



TINJAUAN KEBANGSAAN KESIHATAN DAN MORBIDITI

NATIONAL HEALTH AND MORBIDITY SURVEY
(NHMS)

SESI YANG BERHORMAT MENTERI KESIHATAN BERSAMA MEDIA
BAGI PEMBENTANGAN HASIL TINJAUAN KEBANGSAAN
KESIHATAN & MORBIDITI (NHMS) 2015

Dewan Serbaguna, Aras 8, Blok E7 Kompleks E,
Putrajaya
6 Jun 2016 (Isnin)
9.30 Pagi – 12.00 Tengahari



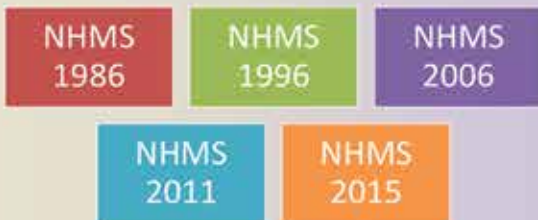
TITLE	PAGE
National Health and Morbidity Survey: An Overview	1
National Health and Morbidity Survey: Methodology	2
Prevalence of Diabetes in Malaysia	3
Trend of Diabetes in Malaysia	4
Hypertension: Think you don't have it?	5
Trend of Hypercholesterolemia in Malaysia	6
Trends of Smoking among Malaysian Adult	7
Smokeless Tobacco Use: Malaysian Scenario	8
Tobacco And Teenager	9
Alarming Trend of Overweight and Obesity Among Malaysian Adults (Poster 1)	10
Alarming Trend of Overweight and Obesity Among Malaysian Adults (Poster 2)	11
Trend of Nutritional Status Among Malaysian Adult	12
Nutritional Status of Malaysian Children < 18 Years Old	13
Fruit Consumption: Do Malaysians get enough?	14
Vegetable Consumption: Do Malaysian adults get enough?	15
How active are we Malaysians?	16
Trend of Alcohol Use in Malaysia	17
Anaemia in Malaysia : Do we need to worry?	18
Healthcare Demand : How do the population seek care when they are sick?	19
Healthcare Demand : Use of Healthcare Services in Malaysia	20
Healthcare Demand : How do the population perceive Malaysia's healthcare delivery systems?	21
Traditional and Complementary Medicine (Poster 1)	22
Traditional and Complementary Medicine (Poster 2)	23
Traditional and Complementary Medicine (Poster 3)	24



The National Health and Morbidity Survey (NHMS) is a nationally representative health survey of population in Malaysia. It was first initiated in 1986 and has been an important method for monitoring the health of the population and utilisation of healthcare services in Malaysia.



Five Main NHMS



The interval of NHMS has been shortened from every 10 years to a 4 yearly cycle since 2011 to ensure timely information is obtained for planning of health programs. The National Health and Morbidity Survey 2015 was conducted as the first survey in a new cycle of NHMS (2015-2018).

SCOUTING AND DATA COLLECTION

NHMS 2015 has repeated most of the modules in the previous NHMS especially on health care demands, health service utilisations, non-communicable diseases and the risk factors. A few other modules such as on traditional and complementary medicine, mental health and disability were also included.



DISSEMINATION OF RESULTS IN REPORTS AND FACT SHEETS



DISSEMINATION OF RESULTS IN CONFERENCES



UTILISATION OF RESULTS BY GOVERNMENT AGENCIES, STAKEHOLDERS & RESEARCHERS





RURAL URBAN



The National Health and Morbidity Survey 2015 (NHMS 2015) was a nationally representative household survey of population in Malaysia. It covered both urban and rural areas and canvassed all states in Malaysia.

A multi-stage stratified sampling method was used in NHMS 2015 to produce a nationally representative data. The primary sampling unit was enumeration block (EB). An EB is a geographically continuous area with identified boundaries. There are about 75,000 EBs in Malaysia. A total 869 EBs were selected where 536 and 333 EBs were from urban and rural areas respectively.



YOUR COMMUNITY



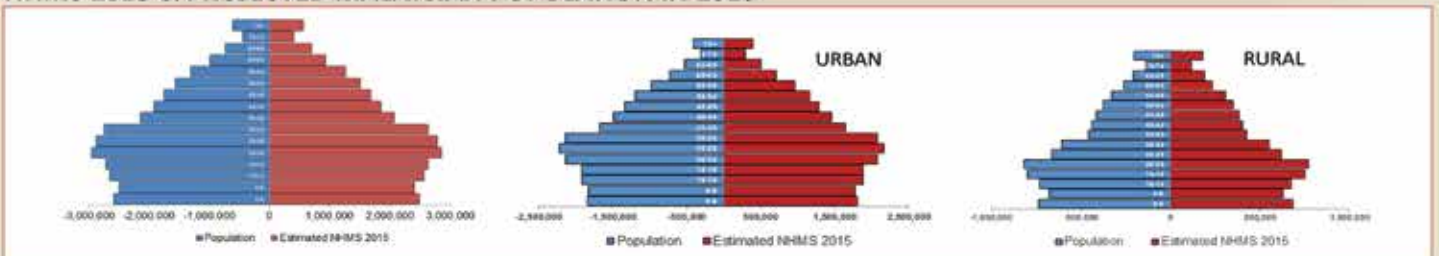
The Secondary Sampling Unit (SSU) was Living Quarter (LQ) within the selected EBs. Twelve LQs were randomly selected from each selected EBs. All households within the selected LQs were included in the study. All eligible members in the households were also included in the study.

Distribution of selected Living Quarters (LQs) in the survey. A total of 10,428 LQs were selected from 869 EBs.

Data collections were via face-to-face interviews were carried out by the data collection teams using mobile devices. Self-administered Questionnaires were carried out for certain modules using paper form.



POPULATION PYRAMID: COMPARISON OF ESTIMATED POPULATION BASED ON NHMS 2015 & PROJECTED MALAYSIAN POPULATION IN 2015

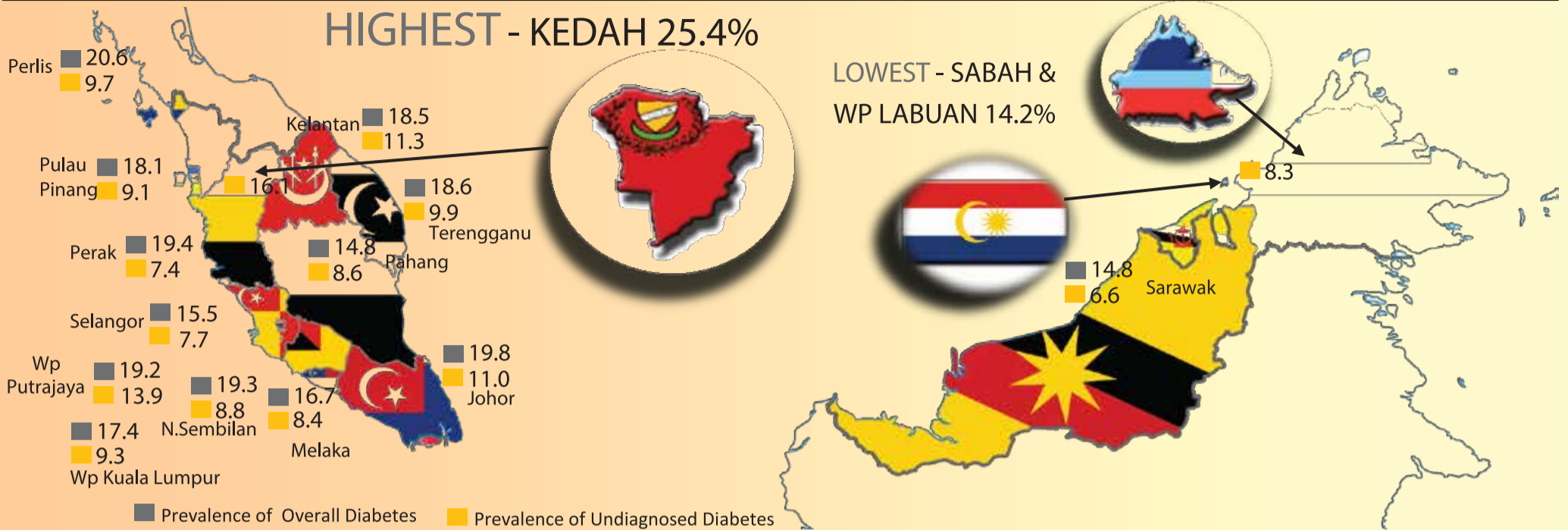


PREVALENCE OF DIABETES IN MALAYSIA

National Health and Morbidity Survey 2015

Hasimah I, Tahir A, Fadhli MY

Institute for Public Health, Ministry Of Health Malaysia

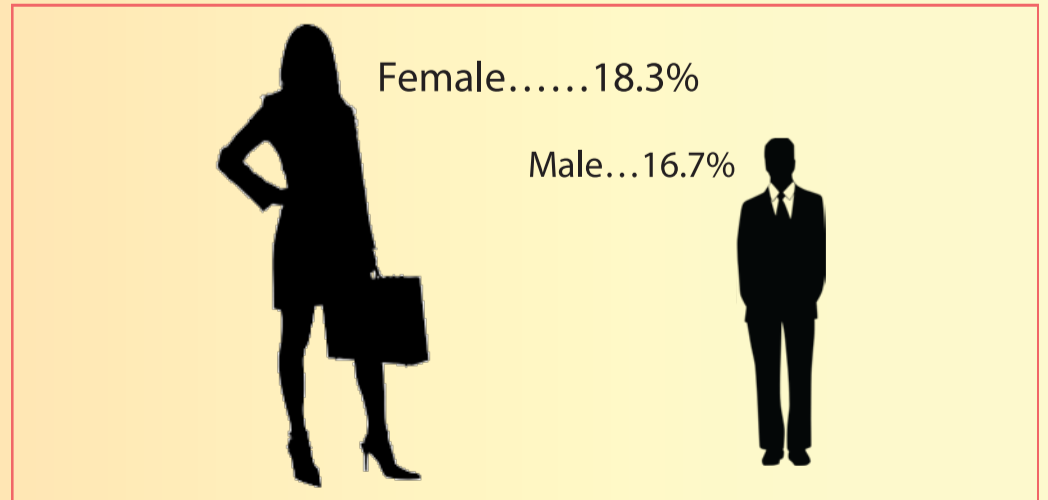
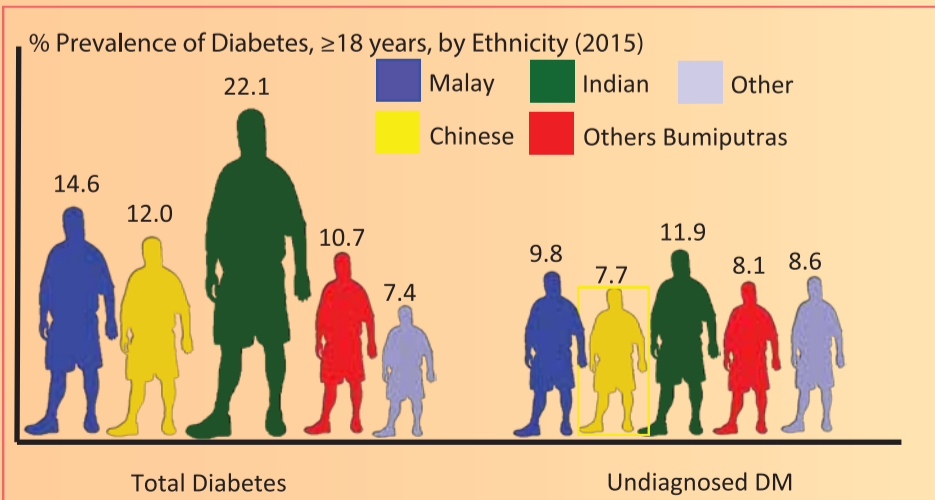
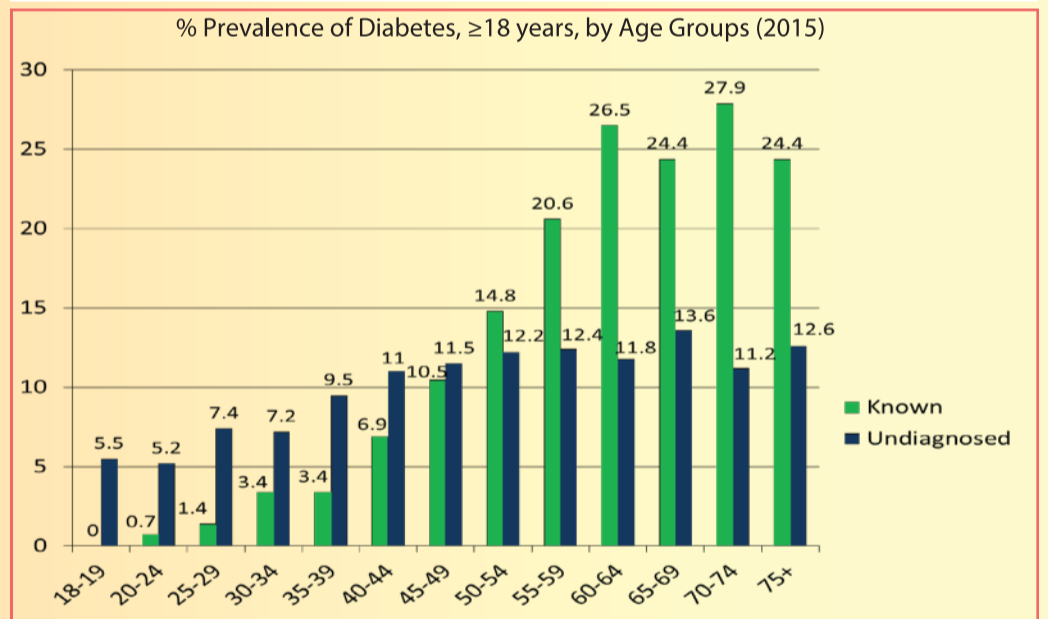
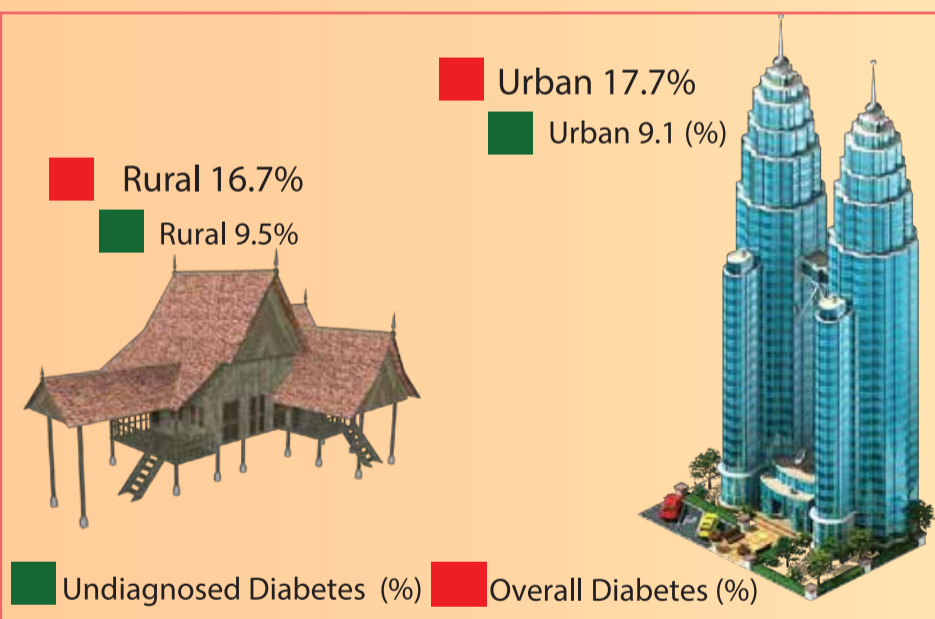


