Annual Report

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Ministry of Health Malaysia Non-Communicable Disease Section

Annual Report

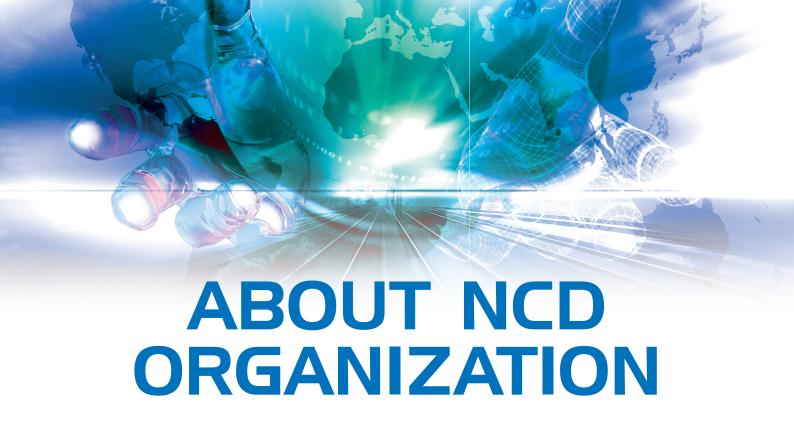
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NCD PREVENTION AND CONTROL



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## Mission

To provide adequate and effective health promotion, prevention, early diagnosis or detection and prompt treatment of diseases of public health importance as well as the rehabilitation of those affected by these diseases.

## Vision

Malaysia is to be a nation of healthy individuals, families, and communities, through a health system that is equitable, affordable, efficient, technologically appropriate, environmentally adaptable and consumer-friendly, with emphasis on quality, innovation, health promotion and respect for human dignity, and which promotes individual responsibility and community participation towards an enhanced quality of life.



#### SECTION FOR NON COMMUNICABLE DISEASE

HEAD OF SECTION: DEPUTY DIRECTOR OF DISEASE CONTROL (NON COMMUNIVABLE) JUSA C Sector for Sector for NCD-CVS-Sector for Mental Occupational and Cancer - FCTC Health, Subtance Environmental Health Abuse, Violence and **Injury Prevention** (MeSVIP) Unit for Occuptional Health Unit Cardiovascular and Diabetes Mental Health Unit Environmental Health Unit Unit for Canser Subtance Abuse Unit Tobacco Control Unit and Secretariat Violence and For PCTC Injury Prevention Unit

PROGRAMME ACHIEVEMENT REPORTS 2011

## DIABETES AND CARDIOVASCULAR DISEASES PREVENTION AND CONTROL



## DIABETES AND CARDIOVASCULAR DISEASES PREVENTION AND CONTROL

## Implementation of the National Strategic Plan for Non-Communicable Diseases (NSP-NCD) in 2011

Upon realisation of the increasing prevalence and burden of NCD and NCD risk factors, the Ministry of Health has strengthened the NCD prevention and control programme in Malaysia by producing the "National Strategic Plan for Non-Communicable Diseases" (NSP-NCD) 2011-2015.NSP-NCD uses diabetes and obesity as the entry points, and it contains seven main strategies:

- i. Prevention and Promotion
- ii. Clinical Management
- iii. Increasing Patient Compliance
- iv. Action with NGOs, Professional Bodies & Other Stakeholders
- v. Monitoring, Research and Surveillance
- vi. Capacity Building
- vii. Policy and Regulatory interventions

Under Strategy One: In December 2011, the MOH has started expanding the focus of its existing Communication for Behavioural Impact (COMBI) programme for dengue to also include NCD. With this new focus, the MOH on 15 December 2011 has also appointed three 1Malaysia Health Ambassadors to encourage Malaysians to adopt healthy lifestyles. The three celebrities who were appointed are (i) Aznil Nawawi; (ii) Phoebe Yap Siok Wah; and (iii) G. Uthaya Kumar. (Photo 1.1)



Photo 1.1: YB Dato' Sri Liow Tiong Lai having a light moment with (from left)
1Malaysia Health Ambassadors Uthaya Kumar, Yap and Aznil (Photo from the Star Online)

Under Strategy One as well, the MOH has introduced the NCD Prevention 1Malaysia program (NCDP-1M) in late 2010. NCDP-1M is an NCD risk factor intervention programme, conducted in three different settings i.e. community, workplace and schools, and uses weight management as the entry point. The main objective of this program is to empower Malaysians to be pro-active in screening for NCD risk factor and to initiate intervention among those found to be at risk, outside of the clinic setting. Currently we have a total of 220 programmes throughout Malaysia (126 community-based, 52 work place-based, and 42 school-based), with about 8,000 participants. For 2011, about 22% of participants have managed to lose weight, and 69% have improved their blood cholesterol levels. The NCDP-1M programme was also used to gain the support and active participation of the "JKKK" as well as "Panel Penasihat Kesihatan" throughout Malaysia.

Under **Strategy Four**: Action with NGOs, Professional Bodies & Other Stakeholders, the MOH have conducted a National NSP-NCD Advocacy Seminar, which was held in Putrajaya International Convention Centre on 22 March 2011, officiated by the YB Health Minister. This seminar was attended by over 70 representatives from NGOs, professional associations, media and sports associations. **(Photo 1.2)** 







Photo 1.2: Above (left) YB Dato' Sri Liow Tiong Lai with Y.Bhg.Dato' Sri Dr Hasan Abdul Rahman, Dr Yahya Baba and Dr Zainal Ariffin Omar, before the officiating ceremony. Above (right) Participants from various ministries, universities, professional bodies, associations and NGOs. Down YB Dato' Sri Liow Tiong Lai conveying his messages during the officiating ceremony.

The Malaysian Health Promotion Board (HPB or MySihat) in 2011 has placed special emphasis on programmes and activities related to NCD. Up till August 2011, the HPB has disbursed funds of RM8.7 million to 181 NGOs for such programmes and activities. In December 2011, the Health Promotion Board have published several training modules on obesity prevention, healthy eating, active living and smoking cessation to increase the skills and capacity of NGOs in their activities.

Under **Strategy Five**: Monitoring, Research and Surveillance, the National Health and Morbidity Survey (NHMS) for NCD risk factors will be conducted every four years starting from 2011 onwards. Previously, this survey was only done every 10 years. In addition, several NCD indicators have been incorporated into the MOH and the Director General of Health KPI.

Under **Strategy Six:** Capacity Building, on 29 November 2011, the MOH (under the Nutrition Division) has organised a seminar entitled "Seminar Peranan Media dalamMeningkatkanTaraf Pemakanan Rakyat Malaysia" (Role of Media in Improving the Nutrition Status of Malaysians) to increase the involvement of media players in promoting healthy eating amongst Malaysians.

Lastly, under **Strategy Seven**: Policy and Regulatory Interventions, to reduce the accessibility towards unhealthy foods and drinks, and increase the availability on healthier choices, Implementation of Healthy Food and Drink Vending Machine in MOH Health Facilities, has been started since June 2011, through circular from MOH General Secretary. This implementation is a mandatory for all the MOH facilities.

To improve school health, the Ministry of Education has agreed to implement the new healthy eating guideline in schools, which consists of three components (i) measurement of students BMI twice a year and reporting the results to parents. Students found to be obese in two consecutive readings will be referred to a healthcare professional; (ii) healthy menu in school canteens; and (iii) depiction of calorie contents of food sold in school canteens.



Following the Majlis Keselamatan Makanan dan Pemakanan Kebangsaan (National Food Safety and Nutrition Council) Meeting which was held on 8 December 2011, the MOH will develop a guideline to control marketing of food and non-alcoholic beverages to children in Malaysia by 2012. This was further reiterated by the YB Health Minister during a dialogue with food and drinks industries which was held on 16 December 2011 in Putrajaya. During this meeting, the food and drink industries have made several commitments to increase the production and promotion of healthy food choices, and adopt an active role in multi-sectoral partnerships with the MOH.

#### Malaysia's Participation in NCD at the Global Level

Year 2011 has seen NCD being highlighted at the global level, not only in health-related agenda, but also into global economic development agenda. Malaysia has participated actively in several international meetings and forums, which culminated in the United Nations Political Declaration on the Prevention and Control of Non-Communicable Diseases in New York, USA.

