# The Prevalence of Diabetes and Factor Associated Among Working Adults: Findings from NHMS 2019 

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#### Abstract

Introduction: Diabetes is one of the most common non communicable disease seen in all countries and continues to increase in number. Furthermore, diabetes may cause loss of productivity due to its complications. Therefore, the purpose of this study is to determine the prevalence of diabetes among working adults in Malaysia and its association with risk factors. Methods: This study used data from National Health and Morbidity Survey (NHMS) 2019 which is a population-based cross-sectional study involving respondent 18 years and above who were working. In total, 5976 respondents were selected to be analyzed. Descriptive and logistic regression analyses for the complex sample were performed to determine the prevalence of diabetes and associated factors. Results: The overall prevalence of diabetes (known and undiagnosed) was $14.6 \%$ ( $95 \% \mathrm{CI}$ : 13.1,16.1). A higher prevalence was seen among males $15.2 \%$ ( $95 \% \mathrm{CI}$ : $13.5,17.1$ ), living in rural areas $14.9 \%(95 \% \mathrm{CI}: 12.7,17.4$ ) and those working in the government sector $17.4 \%$ ( $95 \% \mathrm{CI}$ : 14.0,21.3). A high prevalence was also seen among people who had hypertension $28.9 \%$ ( $95 \%$ CI: $25.7,32.2$ ), hypercholesterolemia $24.5 \%$ ( $95 \% \mathrm{CI}$ : $22.0,27.2$ ), inactive people $16.6 \%$ ( $95 \% \mathrm{CI}$ : $13.6,20.0$ ) and obese $22.0 \%$ ( $95 \% \mathrm{CI}: 18.7,25.5$ ). Multivariate analysis showed that diabetes has statistically significant among males [AOR:1.27 (95\%CI: 1.09,1.47)], overweight [AOR:2.27 (95\%CI: 1.37,3.63)], obese [AOR:3.24 (95\%CI: 1.98,5.31)], people who had hypertension [AOR:1.72 (95\%CI: 1.47,2.0)] and hypercholesterolemia [AOR:1.92 (95\%CI: 1.66,2.22)]. Conclusion: This study showed that high prevalence of diabetes seen among working adults and many factors associated with it, thus, preventive programs such as health education should be implemented to combat this issue.


# Impact and Utilisation of Biomedical Research Findings in the Healthcare Policies of Malaysia 2005-2015 

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#### Abstract

Introduction: Research impact occurs when there are benefits resulting from the undertaking of research. The aim of this study was to look into the impact of funded biomedical research between years 2005-2015 from the aspects of knowledge production, research targeting and capacity building, as well as health system policy and decision making. Methods: This study employed a convergent parallel mixed methods research design incorporating both quantitative and qualitative research approaches. Only biomedical projects related to breast cancer, coronary heart disease and dengue as well as funded by the Ministry of Health $(\mathrm{MOH})$, Ministry of Higher Education (MOHE), and Ministry of Science, Technology, and Innovation (MOSTI) between year 2005 and 2015 were included in this study. Results: From the questionnaire responses ( $\mathrm{N}=58$ ), on average each funded project managed to produce two outputs and one postgraduate student. More than half ( $61.4 \%$ ) of the questionnaire responses agreed that their funded projects would lead to subsequent future research. However, only 6 projects ( $10.3 \%$ ) were reportedly cited in systematic reviews, 4 projects ( $6.9 \%$ ) were cited in health policies, and 3 projects ( $5.2 \%$ ) were cited in Clinical Practice Guidelines (CPGs). In-depth interviews with the key opinion leaders (KOLs) also saw that most of the local research findings were found to be irrelevant to be adopted into policies by the policymakers. Conclusion: Paybacks on knowledge production as well as research targeting and capacity building had been well achieved but the impact on health system policy and decision making had not been well attained.