- Definitions :**
- **Known diabetes:** Respondent being told to have diabetes by a doctor or medical officer (MO)
 - **Undiagnosed diabetes:** Respondents not known to have diabetes and had a fasting capillary glucose ≥ 6.1 mmol/L or random blood glucose ≥ 11.2 mmol/L (CardioChek®)
 - **Impaired fasting glucose:** Respondents not known to have diabetes and had a fasting capillary glucose ≥ 5.6 to <6.1 mmol/L (CardioChek®)

- Key Messages :**
- 17.5% of Malaysians aged ≥ 18 years had diabetes in the year 2015
 - 9.2% of Malaysians aged ≥ 18 years had undiagnosed diabetes
 - 4.7% of Malaysians aged ≥ 18 years had impaired fasting glucose
 - Indians had the highest prevalence of diabetes at 22.1% followed by Malays at 14.6% and Chinese at 12.0%

1 in 5 (3.5 Million) Malaysians adult aged 18 years and above had diabetes

1 in 10 (1.8 Million) Malaysians adult aged 18 years and above had undiagnosed diabetes



RECOMMENDATIONS

- Control and maintain ideal body weight
- Be physically active**
- Practice healthy diet of fresh vegetables and fruits**
- Stop smoking
- Check blood sugar regularly
- Avoid the use of alcohol
- For known diabetics, take medications as recommended and practice healthy lifestyle**



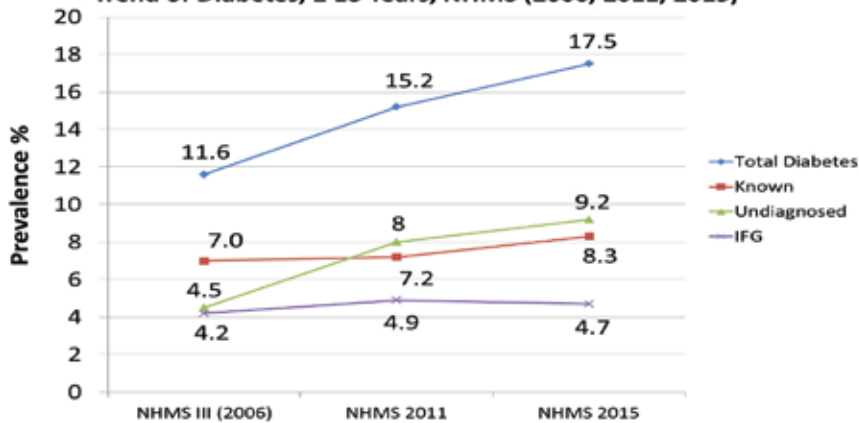
Diabetes is a global epidemic with an increasing trend and causes significant health and economic burden especially in the developing countries

It is an important public health problem because of its high prevalence and detrimental sequelae

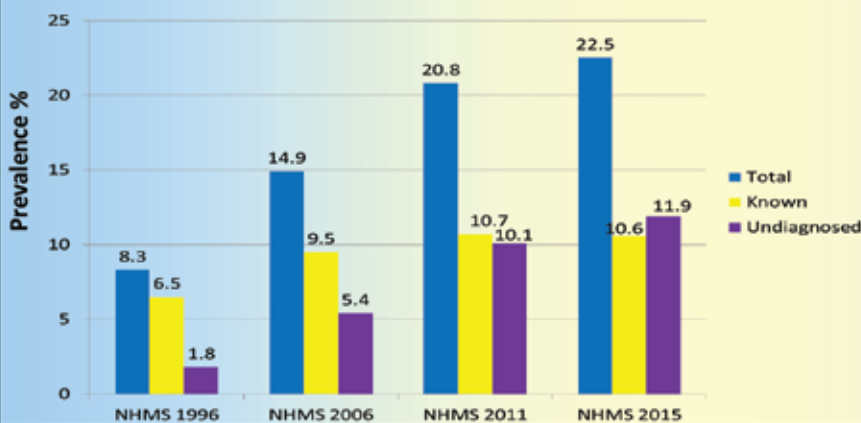
Definitions :

- **Known diabetes:** Respondent being told to have diabetes by a doctor or medical officer
- **Undiagnosed diabetes:** Respondents not known to have diabetes and had a fasting capillary glucose ≥ 6.1 mmol/L or random blood glucose ≥ 11.2 mmol/L (CardioChek®)
- **Impaired fasting glucose:** Respondents not known to have diabetes and had a fasting capillary glucose ≥ 5.6 to <6.1 mmol/L (CardioChek®)

Trend of Diabetes, ≥ 18 Years, NHMS (2006, 2011, 2015)



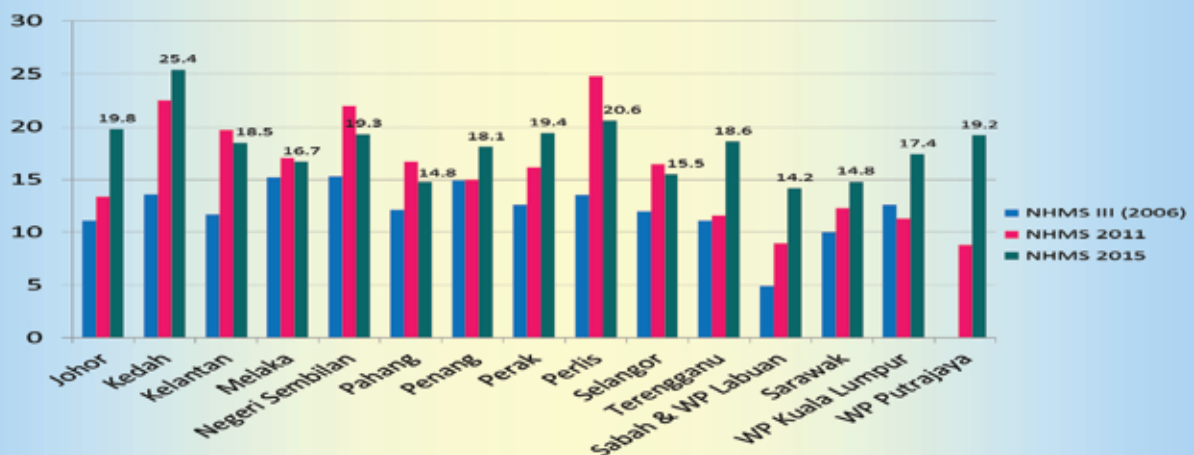
Trend of Diabetes, ≥ 30 Years, NHMS (1996, 2006, 2011 and 2015)



RECOMMENDATIONS :

1. Control and maintain ideal body weight
2. Be physically active
3. Practice healthy diet of fresh vegetables and fruits
4. Stop smoking
5. Check blood sugar regularly
6. Avoid the use of alcohol
7. For known diabetics, take medications as recommended and practice healthy lifestyle

Trend of Diabetes, ≥ 18 years, by States (2006, 2011 & 2015)





National Health & Morbidity Survey

Dr Abdul Aiman bin Abd. Ghani, Dr Nur Liana binti Ab Majid
Institute for Public Health, Ministry of Health



Hypertension is defined by the systolic blood pressure equal to or higher than 140 mmHg and/or the diastolic blood pressure equal to or higher than 90 mmHg

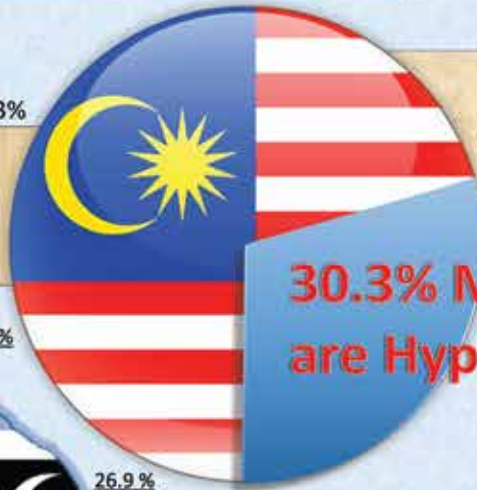


1 in 5 Malaysians have **NO IDEA** that they have HYPERTENSION

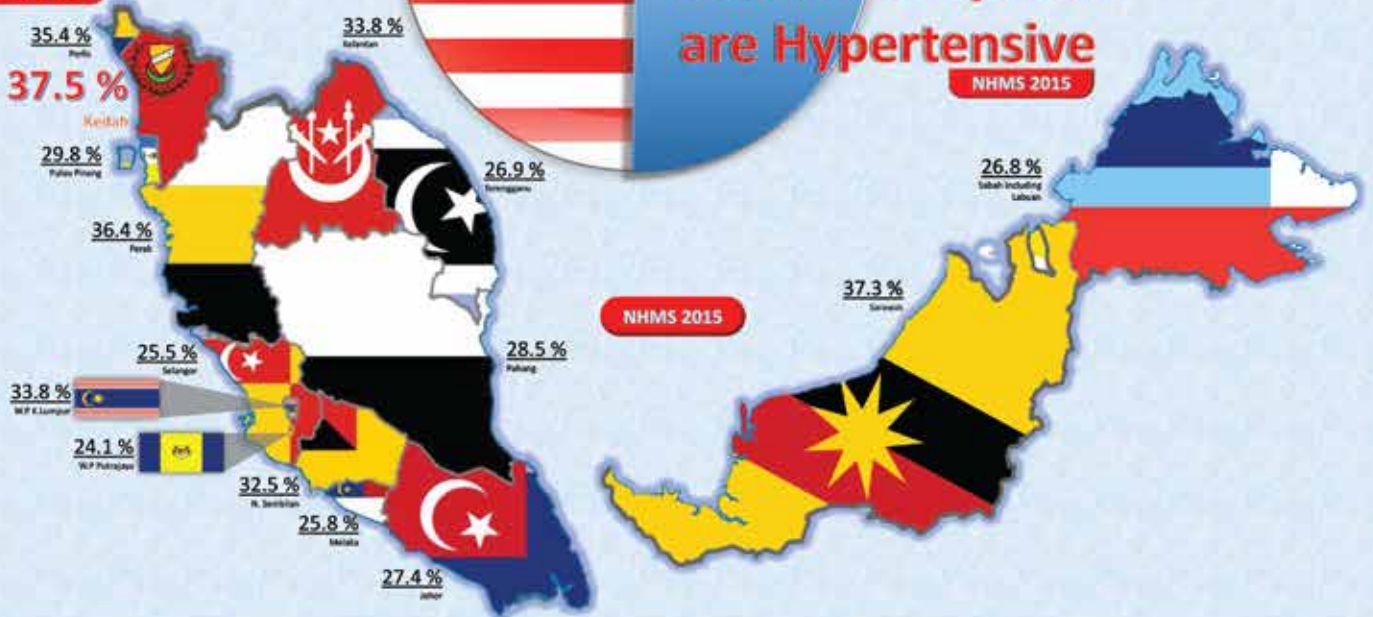
NHMS 2015



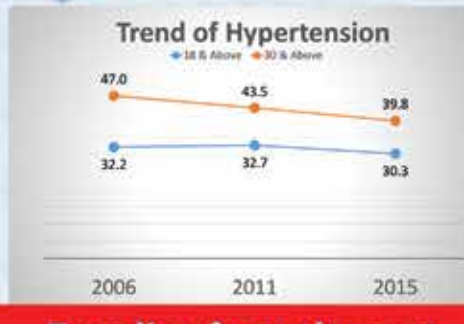
NHMS 2015



NHMS 2015



NHMS 2015



Trending from the past



Recommendations

- Control Ideal Body Weight
- Be Physically Active
- Manage Stress Appropriately
- Take meds regularly* (* For known cases)
- Limit Salt Consumptions
- Avoid Alcohol Use
- Practice Healthy Diet
- Stop Smoking
- Check Blood Pressure Regularly



WHAT IS HYPERCHOLESTEROLEMIA

Hypercholesterolemia is a major cardiovascular disease (CVD) risk factor such as heart disease and stroke.¹ Hypercholesterolemia is defined as fasting total plasma cholesterol more than 5.2 mmol/L.²

IN 2015..