- The Regional High-Level Meeting on Scaling Up Multi-Sectoral Action for Non-Communicable Disease Prevention and Control, Seoul, Republic of Korea (17 to 18 March 2011). This meeting was attended by the Director General of Health, Malaysia, who was invited to present a paper in Session 4. The main output of this meeting is the "Seoul Declaration on Non-Communicable Disease Prevention and Control in the WHO Western Pacific Region" which will feed into the United Nations General Assembly High Level Meeting on NCD.
- The WHO Global Forum: Addressing the Challenge of NCDs (27 April 2011) and the First Global Ministerial Conference on Healthy Lifestyles and NCD Control (28-29 April 2011), in Moscow, Federation of Russia. Malaysia was represented by a delegation headed by the Director General of Health, Malaysia. The meetings were attended by all 192 Member States, with over 600 participants and 92 Member States were represented by their respective Ministers of Health. The final output of this meeting was the draft document entitled "Moscow Declaration on NCDs". This document, together with seven other documents produced by the different WHO regions as the outcomes of the regional consultations held as part of the preparatory process leading towards the High-level Meeting, will feed towards the United Nations General Assembly High Level Meeting on NCD.
- The 64th World Health Assembly, Geneva, Switzerland (16-24 May 2011). The delegation from Malaysia was headed by the Health Minister. The theme for this year's meeting is "Non-Communicable Diseases". As agreed in Resolution WHA64.11, which also endorses the "Moscow Declaration on NCD", Malaysia will continue to give strong support preparations at regional and international levels for the United Nations General Assembly High Level Meeting on NCD.
- The UN High-level Meeting on the Prevention and Control of Non-Communicable Diseases, New York, USA (19 and 20 September 2011). The delegation from Malaysia was headed by the Health Minister. This meeting was a major milestone in the history of global health and development, where it was only the second time that a health related issue is discussed at the highest global forum. At this meeting, all Member States unanimously adopted the Political Declaration on the Prevention and Control of NCD.

• The Technical Consultation on Indicators for Non-Communicable Diseases and Situational Analysis on Cancer Data for ASEAN Region, Kuala Lumpur (21-23 November 2011). This meeting was organized in collaboration with ASEAN Secretariat. Six ASEAN Members with representatives from WHO Western Pacific Regional Office and ASEAN Secretariat attended this meeting. The outputs of the meeting were: (i) the main NCD indicators and time-bound targets for ASEAN region; (ii) recommendations for moving forward in establishing or strengthening national NCD surveillance systems; and (iii) establishing and strengthening cancer registries.

#### National Health and Morbidity Survey 2011

In early 2011, the Health Minister has instructed the MOH to review the implementation of the National Health and Morbidity Surveys (NHMS). The previous interval of 10 years was too infrequent to effectively monitor the changes of NCD risk factors in Malaysia. For NCD risk factors, it was agreed that Malaysia will adopt the WHO STEPwise methodology, and that the NHMS for NCD Risk Factor will be conducted every four years, starting in 2011.

The NCD Section headed the Working Groups for three topics i.e. Diabetes, Hypertension and Hypercholesterolaemia. The prevalence of non-communicable diseases (NCD) risk factors continues to rise in Malaysia. The 2011 National Health and Morbidity Survey (NHMS 2011) has shown that the prevalence of diabetes in Malaysia has increased 31.0% in the space of just 5 years, from 11.6% in 2006 to the current 15.2%. The increase was mostly contributed by the increased proportion of "undiagnosed diabetes". The prevalence of "impaired fasting glucose" has also risen, from 4.2% in 2006 to 4.9% in 2011. (Figure 3.1)

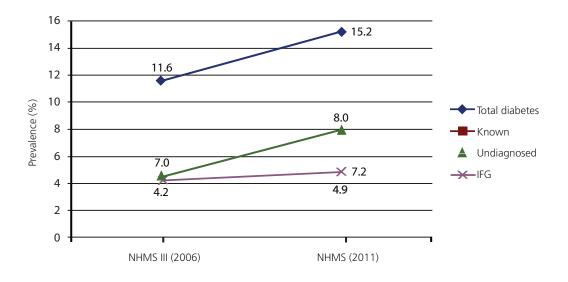


Figure 3.1 Prevalence of Diabetes (≥18 years), NHMS III (2006) and NHMS 2011

For hypertension, the prevalence has increased only slightly from 32.2% in 2006 to the current 32.7%, an increase of about 1.6%. Unfortunately, similar to diabetes, about 60.6% of total hypertensives were due to "undiagnosed hypertension". (Figure 3.2). The prevalence of hypercholesterolaemia has increased almost double in the space of five years, from 20.7% in 2006 to the current prevalence of 32.6%, an increase of 57.5%. The proportion of "undiagnosed hypercholesterolaemia" versus "known hypercholesterolaemia" was even more staggering at 75.8% i.e. 3 out of 4 adults in Malaysia with high cholesterol were undiagnosed. (Figure 3.3). The gaps between diagnosed versus undiagnosed for all three conditions was more pronounced in the younger age groups.

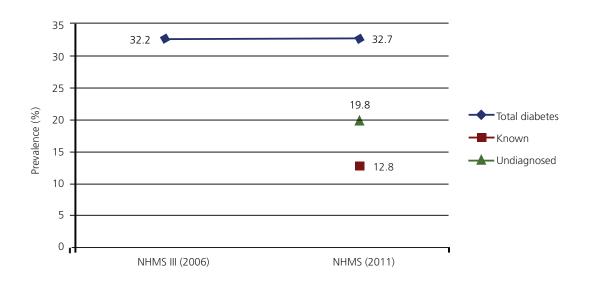


Figure 3.2 Prevalence of Hypertension (≥18 years), NHMS III (2006) and NHMS 2011

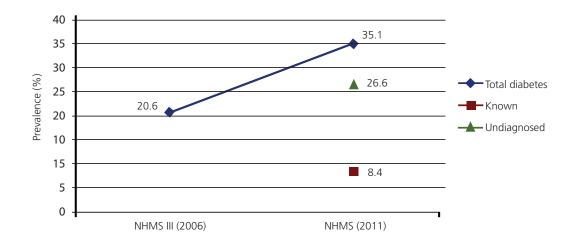


Figure 3.3 Prevalence of Hypercholesterolaemia (≥18 years), NHMS III (2006) and NHMS 2011

The Full Report for NHMS 2011 for NCD risk factors will be published in the first quarter of 2012.

#### National Diabetes Registry (NDR)



The National Diabetes Registry (NDR) is an initiative by the NCD Section, Disease Control Division, MOH to obtain epidemiological and clinical outcome data of diabetes patients receiving treatment in healthcare facilities throughout Malaysia. The specific objectives of NCR are:

- (i) Electronic collection of basic socio-demographic and outcome data of all diagnosed diabetes patients in Malaysia; and
- (ii) Electronic collection of clinical data for the purpose of annual Clinical Audit, for randomly-sampled Type 2 Diabetes patients in pre-determined health care facilities.

INC-Solution Sdn. Bhd. was engaged by the MOH to developed the web-based application and assisting in the technology transfer to replace the existing manual diabetes patient registration system and the stand-alone "Diabetes Clinical Audit" application. Data from the "Audit of Diabetes Control and Management" (ADCM) database from CRC was also transferred into the application.

The NDR went live on 1 January 2011, available at http://ndr.moh.gov.my. Technical and administrative support is provided via ndrsupport@moh.gov.my. For the first stage of implementation, patient registration for all types of diabetes patients (except for Gestational Diabetes) is required for all MOH Health Clinics only; however, in several states, patients in MOH hospitals were also registered. NDR also supports the data entry and analysis for the Diabetes Clinical Audit and Diabetes QA in primary care.

As of 26 January 2012, a total of 496,129 active diabetes patients has already been registered into NDR. As compared to the data on active diabetes patients collected via the Diabetes Returns, we estimate that approximately 75.2% of diabetes patients seeking treatment in MOH health clinics have already been registered into NDR. (Table 4.1).

