

18. Burnout Affects Nearly One in Two Postgraduate Resident Doctors in India: A Systematic Review and Meta-analysis

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BACKGROUND: Burnout among postgraduate resident doctors has emerged as a major concern worldwide, adversely affecting physician well-being, patient safety, and the quality of healthcare delivery. Resident doctors in India frequently work under demanding clinical schedules, prolonged duty hours, and high academic pressure, placing them at increased risk of burnout. Although multiple studies from India have examined burnout among resident doctors, the overall national burden remains uncertain. This systematic review and meta-analysis was conducted to estimate the pooled prevalence of burnout among postgraduate resident doctors in India. **METHODS:** A systematic review of studies reporting burnout among postgraduate resident doctors in India was conducted using PubMed, Scopus, and Google Scholar. Studies meeting predefined eligibility criteria were screened and assessed for inclusion. Data regarding study characteristics, sample size, burnout assessment instruments, and prevalence estimates were extracted. Methodological quality was assessed using the Joanna Briggs Institute critical appraisal checklist for prevalence studies. A random-effects meta-analysis was performed to estimate pooled burnout prevalence. Statistical heterogeneity was assessed using the I^2 statistic. Subgroup analysis based on burnout assessment tools was conducted to explore variability in prevalence estimates. Sensitivity analysis excluding specialty-specific studies was performed to assess robustness of the pooled estimate. Publication bias was evaluated using funnel plot inspection and Egger's regression test. **RESULTS:** A total of 10 studies involving 3,062 postgraduate resident doctors were included in the final analysis. The pooled prevalence of burnout among postgraduate resident doctors in India was 50.9% (95% CI: 39.5–62.2), indicating that nearly one in two resident doctors experience burnout. There was considerable heterogeneity among the included studies ($I^2 = 97.3\%$, $p < 0.001$), suggesting substantial variability in prevalence estimates across study settings. Sensitivity analysis excluding specialty-specific studies yielded a pooled prevalence of 49.2% (95% CI: 33.0–65.5), demonstrating that the overall estimate remained stable and was not substantially influenced by specialty-focused studies. No statistically significant publication bias was observed on Egger's regression test ($p = 0.187$). Most studies were assessed as having low risk of bias based on the Joanna Briggs Institute critical appraisal checklist. **CONCLUSION:** Burnout affects nearly half of postgraduate resident doctors in India, reflecting a substantial burden on the resident medical workforce. The persistence of high burnout prevalence across studies highlights an urgent need for institutional interventions aimed at improving resident well-being, regulating workload, and strengthening mental health support systems. Addressing burnout among resident doctors is essential not only for physician welfare but also for improving patient safety and the overall quality of healthcare delivery.

Key Words: Burnout, Professional; Internship and Residency; Physicians; India; Meta-Analysis; Systematic Review (Source: MeSH-NLM).