1 IN 2 MALAYSIANS ADULT AGE 18 YEARS AND ABOVE HAD HIGH CHOLESTEROL LEVEL

43.5% **52.2%**
...HAD HIGH CHOLESTEROL LEVEL

38.6%
(7.8 million)
UNDIAGNOSED
HYPERCHOLESTEROLEMIA

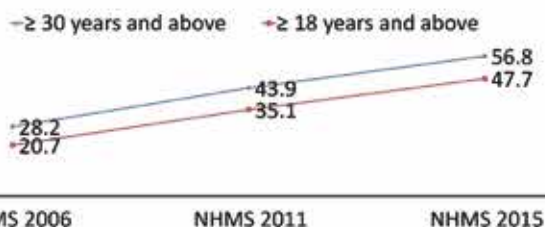
47.7%
(9.6 million)
OVERALL
HYPERCHOLESTEROLEMIA

9.1%
(1.8 million)
DIAGNOSED
HYPERCHOLESTEROLEMIA



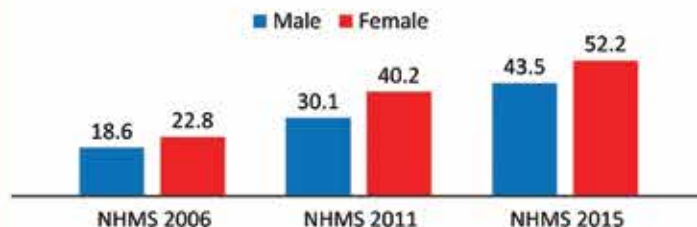
OVERALL TREND OF HYPERCHOLESTEROLEMIA AMONG MALAYSIAN ADULTS

Trend of hypercholesterolemia, NHMS (2006, 2011 and 2015), %



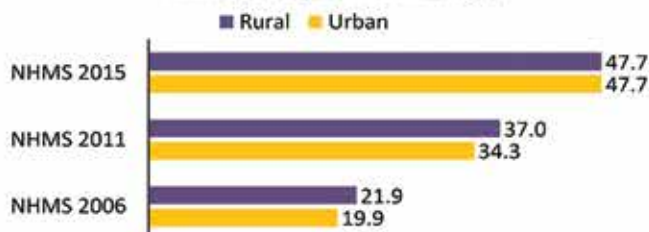
Prevalence of hypercholesterolemia has increased by year

Trend of hypercholesterolemia by gender, NHMS (2006, 2011 and 2015), %



More female has hypercholesterolemia than male

Trend of hypercholesterolemia by locality, NHMS (2006, 2011 and 2015), %



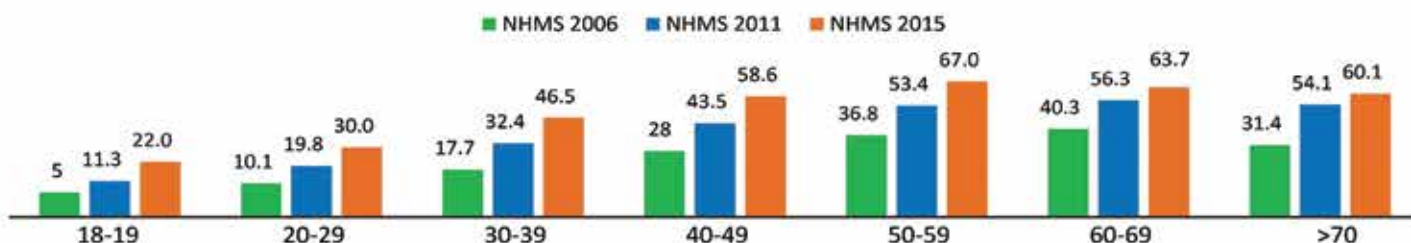
Prevalence of hypercholesterolemia was comparable in the urban and rural area

Prevalence of known and undiagnosed hypercholesterolemia, NHMS (2011 and 2015), %



Prevalence of undiagnosed hypercholesterolemia was higher than known hypercholesterolemia

Trend of hypercholesterolemia by age, NHMS (2006, 2011 and 2015), %



The prevalence of hypercholesterolemia increased by age but the prevalence decreased after age 70 and above

RECOMMENDATION

1. Control and maintain ideal body weight
2. Be physically active
3. Practice healthy diet of fresh vegetables and fruits
4. Stop smoking
5. Avoid the use of alcohol
6. Take medications, if recommended and practice healthy lifestyle

REFERENCES

1. Global Atlas on Cardiovascular Disease Prevention and Control. Mendis S, Puskas P, Norving B editors. World Health Organization, Geneva 2011.
2. ATP III Final Report: Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) Final Report. Circulation.2002;106:3143-3421.

TRENDS OF SMOKING AMONG MALAYSIAN ADULTS, 1996-2015

(National Health and Morbidity Survey & Global Adult Tobacco Survey)



Tee Guat Hong¹, Lim Kuang Kuay¹, Mohd Azahadi Omar¹, Chan Ying Ying¹, Tahir Aris¹, Noraryana Hassan², Nizam Baharom²
¹Institute for Public Health, Ministry of Health Malaysia, ²Disease Control Division, Ministry of Health Malaysia



1 in 4
(4.8 millions)




45.1%

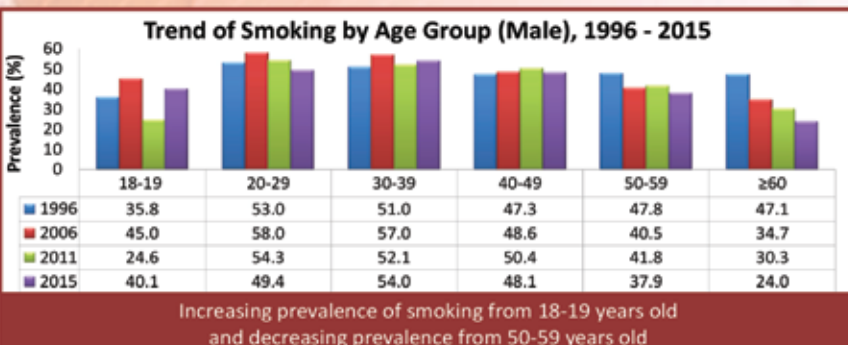
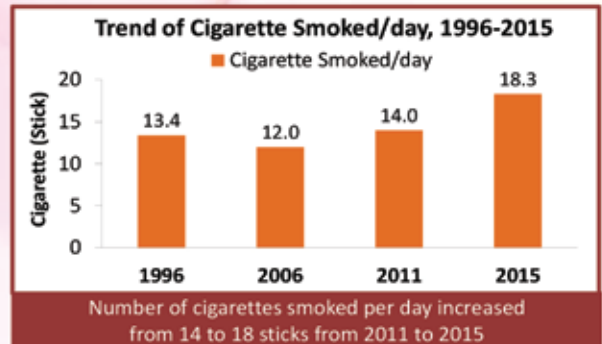
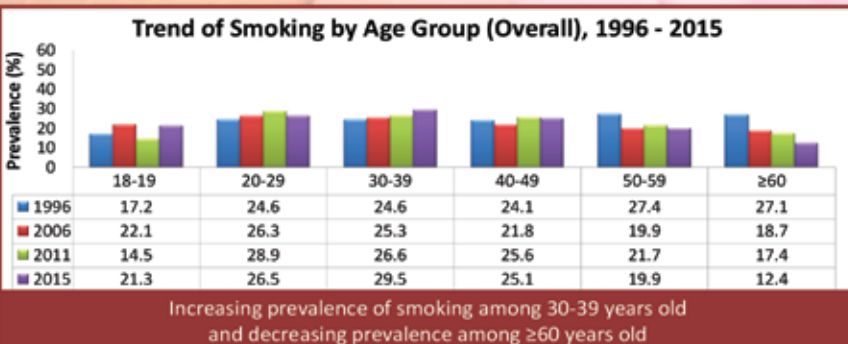
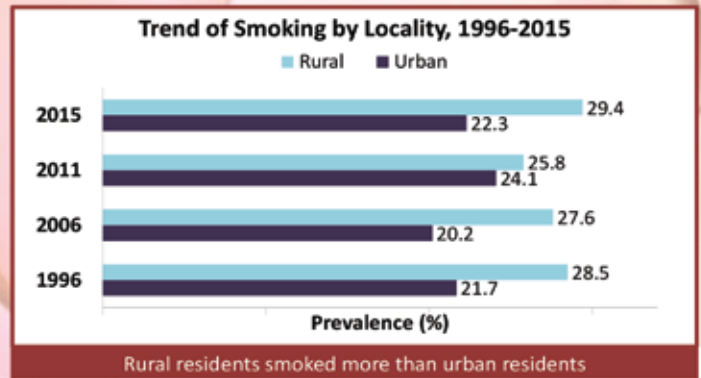
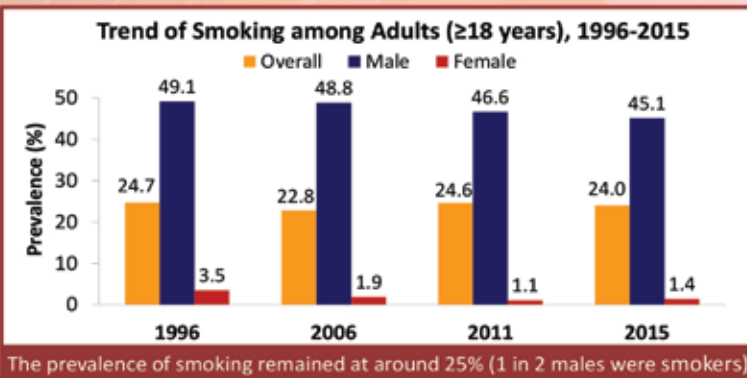


1.4%


2015
Current Smokers



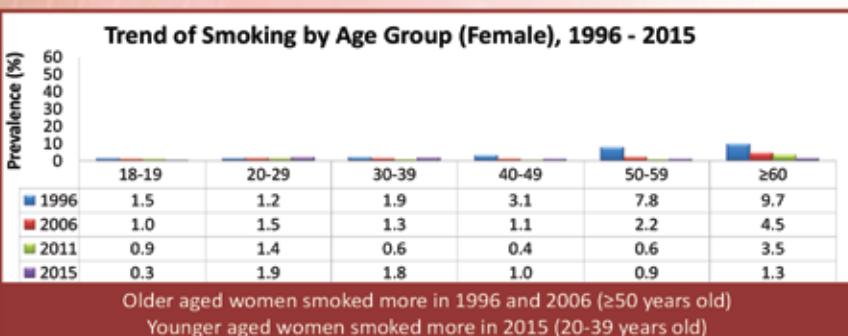
- Smoking accounts for 15% of hospitalisation and 35% of in-hospital deaths in Malaysia
- Smoking kills 20,000 Malaysians every year
- Current smoker is defined as currently smoking either daily or occasionally



Recommendations



- To improve primary and secondary prevention programmes by tailoring towards the needs of vulnerable groups especially youths and females.
- To strengthen nicotine addiction therapy to reduce the average number of cigarettes smoked per day. Cessation services must be expanded for accessibility to service providers and pharmacotherapy.
- To provide centralised national quit line, this would be beneficial to increase the efficacy of cessation programme.



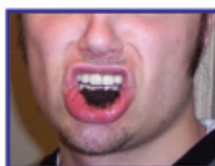
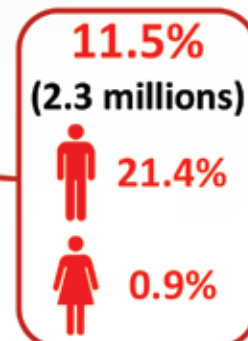
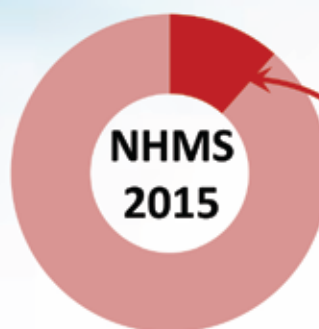
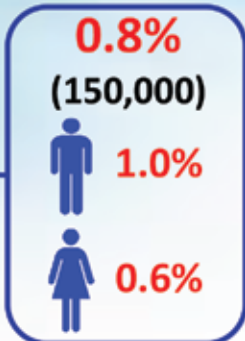
Don't kill yourself and us too.