**Table 4.1** Coverage of Diabetes Patients currently seeking treatment in MOH health clinics already registered into NDR, 2011

State	Health clinics	Estimated active patients (2010)	Patients registered in NDR	Percentage registered
Johor	88	91,329	68,164	74.64
Kedah	53	67,112	25,147	37.47
Kelantan	53	25,178	21,927	87.09
Melaka	27	31,427	32,869	104.59
N. Sembilan	42	39,393	42,679	108.34
Pahang	70	43,871	34,377	78.36
Perak	70	75,472	53,307	70.63
Perlis	9	10,222	7,905	77.33
Pulau Pinang	26	37,404	36,011	96.28
Sabah	19	10,926	9,371	85.77
Sarawak	21	64,848	32,201	49.66
Selangor	55	113,508	85,146	75.01
Terengganu	37	20,058	17,923	89.36
WPKL	14	28 ,638	28,507	99.54
WP Labuan	1	552	595	107.79
TOTAL	585	659,938	496,129	75.18

## Diabetes Returns and Diabetes QA in Primary Care, 2011

In 2011, there were 764,594 diabetes patients on "active" follow-up at 585 MOH health clinics providing diabetes services throughout Malaysia. These patients contributed to 3,123,981 attendances in MOH health clinics, which works out to approximately 10% of total outpatient attendances. In addition, a total of 87,142 patients were newly diagnosed and registered in 2010. (Table 5.2)

**Table 5.2** Distribution of Number of Active Diabetes Patients, Total Number of OPD Attendances, And Number of Newly Diagnosed Diabetes Patients By State, 2010 And 2011

States	No. of Active Patients		Total No. of Attendances		Newly Diagnosed	
	2010	2011	2010	2011	2010	2011
Perlis	10,222	11,536	41,772	80,238	1,849	2,053
Kedah	67,112	68,505	214,687	216,333	5,661	6,889
Pulau Pinang	37,404	35,900	111,696	142,385	7,018	7,759
Perak	75,472	78,333	270,599	247,866	6,829	7,400
Selangor	113,508	83,622	370,471	400,226	14,560	14,774
FT K.Lumpur*	28,638	28,525	93,320	85,564	3,761	2,741
N.Sembilan	39,393	42,962	141,999	173,595	3,807	3,908
Melaka	31,427	115,023	90,668	132,677	5,905	4,863
Johor	91,329	98,798	445,272	342,947	9,318	8,718
Pahang	43,871	41,981	191,136	199,184	6,454	5,629
Terengganu	20,058	16,944	104,194	111,021	3,408	3,414
Kelantan	25,178	25,538	65,654	361,990	1,540	3,803
Sarawak	64,848	103,177	190,672	575,647	6,805	12,737
Sabah	10,926	13,148	42,709	42,709 51,261		2,392
FT Labuan	552	602	2,475	3,047	120	62
Total	659,938	764,594	2,377,324 3,123,981		78,784	87,142

Note: \* includes FT Putrajaya

Results of the Diabetes Quality Assurance Program (QAP) at the primary care level entitled "Quality of Diabetes Care at MOH Health Care Facilities: Glycaemic Control" showed a decrease, from 18.2% in 2010 to 15.6% in 2011. (Table 5.3) This could have been partly contributed by the implementation of the Diabetes Clinical Module within the NDR. Under the NDR module of "Diabetes Clinical Audit", the system actually randomly selected the patients to be audited and generate a list for each health clinic to audit. All 100% patients selected have to be audited, and the problem comes when the clinic have not updated the status of their patients who are no longer on follow-up, and therefore, these patients didn't have data for the past 1 year (and therefore had missing or absent data). For the implementation in 2012, it was reinforced that all clinics have to continually update the status of their patients in the registry.

**Table 5.3** "Quality of Diabetes Care at MOH Health Care Facilities: Glycaemic Control" Results, 2009, 2010 and 2011

	2009	201	10			
States	HbA1c <6.5%	HbA1c <6.5%	Bil.	Bil. HbA1c <6.5%	Bil. Sampel	HbA1c <6.5% (%)
Johor	14.0	18.3	5,705	1,304	9,074	14.4
Kedah	8.5	12.8	6,722	811	6,610	12.3
Kelantan	8.7	9.2	7,426	575	4,605	12.5
Melaka	18.4	15.3	6,342	1,626	9,596	16.9
N. Sembilan	13.9	19.6	14,842	2,799	15,750	17.8
Pahang	13.4	19.9	7,108	895	6,705	13.4
Perak	14.5	16.3	6,276	798	5,740	13.9
Perlis	30.6	24.3	800	197	754	26.1
Pulau Pinang	12.3	18.5	3,694	759	3,928	19.3
Sabah	22.6	19.6	3,437	576	2,221	25.9
Sarawak	7.8	3.6	5,913	189	2,966	6.4
Selangor	15.8	25.2	7,019	940	6,211	15.1
Terengganu	19.9	20.5	3,958	557	3,612	17.9
WP K.Lumpur	12.6	27.9	3029	727	4,150	17.5
WP Labuan	n.a	30.8	315	18	78	23.1
Malaysia	13.3	17.2	76,881	12,771	82,000	15.6

## Seminar "Advocacy of the National Strategic Plan for Non-Communicable Disease" on March 22, 2011

Seminar of Advocacy on the National Strategic Plan for Non-Communicable Disease (NSP-NCD) which was held on March 22, 2011 at the Putrajaya International Convention Centre was officiated by YB Dato' Sri Liow Tiong Lai, Minister of Health Malaysia. This seminar was a collaboration between Disease Control Division, Ministry of Health Malaysia and Malaysia Health Promotion Board or Mysihat. The seminar was attended by staff from various ministries, professional bodies, Higher Education Institutions, Non-Governmental Organisations (NGOs), celebrity chef and media. The objective of the seminar was to inform the implementation of the NSP NCD for the year 2011, role to be played by each stakeholder in prevention of NCD and also to get support from other stakeholders for the prevention of NCD in Malaysia. Four papers were presented which were (i) The burden of Disease in Malaysia; and (ii) National Strategic Plan for Non-Communicable Disease (NSP-NCD) for the year 2011, both papers by Dr Feisul Idzwan Mustapha; (iii) The role of NGOs, professional bodies and other stakeholders in order to support the implementation of the NSP-NCD, by Dr Zainal Arrifin Omar ;and (iv) The role of Malaysia Health Promotion Board, by Dr Yahya Baba. Following are the abstracts of the four papers.

 Presentation I: The burden of disease in Malaysia, by Dr Feisul Idzwan bin Mustapha

NCD refers to diseases which are not speaded from an individual to another individual. The main NCDs are cardiovascular diseases (heart disease and stroke), diabetes and cancer. NCD shares three same risk factors. The main risk factors are sedentary lifestyle (inactive), unhealthy diet and smoking. NCD is the leading cause of premature death in Malaysia (below 60 years).

 Presentation II: National Strategic Plan for Non-Communicable Disease (NSP-NCD) for the year 2011, by Dr Feisul Idzwan Mustapha

NSP-NCD is intended to address the burden of NCD in Malaysia which emphasizes the involvement of various agencies. NSP-NCD has been approved by the Committee Policy and Planning, Ministry of Health and was launched by the Minister of Health on December 14, 2010. NSP-NCD adopted seven key strategies and to ensure that policy intervention and regulations have been implemented effectively a cabinet level committee was formed.

• Presentation III: The Role of NGOs, Professional Bodies and other Stakeholders in order to support the implementation of the NSP-NCD, by Dr Zainal Ariffin Omar.

Cooperation and partnerships between various parties, organizations and sectors are important to achieve the objectives of the NSP-NCD. The NGOs, professional bodies and the media play an important role in the prevention and control of NCD. Civil society, including NGOs and associations of people play different role than the government and private sector. Partnership and collaborative relationship between the various parties, to achieve common objectives based on the understanding of duties and responsibilities to ensure the effectiveness of the partnership. All programs and activities must be in line with NCD prevention and control framework as contained in NSP-NCD.

 Presentation IV: The role of the Malaysian Health Promotion Board in supporting the implementation of the NSP-NCD, by Dr Yahya Baba.

The main objective of the campaign is to expand the field of health promotion with the intensive involvement through the non-governmental organizations. According to Health Promotion Board Act (651) 2006, health promotion refers to any action or activity, such as strengthening the skills and the ability of individuals, groups and communities, to improve social and environment towards better health status. Priority areas of the health promotion such as do not smoke, promotes exercise and physical activity, healthy eating, mental health, cancer prevention, diabetes prevention, cardiovascular disease prevention, sexual health (HIV/ AIDS), research in the health promotion field and also health promotion through sports activities and cultural.



Photo 6.1 Minister of health officiate the seminar



Photo 6.2 Participant from various agencies



**Photo 6.3** YB Dato' Sri Liow Tiong Lai with Y.Bhg. Dato' Sri Dr Hasan Abdul Rahman, Dr Yahya Baba and Dr. Zainal Ariffin Omar, before the officiating ceremony.

## Working Trip to Singapore Health Promotion Board (HPB), 28 to 29 July 2011

The main objective of the visit was to see the latest implementation of NCD risk factors intervention in the community and workplace, undertaken by Singapore Health Promotion Board. Four locations were visited as follows:

- Bukit Timah Community Club-Community Club in Singapore uses the concepts of "Promoting Healthy Community Center". Implementations of the healthy community center model will be used throughout Singapore.
- Yu Hua Hawker Centre Food court is a pioneer project for introducing brown rice and wholemeal flour noodles as well as the provision of healthier food choices. Again the model implementation in the food court is proposed to be expanded to other food courts around Singapore.
- Wellington Primary School Project "Health Promoting School Canteen" which introduced the concepts of Healthy Set Meals. This was a new project which was introduced in July 1, 2011.
- Health Zone, Health Promotion Board This is a health promotion centre for the public and has several facilities and educational programs, especially to school children.

