

## ABSTRACT

Tuberculosis (TB) is an infectious bacterial disease caused by the bacillus *Mycobacterium tuberculosis*. Globally in 2017, TB infected about 10.0 million people, and 1.6 million died from TB. Kenya is among the 30 high TB burden countries that account for 80% of the global TB burden and 4<sup>th</sup> in Africa. Bumula Sub County had a case notification of 454 cases per 100,000 people in 2016. Studies that have focused on determinants of TB prevalence among household members are lacking in Bumula therefore, the aim of this study was to establish the determinants of TB prevalence among household members in Bumula Sub-County, Bungoma County. The study design was a descriptive cross-sectional survey, a questionnaire and interview guide were used for data collection. Pre-testing of the tools was done at Kanduyi Sub County. Data was collected from all the 200 participants who had TB in 2016. Data analysis was done using SPSS version 20. Research findings showed that the mean age of the participants was  $42.92 \pm 1.133$  years, Majority of the participants were male 56.5% (113/200) and most of the participants had primary level of education 48.5% (97/200). The results showed that 78.5% (157/200) of patients infected with TB took more than 4 weeks before seeking medical attention. Body mass index ( $\chi^2=14.224$ ,  $df=3$ ,  $p=0.003$ ), previous history of TB ( $\chi^2=7.722$ ,  $df=1$ ,  $p=0.005$ ) and cigarette smoking ( $\chi^2=0.077$   $df=2$   $p=0.045$ ) were determinants of TB prevalence in Bumula Sub-County. This study concluded that: majority of the participants went to chemist for medical care when they first experienced TB symptoms. Malnutrition, cigarette smoking and previous history of TB were determinant of TB prevalence. It is recommended that government should adopt a policy such that all patients with malnutrition status should be screened for TB and effort should be put in place to improve the nutritional status of such individuals and community at large. Health promotion officers should offer health education focusing on the harmful effects of tobacco smoking. Strengthen of policy on regular screening of previously treated TB patients.