SMOKELESS TOBACCO USE : MALAYSIAN SCENARIO

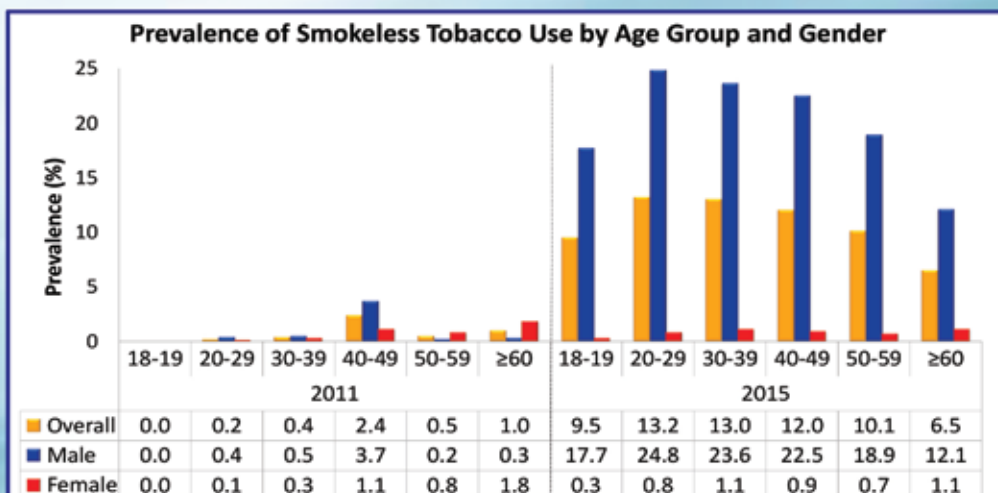
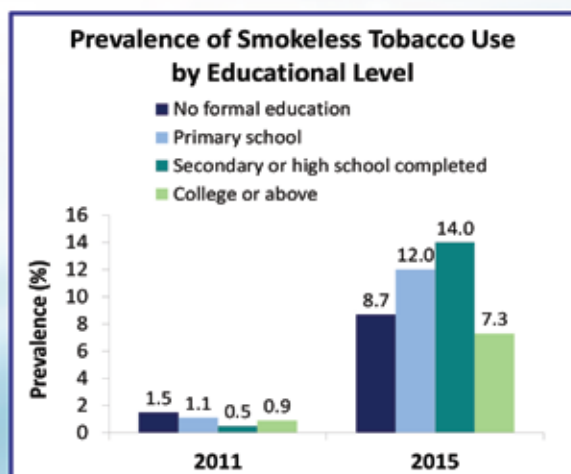
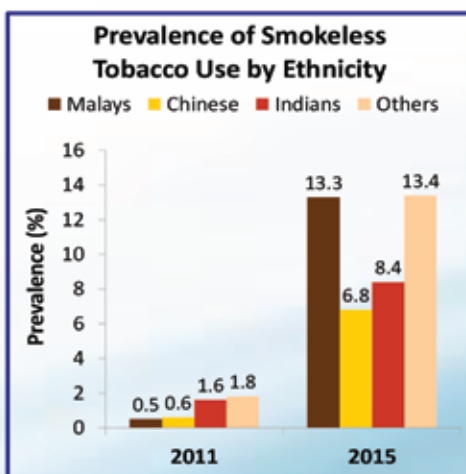
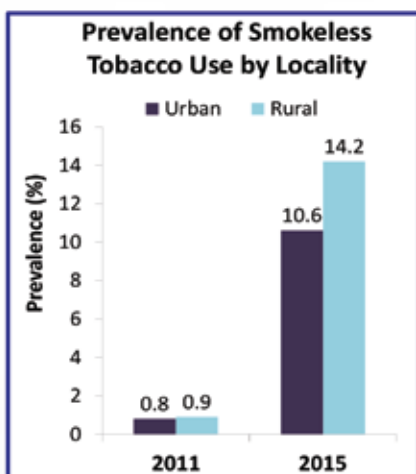
(National Health and Morbidity Survey & Global Adult Tobacco Survey)

Tee Guat Hiong¹, Mohd Azahadi Omar¹, Chan Ying Ying¹, Lim Kuang Kuay, Tahir Aris¹, Noraryana Hassan², Nizam Baharom²
¹Institute for Public Health, Ministry of Health Malaysia; ²Disease Control Division, Ministry of Health Malaysia



Smokeless Tobacco

- At least 28 chemicals in smokeless tobacco have been found to cause cancer such as oral cancer
- No form of smokeless tobacco is a safe substitute for cigarettes



Recommendations

- To explore the sudden increased in the usage of smokeless tobacco.
- To conduct further study in determining the situation of vapping in Malaysia.
- To continue promotion and advocating on anti vapping, anti smoking and all forms of smoking habits.



Noor Ani Ahmad, S Maria Awaluddin, Mohammad Aznuddin Abd Razak, Rajini Sooryanarayana, Mohd Kamal Ariff Abd Ghani, Norhafizah Sahril, Chan Ying Ying, Muslimah Yusof, Noraida Mohd Kasim, Rahama Samad, Tahir Aris

Institute for Public Health, Ministry of Health Malaysia



1 in 10

Malaysian aged 13 to 17 yr

smoked



9 in 10 teenage smokers had attempted to quit smoking

who smoked?

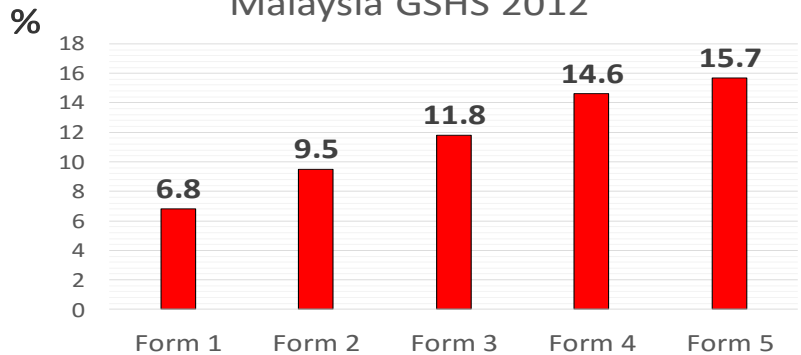
2 in 10 boys

2 in 100 girls



71% tried cigarette before the age of 14 yrs

Current smoking among teenagers, Malaysia GSHS 2012



4 in 10 teenagers were exposed to secondhand smoke



4 in 10 teenagers had parents/ guardians who smoked

We recommend to...

1. use creative and innovative approaches such as through social media to increase awareness of the detrimental effect of tobacco
2. initiate intervention strategies at primary schools
3. strengthen resiliency among teenagers
4. create supportive environment: advocate clean air, free from tobacco smoke

Alarming Trend of Overweight and Obesity Among Malaysian Adults (National Health and Morbidity Survey)



Nur Shahida AA, Ruhaya S, Rashidah A, Mohd Hasnan A, Syafinaz MS, Nor Azian MZ, Azli B, Fatimah O, Mohd Azahadi O, Balkish MN
Institute for Public Health

Introduction

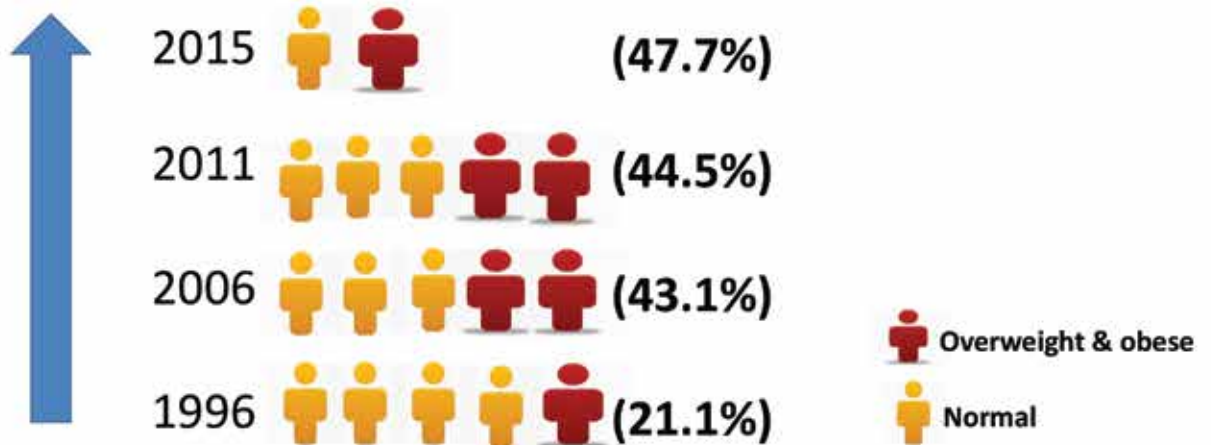
- ❖ Overweight and obesity has become a major public health problem.
- ❖ In both men and women, obesity is a major risk factor for premature death or serious chronic conditions that impair the overall quality of human life.
- ❖ BMI was calculated by dividing weight in kilograms by height in meters squared (WHO, 1998).

BMI classification: Normal (18.5-24.9)
Overweight (25.0-29.9)
Obese (≥ 30)

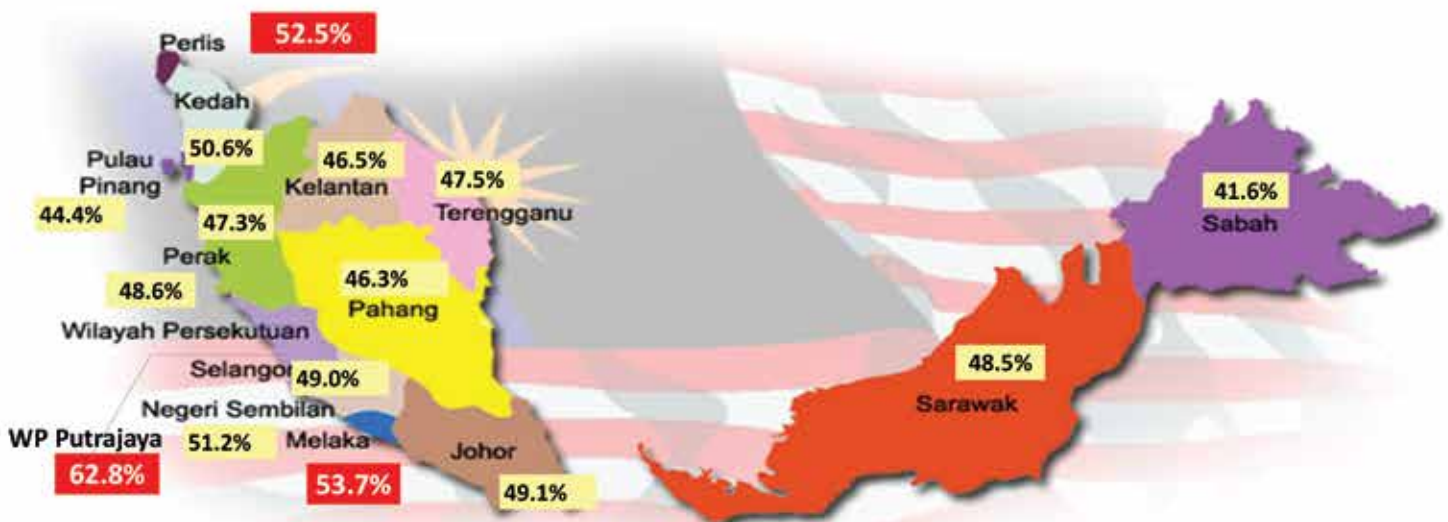
$$\text{BMI} = \text{KG}/\text{M}^2$$

5.6 million are overweight & 3.3 million are obese

Overall Trend Among Malaysian Adults



NHMS 2015 : Prevalence Overweight and Obesity by State

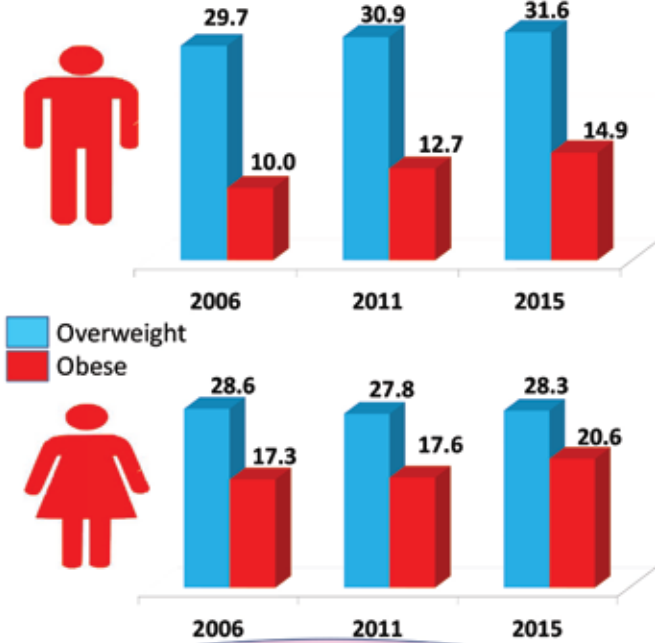


Alarming Trend Of Overweight And Obesity Among Malaysian Adults (National Health And Morbidity Survey)



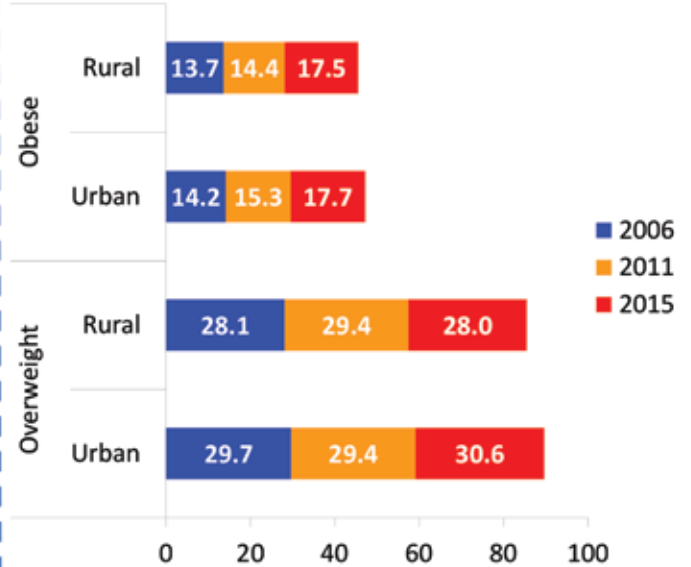
Ruhaya S, Rashidah A, Nur Shahida AA, Mohd Hasnan A, Syafinaz MS, Nor Azian MZ, Azli B, Fatimah O, Mohd Azahadi O, Balkish MN
Institute for Public Health

