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Skills for a Shared Future: Authentic Evidence on Digital and Technical Readiness of Youth Nurses — A Global-to-Local Comparative Account for World Youth Skills Day 2026

Dr. S R Gajendra Singh
Editor-in-Chief
RV Journal of Nursing Sciences, Bengaluru.
Email: editorinchief.rvjns@rvei.edu.in Mobile: 9448406646

The Global Baseline

Digital-skill acquisition begins with access, and access remains starkly uneven. The International Telecommunication Union's Measuring Digital Development, facts and figures 2025 reports that 82% of youth aged 15–24 years use the Internet globally, compared with 72% of the rest of the population[3]. This youth advantage is not evenly shared across continents, youth Internet use has reached 98% in Europe, 97% in the Americas, 96% in the CIS and 89% in the Asia-Pacific, but only 50% in Africa[3]. A parallel rural–urban divide persists globally — 85% of urban residents were online in 2025 versus 58% of rural residents and in low-income countries barely one in seven rural residents (14%) is connected[3]. These are not abstract connectivity statistics, they define the ceiling on how much digital-health competency any national nursing workforce can realistically build without parallel investment in infrastructure.

Against this backdrop, the global nursing workforce grew from 27.9 million in 2018 to 29.8 million in 2023[4], and the WHO/International Council of Nurses State of the World's Nursing 2025 report named "harnessing digital technologies" a workforce-policy priority for the first time[5]. Yet distribution is deeply skewed, 78% of the world's nurses serve countries home to only 49% of the global population[4], and Africa and the Eastern Mediterranean Region are projected to absorb roughly 70% of the residual 4.1 million nurse shortfall forecast for 2030[6]. A digital-skills agenda for youth nurses that ignores this continental skew will simply widen it.

The Indian Context: What the National Data Actually Say

India offers the clearest, most granular test of this global pattern, because its own national statistical machinery has measured youth ICT skills directly. The National Statistical Office's 78th round Multi-Indicator Survey found that only 24% of rural Indians aged 15–29 could operate a computer, against 56% of their urban counterparts[7], copy-paste proficiency stood at 61.1% urban versus 32.9% rural and only 5–6% of rural 15–24-year-olds could use a basic spreadsheet or presentation tool[7]. A separate analysis of the same NSSO dataset found that 73% of Indian youth could not send an email with an attachment, with rural email proficiency at just 19.2% against 45.2% in urban areas — though Kerala ranked first nationally on all nine measured ICT parameters, with 73% of its youth able to send emails with attachments, 51% able to run a spreadsheet formula and 40% able to build a digital presentation[8]. Taken together, NSSO data classify only 27.5% of Indian youth aged 15–29 as "digitally skilled" nationally[9].

Gender compounds the geographic gap. The 2025 NSS Telecom Survey found device ownership among urban youth at 82% versus 69.3% in rural areas and 83.3% among males versus 63% among females, online-banking use stood at 79.3% for young men against 57.5% for young women and 79.7% in urban areas versus 63.4% in rural ones[10]. The National Family Health Survey-5 similarly found that only 46.6% of Indian women owned a mobile phone compared with 72.3% of men and only 24.6% of rural women had ever used the Internet compared with 48.7% of rural men, even as national smartphone penetration rose from 23% in 2016 to 54% in 2021[11]. The Annual Status of Education Report 2024 adds a further nuance directly relevant to skills depth, 82% of rural Indian youth reported knowing how to use a smartphone, but only 31% owned one personally, meaning most rural youth build digital familiarity on borrowed or shared devices rather than through sustained, independent practice[12]. Since Indian nursing recruitment draws disproportionately from rural, small-town and lower-income households and the profession remains over 90% female, these same rural and gender gradients almost certainly run

straight into pre-registration nursing cohorts — even though no dedicated national digital-skills audit of nursing students yet exists to confirm the magnitude directly.

India's Nursing Workforce and Digital-Health Infrastructure

On the supply side, India's Health Minister informed the Rajya Sabha that the country has approximately 33.41 lakh (3.34 million) registered nursing personnel, comprising 23.40 lakh registered nurses and midwives, about 9.44 lakh Auxiliary Nurse Midwives and 56,854 lady health visitors, yielding a nurse-population ratio of just 1.96 per 1,000 population — roughly 19.6 per 10,000 well short of WHO benchmarks associated with universal health coverage[13]. On the infrastructure side, the Ayushman Bharat Digital Mission has issued over 79.91 crore (799 million) ABHA digital health IDs and linked more than 67 crore health records through interoperable Health Facility and Healthcare Professionals Registries[14], and national policy now mandates that healthcare providers maintain digital patient records under Ministry of Health and Family Welfare guidelines[15]. This is a genuine, large-scale infrastructural achievement. But infrastructure and workforce competency are not the same thing. A peer-reviewed feasibility study of a Digital Health Competency Framework for frontline health workers, including Auxiliary Nurse Midwives and ASHA's, in Uttar Pradesh found measurable knowledge and service-delivery gains after structured digital training — while confirming that, outside this and a handful of similar pilots, no standardised, cadre-specific digital curriculum for Indian nurses yet exists[16].