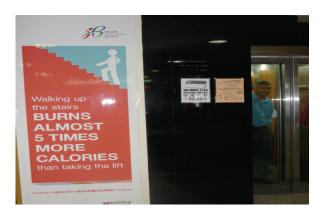


Photo 7.1 Signage at the Community center



**Photo 7.2** Group photo between MOH staff and Health Promotion Board Singapore



Photo 7.3 Bukit Timah Community Club Signage



Photo 7.4 Welcome speech by Wellington Students



Photo 7.5 Activity at School Canteen



Photo 7.6 Type of food and calories content display at the canteen



Photo 7.7 Model Health Food Pyramid displayed in the canteen



Photo 7.8 Food served at school canteen



Photo 7.9 Advertisement board at Hawker food court



Photo 7.10 Promoting whole grain in the menu at Hawker food



Photo 7.11 Health Zone Corner



Photo 7.12 Brown Rice



Photo 7.13 Wholegrain noodle

## Press Release from Honourable Deputy Prime Minister at Cabinet Committee on Healthy Living Environment (JKPHS) on April 4 2011 at Parliament Building.

Non-Communicable Diseases (Non-communicable Disease or NCD) is the main cause of the disability and premature death in Malaysia. This situation is worrying the government because it has a negative impact on the economy and national development.

The Government is strongly committed to address this NCD epidemic. On December 17 year 2010, Cabinet has approved the National Strategic Plan for Non-Communicable Disease. The main thrust of NSP-NCD is using the whole of government approach or whole of society and multi-sectoral approach to achieve the main objective to reduce the burden of NCD.

NSP-NCD has seven strategies and to ensure that the NSP-NCD can be implemented as planned especially for the strategy seven: The Policy and Regulatory Interventions, a cabinet committee level was established. The committee is chaired by Deputy Prime Minister and composed of ten (10) Ministries.

NSP-NCD also outlines 43 main activities, most of them require the involvement of various sectors. Enhancing health promotion activities at the grassroots level is very important to increase knowledge and awareness among Malaysians. Environment that supports healthy eating, living actively and smoke free could encourage Malaysians to change their behaviour to positive manner. This is a form of health protection by the government to ensure the health and welfare of the Malaysian.

## Workshop on Framework for Physical Activity and Exercise, from 2 to 4 October 2011.

Workshop on Framework for Physical Activity and Exercise was held from 2 to 4 October 2011 at Hotel De Palma Inn Shah Alam, Selangor. This workshop was attended by 22 officers from the Ministry of Health, which consists of Public Health Physicians, District Health Officer, Medical Officer, Epidemiology Officer, Nutritionist, Dietician, Health Education Officer and Research Officer.

The main objective of the workshop is to strengthen the implementation of the NCD risk factor interventions in Malaysia, which focus on physical activity and exercise. The main objectives of this workshop are:

- Identifying the relevant policies and best practices of physical activity in Malaysia in various setting;
- To create components in terms of evaluation and monitoring of process indicators and outcome indicators with targets; and
- To propose programs and activities that is most effective in promoting and increasing physical activity levels among Malaysians.

This workshop includes presentation paper by Prof Dr Mohd Nasir Mohd Taib from University Putra Malaysia as facilitator for this workshop. This workshop was followed by group discussion based on three main topics namely (i) The policy to encourage physical activity in community, school and workplaces; (ii) The World Health Organization recommendations of Physical Activity by age group; and (iii) Best practice interventions to promote physical activity. Each output was presented during final discussion. The results of the discussions and decisions made at this workshop will be basis for strengthening NCD disease prevention.

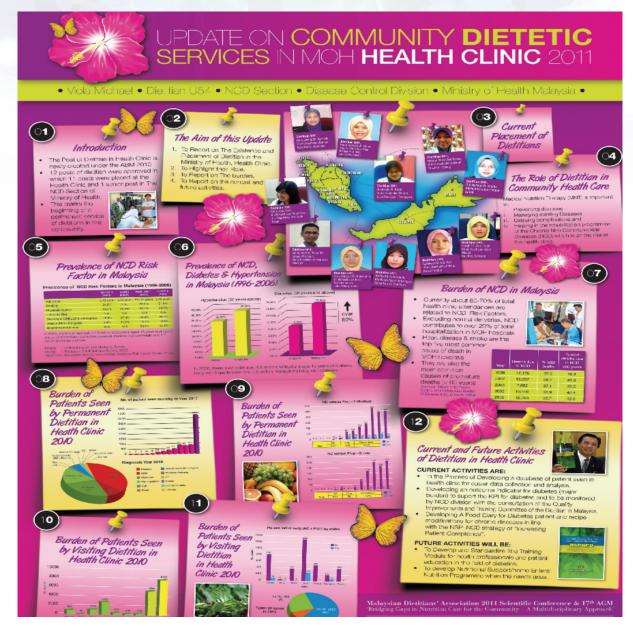
#### Coordinating the Dietetic Services in Health Clinic

NCD Section together with Family Health Development Division (Primary Section) and The Main Technical Committee of Dietitian are involved in coordinating, supervising and monitoring of the activities of the dietitian especially in the management of Chronic Non Communicable Diseases.

#### Background of Dietetic Services in Health Clinic

Under the budget of ABM 2010, approval of 11 posts of dietitian in Health Clinic and 1 senior post in Disease Control Division (NCD Section) of MOH marks the beginning of a permanent service of dietitians in the Community. In 2011, under the ABM 2011, another post were approved and it was filled up beginning in month of July 2011. Currently the dietitians are placed in Jinjang Health Clinic (Federal Territory of Kuala Lumpur), Kelana Jaya Health Clinic (Selangor), Green Town Health Clinic (Perak), Jalan Mahammodiah Health Clinic (Johor Bharu), Bandar AlorSetar Health Clinic (Kedah), Ampangan Health Clinic (Negeri Sembilan), Hiliran Health Clinic (Kuala Terengganu), Beserah Health Clinic (Kuantan, Pahang), Putatan Health Clinic (Sabah), Jalan Masjid Health Clinic (Kuching, Sarawak), Bandar Kota Bharu Health Clinic (Kota Bharu, Kelantan) and Luyang Health Clinic (Sabah).

Medical Nutrition Therapy is very important in prevention, managing existing diseases, delaying the complication and helping in the rehabilitation programme of chronic NCD which is on the rise especially at the health clinic. After the placement of the 11 permanent dietitian starting in April 2010 together with visiting dietitian, 9437 patients were seen (compared to 8186 patients seen only by visiting dietitian in 2009). Almost 60 % of patients seen are diabetes.



Poster presented in Malaysian Dietitian's Association Scientific Conference &17th AGM on Update On Community Dietetic Services in MOH Health Clinic 2011

## **Activities Implemented in 2011**

National Community Dietetic Management Meeting

The Objectives of this meeting is to:

- Provide exposure and orientation to the new dietitian in term of their job, function and duties
- Coordinate Activities and task of Dietitian in health clinic
- Plan Quality improvement activities
- Present the work load or statistic of dietitian in each clinic
- Do annual and long term planning
- Discuss and solve problems and shortages faced by each dietitian
- Evaluate and monitor the plans or programme implemented

Meetings were held by two times as stated below:

- Meetings and Briefing of The NSPNCD Strategy (2011-2015) and issues related to Dietetic in the community held on 14-16 March 2011 at the Dietetic and Catering Department of Kuala Lumpur Hospital.
- National Community Dietetic Management Meeting 2/2011) held on 29 to 30th September 2011 at the Anopheles Room, Level 4, Block E10, Parcel E, Putrajaya.

Technical Meeting on the development of the "educational tools" to educate and empower patient especially Diabetes patients. Two meetings were held that was in May and August 2011. All the meetings held have resulted in output and outcome as follows:

#### • Database of Patients in the entire health clinic with Dietition

Coordination of data collection for patients in the entire clinic by using" Excel Template "and the data analysis by 2 dietitians as agreed by every health clinic dietitian. The analyzed data then were able to be presented during each meetings and discussion also were done on the improvement of the patients data and statistic in each meetings and on line.

