

Knowledge, Attitude, and Practice of Infection Prevention and Control Among Hospital Cleaners in Secondary Health Facilities in FCT

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ABSTRACT

Infection prevention and control (IPC) is one of the pillars of safe healthcare provision, especially in low- and middle-income countries where healthcare-associated infections (HAIs) are a significant public health concern. Hospital environment cleanliness and cross-contamination prevention depend on the hospitals' cleaners, but their knowledge, attitudes, and practices (KAP) regarding IPC are seldom documented. In Nigeria, there is poor evidence of IPC compliance among non-clinical secondary healthcare workers. This research evaluated the KAP of hospital cleaners towards IPC and identified determinants that affect their compliance in chosen secondary health care institutions in the Federal Capital Territory (FCT) Abuja. A descriptive cross-sectional study was implemented among 116 hospital cleaners in four secondary health care institutions in FCT Abuja (Asokoro, Nyanya, Karshi, and Wuse General Hospitals). Questionnaire information based on WHO IPC guidelines was collected and analyzed with descriptive and inferential statistics (Chi-square and Spearman's rho) at $p < 0.05$ levels of significance. Ethical clearance and institutional permissions were sought before collecting data. Respondents were found to be pre-dominantly 26–45 years (53.44%), female (74.14%), and having at least secondary education (51.72%). 62.07% of these have attended IPC training, and training was predominantly in 2024 and 2025. Respondents demonstrated satisfactory overall knowledge in IPC, especially on modes of infection transmission along routes (77.59%), importance of hand hygiene (89.66%), and correct use of personal protective equipment (94.83%). However, procedural knowledge was moderate, i.e., on WHO's Five Moments of Hand Hygiene (65.52%) and hand rubbing duration (70.69%). Attitudes were generally positive, with most respondents recognizing IPC as a significant job aspect and having the inclination to follow IPC practices, even if some showed unwillingness in the use of PPE. Practices were moderate: 68.97% always washed hands when working, 65.52% wore PPE when cleaning spills, and 87.07% followed waste segregation practice. Practice and knowledge had a strong association with years of experience and level of education and not age. Availability of PPE and disinfectants also had a strong positive effect on IPC practice and knowledge ($p < 0.05$). This research shows that hospital cleaners have good general knowledge and good attitudes towards IPC but poor practices, reflecting the discrepancy between awareness and persistent practice. Education level, experience, availability of resources, and supportive management were determinants of compliance. IPC among hospital cleaners can be enhanced through regular, cleaner-specific training and refresher courses, regular and sufficient availability of IPC supplies like PPE and disinfectants, and hospital cleaner involvement in facility IPC policy platforms. Enhanced supervision and supportive leadership will guarantee compliance. Emphasizing these factors will enhance IPC adherence, decrease the burden of healthcare-associated infections, and contribute to healthier working conditions for patients and health workers. practices were moderate: 68.97% always washed their hands during work, 65.52% used PPE when cleaning spills, and 87.07% adhered to waste segregation protocols. Educational level and years of experience were significantly associated with knowledge and practice, while age was not. Availability of PPE and disinfectants also significantly improved IPC knowledge and practice ($p < 0.05$). This study demonstrates that hospital cleaners possess good general knowledge and positive attitudes toward IPC, but their practices remain suboptimal, indicating a gap between awareness and consistent implementation.



Educational level, work experience, resource availability, and management support were identified as key determinants of compliance. Strengthening IPC among hospital cleaners requires regular, cleaner-specific training and refresher programmes, adequate and consistent supply of IPC materials such as PPE and disinfectants, and integrating hospital cleaners into facility IPC policy frameworks. Reinforcing supervision and supportive leadership will further sustain adherence. Addressing these areas will enhance IPC compliance, reduce healthcare-associated infections, and contribute to safer healthcare environments for both patients and health workers.

Keywords: Infection Prevention and Control; Hospital Cleaners; Knowledge, Attitude and Practice; Healthcare-Associated Infections; Personal Protective Equipment; Hand Hygiene; Abuja, Nigeria