Overall overweight and obesity by sex



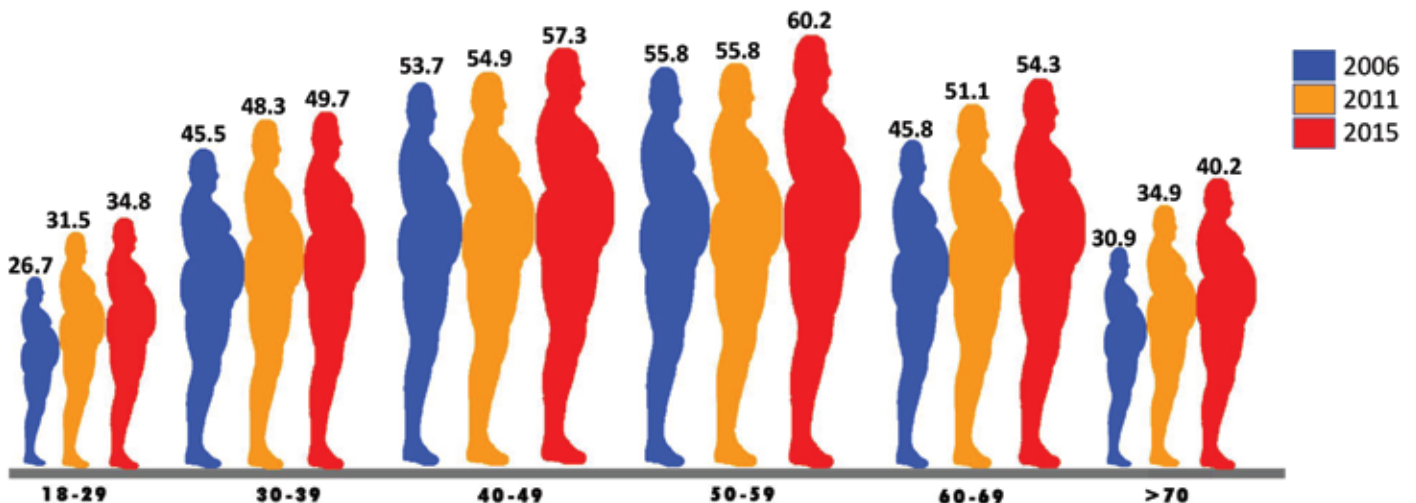
Men were more prone to overweight whereas women were more prone to obesity

Overall overweight and obesity by strata



Prevalence of overweight and obesity were similar in the urban and rural areas

Overall overweight and obesity by age categories



Conclusion

- The results indicated that overweight and obesity problems were overspread in both urban and rural areas.
- The prevalence of overweight among men slightly increased by year. The prevalence of overweight among women had decreased slightly from 2006 to 2011 but slightly increased from 2011 to 2015. In terms of obesity, prevalence among women increased steeply from 2011 to 2015 as compared to men.
- The prevalence of overweight and obesity were found to increase with age until ages 50-59 but the prevalence decreased after ages of 60.

Recommendation:

Collaborative effort among all sectors is needed in prevention to control of overweight and obesity in Malaysia.

TREND OF NURITIONAL STATUS AMONG MALAYSIAN ADULTS FROM YEAR 2006 TO 2015

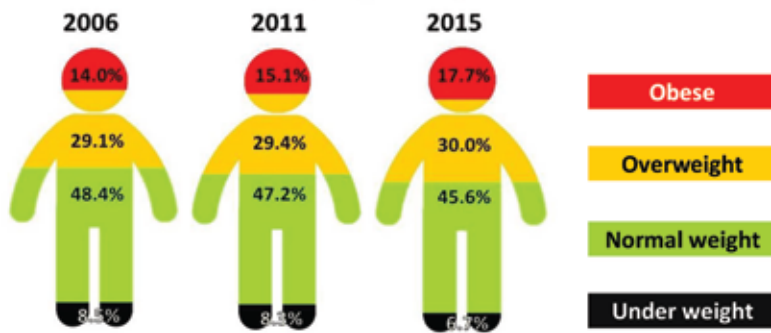


Cheong SM¹, Rashidah A¹, Ruhaya S¹, Rusidah S², Nur Shahida AA¹, Mohd Hasnan A¹, Syafinaz MS¹, Azli BS¹, Fatimah O¹, Nor Azian MZ¹

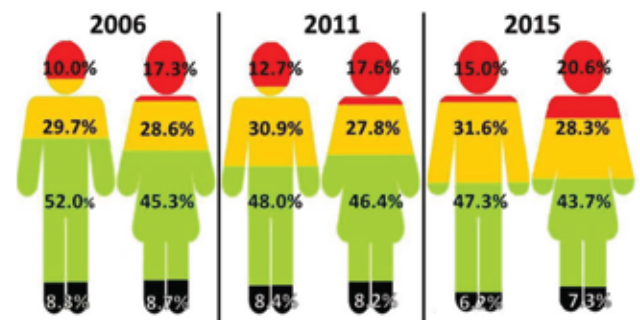
¹Institute for Public Health, Ministry of Health Malaysia

²Nutrition Division, Ministry of Health Malaysia

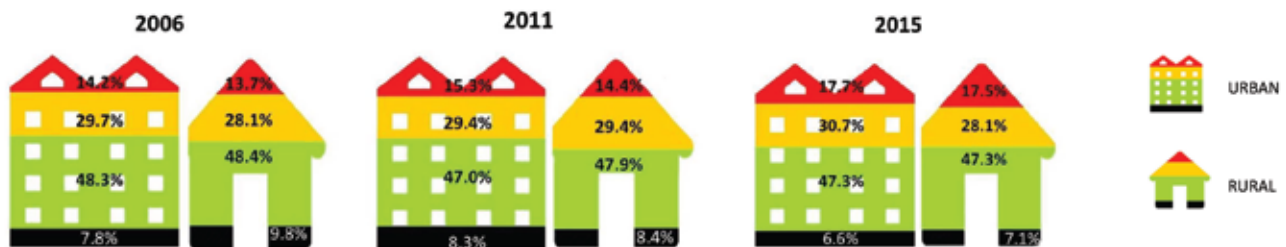
Nutritional Status among Malaysian



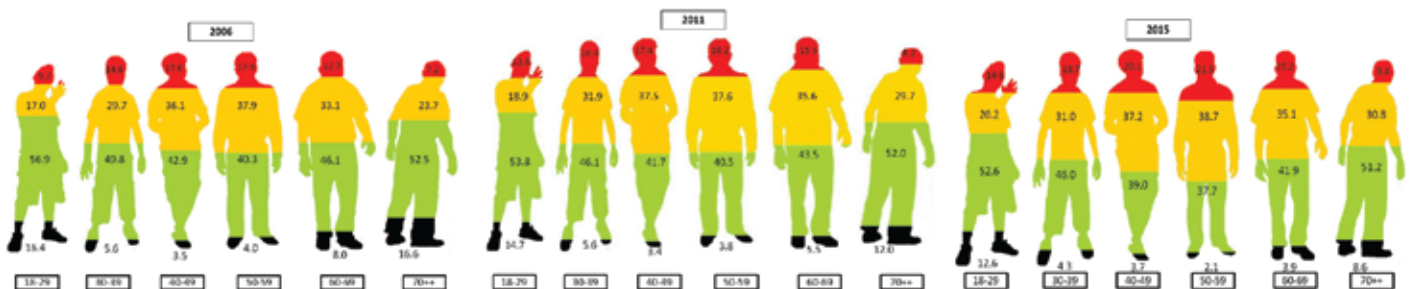
Nutritional Status among Male and Female



Nutritional Status between Urban and Rural Areas



Nutritional Status among Different Age Groups



Conclusion

In the past 10 years, the overall prevalence of underweight has decreased, especially among younger adults and elderly. While obesity rate has increased mainly among females and middle-age adults.

Recommendations

More aggressive multipronged strategies to address both underweight and obese problems are warranted involving all relevant key stakeholders.

References

1. The Third National Health and Morbidity Survey 2006. (2006). Institute For Public Health, Ministry of Malaysia.
2. National Health and Morbidity Survey 2011. (2011). Institute For Public Health, Ministry of Malaysia.
3. National Health and Morbidity Survey 2015. (2015). Institute For Public Health, Ministry of Malaysia.



“Good nutritional status contributes to a healthy development of the children”

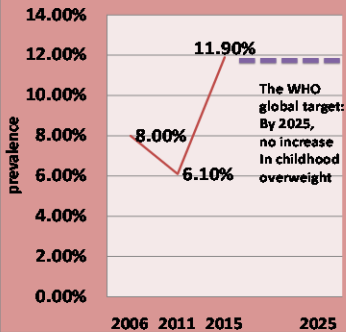


Overweight: > +2SD z score of BMI for age from the growth chart

Stunting: ≤ -2SD z score of height for age from the growth chart

Wasting: ≤ -2SD z score of weight for height from the growth chart

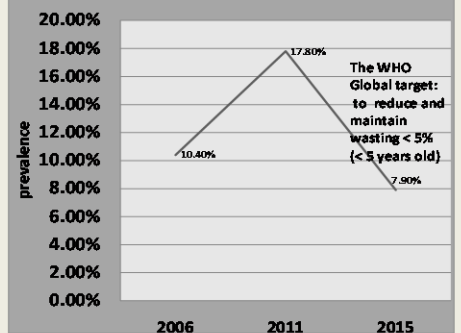
Overweight trend among Malaysian children < 18 years old (2006-2015)



Stunting trend among Malaysian children < 18 years old (2006-2015)

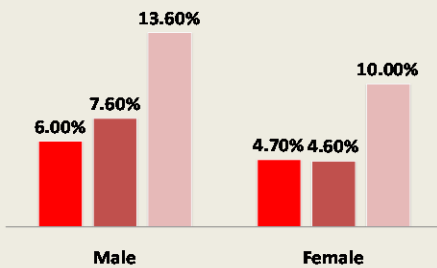


Wasting trend among Malaysian children < 13 years old (2006-2015)



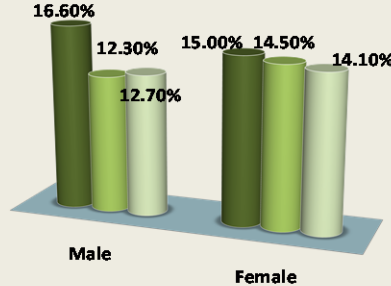
Prevalence of overweight by sex among Malaysian children < 18 years old

■ 2006 ■ 2011 ■ 2015



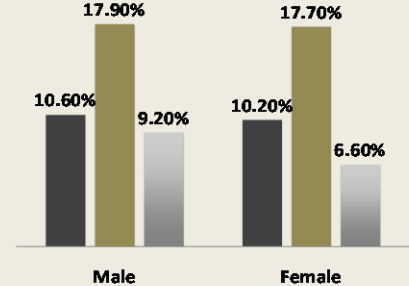
Prevalence of stunting by sex among Malaysian children < 18 years old

■ 2006 ■ 2011 ■ 2015



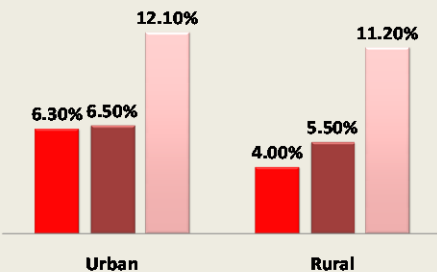
Prevalence of wasting by sex among Malaysian children < 13 years old

■ 2006 ■ 2011 ■ 2015



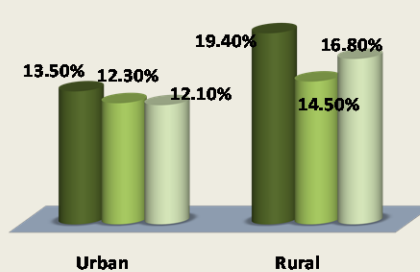
Prevalence of overweight by strata among Malaysian children < 18 years old

■ 2006 ■ 2011 ■ 2015



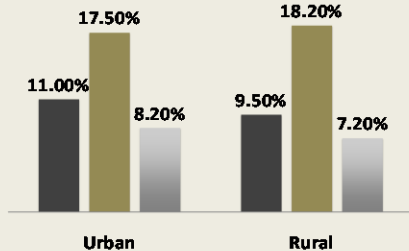
Prevalence of stunting by strata among Malaysian children < 18 years old

■ 2006 ■ 2011 ■ 2015



Prevalence of wasting by strata among Malaysian children < 13 years old

■ 2006 ■ 2011 ■ 2015



Recommendations



Enact policies to enhance food systems to support healthy dietary practice, and implement local policies to promote physical activity.



Scale up the prevention program, improve maternal nutrition, and support the breast feeding to reduce stunting rate.



Scale up coverage of services for the identification and treatment of wasting.



FRUIT CONSUMPTION: DO MALAYSIANS GET ENOUGH?



