## Burnout in South African dialysis nurse practitioners - Effect of workplace experience and the COVID-19 pandemic

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## Abstract

Introduction: Provision of dialysis to kidney failure patients relies on skilled dialysis nurse practitioners (DNPs). Workplace stressors in the resource-limited state sector and the recent COVID-19 pandemic have increased burnout in other nursing specialities; little is known of their effect on DNPs. We here report the first analysis of burnout in South African state DNPs.

Methods: Sixty-four anonymous volunteers (69% of state DNPs in Johannesburg) were recruited. Burnout was assessed using the Maslach Burnout Inventory – Human Services Survey (MBI-HSS), respondents additionally completed surveys analysing workplace and COVID-19 experience. The effect of respondent demographics, workplace, and COVID-19 experience on burnout was determined using regression modelling.

Results: MBI-HSS defined burnout occurred in 21.9%. Workplace challenges were reported by 96.8%, with lack of sufficient staff (96.8%), insufficient pay (75%), and perceived lack of management support (69.8%) being frequent. Only 27.4% felt that patients were understanding of challenges; 46.9% reported feeling supported by medical colleagues. Sixty-four percent reported deteriorated career perception following the COVID-19 pandemic; increased absenteeism (92.1%), personal health concerns (90.6%), higher patient numbers (88.9%), and increased patient deaths (87.5%) were factors. Younger age ( $\beta$ -0.29  $\pm$  0.12, p = 0.015), longer time in current portfolio ( $\beta$  0.38  $\pm$  0.15, p = 0.012), lack of management support ( $\beta$  2.76  $\pm$  0.93, p = 0.003), and deteriorated career perception following COVID-19 ( $\beta$  3.68  $\pm$  0.91, p < 0.001) increased emotional exhaustion; inadequate pay reduced personal accomplishment ( $\beta$ -1.12  $\pm$  0.54, p - 0.036). Deterioration in career perception following COVID-19 independently increased burnout (OR 2.07, 95% CI 1.06 – 4.06, p = 0.033).

Conclusion: Burnout rates in South African DNPs exceed that reported in other regions. Inadequate remuneration and poor management support are important factors in burnout. The COVID-19 pandemic continues to exert a significant effect on career appraisal and thus on burnout in these practitioners.

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