.0000445682.52553.89](https://doi.org/10.1097/01.NAJ.0000445682.52553.89)
10. Harihara Suchandra, Dinakaran Damodaran, Barikar C. Malathesh, Lakshmi Nirisha P., Narayana Manjunatha, C Naveen Kumar, Gopi Gajera, Sujai Ramachandraiah, Chethan Basavarajappa, Rajendra Gowda K.M., Suresh Bada Math, [Telepsychiatry During the COVID Pandemic: Reflection from India](#), *Telehealth and Medicine Today: Vol. 6 No. 2 (2021)*
11. Home-ATA main [Internet]. [Americantelemed.org](http://www.americantelemed.org). [cited 6 May 2020]. Available from: <http://www.americantelemed.org/home>
12. Husson NM, Zulkosky K, Fetter M, Kamerer J. Integrating community health simulation scenarios: experiences from the NCSBN National Simulation Study. *Clin Simulat Nurs* 2014; 10(11): 581-6. doi: [10.1016/j.ecns.2013.11.009](https://doi.org/10.1016/j.ecns.2013.11.009)
13. Khan I, Dhanalakshmi MK, Naveena JH. Effectiveness of SIM on knowledge regarding telemedicine among the staff nurses. *International Journal of Nursing Critical Care (IJNCC)* 2015; 1(2):1-6
14. Koivunen M, Niemi A, Hupli M. The use of electronic devices for communication with colleagues and other healthcare professionals-nursing professionals' perspectives. *J Adv Nurs* 2015; 71: 620-31. doi: [10.1111/jan.12529](https://doi.org/10.1111/jan.12529)

15. Leino-Kilpi H, Gröndahl W, Pekonen A, Katajisto J, Suhonen R, Valkeapää K, et al. Knowledge received by hospital patients – a factor connected with the patient-centred quality of nursing care. *Int J Nurs Pract* 2015; 21(6): 689–98. doi: [10.1111/ijn.12277](https://doi.org/10.1111/ijn.12277)
16. Malhotra P, Ramachandran A, Chauhan R, Soni D, Garg N. Assessment of knowledge, perception, and willingness of using telemedicine among medical and allied healthcare students studying in private institutions. *Telehealth and Medicine Today*. 2020; 5(4). doi: [10.30953/tmt.v5.228](https://doi.org/10.30953/tmt.v5.228)
17. Niemi A, Hupli M, Koivunen M. The use of electronic communication for patient-professional interaction–nursing staff's point of view. *Fin J eHealth eWelfare* 2016; 8: 200–15.
18. Nissen RM, Brockevelt BL. The effect of education on student perceptions about telehealth. *Int J Health Sci* 2016; 4: 5–10.
19. Pilarski T. Where is nursing informatics in undergraduate nursing education. *Canadian J Nurs Informat* 2010; 5.
20. Poreddi, V., Veerabhadraiah, B. V., Reddy, S., Manjunatha, N., Channaveerachari, N. K., & Math, S. B. (2021). Nursing interns' perceptions of telenursing: Implications for nursing education. *Telehealth and Medicine Today*, 6(2). <https://doi.org/10.30953/tmt.v6.258>
21. Qadir, H. R. (2022). Telenursing – A review. *International Journal of Advanced Research*, 10(6), 1099–1101. <https://doi.org/10.21474/IJAR01/14990>
22. Reiersen IÅ, Solli H, Bjørk IT. Nursing students' perspectives on telenursing in patient care after simulation. *Clin Simulat Nurs* 2015; 11: 244–50. doi: [10.1016/j.ecns.2015.02.003](https://doi.org/10.1016/j.ecns.2015.02.003)
23. Schlachta-Fairchild L, Varghese SB, Deickman A, Castelli D. Telehealth and telenursing are live: APN policy and practice implications. *J Nurse Pract* 2010; 6(2): 98–106. doi: [10.1016/j.nurpra.2009.10.019](https://doi.org/10.1016/j.nurpra.2009.10.019)
24. Sharma, M., Parashar, A. K., Bhawana, P., Sharma, D. K., & Kumar, A. (2022). Telenursing: A boon for healthcare in India—a scoping review. *Research Square Preprint*. <https://doi.org/10.21203/rs.3.rs-1543563/v1>
25. Thomas Parel J. Internet addiction among nursing students: a cross sectional survey. *Asian J Nurs Res* 2018; 7: 466–9. doi: [10.5958/2349-2996.2017.00091.X](https://doi.org/10.5958/2349-2996.2017.00091.X)
26. Tschetter L, Lubeck P, Fahrenwald N. Integrating QSEN and technology to address rural health care: initial outcomes. *Clinical Simulat in Nursing* 2013; 9: e469–75. doi: [10.1016/j.ecns.2012.09.005](https://doi.org/10.1016/j.ecns.2012.09.005)
27. Vaidehi, R., Reddy, A. B., & Banerjee, S. (2021). Explaining caste-based digital divide in India. *arXiv preprint arXiv:2106.15917*. <https://doi.org/10.48550/arXiv.2106.15917>