National Health and Morbidity Survey

Syafinaz Mohd Sallehuddin, Rashidah Ambak, Ruhaya Salleh, Mohamad Hasnan Ahmad, Nur Shahida Abdul Aziz, Nor Azian Mohd Zaki, Fatimah Othman, Azli Baharudin

Institute for Public Health, Ministry of Health

Most fruits are low in:

CALORIES
SODIUM
FAT

Provide essential nutrients:

POTASSIUM	VITAMINS AND BIO-ACTIVE SUBSTANCES
SIMPLE SUGARS	
FIBRE	



Inadequate intake may lead to:

* Worldwide¹

- 19 % OF GASTROINTESTINAL CANCERS
- 31% OF ISCHAEMIC HEART DISEASE (IHD)
- 11% STROKE

- Fruit intake is adequate if consumed 2 OR MORE SERVINGS PER DAY (Malaysian Dietary Guideline, 2010).²
- SERVING size refers to an average amount that individuals should choose to eat each day.²

WHO CONSUMED ADEQUATE FRUIT IN 2015?



ONLY 1 in 10
ADULTS (9.9%)



ONLY 1 in 11
MEN (8.5%)



ONLY 1 in 8
WOMEN (11.5%)

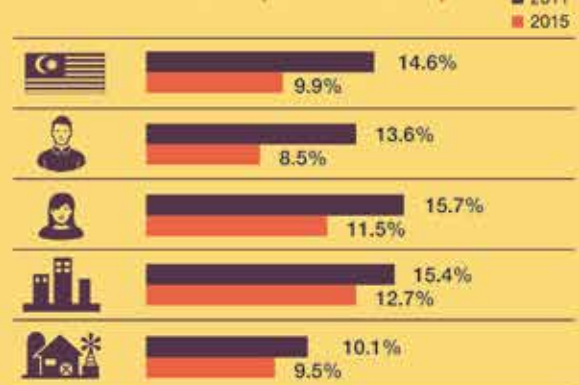


ONLY 1 in 10
Malaysians in the
URBAN area
(10.1%)

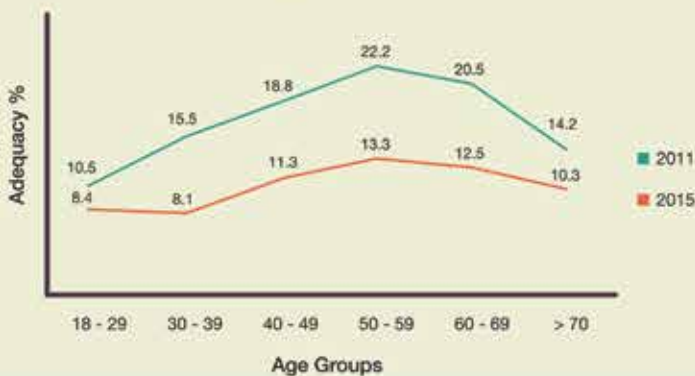


ONLY 1 in 10
Malaysians in the
RURAL area
(9.5%)

TRENDS OF FRUIT CONSUMPTION ADEQUACY BY YEAR (2011 TO 2015)



Fruit consumption adequacy (%) by age categories in 2011 and 2015



WHAT IS A SERVING OF FRUIT?



1 medium – Apple, Pear,
Orange, Banana, Mango



1 slice or 1 cup diced –
Watermelon, Papaya,
Pineapple, Melon



8 seeds - Rambutan, Duku,
Grapes, Pulasan



3 medium seeds -
Durian, Nangka

CONCLUSION:

- The Malaysian adults are not consuming adequate fruits as recommended by the World Health Organization
- The adequacy of fruit consumption has reduced from 14.6% in 2011 to 9.9% in 2015.

RECOMMENDATION:

The Ministry of Health and other policy makers should focus more on the efforts to increase the awareness and promoting the benefits of adequate intake of fruits among Malaysians.

REFERENCES:

- The World Health Report. Reducing risks, promoting health. Geneva, World Health Organization, 2002.
- Ministry of Health, Malaysia (2010). Malaysian Dietary Guidelines (2nd ed.). Malaysia: National Coordinating Committee on Food and Nutrition.

VEGETABLE CONSUMPTION: DO MALAYSIAN ADULTS GET ENOUGH?



National Health and Morbidity Survey

Rashidah A, Ruhaya S, Mohd Hasnan A, Nur Shahida AA, Syafinaz MS, Nor Azian MZ, Azli B, Fatimah O, Mohd Azahadi O
Institute for Public Health

EXCELLENT SOURCE

- ✓ Minerals: Calcium, Magnesium, Potassium, Iron
- ✓ Vitamins: Folate, Riboflavin, Niacin, Vitamin A, Vitamin B6
- ✓ Antioxidants: Vitamin C, Lutein, Zeaxanthin, Anthocyanins
- ✓ Phytochemicals
- ✓ Fibre

LOW IN CALORIE



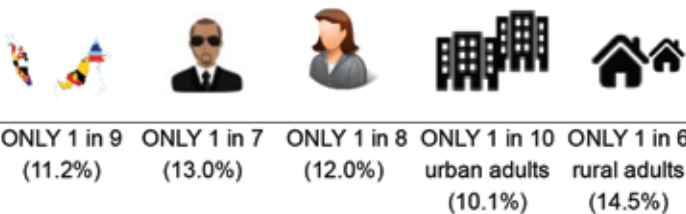
ADEQUATE INTAKE REDUCES RISK

- ↓ 20% of esophageal cancer
- ↓ 12% of lung cancer
- ↓ 31% of ischemic heart disease

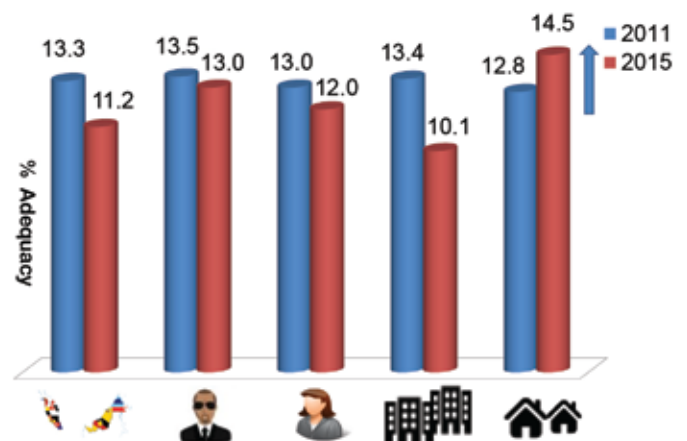
ADEQUATE IF TAKEN ≥ 3 SERVINGS per day

~ **SERVING** refers to an average amount that individuals should choose to eat each day²

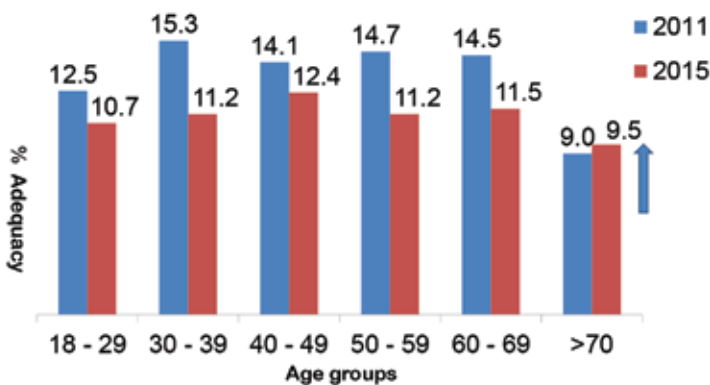
WHO CONSUMED ADEQUATE VEGETABLES IN 2015?



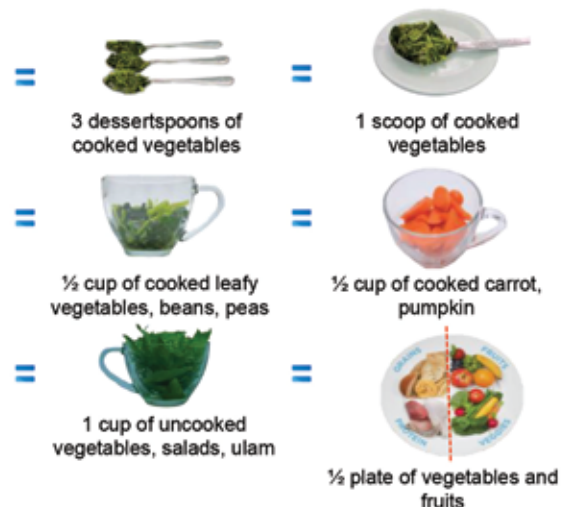
VEGETABLE ADEQUACY IN 2011 AND 2015



VEGETABLE ADEQUACY BY AGE IN 2011 AND 2015



WHAT IS 1 SERVE OF VEGETABLES?²



CONCLUSION:

1. Most of the Malaysian adults are **not consuming adequate vegetables** as recommended by the Malaysian Dietary Guideline.
2. The adequacy of vegetable consumption among Malaysians has **reduced from 13.3% (2011) to 11.2% (2015)**.

RECOMMENDATION:

The Ministry of Health Malaysia with other stakeholders should strengthen their efforts in creating awareness on the importance of adequate intake of vegetables and ensure that vegetables are accessible and affordable to the people.

REFERENCES:

1. Lock, K., Pomeroy, J., Caser, L., Altmann, D.R., & McKee, M. (2005). The global burden of disease attributable to low consumption of fruit and vegetables: implications for the global strategy on diet. *Bulletin of the World Health Organization*, 83(2), 100-108
2. Ministry of Health, Malaysia (2010). *Malaysian Dietary Guidelines (2nd ed.)*. Malaysia: National Coordinating Committee on Food and Nutrition.



How active are we MALAYSIANS?



Chandrika Jeevananthan
Lim Kuang Kuay, Chan Ying Ying,
Mohd Azahadi Bin Omar,
Khee Yi Yi
Institute for Public Health,
Ministry of Health Malaysia

NHMS 2015
(National Health and Morbidity Survey)

2015 POPULATION
30.8 MILLION

33.1% LACK PHYSICAL ACTIVITY
(10.2 MILLION)

AT LEAST **1** IN **3** MALAYSIANS
ARE DEEMED **NOT ACTIVE**

PHYSICAL ACTIVITY IS CRITICAL FOR POPULATION HEALTH

- ▶ Promotes healthy growth and development in child and youth
- ▶ Supports healthy aging and prevents osteoporosis
- ▶ Lowers the risk of several diseases (heart disease, diabetes, colon & breast cancer)
- ▶ Prolongs life, enhances productivity and contributes to economic prosperity

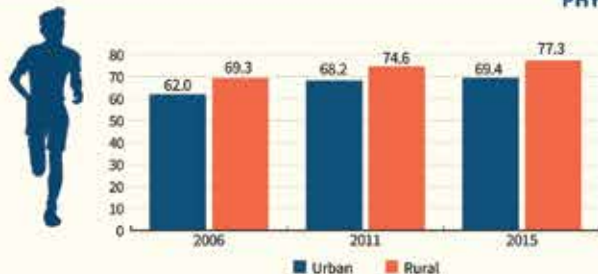


**ADULTS NEED
150 MINUTES
OF HEART PUMPING
PHYSICAL ACTIVITY PER WEEK**

WHO Recommends

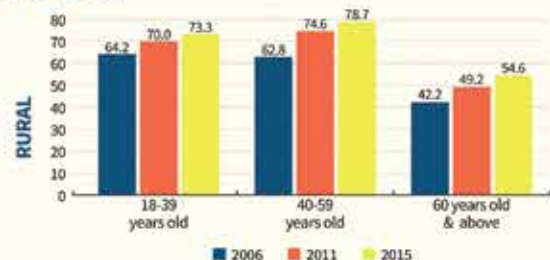
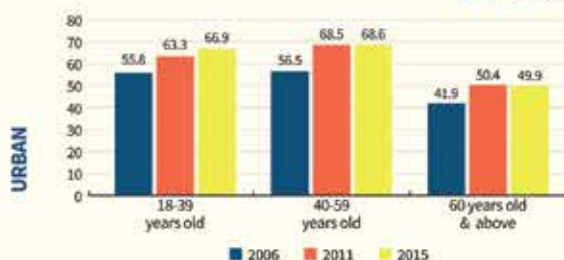
PHYSICAL ACTIVITY OF MALAYSIANS OVER THE LAST DECADE

PHYSICAL ACTIVITY BY GENDER (%)



Both male and female in rural areas shows a higher prevalence of increased physical activity in comparison to those living in urban regions, however, there is an increase in the prevalence of physical activity over the years in both urban and rural areas. Males are more active than females in both areas.

PREVALENCE OF PHYSICAL ACTIVITY BY AGE (%)



The prevalence of physical activity is highest among the age group of 40-59 year olds living in both urban and rural areas and decreased after 60 years of age and above

THE 6 THRUST OF ACTIVE LIVING FOR MALAYSIAN

1. To strengthen public policy that support active living

- Advocacy of the NASPAL (National Strategic Plan For Active Living) to all relevant Ministries, agencies and NGOs
- Development of Malaysian Physical Activity Guidelines

2. To expand appropriate environments

- Providing physical activity – conducive environments in various setting (Academic institution, workplace, community & healthcare facilities)
- Special on ground activities involving local community
- Safe & quality supportive facilities and amenities
- Provision of sufficient equipments for physical activity

3. To increase public motivation & understanding through public education

- Increasing provision of accessible public information and education on physical activity and non-communicable disease through conventional and contemporary media platforms especially social media
- Fortifying related employees through capacity building on social media management
- Development of database on places that support physical activities (public parks, cycling lane, sport centres, gymnasiums, fitness studios and playground)

4. To intensify behavior change programs

- Improving structured physical activities initiatives in the community
- Groom qualified fitness instructors in the community
- Focused intervention program for specific group using contemporary approach

5. To enhance partnership & collaboration

- Formation on inter-agency working groups at all relevant levels
- Development of NGOs alliance related to physical activity to complement promotion of active living
- Initiation Corporate Social responsibilities programs with corporate sectors

6. To strengthen evaluation, monitoring & research

- Promote and support research in areas related to physical activity (programs, impact, advocacy, promotion, behavior, etc.)
- Review overseas and local literature of health promotion interventions on physical activity to identify elements of sustainability.

