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NHMS 2019

National Health and Morbidity Survey 2019
Technical Report — Volume I

NCDs — Non-Communicable Diseases: Risk Factors and other Health Problems

National Institutes of Health (NIH)
Ministry of Health Malaysia

NATIONAL HEALTH AND MORBIDITY SURVEY 2019: NON-COMMUNICABLE DISEASES, HEALTHCARE DEMAND AND HEALTH LITERACY

Volume I: NCDs – Non-Communicable Diseases: Risk Factors and other Health Problems
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The views expressed in this report are those of the authors alone and do not necessarily represent the opinions of other investigators participating in the survey, nor the views or policy of the Ministry of Health.



Message from the Director General of Health Malaysia

The National Health and Morbidity Survey (NHMS) was first carried out by the Ministry of Health Malaysia in 1986 and subsequently in ten-yearly intervals, i.e. in 1996 and 2006, to obtain local data on the nation's population health. However, given the growing importance of 'time-context' data to effectively respond to the healthcare needs in Malaysia, the NHMS is now carried out every year since 2011, with a regular four-yearly interval survey on Non-Communicable Diseases (NCDs).

The significance of the NHMS goes beyond providing up-to-date epidemiological data on the key diseases and NCDs risk factors. An understanding of disease trends and their risk factors will supplement and aid the country in planning for the healthcare needs of the people in Malaysia. Thus, the information gained from the NHMS will unequivocally facilitate the process of benchmarking our progress towards global commitments and strategically prioritise our nation to achieve Universal Health Coverage (UHC) and the Sustainable Developmental Goals (SDG).

The alarming rise of NCDs in Malaysia over the years is of grave concern as we approach an ageing nation status. In 2016, the Ministry of Health developed the National Strategic Plan on Non-Communicable Diseases (NSP-NCD) to tackle the growing burden of NCDs in Malaysia. The analysis obtained from this survey will provide the Ministry of Health the tools towards monitoring and evaluating the formulated health policies and strategies to strengthen healthcare delivery to the nation continuously.

This latest NHMS aimed to provide community-based data to determine the prevalence of NCDs, the prevalence of risk factors of NCDs, and relevant critical areas of concern. The diseases and risk factors studied in each NHMS is overseen by the NHMS Steering Committee, which consists of Ministry of Health policymakers as well as state representatives and experts from local universities. Each topic studied in the survey is critically evaluated to ensure appropriate and meaningful data collection.

The NHMS 2019 was carried out between July and October 2019, simultaneously across all 13 states and three Federal Territories in Malaysia. A total of 70 research teams of over 300 personnel, consisting of field supervisors, research assistants and nurses were mobilised for data collection. In addition, dozens of experts from the Ministry of Health and local universities from various fields were involved in the analysis and preparation of this report. The success of this nation-wide survey is owed to the gracious support from all the state health departments in carrying out scouting activities, providing nurses, and assisting the research teams. I wish to express my gratitude to all State Health Directors and their team members for their immense contribution.

My commendation also goes to the survey team from the Institute for Public Health, Institute for Health Systems Research, and Institute for Health Behavioural Research for the successful completion of this important survey. Thank you to all the agencies involved for their support and cooperation throughout the process.

Last but not least, I also thank all the respondents who had taken the time to participate in this survey and urge everyone to join hands towards creating a healthy Malaysia. This survey has highlighted several areas of concern that will be addressed by the Ministry of Health as we continue to improve the health status and health delivery in the country.

Datuk Dr Noor Hisham bin Abdullah
Director General of Health Malaysia
Chairman of NHMS Steering Committee
Ministry of Health Malaysia

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Executive Summary

The National Health and Morbidity Survey (NHMS) is carried out to provide community based data to the Ministry of Health Malaysia for review of health programs and priorities. The starting of each cycle of NHMS focuses on non-communicable diseases (NCDs), risk factors for NCDs, healthcare demand and other areas of priority as determined by the Ministry of Health. The year 2019 marks the beginning of a new cycle of NHMS, to study these key areas to determine the health status of the people in Malaysia, as well as monitor the trends of diseases and healthcare utilization in Malaysia.

Complex study design, with two stage stratified cluster sampling, was utilized in NHMS 2019. A total of 475 Enumeration Blocks (EBs) were selected across all 13 states and 3 federal territories in Malaysia, with 12 Livings Quarters (LQs) selected from each EB, resulting in almost 5,700 LQs randomly selected to be included in this survey. A trained team, consisting of trained research assistants and nurses carried out face-to-face interviews, self-administered questionnaires, clinical assessment as well as point-of-care blood testing. All those living in the selected LQs were eligible for this survey, with a total of 14,965 individuals agreeing to participate, and resulting in a response rate of 87.2%.

The NHMS 2019 found that the prevalence of known diabetes to be at 9.4%, while the prevalence of raised blood glucose among unknown diabetes to be 8.9%, resulting in the prevalence of overall raised blood glucose in Malaysia in 2019 to be 18.3%. This was an increase compared to findings of 2011 of 11.2% and 2015 of 13.4%. There were no large differences noted between sexes or urban and rural localities. The prevalence of raised blood glucose by each state showed varying rates, from as low as 9.8% to as high as 33.2%. Over 80% of those with raised blood glucose but unknown to have diabetes were aged 60 years and below.

