

Abstract

Abstract Background Nurse burnout, manifested by emotional exhaustion, cognitive strain, disengagement, and reduced professional efficacy arising from chronic occupational stress, threatens workforce stability, mental health, and quality of care, particularly in resource-limited sub-Saharan Africa. The study examined the prevalence, predictors, and consequences of burnout among nurses. **Methods** A cross-sectional study was conducted among 97 systematically sampled nurses at Narok County Referral Hospital, Kenya. Data were collected using a structured, self-administered questionnaire comprising socio-demographic and workplace characteristics and the Nurses' Burnout Assessment Scale (NBAS-10), a concise 10-item instrument developed by the authors and grounded in the Job Demand-Resources (JD-R) model; Cronbach's $\alpha = 0.86$. Analyses employed descriptive statistics, chi-square tests, Pearson correlations, and logistic regression ($p < 0.05$). **Results** Participants were predominantly female (69.1%); mean age 35.7 ± 7.8 years, and most held diploma qualifications (66.0%). Overall, 84.6% reported moderate-to-high burnout, including 36.1% with high burnout (NBAS-10 ≥ 27 ; mean score 25.8 ± 7.4). Job dissatisfaction (54.6%), turnover intent (52.6%), and mental health impact (91.8%) were prevalent. Excessive workload, inadequate staffing, resource shortages, and limited managerial support were significantly associated with higher burnout. Independent predictors of high burnout included age < 40 years (AOR = 3.96), high nurse-to-patient workload (AOR = 3.48), and turnover intention (AOR = 4.20). **Conclusion** Nurse burnout in Narok County is highly prevalent and is driven by workload and organizational factors, with significant implications for workforce retention and quality of care. The NBAS-10 is provided as a freely available, open-access instrument, with the full scale included to support replication and future research. Comprehensive psychometric validation is reported separately.