

# The prevalence of type 2 diabetes mellitus among healthcare workers and its associated factors in Pasir Mas district, Kelantan

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## ABSTRACT

**Introduction:** Type 2 Diabetes Mellitus (T2DM) has become a significant public health threat as the prevalence keeps increasing internationally and locally. Health care workers (HCWs) involved in managing and controlling T2DM serve an important role in increasing awareness on T2DM prevention. Despite working in an environment related to disease prevention and health promotion, HCWs are not spared from being affected with T2DM. Consequently, this would impair the health system function as T2DM is associated with countless acute and chronic complications which lead to negative impact to the quality of life of the HCWs. However, knowledge on prevalence and factors contributing to T2DM among HCWs is still scarce. This study aimed to determine the prevalence of T2DM among HCWs and its associated factors in Pasir Mas Health District, Kelantan. **Materials and Methods:** A cross-sectional study was conducted using secondary data extracted from HCWs screening records from January to May 2023 in Pasir Mas Health District. HCWs who fulfilled the study criteria were included in the study. All samples taken. All information was collected using proforma and analysed using IBM SPSS Version 26. The outcome was categorized into T2DM and non-T2DM. The parameters related to factors associated with T2DM were determined using Multiple Logistic Regression. **Results:** A total of 467 HCWs were included in the study. The mean age was 40.72 (SD 7.34) with the majority of them are female (70.2%). The prevalence of T2DM among HCWs in Pasir Mas Health District was 11.6% (95% CI 9%, 14%). HCWs with age  $\geq 45$  years old (AdjOR 4.71, 95% CI 2.43,9.13,  $p < 0.001$ ), family history of T2DM (AdjOR 7.91, 95% CI 4.08,15.3,  $p < 0.001$ ) and hypercholesterolemia (AdjOR 0.47, 95% CI 0.24,0.92,  $p = 0.028$ ) were significantly associated with T2DM. **Conclusion:** The prevalence of T2DM among HCWs Pasir Mas Health District was 11.6%. The contributing factors for T2DM among HCWs were age, family history of T2DM and hypercholesterolemia. Therefore, these findings have the potential to assist in developing more focused interventions aimed at decreasing the occurrence of T2DM among HCWs. Consequently, this could lead to an enhancement in the quality of health services by promoting the well-being of HCWs and portraying a positive image.