The prevalence of known hypertension was found to be 15.9% in NHMS 2019. Raised blood pressure among unknown hypertension was 14.1%, with an overall prevalence of raised blood pressure in Malaysia to be 30.0%. The trend for raised blood pressure shows a plateau compared to findings of 2011 of 32.6% and 2015 of 30.3%. The prevalence of known hypercholesterolemia was found to be 13.5% with the prevalence of raised blood total cholesterol among unknown hypercholesterolemia to be 24.6%. This is a reduction compared to the 47.7% reported in NHMS 2015.

This survey also found that 50.1% of adults in Malaysia were overweight or obese, with 30.4% being overweight and 19.7% obese. A total of 52.6% of adults were found to have abdominal obesity. The trends of overweight, obesity and abdominal obesity continue to rise compared to findings of 2011 and 2015. Among children 5-17 years of age, a total of 15.0% were overweight, with 14.8% being obese. On the other hand, the number of children under 5 years of age being stunted, showed an increase compared to previous years, from 16.6% in 2011, 17.7% in 2015 to 21.8% in 2019.

In 2019, the prevalence of adults who are physically inactive was 25.1%. This was an improvement, a reduction from 35.7% in 2011 to 33.5% in 2015. However, a staggering 94.9% of adults were found to not consume adequate fruits and/or vegetables daily. The awareness of the Healthy Plate Concept (Suku Suku Separuh), was found to be 20.4% in the population, with only 14.0% of the adults who are aware, admitting to practicing it daily. The survey also found the prevalence of current smokers to 21.3%, with the use of e-cigarettes at 4.9%. The number of current alcohol drinkers were found to be 11.8%, with a reduction seen in harmful alcohol use, with the proportion of binge drinkers reducing from 59.4% in 2015 to 45.8% in 2019 and reducing proportion of heavy episodic drinkers from 10.8% in 2015 to 8.4% in 2019.

A total of 2.3% of the adults in Malaysia were found to have depression. Among children 5 to 15 years of age, 7.9% of children were found to have mental health problems, and a rise was seen compared to findings of 2015, mainly due to poor interaction with their peers. The prevalence of disability among adults was found to be 11.1%, and 4.7% among children 2 to 17 years of age. A total of 21.3% of adults in Malaysia were found to have anaemia, with 29.9% of women in reproductive age (15 to 49 years of age) to be anaemic.

The survey findings also found that 1.5% of the people in Malaysia to have ever used drugs, with 0.5% being current drug users. Marijuana, kratom and amphetamine were found to be the most prevalent substance used. A total of 31.6% of adult men and 36.1% of men over 40 years of age reported having erectile dysfunction. Furthermore 16.3% of men over 40 years of age reported of having lower urinary tract symptoms, suggestive of having benign prostatic hyperplasia. Among women, 49.0% of adult women reported practicing breast self-examination in the past 12 months while 36.6% of women age 20 years and above reported having done a pap smear in the past 12 months. Only 25.0% of women age 40 years and above reported to having ever done a mammogram, while of 21.0% of women had done so in the past 3 years, as recommended by the Ministry of Health Malaysia.

Understanding the status and prevalence of NCDs and its risk factors is essential, as it is one of the major causes of mortality and morbidity in Malaysia. We are hopeful that the findings of this survey will aid policy makers and program managers in carrying out their tasks, improving existing programs as well as plan to future needs of the people in Malaysia. Strengthening the delivery of primary healthcare services and empowerment of the people remains the mainstay towards combating this rising problem in Malaysia. The survey findings of rising prevalence rates of several key NCDs and risk factors highlights the critical need for clinicians, researchers, program managers, policy makers and most importantly each and every individual to join hands in combating NCDs in Malaysia.

LIST OF ABBREVIATIONS

BPH - Benign Prostatic Hyperplasia
BMI - Body Mass Index
CI - Confidence Interval
CPRD - Commercially Packed Ready to Drink
EB - Enumeration Block
ED - Erectile Dysfunction
FBG - Fasting Blood Glucose
FOBT - Faecal Occult Blood Tests
GATS - Global Adult Tobacco Surveillance
HEPA - Health-Enhancing Physical Activity
HPV - Human Papilloma Virus
IPAQ - International Physical Activity Questionnaire
LQ - Living Quarter
LUTS - Lower Urinary Tract Symptoms
MDG - Malaysian Dietary Guidelines
MOH - Ministry of Health
NADA - National Anti-Drug Agency
NASPAL - National Strategic Plan for Active Living
NCD - Non-Communicable Disease
NGO - Non-Government Organization
NHMS - National Health and Morbidity Survey
NSPTC - National Strategic Plan on Tobacco Control
OSCA - One Stop Centre for Addiction
POA - Plan of Action
PHQ - Patient Health Questionnaire
PWD - Person with Disabilities
QoL - Quality of Life
SCS - Survey Creation System
SDG - Sustainable Development Goals
SDQ - Strength and Difficulties Questionnaire
SSB - Sugar Sweetened Beverage
UNICEF - United Nations Children's Fund
WC - Waist Circumference
WG - The Washington Group on Disability Statistics
WHO - World Health Organization





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