The State-Level Mirror Within India

India's internal range is itself instructive. Kerala topped every one of the nine NSSO ICT parameters nationally[8], consistent with its stronger nurse-education density and long-standing investment in public health infrastructure. Uttar Pradesh, by contrast — home to roughly 16.5% of India's population, 77.7% rural, and ranked lowest nationally on the NITI Aayog health performance index[16] — required a dedicated, instructor-supported digital health competency pilot before its frontline nursing and allied cadres could achieve baseline digital gains. The distance between Kerala's near-ceiling ICT proficiency and Uttar Pradesh's pilot-stage digital health training is in effect, a decade-wide skills gap sitting inside a single country's nursing and public-health-nursing workforce and it maps closely onto the same state-wise disparities visible in the general NSSO youth ICT data.

The Migration Mirror: One Nurse, Three Systems

India remains one of the world's largest source countries for internationally migrating nurses, sending trained personnel to the United Kingdom, the Gulf Cooperation Council states and Australia even as its own domestic nurse-population ratio trails WHO benchmarks[17]. In these destinations, developed systems, Indian-trained nurses enter workplaces bracing simultaneously for domestic-workforce retirements and rising reliance on foreign-trained recruits, where electronic health records and AI-assisted triage are baseline day-one expectations[18]. Within India's own developing health system, the same graduate typically acquires digital fluency informally, on the job, given the absence of a standardised pre-service curriculum outside isolated pilots. In the underdeveloped and fragile systems of parts of sub-Saharan Africa and conflict-affected settings — precisely the regions projected to absorb 70% of the residual global nursing shortfall[6] — digital tools may be largely or entirely absent, even as global workforce policy increasingly assumes digital competence as a baseline qualification. Digital competence, in short, is not a fixed personal attribute of the nurse, it is a variable of the system she is deployed into — which is exactly why standardised digital training delivered before migration or deployment is the one lever India's own education system fully controls.

An Equity Caution

Digitalisation is not an automatically equalising force. Analysts of India's national digital health mission caution that where skills and access are unevenly distributed, a hard-digital mandate can deepen dependence on intermediaries and widen — rather than close — existing disparities, effectively turning digital access into a new social determinant of health[19]. Given that the rural, female and low-income gradients documented above (in device ownership, email skills, spreadsheet use and Internet access) map closely onto the demographic profile of India's nursing intake, digital-skills policy for youth nurses must be designed explicitly as an equity intervention — not merely a productivity or efficiency measure.

What the Evidence Demands

Four steps follow directly from the data reviewed here. First, the Indian Nursing Council should mandate a cadre-specific digital-health competency module — covering ABDM/EHR navigation, telehealth conduct, basic AI-assisted documentation and data privacy — within pre-registration curricula as a licensing requirement, not as an elective, closing the gap between India's 79.91-crore-ID digital infrastructure[14] and its still-informal digital pedagogy for nurses. Second, the Uttar Pradesh-style Digital Health Competency Framework should be scaled nationally and prioritised for ASHA and ANM cadres, the very group shown to anchor last-mile data quality yet remain least resourced for structured digital training[16]. Third, given the clear gender and rural penalties documented in NSSO, NSS Telecom and NFHS-5 data, digital-skilling investment should be weighted toward rural and female nursing students specifically, rather than distributed as a uniform national average that will, by definition, under-serve exactly the students most at risk of

exclusion. Fourth, a dedicated national nursing-specific digital-competency survey — modelled on the NSS Multiple Indicator Survey methodology but administered within nursing and allied health training institutions — should be commissioned, since no such profession-specific baseline currently exists[20], and every recommendation above rests on population-level proxies rather than direct measurement of the nursing workforce itself.

Conclusion

The statistics assembled here — from ITU's global connectivity data down to NSSO's district-level ICT skill surveys and a single Uttar Pradesh nursing pilot tell one continuous story at every scale: digital opportunity for young nurses is real, but it is not shared. "Skills for a Shared Future" will remain a slogan for Indian nursing until the digital-skilling gaps which can be measure by geography, by gender, by state and by health-system tier — are closed by policy as deliberately as they were opened by circumstance.

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