

Health belief model-based intervention on knowledge and practice of standard precautions among primary healthcare workers in a state of Malaysia

ABSTRACT

The Standard Precautions (SP), which consists of hand and respiratory hygiene, personal protection equipment, safe injection and others are crucial in preventing healthcare-associated infections (HAIs) and occupational infections among healthcare workers (HCWs). HAIs have caused antimicrobial resistance, increase mortality and financial burden to the health organization. Europe has shown 40.8% compliance to SP while in Malaysia, only 50% of HCWs comply with SP. Health Belief Model (HBM)-based intervention was developed to promote behavioural change among HCWs. This research aims to evaluate the effectiveness of HBM-based intervention module in improving knowledge and practice of SP among HCWs. This is a cluster randomized control trial involving 104 HCWs in the control group and 94 HCWs in the intervention group from eight health clinics in a state in Malaysia. The scores of knowledge and practice were computed using a self-administered questionnaire at pre-, immediate post- and 6-months post-intervention. The intervention group was given a one-day intervention course while the control group had received the same intervention after the study completed. Analysis showed that there was a significant difference in knowledge and practice scores between and within groups after adjusting for covariate and cluster effect ($p < 0.05$). All HBM constructs also demonstrated significant improvement ($p < 0.05$) between and within groups except for the perceived barrier ($p = 0.813$ and $p = 0.931$ respectively). The intervention module is effective in improving the knowledge and practice of SP among HCWs. Regular and periodic educational training incorporated with HBM is essential to promote behavioural change.

Keyword: Health Belief Model (HBM)-based intervention; Knowledge; Practice; Standard precautions