

**MASENO UNIVERSITY**  
**SCHOOL OF PUBLIC HEALTH AND COMMUNITY DEVELOPMENT**  
**MASTER OF PUBLIC HEALTH**  
**ASSESSMENT OF INFECTION PREVENTION AND CONTROL PRACTICES**  
**AMONG HEALTHCARE WORKERS IN PUBLIC HEALTH FACILITIES IN VIHIGA**  
**SUB COUNTY, KENYA**

**ABSTRACT**

Infection prevention and control is not only crucial in protecting patients, health care workers and visitors in health care settings from health care associated infections which are protracted cause of morbidity and mortality but also in preparation and response to communicable disease crisis. Despite the high burden of health care associated infections and need for enhanced prevention and control of these infections in Vihiga Sub County, factors influencing infection prevention and control practices among health care workers had not been determined. The main objective of this study was to assess infection prevention and control practices among health care workers in public health facilities in Vihiga Sub County. The aim was to provide baseline data for implementing infection prevention and control standard precautions in health care facilities. A cross sectional study was carried out in five public health facilities in Vihiga Sub County which were selected through purposive sampling method. Data were collected using self administered structured questionnaires on 173 health care workers, observational checklists and Key Informant Interviews. Collected data were checked, coded and transferred to SPSS version 20 for analysis. Frequency and chi-square were calculated with P-value  $\leq 0.05$  being considered significant. There was significant association between awareness of other laws concerning infection prevention and cleaning hands before and after attending to patients ( $\chi^2 = 11.198$ , d.f = 3, P-value 0.011). There was association between provision of resources by administration and hand hygiene ( $\chi^2 = 29.89$ , d.f = 9, P-value  $< 0.001$ ), use of personal protective equipment by health care workers ( $\chi^2 = 24.994$ , d.f = 9, P-value 0.003) and segregation of biomedical wastes ( $\chi^2 = 37.127$ , d.f = 9, P-value  $< 0.001$ ). Although health care workers demonstrated sufficient knowledge on basic components of infection prevention and control (84.7%), larger proportion had never read the national IPC guidelines. Reading IPC guidelines appeared to have a better relationship with hand hygiene practices ( $\chi^2 = 14.05$ , d.f = 3, P-value 0.003) and use of PPEs ( $\chi^2 = 7.619$ , d.f = 3, P-value 0.05). The level of health care workers' compliance with infection prevention and control protective measures was below expected threshold (66.95%). Insufficient infection prevention and control resources, negative staff attitude, staff shortage, lack of training and lack of enforcement of infection prevention and control by managers were found to be main barriers to compliance with infection prevention and control standard precautions. From these findings, it was concluded that provision of IPC resources by administration, awareness of other laws and reading national IPC guidelines are prerequisites for better infection prevention and control practices among health care workers. IPC resources should be availed in a timely manner; health care workers should be sensitized on national IPC guidelines on regular basis and IPC support supervision by County and Sub County health management teams should be conducted regularly.

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