Source: Bahagian Pendidikan Kesihatan, Cawangan Kesejahteraan Populasi, Sektor Cara Hidup Sihat



Make physical activity a part of
daily life during all stages of life



TREND OF ALCOHOL USE IN MALAYSIA

FINDINGS FROM NATIONAL HEALTH AND MORBIDITY SURVEY



Hamizatul Akmal AH¹,
Rozanir K², Fadhli MY¹, Aiman AG¹

¹ Institute for Public Health,
Ministry of Health Malaysia

² Health Department of Federal Territory Kuala Lumpur
and Putrajaya, Ministry of Health Malaysia

Globally, harmful use of alcohol causes approximately 3.3 MILLION deaths every year and 5.1% of the global burden diseases attributable to alcohol use.

In 2015



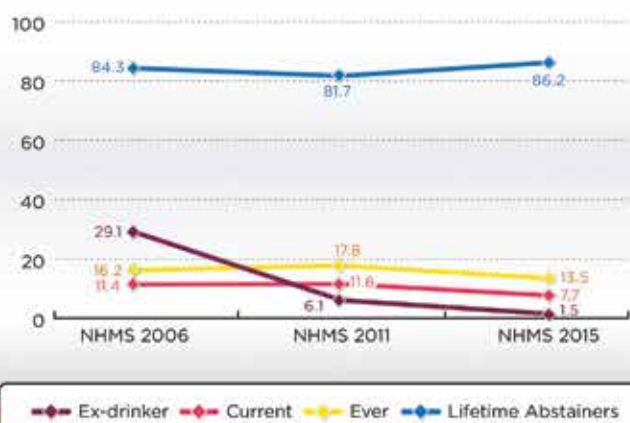
About 1 in 10 people



Individuals aged 13 years and above currently consumed alcoholic beverages such as beer, stout, wine, whisky, samsu, rice wine, toddy and others.

15.1 % (1.7 MILLION)
NON-MALAY
CONSUMED ALCOHOL

Prevalence of Lifetime Abstainer, Ever Drinker, Current Drinker and Ex-drinker, ≥ 13 years (2006, 2011, 2015)



WHAT IS?

ALCOHOL DRINK

Any drink containing ethanol irrespective of concentration and inclusive of those consumed for medical purposes such as alcoholic tonic

LIFETIME ABSTAINERS

Respondent who never consume alcohol in their lifetime

EVER DRINKER

Respondent who had history of consuming alcohol

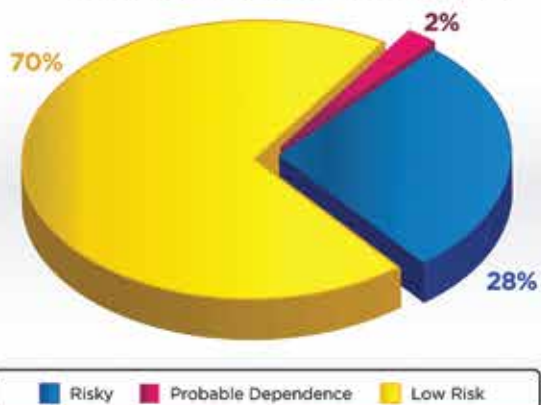
CURRENT DRINKER

Respondent who still consumed alcohol for the past twelve (12) months prior to the survey

EX-DRINKER

Respondent who did not drink alcohol for the past twelve (12) months

Proportion of Drinkers (Aged 18 Years Old and Above) According to Their Pattern of Drinking



NATIONAL HEALTH AND MORBIDITY SURVEY 2015 REVEALED, AMONG CURRENT DRINKER:

3 IN 10 ADOLESCENT POPULATION
1 IN 2 DRINK ALCOHOL WITH INTENTION OF BECOMING INTOXICATED (BINGE DRINKING)

RECOMMENDATION

- ▶ Promote screening for all drinkers to identify their risk to alcohol-related harm
- ▶ Strengthen brief intervention in primary care setting to minimize harmful effect of alcohol
- ▶ Community mobilization to prevent teen aged drinking
- ▶ Strengthen enforcement on alcoholic beverages standard and prohibition of sales to under aged





Anaemia can cause....

- **Fatigue** and **weakness**
- Impairs **women & children's health** and **well-being**
- Impairs **quality of life** for **elderly**

4.9 millions

1 in 4 Malaysian adults

2.6 millions

women of reproductive age

35 % of elderly population



.....were screened to be anaemic.



2.5x more likely to be anaemic than men in general population.

4x more likely to be anaemic than men in young adults population.

1 in 3 adolescent female

1 in 3 women of reproductive age

1 in 3 elderly women

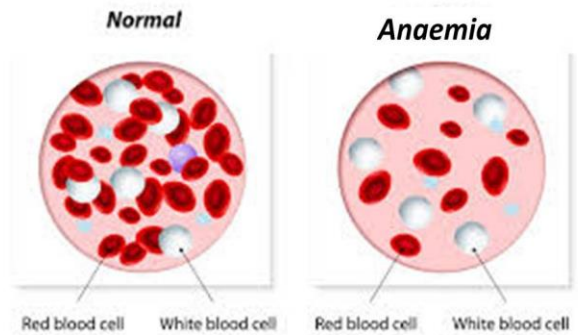
.....were screened to be anaemic.

What is anaemia?

- Anaemia is a condition where there is **not enough of the healthy red blood cells**.

Why it happens?

- Inadequate dietary iron intake or absorption
- Blood loss e.g.: menses
- **It is a treatable condition.**
- Anaemia is detected by doing a blood test.
- The cut-off point to detect anaemia is based on the WHO guidelines.
- Haemoglobin level for anaemia in adult:
 - < 12.0 g/dl for non-pregnant woman
 - < 13.0 g/dl for man



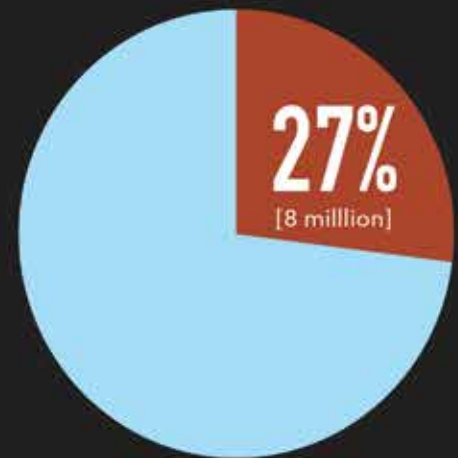
We recommend to :

- strengthen the health promotion program.
 - National food campaign e.g "Fight anaemia with the right food"
- enhance the anaemia intervention program.
 - Iron & folic acid supplementation to the targeted group
- implement the national fortification of wheat flour with folic acid and iron.



HOW DO THE POPULATION SEEK CARE WHEN THEY ARE SICK?

Percent of population
REPORTED SICK
in 2015



If they were sick...
WHAT DID THEY DO?

■ Yes ■ No



Data source: National Health & Morbidity Survey 2015

Note: Example of "health problems"—Fever, sore throat, difficulty in swallowing, running nose, cough, indigestion, diarrhoea, skin problem, backache, allergies etc



For more information, please refer to the report: National Health & Morbidity Survey, Health Care Demand (Volume 2)

Data source: National Health & Morbidity Survey 2011

USE OF HEALTHCARE SERVICES IN MALAYSIA

PUBLIC or PRIVATE health facilities

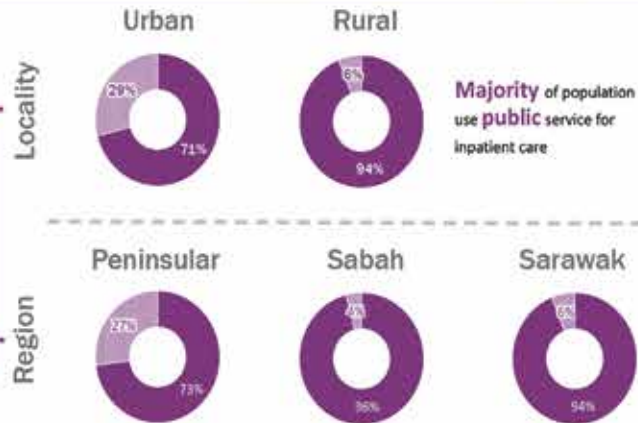
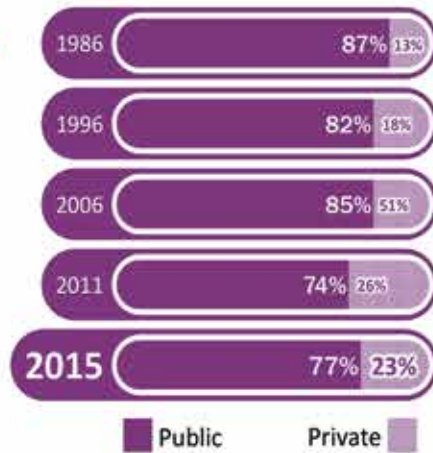
INPATIENT healthcare services

8% (2.2 million) of the population reported to have hospital admission in the last one year preceding the survey (2015)

Trends

1986-2015

Corresponds to the year survey was conducted



Majority of population use **public** service for inpatient care

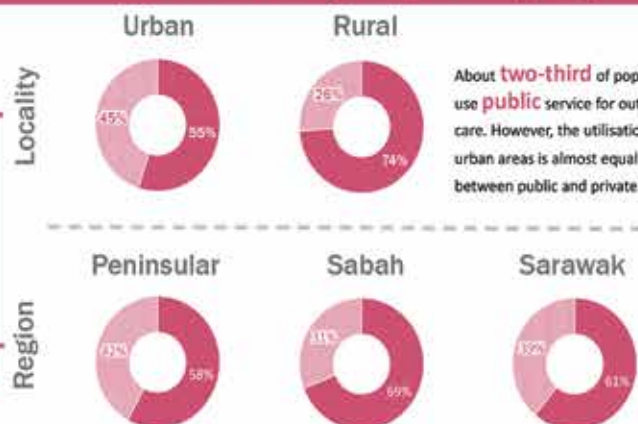
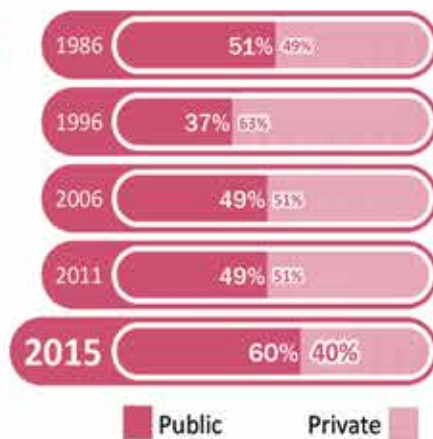
OUTPATIENT healthcare services

9% (2.6 million) of the population reported to receive outpatient care in the last two weeks preceding the survey (2015)

Trends

1986-2015

Corresponds to the year survey was conducted



About **two-third** of population use **public** service for outpatient care. However, the utilisation in urban areas is almost equal between public and private

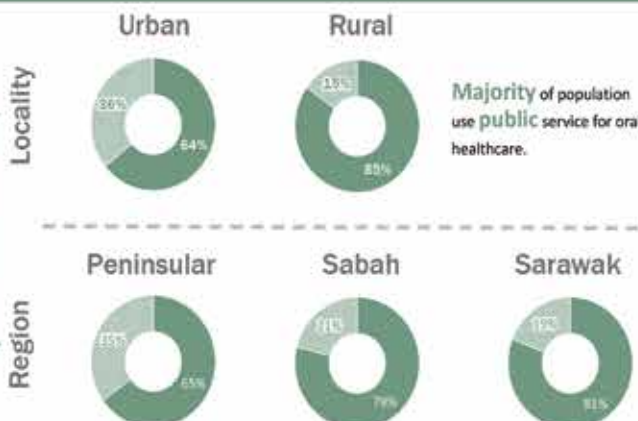
ORAL healthcare services

28% (8.2 million) of the population reported to receive oral health care in the last one year preceding the survey (2015)

Trends

2011-2015

Corresponds to the year survey was conducted



Majority of population use **public** service for oral healthcare.



Data source:
National Health & Morbidity Survey (NHMS) 1986, 1996, 2006, 2011 & 2015

HOW DO THE POPULATION PERCEIVE MALAYSIA'S HEALTHCARE DELIVERY SYSTEMS?

What is **GOOD** about...public and private healthcare facilities?

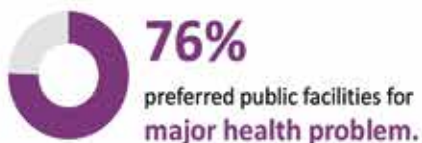
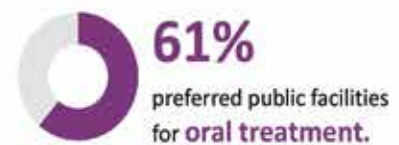
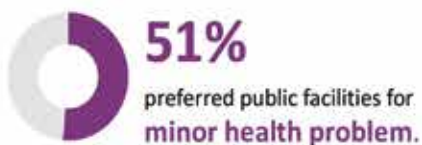
Public		Private
Treatment charges		Staffs' courtesy
Services outcome		Services outcome
Staffs' courtesy		Comfort of facilities
Clarity of explanation		Clarity of explanation
Availability of equipment		Availability of specialists

What still **NEEDS IMPROVEMENT**...public and private healthcare facilities?