#### • Burden of Patient Seen From January to Jun 2011

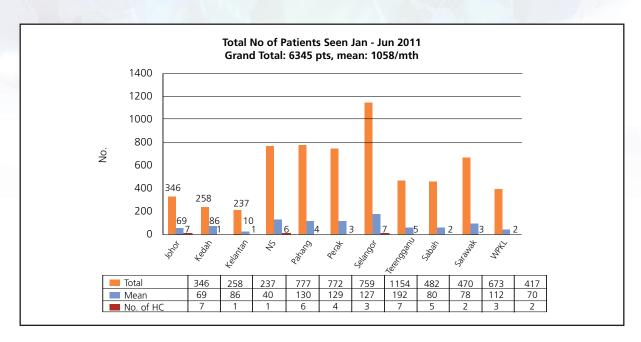
From January to June 2011, the permanent dietitian in 11 the health clinics had managed to attend to 6345 patients of which 5556 were new cases, 789 were follow up cases and the visiting dietitian had managed to attend 1811 cases in which 1581 patients were new cases and 230 were follow up cases. 51% of cases seen are diabetes, followed by hypertension (29.0%), hiperlipidemia (25.0%) and the other risk factors for NCD and Chronic NCD. Details of the statistic are as shown below:

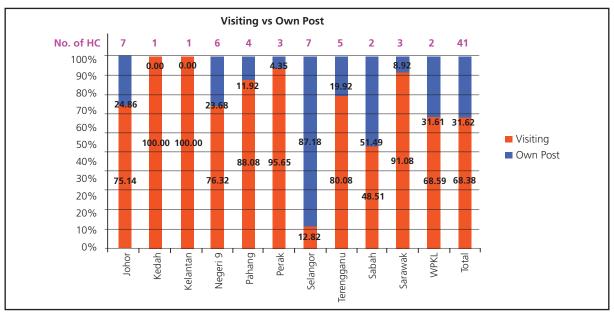
i. Statistic of patients seen by permanent dietitian (Jan – Jun 2011)

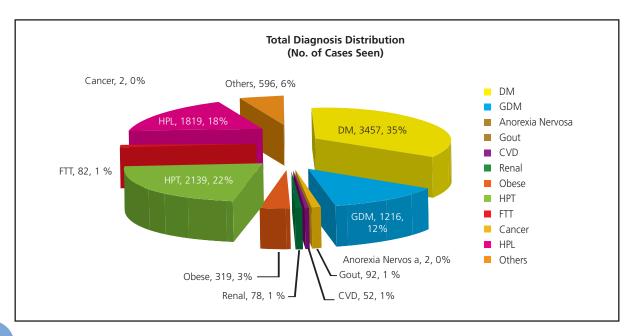
#### Total No of Patients Seen by Months (all ttc)

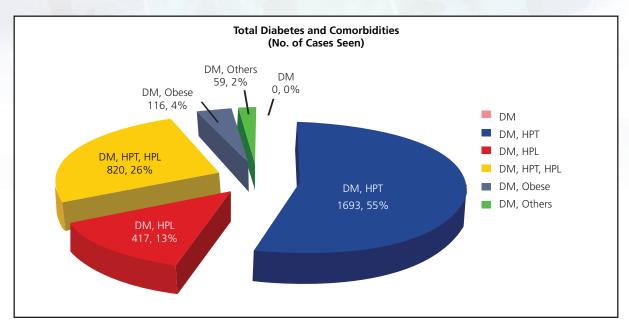
State	Month								Total
State	January	February	March	April	May	June	Total	Mean	НС
Johor	63	81	61	49	92	0	346	69	7
Kedah	108	74	76	0	0	0	258	86	1
Kelantan	44	44	45	22	58	24	237	40	1
NS	89	116	174	130	118	150	777	130	6
Pahang	120	96	148	134	145	129	772	129	4
Perak	147	138	103	112	134	125	759	127	3
Selangor	156	180	203	206	167	242	1154	192	7
Terengganu	65	65	82	90	112	68	482	80	5
Sabah	40	40	108	101	76	105	470	78	2
Sarawak	107	107	97	143	121	98	673	112	3
WPKL	76	51	74	62	76	78	417	70	2
Total	1015	992	1171	1049	1099	1019	6345	1058	42

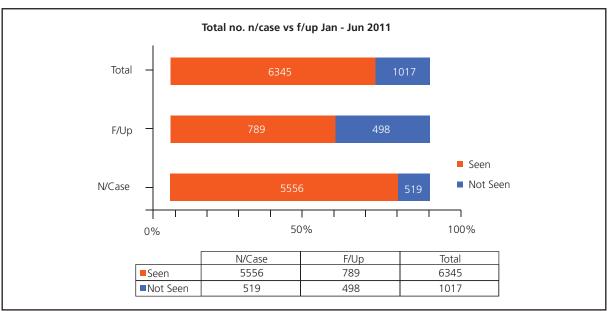
TOTAL MEAN = 96/HC



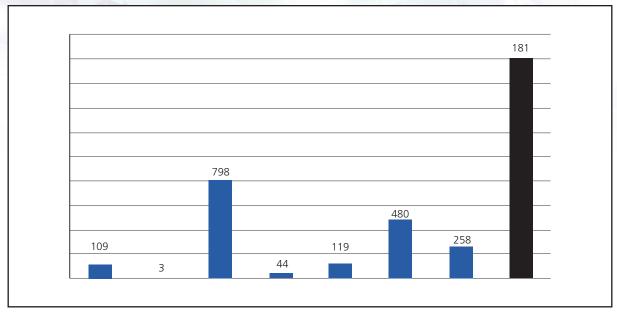


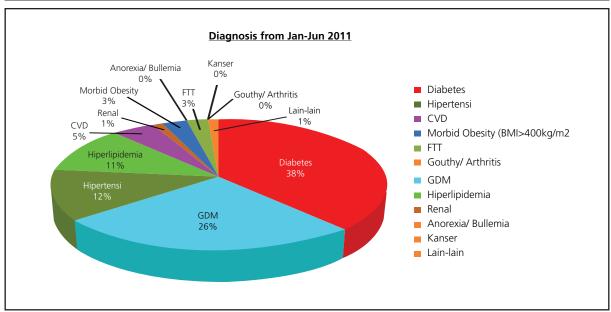


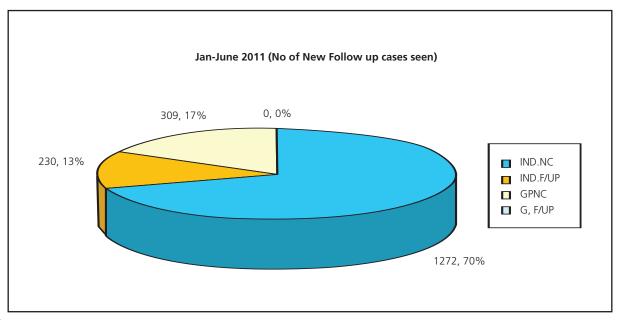




ii. Statistic Of Patient Seen by Visiting Dietitian from the hospital to clinic.







## Activities Implemented by NCD Section in 2011 in collaboration with The Technical Committee of Dietetic.

Developed Training Module for patients

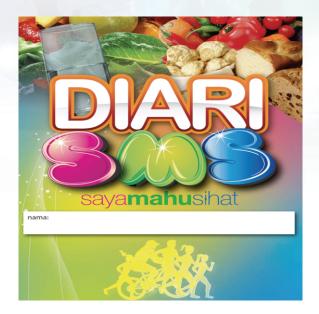
This training modul is in the form of CD for patients in which it can be used by dietitian in health clinic to give education to patients in group. There are 5 topics prepared as follows;

- Pemakanan Sihat (Healthy Eating)
- Pemakanan Diabetes (Diet For Diabetes)
- Pemakanan untukTekanan darah Tinggi (Diet for Hipertension and Hiperlipidemia)
- Pemakanan Untuk GDM (Diet For Gestational Diabetes Diet)
- Pemakanan Untuk Morbid Obesiti (Diet for Morbid Obese)



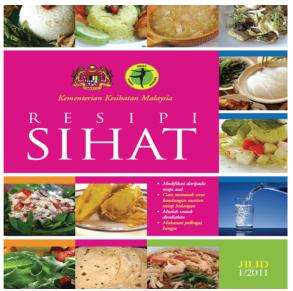


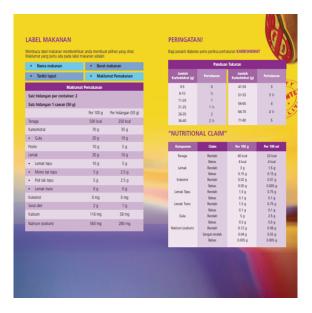
- Developed patients education and empowerment tools such us,
  - Food Diary for "diabetes patient" booklet.
  - Leaftlets on "diet for diabetes".
  - Healthy recipes for diabetes.
  - Guide to "food labelling" for diabetes.







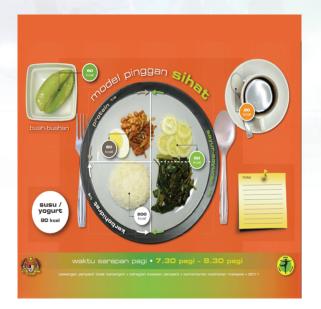


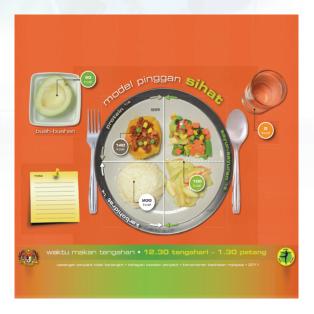


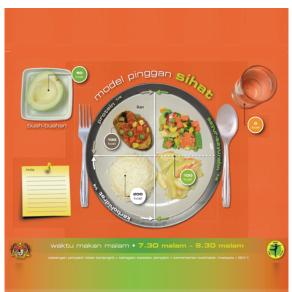
• Developed a poster On "Plan your Activities" to teach public on how to burn calories by doing different types of physical activities and exercises.



