Knowledge, Attitude and Practice Toward Prevention of Nosocomial Infections Amongst Medical Laboratory Scientists in Selected Public Hospitals in FCT Abuja

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ABSTRACT

Nosocomial infections remain a major public health challenge, particularly in developing countries where healthcare systems face constraints in infrastructure, staffing, and resources. Medical laboratory scientists play a critical role in preventing and controlling such infections due to their constant exposure to infectious materials and direct involvement in diagnostic processes. This study assessed the knowledge, attitude, and practice (KAP) of medical laboratory scientists toward the prevention of nosocomial infections in selected public hospitals in the Federal Capital Territory (FCT), Abuja. A cross-sectional descriptive design was employed, and data were collected using a structured questionnaire administered to 82 medical laboratory scientists, of which 70 were completed and returned, yielding a response rate of 85.4%. Both descriptive and inferential statistical methods were applied in the analysis. The findings revealed that the respondents demonstrated high levels of knowledge regarding nosocomial infections, including their causes, risk factors, and preventive measures. Almost all participants correctly identified major transmission routes, acknowledged the importance of hand hygiene, vaccination, and biosafety precautions, and recognized the need for continuous training. Despite this high knowledge, gaps were observed in attitudes and practices. While most respondents expressed positive attitudes toward PPE use and exposure reporting, many did not view infection prevention as part of their professional responsibility. Similarly, while adherence to basic practices such as hand washing and sharps disposal was strong, weaker compliance was recorded in areas such as consistent use of biosafety cabinets, reporting of occupational exposures, and completion of Hepatitis B vaccination. Pearson correlation analysis showed no statistically significant relationships between knowledge, attitude, and practice, suggesting that systemic and institutional factors such as infrastructure, workload, and managerial support are stronger determinants of behavior than knowledge alone. The study concludes that while medical laboratory scientists in the FCT possess excellent theoretical knowledge of nosocomial infections, this does not consistently translate into safe practices. To strengthen infection prevention and control, the study recommends mandatory continuous training, universal Hepatitis B vaccination, provision of adequate protective equipment, effective reporting systems, and stronger managerial commitment to infection control policies. Addressing these systemic barriers will enhance compliance, protect healthcare workers, and reduce the burden of nosocomial infections, thereby improving patient safety and healthcare outcomes in Nigeria.

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