Public		Private
Waiting time (queuing)		Treatment charges
Allowed to choose doctor		Convenience of location
Time spent with doctor		Waiting time (queuing)

Choice of healthcare provider: What do people want?

More than half of the adult population (18 years and above) preferred **public facilities** when they had minor health problem, major health problem, minor surgery, major surgery, oral treatment and for birth/delivery.



For more information, please refer to the report:
National Health & Morbidity Survey (NHMS) 2015, Health Care Demand (Volume 3)





NATIONAL HEALTH MORBIDITY SURVEY 2015

Traditional and Complementary Medicine

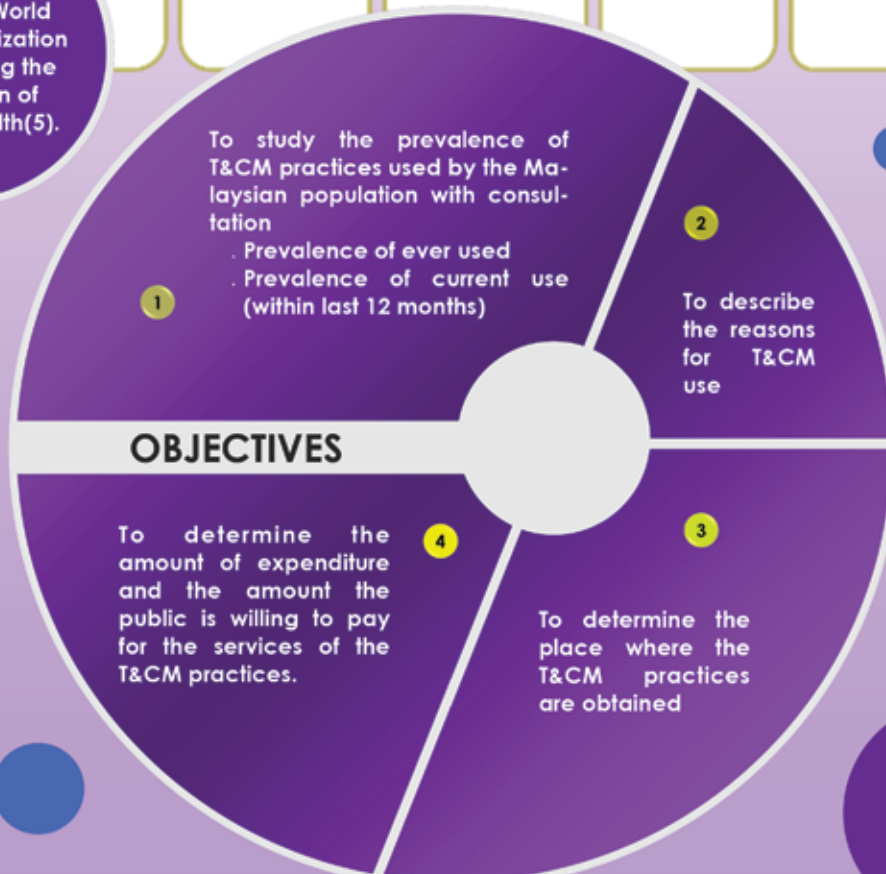
Siti Khairul Bariyyah Akhbar¹, Aidatul Azura Abdul Rani², Ida Farah Ahmad¹, Ahmad Faudzi Yusoff¹, Ariyani Amin², Balkish Mahadir Naidu⁴, Wan Shakira Rodzlan Hasani⁴, Shamsaini Shamsuddin², Noridah Mohd Salleh³, Noor Khairiyah Shazwani Sholehudin², Hanisah Akbar Tajuddin¹, Cheong Yin Ying², Ami Fazlin Syed Mohamed¹,
¹Institute for Medical Research, ²Traditional and Complementary Medicine Division, ³Primary Health Development Division, ⁴Institute for Public Health

BACKGROUND

- The main healthcare system in Malaysia is the conventional medical system but in reflection to its rich ethnic diversity, the traditional medicine of each group is very much ingrained in the society.
- In 2004, a study on the use of Traditional and Complementary Medicine (T&CM) by the Malaysian population showed a prevalence of 69.4% of the Malaysian population had ever used T&CM in their lifetime, and 55.6% had used T&CM within the last 12 months period.(1)
- The prevalence of use within the last 12 months period was comparable to the T&CM use in other countries, such as, Australia 68.9% (2) and Japan 76.0%.(3)
- Among the initiatives and measures that were taken to ensure safety and quality of T&CM practices:

- ✓ The establishment of the T&CM Division
- ✓ The gazettelement of T&CM Act (2013) (4)
- ✓ The regulation of the practitioners and practices
- ✓ The standardisation & accreditation of education and training of recognised practices
- ✓ The establishment of T&CM units in selected government hospitals
- ✓ The promotion of safe use of T&CM
- ✓ The increased number of research and development.

This is in line with the strategy of World Health Organization in recognising the contribution of T&CM to health(5).





NATIONAL HEALTH MORBIDITY SURVEY 2015

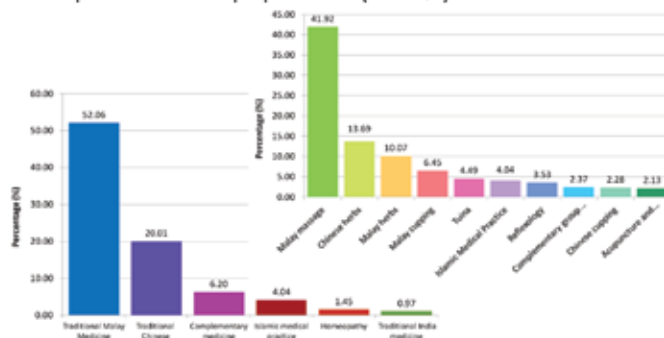
Traditional and Complementary Medicine

Siti Khairul Bariyyah Akhbar¹, Aidatul Azura Abdul Rani², Ida Farah Ahmad¹, Ahmad Faudzi Yusoff¹, Ariyani Amin², Balkish Mahadir Naidu⁴, Wan Shakira Rodzlan Hasani⁴, Shamsaini Shamsuddin², Noridah Mohd Salleh³, Noor Khairiyah Shazwani Sholehudin², Hanisah Akbar Tajuddin¹, Cheong Yin Ying², Ami Fazlin Syed Mohamed¹,
¹Institute for Medical Research, ²Traditional and Complementary Medicine Division, ³Primary Health Development Division, ⁴Institute for Public Health

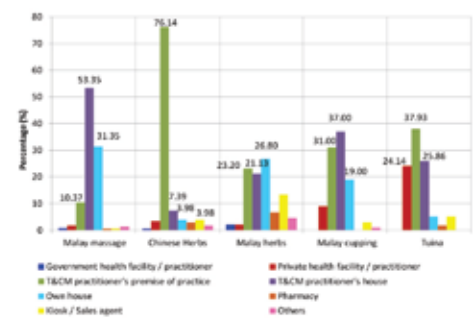
KEY FINDINGS

1 Prevalence of T&CM practices used by the Malaysia population

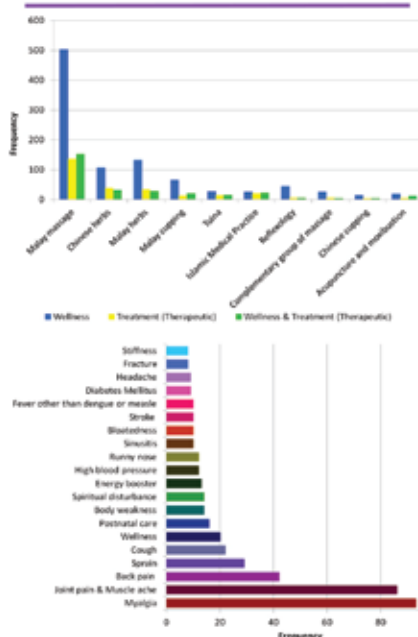
- 29.25% of the population had used T&CM practices with consultation in their lifetime
- 21.51% of the population used T&CM within the last 12 months with consultation.
 - Females (23.89%) showed significantly higher T&CM use compared to males (19.33%)
 - Urban population (22.64%) had higher percentage of use compared to rural population (18.23%)



3 Places where the T&CM were obtained



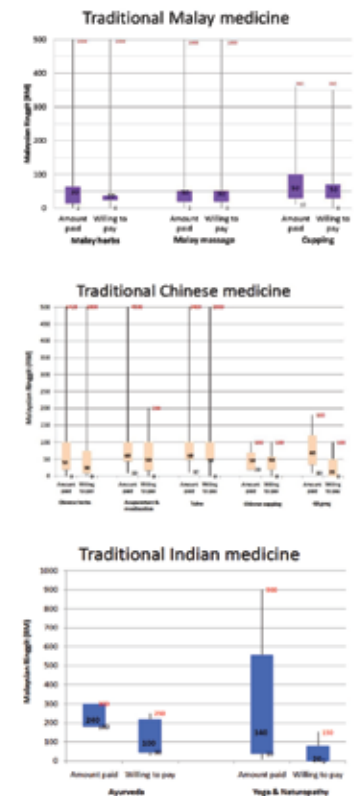
2 Reasons for T&CM use



KEY FINDINGS

Use within last 12 months with consultation

4 Payment

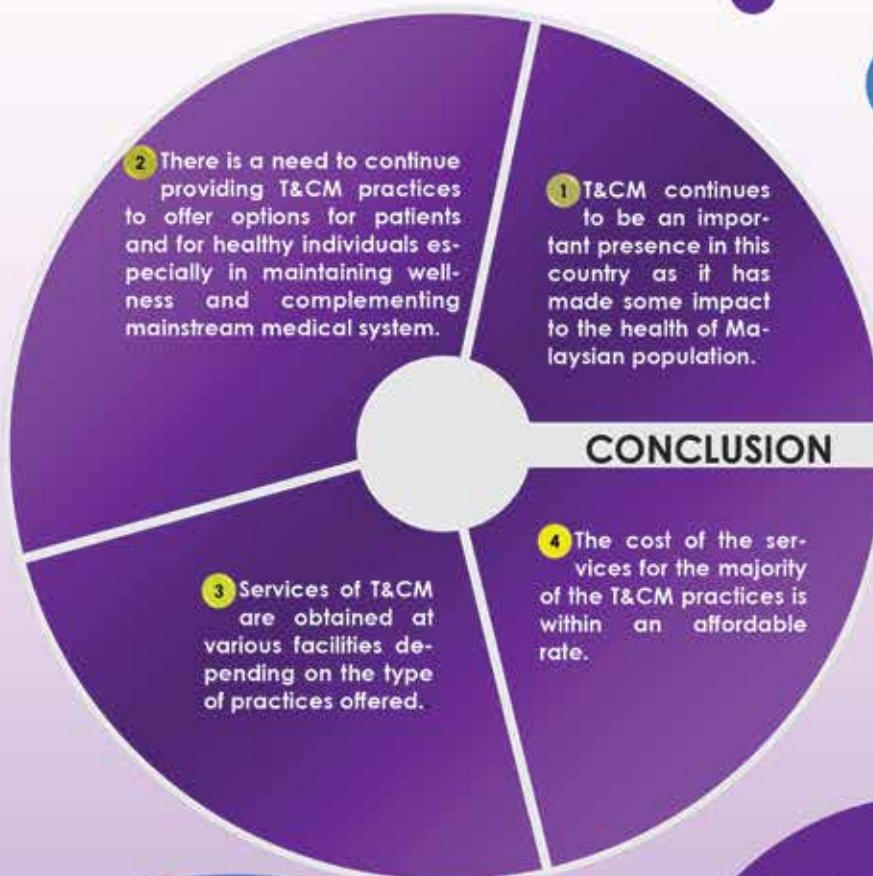




NATIONAL HEALTH MORBIDITY SURVEY 2015

Traditional and Complementary Medicine

Siti Khairul Bariyyah Akhbar¹, Aidatul Azura Abdul Rani², Ida Farah Ahmad¹, Ahmad Faudzi Yusoff¹, Ariyani Amin², Balkish Mahadir Naidu⁴, Wan Shakira Rodzlan Hasani⁴, Shamsaini Shamsuddin², Noridah Mohd Salleh³, Noor Khairiyah Shazwani Sholehudin², Hanisah Akbar Tajuddin¹, Cheong Yin Ying², Ami Fazlin Syed Mohamed¹,
¹Institute for Medical Research, ²Traditional and Complementary Medicine Division, ³Primary Health Development Division, ⁴Institute for Public Health



REFERENCES

- 1 Siti ZM, Tahir A, Farah AI, Fazlin SMA, Sondri S, Azman AH, et al. Use of traditional and complementary medicine in Malaysia: a baseline study. *Complementary therapies in medicine*. 2009; 17(5-6):292-9.
- 2 Xue CC, Zhang AL, Lin V, Da Costa C, Story DF. Complementary and alternative medicine use in Australia: a national population-based survey. *J Altern Complement Med*. 2007;13(6):643-50.
- 3 Yamashita H, Tsukayama H, Sugishita C. Popularity of complementary and alternative medicine in Japan: a telephone survey. *Complementary therapies in medicine*. 2002;10(2):84-93.
- 4 Traditional and Complementary Medicine Act 2013, Law of Malaysia(2013).
- 5 WHO. WHO traditional medicine strategy: 2014-2023. Geneva: 2013.

ACKNOWLEDGEMENT

We would like to thank the following people:

Director General of Health Malaysia,
Director of Institute of Public Health,
Director of Institute for Medical Research,
Director of Traditional and Complementary Division,
Director of Family Health & Development Division,
Principal investigator of NHMS 2015,
co-investigators and support staff.

Institut Kesihatan Umum
Kementerian Kesihatan Malaysia
www.iku.moh.gov.my