• Developed education tools for diabetes and high risk individual such as person with Impaired Glucose Tolerance Test (IGT), Overweight, obese, high cholesterol by using the "Plate method for high risk group" model specifically for 3 meals that is for Breakfast, Lunch, Dinner and the explanation and benefits of Plate Method.









• Developed "Key performance Indicators" which is still on trial after the meetings in September 2011 in which 3 KPI in the forms of outcome and 1 process indicators were proposed. These indicators will be used to monitor the effectiveness of dietetic services in the health clinic.

Dietetic Services in the Community especially in health clinic is still new and with the implementation of NSP-NCD 7 strategies to control and prevent NCD, the role of dietitian is crucial to help the management of Chronic Non Communicable Diseases in the Country.

# **CANCER CONTROL**

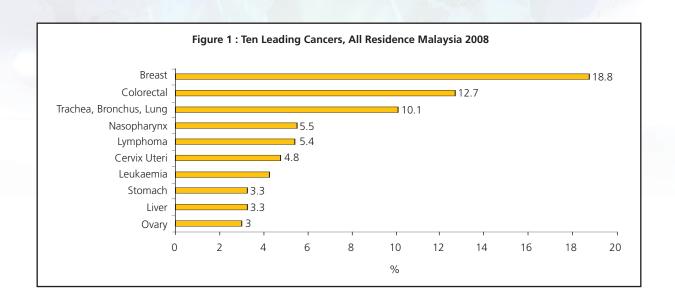


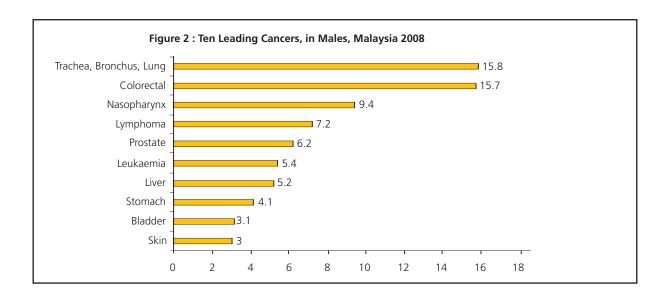
# CANCER CONTROL PROGRAMME

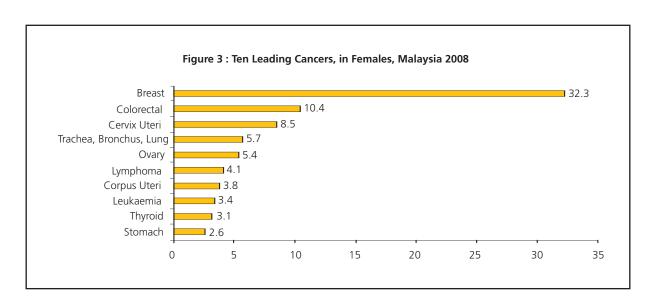
# The National Cancer Registry (NCR)

The National Cancer Registry (NCR) was established at the Non-Communicable Disease Section, Disease Control Division in Jun 2006 and started collecting data from January 2007. Following that, new Cancer Registries were established in Selangor, Perak, Kedah, Terengganu, Malacca, Negeri Sembilan, Federal Territory of Kuala Lumpur and Perlis. The existing cancer registries namely, Penang, Kelantan, Pahang, Johore, Sabah and Sarawak continue with the activities. All State Cancer Registries are required to send cancer data collected at state level to the Ministry of Health to be registered at the NCR data-base. From 1st January 2007 until 31st December 2011, a total of 57,800 cancer cases diagnosed in 2007 until 2011 were registered at the National Cancer Registry. It comprises of 44.8% males and 55.2% females. Of all the cases registered at the NCR data-base, 39.5% are Malay, 40.7% Chinese, 6.4% Indian and 13.4% others.

The collection of cancer data is a continuous process, hence, there are cases which are yet to be notified and registered at the NCR. As of this point, NCR is preparing the 2008 cancer report. There were 17,763 cancer cases diagnosed in 2008 reported and registered to NCR. Figure 1 described the leading cancers among Malaysian males and females in 2008 while figure 2 and 3 described the leading cancers amongst the general population in Malaysia. The three leading cancers among the general population in Malaysia were breast (18.8%), colorectal (12.7%) and lung (10.1%). In males, the three leading cancers were lung (15.8%) followed by colorectal (15.7%) and nasopharynx (9.4%) while in females, the three leading cancers were breast (32.3%) followed by colorectal (10.4%) and cervix (8.5%), The three leading cancers were similar with the 2007 report. Figure 4 showed the incidence of cancers occurred at all ages and increases with age. The incidence rate in males exceeded the incidence rate in females after the age of 60 years.







# FCTC SECRETARIAT AND TOBACCO CONTROL



# FCTC SECRETARIAT AND TOBACCO CONTROL PROGRAMME

The Tobacco Control & FCTC Unit was established in 2006, under the Non-Communicable Disease Section, after Malaysia ratified the global treaty, WHO Framework Convention on Tobacco Control (WHO FCTC). This unit previously had dual functions i.e. to control cancer as well as tobacco, but these are now two separate entities.

The foremost objective of this Unit is to reduce the impact of tobacco use so that it will no longer remain a major public health burden. The main approaches would be to prevent smoking uptake particularly amongst youths and to protect the public from the threats of second-hand smoke.

There are six major components of the Tobacco Control Programme and these are:

- FCTC: Intersectoral collaboration and capacity building
- Legislation & Enforcement
- Health Promotion and Advocacy
- Smoking Cessation Programme
- Tax and Price Measures
- Research, Surveillance & Evaluation

#### **FCTC**

The Unit serves as the National Secretariat for the implementation of the world's first and only global legal tool, i.e. the WHO Framework Convention on Tobacco Control (WHO FCTC). This Unit is now known as the FCTC Malaysia, since the Malaysian Government officially became a party to the WHO FCTC in December 2005. Malaysia's involvement in the FCTC process has been active until now. Malaysian representatives had partake in previous sessions of the Conference of Parties (COP) as well as sessions of the Intergovernmental Negotiating Body (INB) for the Protocol on FCTC Article 15 i.e. on control of illicit tobacco trade as well as becoming a partner country for the WHO FCTC Articles 5.3, 11, 12 and 13 working groups. At the national level, FCTC Malaysia coordinates at least four interagency meetings to discuss FCTC implementation status.

#### LEGISLATION AND ENFORCEMENT

In 2011, the Tobacco Control & FCTC Unit had successfully enacted provisions for smoke-free areas in support of the Smoke-Free Melaka Initiative (MBAR) commenced by the Melaka State Government. This foremost project was a collaborative effort between an alliance of non-government organizations (GaNMBAR) with financial commitment from the Malaysian Health Promotion Board (MySihat) and the Government through its numerous agencies. Smoke-Free Melaka Initiative (MBAR) then became an important model project for other Heritage Sites within the ASEAN Region.

Enforcement of the provisions in the Control of Tobacco Products Regulations is being carried out throughout the country by over 2,000 of the Ministry of Health enforcement officers located at the states and district levels. There are two major types of enforcement activities, i.e. the routine and the thematic operations known as "Enforcement Information Blast" or "E-Info Blast". Tables A & B summarizes enforcement activities carried out in 2011 compared with prior years.

Table A: Compilation report for OPS E-Info BLAST 2011

	Activities	2011	2010
1	Number of premises inspected	16,948	11,539
2	Number of offer to compound offence	3,226	1,441
3	Compound values imposed (RM)	705,200	273,850.00

Table B: National Performance of CTPR Enforcement

	Activities	2011	2010	2009	2008
	Compound produce under Control of To	obacco Produ	ct Regulations	Amendment	2008
1	Number of notice produced (sec. 32B)	24,098	17,346	11,980	7,100
2	Number of compounds produced	13,646	10,260	6,619	4329
3	Number of compounds produced (RM)	3,024,630	2,198,939	1,419,136	919,535
4	Number of compounds described	12,981	9,219	6,304	3,679
5	The total amount paid compound (RM)	1,778,865	993,775	556,180	321,613
6	Percentage of the compound described	95.1%	89.8%	95.2%	85%
	Court action under Control of Tobac	co Product Re	egulations Am	endment 200	8
7	The number registered in court	5,873	6,175	4,351	3,098
8	Number of Fine	892	854	670	665
9	Fines (RM)	255,205	228,870	147,098	165,895
10	Number of imprisoned	1	1	1	0
11	Number of D&A Cases	24	40	117	62
12	Number of DNAA Cases	3,174	3,387	2,758	1079
13	Seized	8,671	10,905	NA	NA
14	Value (RM)	59,739	331,557	NA	NA

#### ANTI-TOBACCO PROMOTION

The Tobacco Control & FCTC Unit works closely with the MOH Health Education Division to implement appropriate health promotion activities in order to increase public awareness about the hazards of tobacco and the benefits of not smoking. Amongst the activities include the nationwide 'Tak Nak Merokok' media campaign, World No Tobacco Day celebration and the New Breath Beginning Ramadhan Campaign.

