



Letter to the Editor

Beyond the clinics: The promise and pitfalls of dermatology residency in district hospitals

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Dear Sir,

The district residency program (DRP) was introduced as a mandatory initiative by the National Medical Commission to enhance postgraduate medical education by exposing residents to secondary-level healthcare facilities.^[1] While its implementation in fields like internal medicine and surgery has been relatively straightforward, its execution in dermatology presents unique challenges and opportunities.

Dermatological diseases contribute significantly to the global burden of disease, particularly in developing countries where access to specialized care is limited.^[2,3] In India, conditions such as leprosy, fungal infections, autoimmune skin disorders, and chronic dermatoses are prevalent in district hospitals, yet dermatology services remain underdeveloped.^[4] The DRP for dermatology residents aims to bridge this gap by providing much-needed dermatological expertise in underserved areas while equipping residents with valuable clinical experience.^[5]

Despite its potential, the program faces significant challenges. First, many district hospitals lack the necessary infrastructure to support comprehensive dermatology training, including dermatopathology laboratories and advanced therapeutic modalities such as biologics and laser treatments.^[6] The absence of histopathological confirmation delays accurate diagnosis of malignancies, blistering disorders, and atypical infections, while the unavailability of biologics and immunosuppressants forces clinicians to rely on older, often less effective or more toxic systemic agents (e.g., prolonged high-dose corticosteroids instead of targeted biologics for severe psoriasis or pemphigus). This directly compromises patient outcomes, increases the risk of adverse effects, and prolongs morbidity in rural populations who already have a limited follow-up capacity. Second, the absence of experienced dermatologists in district settings results in inadequate mentorship, potentially compromising the educational value of the residency.^[7,8] Residents often function as the sole “specialist” for the entire district, leading to diagnostic uncertainty in complex cases and missed learning opportunities that on-campus senior faculty would otherwise provide through bedside teaching and multidisciplinary discussions. Furthermore, dermatology is a largely outpatient-based specialty, and district hospitals primarily focus on acute care, limiting residents’ exposure to chronic dermatological conditions.^[9] Patients with chronic plaque psoriasis, vitiligo, or autoimmune bullous diseases are frequently lost to follow-up because of travel distance and cost, resulting in treatment non-adherence, disease flares, and preventable complications such as secondary infections or erythroderma.

To overcome these limitations, several practical strategies – some already piloted successfully – can be considered, even within current resource constraints: (1) Establishment of “hub-and-

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spoke” dermatopathology networks where biopsy specimens are transported or digitally scanned and reported by parent medical college pathologists within 48–72 h. (2) Creation of a state-level essential dermatology drug list that includes at least one biologic (e.g., secukinumab or low-dose methotrexate with monitoring protocols) and basic immunosuppressive agents stocked at district hospitals. (3) Mandatory weekly academic scheduling with the parent institute through high-quality videoconferencing for case presentations, journal clubs, and histopathology slide discussions. (4) Deployment of portable handheld dermoscopes and smartphone-based whole-slide imaging to facilitate real-time second opinions.

Teledermatology has been proposed as a viable solution to overcome these challenges.^[10,11] Studies have demonstrated that integrating teledermatology into residency training can enhance diagnostic accuracy and treatment outcomes, particularly in resource-limited settings.^[12] In addition, teledermatology reduces the number of unnecessary in-person referrals while maintaining quality care, with studies showing prevention rates of 68–74% for physical referrals when properly implemented.^[13,14] The mean response time of specialists through teledermatology platforms is approximately 4.6 h, enabling rapid consultation and improving efficiency.^[15] In the author’s personal experience during DRP posting, a store-and-forward teledermatology platform connected to the parent institute reduced unnecessary referrals by nearly 70% and allowed residents to manage over 85% of cases locally with remote guidance, significantly boosting both confidence and competence.

While the DRP for dermatology residents is a step in the right direction, addressing its infrastructural, mentorship, and logistical shortcomings through targeted reforms and innovative tools is essential. Strengthening district hospital infrastructure, appointing experienced faculty, establishing robust hub-and-spoke networks, and leveraging telemedicine can enhance the learning experience while improving dermatological care in rural India. Policy interventions and continuous feedback from stakeholders will be crucial in refining the program to achieve its intended goals.

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REFERENCES

1. National Medical Commission. Post-graduate medical education regulations; 2023. Available from: <https://www.nmc.org.in/mcirest/open/getdocument?path=%2fdocuments%2fpublic%2fportal%2flatestnews%2fmer.pdf> [Last accessed on 2025 Oct 03].
2. Hay RJ, Johns NE, Williams HC, Bolliger IW, Dellavalle RP, Margolis DJ, *et al.* The global burden of skin disease in 2010: An analysis of the prevalence and impact of skin conditions. *J Invest Dermatol* 2014;134:1527-34.
3. Seth D, Cheldize K, Brown D, Freeman EF. Global burden of skin disease: Inequities and innovations. *Curr Dermatol Rep* 2017;6:204-10.
4. Karimkhani C, Dellavalle RP, Coffeng LE, Flohr C, Hay RJ, Langan SM, *et al.* Global skin disease morbidity and mortality: An update from the Global Burden of Disease Study 2013. *JAMA Dermatol* 2017;153:406-12.
5. Adiga A, Nagabushan S, Bhat MR. District residency programme for postgraduates in India: Dermatology residents’ perspectives. *Indian J Dermatol Venereol Leprol* 2025;91:698-9.
6. Cacodcar J, Kamble VU, Dias NC. District residency programme. *Healthline* 2025;16:3-5.
7. Santhosh V, Faruqui AR. District residency programme: Experience of a pharmacology resident. *Natl Med J India* 2025;38:22.
8. Gupta A, Singal A. Duty or detour? The unfulfilled promise of the district residency programme in India. *Indian J Dermatol Venereol Leprol* 2025;91:569-70.
9. Doddihal C, Pattankar T. District residency programme (DRP) for post-graduates: The community medicine perspective. *Natl J Community Med* 2024;15:635-7.
10. Armstrong AW, Chambers CJ, Maverakis E. Accessing dermatologic care with an innovative online model: A randomized controlled trial. *JAMA Dermatol* 2017;153:345-51.
11. Giavina-Bianchi M, Santos AP, Cordioli E. Teledermatology reduces dermatology referrals and improves access to specialists. *EClinical Medicine*. 2020;29-30:100641.
12. Tensen E, Van Der Heijden J, Jaspers MW, Witkamp L. Two decades of teledermatology: Current status and integration in national healthcare systems. *Curr Dermatol Rep* 2016;5:96-104.
13. Van Der Heijden JP, De Keizer NF, Bos JD, Spuls PI, Witkamp L. Teledermatology applied following patient selection by general practitioners in daily practice improves efficiency and quality of care at lower cost. *Br J Dermatol* 2011;165:1058-65.
14. Zarchi K, Haugaard VB, Dufour DN, Jemec GB. Expert advice provided through telemedicine improves healing of chronic wounds: Prospective cluster controlled study. *J Invest Dermatol* 2015;135:895-900.
15. Trettel A, Eissing L, Augustin M. Telemedicine in dermatology: Findings and experiences worldwide - a systematic literature review. *J Eur Acad Dermatol Venereol* 2018;32:215-24.

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