

## ABSTRACT

As being 30<sup>th</sup> highest country of tuberculosis, multidrug resistant and TB/HIV burden, Myanmar has TB incidence of 351/100000 population in 2017. Health care workers (HCWs) are at increased risk of TB infection than general population. TB infection control (TBIC) measures minimize the risk of TB transmission and protect HCWs and community from getting TB infection. The cross-sectional study applying mixed method was conducted in eleven health facilities of Yangon Region to assess TBIC measures. A total of 309 HCWs from eleven health facilities were investigated to determine awareness and practice on TBIC measures. Half of health facilities had TBIC plan and committees and seven had assigned focal persons. All conducted TB screening. Ultraviolet Germicidal irradiation present in nine facilities. N95 respirators were readily available but limited choice of size in two facilities. All facilities had more than 12 air changes per hour (ACH) in three different situations except in South Okkalapa general consultation room. Although there was acceptable level of ACH, the consultation room in Aung San and MDRTB waiting area had relatively low ACH in third situation. In qualitative study, the main challenges in implementing TBIC measures were time limitation, scarce human-resources, administrative problems, poor adherence of patients, attitude and practice of HCWs and building design. 68.9% of HCWs had attended TBIC training. Although 66.3% of HCWs had good level of awareness on TBIC, 38.50% had good practice (more than 80% of scores). There was no statistically significant association with awareness on TBIC among HCWs. One to ten years duration of employment ( $p$  value 0.05), attendance of TBIC training ( $p$  value <0.001) and being midwives, lady health visitors, trained nurses and public health supervisors ( $p$  value 0.021) were positively associated with good practice. Managerial and administrative measures were poorly implemented. High knowledge and low practice gap existed among HCWs which could be overcome by regular training and monitoring. TBIC training should be expanded on township level to cover all basic health staff.