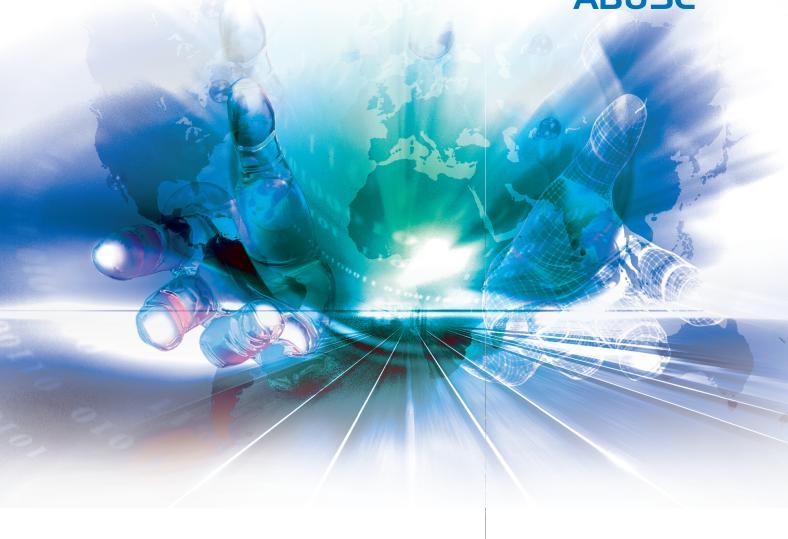
#### **SMOKING CESSATION**

Together with the Primary Health Care Section of the Family Health & Development Division, MOH, the Tobacco Control Unit conducted a workshop on 'Brief Intervention in Smoking Cessation' for relevant officers from all the State Health Departments and selected staff from specific health centers. This was part of a pilot project introduced by the World Health Organization, Western Pacific Regional Office (WPRO) to test simple brief intervention techniques along side other approaches in smoking cessation.

#### NATIONAL TOBACCO SURVEY

Malaysia carried out its first Global Adult Tobacco Survey (GATS) in November 2011. This tobacco specific national survey supported by the WHO and the US Centers for Disease Control (CDC USA) is a very comprehensive study compared to prior National Health & Morbidity Surveys. However, results of GATS Malaysia are still not available during preparation of this report.

# ALCOHOL AND SUBSTANCE ABUSE



# ALCOHOL AND SUBSTANCE ABUSE PREVENTION PROGRAMME

Alcohol and Substance Abuse Prevention and Reduction Unit are responsible for activities relating to prevention and reduction of psychoactive drug use, abuse and dependence including alcohol. In addition this unit also compiles and disseminates scientific information on substance use, misuse and dependence, as well as their health and social consequences.

#### **Objectives**

- To formulate policy and plan of action to prevent and control drug and alcohol related harm
- To develop program for preventing and reducing alcohol and drug abuse related harm
- To monitor and evaluate the implementation of the substance prevention program
- Surveillance on disorder and diseases related to drug and alcohol abuse
- To plan and initiate research related to illicit drug use and alcohol consumption
- To collaborate with other relevant agencies in preventing and controlling drug and alcohol abuse

#### **Activities**

Global movement to combat harmful use of alcohol

Due to the complexity of alcohol related harm, concerted global action must be in place to support WHO Member States in their effort to reduce the harmful use of alcohol. In response to this "Global Strategy to Reduce Harmful Use of Alcohol" was endorsed by 63rd World Health Assembly in May 2010. The vision behind the Global Strategy is to improve health and social outcomes for individual, families and communities, with considerably reduced morbidity and mortality due to harmful use of alcohol and their social consequences.

National Counterparts for implementation of the Global Strategy was held in Gevena on the 8th to 11 February 2011. Together with this was the launching of Global Status Report on Alcohol and Health. This report provides comparable global information on 3 principal issues on alcohol control; 1) the consumption of alcohol, 2) alcohol related harm and 3) the policy responses worldwide. The report can be downloaded through www.who.int/substance\_abuse.

#### Training on substance abuse management at primary care level

Training on substance abuse management was carried out at the national level on the 28 to 30 June at Avillion Admiral Cove Hotel, Port Dickson. The three-days training covered several topics on the management of illegal drug, alcohol and nicotine use. It was jointly organized with National Institute of Health.

The aims were to increase knowledge and skills on substance abuse management among MOH staff working at primary care clinic, increasing human capacity in the field of addiction medicine in Malaysia. This was the third training conducted at national level and approximately 105 staffs have been trained since it was started in 2009.

#### Guidelines and modules

A workshop to finalize a guideline for "Management of Amphetamine Type Stimulant (ATS) abuse in primary and community level" was held on 17 to 19 October 2011. It was attended by specialist in Psychiatry, Public Health, Family Medicine and paramedics. Academician and officers from the National Anti-Drug Agency (AADK) were also invited to share their knowledge and experience in managing ATS users.

#### Demonstration/ pilot project

Four health clinics in remote areas in Tuaran and Keningau, Sabah were chosen to implement the screening, brief intervention and referral to treatment (SBIRT) as demonstration project. The project was implemented for a year from August 2010 to July 2011, with a total of 526 clients has been screened for their pattern of alcohol use using Alcohol Use Disorder Identification Test (AUDIT). Figure 1 illustrated their risk of alcohol use according to gender.

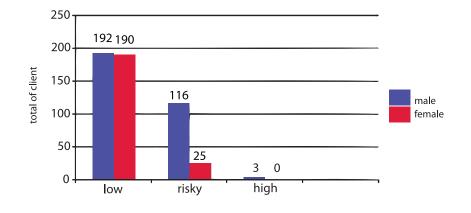


Figure 1 : Risk of alcohol use by ge

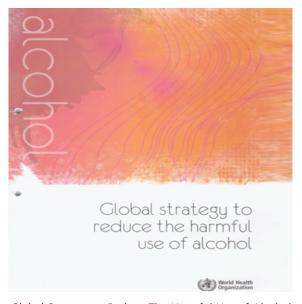
Photo 7.13 Wholegrain noodle

Among these 526 clients, 144 clients have been identified practicing a risky pattern of alcohol use and subsequently have been intervened, though only 105 clients (80%) came for the intervention. Post intervention data revealed out of 105 clients, 93 clients (88.6%) have reduced their alcohol intake. In term of risk of alcohol use, within 6 to 12 months post-intervention, 53 clients (50.5%) were in the low risk group, 52 (49.5%) clients still in the risky group and none in the high risk group.

In 2011 another 2 states that are Sarawak and Selangor have embarked Screening, Brief Intervention, Referral to Treatment (SBIRT) programme as a demonstration project. Eleven health clinics at Sri Aman, Sarawak have started the program in May 2011. Meanwhile for Selangor, SBIRT has been implemented in August 2011 in four clinics at Gombak district.



SBIRT programme briefing at KK Skrang, Sri Aman



Global Strategy to Reduce The Harmful Use of Alcohol

# VIOLENCE AND INJURY PREVENTION



# **VIOLENCE & INJURY PREVENTION PROGRAMME**

### **Objectives**

Working together with other agencies in reducing morbidity, mortality and disability due toviolence and injuries.

#### Role and Function

- Acts as a focal point for activities related to violence and injury prevention for the Ministry of Health.
- Coordinates the formulation of violence and injury prevention policy for the health sector.
- Coordinates establishment of activities, monitors and evaluates achievement of relevant program/ activities.
- Acts as the secretariat for the Coordinating Panel for Social Issues related to Children under the National Social Council.

#### **2011 ACHIEVEMENTS**

#### SURVEILLANCE

#### Analysis of MOH Data

The health sector is one of the main data sources for violence and injury. VIP unit routinely compiles and analyses data from:

- The National Informatics Center (MOH Admission and Death Due to Injury)
- One Stop Crisis Center (Child Abuse and Domestic Violence Data)
- The SCAN Team (Child Abuse Data)

Apart from the above, VIP also compile and analyses data from other sources such as:

- Department of Social Welfare (Child Abuse and Domestic Violence Data)
- Royal Malaysian Police (Violence and Road Traffic Injury Data)
- National Statistic Department (Mortality Data related to Injury)

#### **Statistics**

Health Facts 2010 indicates injury, poisoning and certain other consequences of external causes as the 3rd and 5th principal causes of hospitalization and deaths in MOH Hospitals respectively.

