Why India needs family physicians in the age of point-of-care diagnostics

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Point-of-care devices have quietly entered Indian households. Glucometers for diabetes, pulse oximeters from the Covid years, home pregnancy kits, and digital blood pressure monitors are now commonplace. These devices, designed to provide rapid results at or near the site of care, can be invaluable when used properly. They reduce diagnostic delays, help patients track chronic conditions, and extend healthcare to areas far from laboratories and hospitals. India's point-of-care diagnostics market is projected to grow from $1.41 billion in FY 2024 to $2.71 billion by FY 2032, driven by chronic disease, innovation, and rising demand for home healthcare.

Yet their promise is overshadowed by a worrying pattern of self-medication. Studies show that individuals are bypassing doctors and making treatment decisions based solely on these readings. A 2016 cross-sectional study in Chennai reported that 64% of adults with diabetes using home glucometers admitted to adjusting their anti-diabetic medicines on their own. During the Covid-19 pandemic, a survey in urban South India found that 92% of patients in home isolation used a pulse oximeter, with almost 30% self-medicating with antibiotics or ivermectin. National surveys on abortion show a parallel trend: home pregnancy kits, combined with self-procured pills, are enabling large-scale self-managed abortions, with the National Family Health Survey (NFHS)-5 documenting this across 724,115 women. These are not isolated cases but part of a wider drift towards device-driven autonomy without adequate medical oversight.

The dangers of such behaviour are clear. Numbers without context can mislead: a high glucose reading may reflect a recent meal rather than poor control, and an unsupervised increase in dosage can trigger life-threatening hypoglycaemia. A negative rapid antigen test may give false reassurance, while a faint positive pregnancy test without clinical confirmation can lead to unsafe choices. Most damaging is the misuse of antibiotics. Treating oneself based on a urine dipstick or guesswork about infection fuels antimicrobial resistance (AMR), already a major public health threat in India. What begins as convenience accumulates into a collective hazard.

Why then do people persist? The reasons are familiar: long queues, high costs, hurried consultations and limited trust in the system. For many, especially the urban middle class, it often feels faster and cheaper to rely on the device at home than on the overburdened physician across town. Pharmacies supply antibiotics without prescription, reinforcing the habit. In rural settings, where doctors are scarce, devices may be the only option.

This behaviour also reflects a deeper structural crisis: the disappearance of the family physician. Until a few decades ago, most neighbourhoods in India had a general practitioner who knew families across generations and acted as the first filter for everything from fevers to chronic ailments. That institution is collapsing. Current data show the average family physician is over 65, with few younger doctors stepping in. A 2025 national survey found only 48% of trained family physicians working in primary care, mostly in the private sector. The revised Competency-Based Medical Education Guidelines for 2024, which shape the MBBS curricula, do not mention "general practice" or recognise "family medicine" as a speciality. Meanwhile, graduates pursue specialist qualifications, with a multi-state survey confirming that general practice is no longer seen as a viable career path.

The costs of this shift are profound. With few family physicians, patients are left with two options: self-care with devices or direct specialist care. Over-dependence on specialists skews the system: cardiologists are occupied with routine hypertension, gynaecologists with minor urinary infections, and neurologists with primary headaches. The result is soaring healthcare costs, overcrowded tertiary hospitals, and fragmented care. The family physician once provided continuity in tracking histories, holistic advice, and coordinated referrals. Without them, patients shuttle between specialists, carrying inconsistent records and receiving disjointed instructions. Devices fill part of this vacuum but, without interpretation, amplify confusion.

The solution is not to roll back devices but to integrate them responsibly into a stronger primary care system. Family physicians and general practitioners must be revived as the anchors of healthcare. Medical curricula should explicitly include family medicine, not erase it. Government incentives, such as higher pay scales, subsidised clinic spaces, or rural service credits, could make general practice attractive for young graduates. For practitioners, the message is to embrace point-of-care devices as adjuncts, training patients in their use but insisting on professional interpretation. For the public, the principle must be clear: devices are guides, not verdicts; they should prompt a consultation, not replace it. Pharmacists too must be brought into the fold, regulated to discourage casual sales of antibiotics.

India has the chance to chart a new balance: leverage the accessibility of point-of-care technology while rebuilding the dwindling cadre of family physicians. If it fails, it risks a health culture where patients drift between machines and specialists, with no one to provide continuity, context, or trust. If it succeeds, it can create a modern system where the family doctor of old returns, this time with digital tools in hand, blending technology with judgement. In the end, devices can give us numbers, but only doctors, with their training and experience, can give those numbers meaning.

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