10 PRINCIPAL CAUSES OF HOSPITALISATION IN MC	OH HOSPITALS
Pregnancy, childbirth and the puerperium	25.72%
Diseases of the respiratory system	9.56%
Injury, poisoning and certain other consequences of exter nal causes	8.98%
Certain infectious and parasitic diseases	8.29%
Certain condition originating in the perinatal period	7.35%
Diseases of the circulatory system	6.88%
Diseases of the digestive system	5.09%
Diseases of the genitourinary system	4.95%
Neoplasms	3.62%
Factors influencing health status and contact with health services	3.54%

Source: Health Facts 2010

Data collected from SCAN Team of MOH Hospitals from July till December 2011, showed that there were 451 cases of child abuse referred for treatment under the team, 75% of which were sexual abuse.

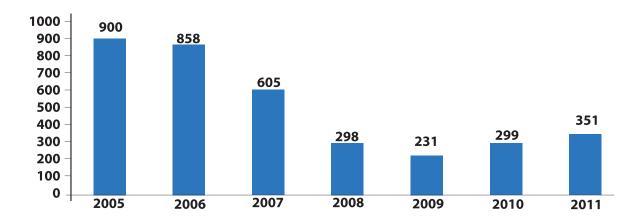


Photo 7.13 Wholegrain noodle

#### ADVOCACY ROLE AND INTERAGENCY COLLABORATION

#### Issues Related To Child Abuse and Domestic Violence

VIP unit had been actively involved in working with other agencies in issues related to Child Abuse and Domestic Violence.

A working together Document for the Management of Domestic Violence Cases had been produced in collaboration with The Ministry of Women, Family and Community Development.

VIP represents MOH in the Coordinating Council for Child Protection, chaired by the Department of Social Welfare. Council and has actively played the advocacy role in issues related to Child Abuse and Neglect. (4 meetings were conducted in 2011).

In making efforts to enhance safety and health aspects of children in nurseries, VIP works very closely with the Law and Advocacy Division of the Department of Social Welfare and the Ministry of Local Government. In 2011, VIP reviewed and updated the checklist for Health Technical Support (HTS) for the registration of nurseries, in line with the production of a common guideline for the registration of Nurseries which was facilitated by the Ministry of Local Government. The revised checklist for HTS is now in used nationwide and available online at MOH website.

To further strengthen the role of MOH in ensuring the safety and health of nurseries, VIP has also worked with the Department of Social Welfare in reviewing the training module for owners and child minders of nurseries. A special training module has been developed to ensure safety and health issues which include injury and disease prevention are covered during the training.

An alert system to trace missing child, established by the Ministry of Women, Family and Community Development had been put in place following Cabinet Approval in Jan 2011. VIP as the focal point for child abuse prevention program of the MOH, is a member of the task force for its implementation and had participated by incorporating information of the missing person in MOH and JKM websites, health offices, hospitals and clinics. Since Jan 2011, 3 missing children had been alerted using this mechanism by which two of them were found alive and one found dead.

#### **Issues Related To Road Safety**

VIP Unit is a member for National Road Safety Council. VIP works very closely with Ministry of Transport and has contributed in the development of Malaysian National Road Safety Action Plan.

#### CAPACITY BUILDING

To enhance the ability of health personnel in recognizing cases of child abuse in orderto initiate early intervention, all State Health Department are required to conduct violence sensitization training at least once a year.

To facilitate the running of the training, a training module had been produced in 2011 and distributed to all State NCD Officers.

#### RESEARCH

Apart from all the above, VIP had also participated and contributed in relevant studies such as:

- Assessing Community Readiness for Child Maltreatment Prevention in Malaysia in collaboration with WHO.
- Global Status Report on Road Safety 2 in collaboration with WHO.
- National Health Morbidity Survey IV Injury group.
- Malaysian Global School Based Student Health Survey in Collaboration with WHO.

# MENTAL HEALTH



# MENTAL HEALTH PROGRAMME

The Mental Health Unit under the Non-Communicable Disease Section is responsible for the development of the Community Mental Health Programme.

The objectives of the programme include:

- To promote healthy mind among the population through instilling healthy lifestyle and coping skills
- To reduce prevalence of mental disorders of high risk groups through screening and early intervention at the PHC level
- To provide treatment and care for those with mental health problems and illnesses at PHC level
- To facilitate optimal psychosocial functioning of the mentally ill individual in the community

Scope of programme includes promotion of mental health, prevention and early detection through screening for mental heath problems, treatment at primary health care and psychosocial rehabilitation.

Several activities were conducted in the year 2011 as following:

#### • National Strategic and Action Plan for Suicide Prevention Plan

A National Strategic and Action Plan for Suicide Prevention Programme was developed by the technical working group and was presented and approved at the Public Health Exco and Policy Meeting which is chaired by Deputy Director General of Public Health in late 2011. This plan outlines the implementation strategies among which are:

- Improving awareness among public and health care providers on suicide and suicidal behaviour.
- Promote early detection of signs and symptoms of mental disorders and risks factors for suicide among primary health care providers, teachers, school counsellors, police, community and religious leaders and emergency medical care personnels.
- Foster intersectoral collaboration among various agencies towards enhancing suicide prevention.
- Advocate relevant agencies on efforts towards reducing access to lethal means.

#### Advisory Council for Mental Health Promotion Meeting

Advisory Council for Mental Health Promotion was set up by the Ministry of Health. This Council which is chaired by Minister of Health consists of members of various experts with backgrounds related to mental health. The members include government and university psychiatrists, public health specialists, representative from Education Ministry, president of Malaysian Psychiatric Association, president of Malaysian Mental Health Association, presidents of mental health NGO's as well as representatives from media. This council serves to advise the Health Minister on issues related to mental health as well as providing insights and views on the strategy and directions in the implementation of mental health activities. Mental Health Unit of Disease Control Division acts as the secretariat for this council. In 2011, two meetings were held on the 18th January 2011 and 5th October 2011 respectively.

#### Healthy Mind Services (MINDA SIHAT)

The Healthy Mind Services which was piloted since 2008 until 2010 at nine Health Clinics throughout Malaysia was implemented using the Guidelines and Standard Operating Procedure of Healthy Mind Services. The objective of the service is to promote the community to screen for their mental health status and risk factors to identify stress, anxiety and depression, and to empower the community to handle stress effectively through instilling mental health life skills and relaxation techniques. This programme has been extended to other Health Clinics in 2011. 536 out of 806 Health Clinics carried out the screening programme.

#### Follow up Treatment and Psychosocial Rehabilitation for Mentally III at Health Clinics

A total of 678 (84.5%) Health Clinics had implemented the follow up treatment for the stable mentally ill patients. Till December 2011, a total number of new cases detected to have mental disorders in the governmental health clinics are 1,244 cases. A total of 597 cases had received psychosocial rehabilitation in 26 health clinics implementing psychosocial rehabilitation services to improve their psychosocial functioning and promote independent living in the community.

#### • Healthy Mind Programme in School

Six schools were took part in the pilot project. 6,540 students were screened and the results showed that the percentage of students who had severe stress was 4.8% (327 students), severe anxiety was 17.1% (1,167 students) and a sign of severe depressions was 5.2% (355 students). Advisory Council for Mental Health Promotion meeting on 5th October 2011 has decided that this programme should be carried out in all schools.

# **OCCUPATIONAL HEALTH**



## OCCUPATIONAL HEALTH PROGRAMME

### **Objectives**

- To promote the safety and health at workplace which includes work environment and process
- To increase awareness among employers, employees and communities on occupational safety and health aspects
- To prevent occupational related health problems arising from the work environment and work process amongst workers
- To reduce the morbidity and mortality due to occupational diseases and injury

#### **Programme Strategies**

- Training of staffs on occupational health (OH)
- Enhancing the surveillance of occupational diseases
- Occupational Health promotion in the workplace
- Developing Basic Occupational Healthcare Service (BOSH) through Primary Health Care (PHC) services
- Producing guidelines and Standard Operating Procedures (SOP) for MOH staff
- Enhancing the cooperation among government department and other agencies

#### Programme Activities and Achievement

Occupational Disease and Injury Surveillance

Sharps Injury Surveillance (SIS)

Sharps injury surveillance (SIS) was introduced in Ministry of Health Malaysia in the year 2007 to provide a basis for a registry on sharps injuries among healthcare workers and to provide data for policies, strategies and program development in the prevention of occupational related diseases.

Data was retrieved from OHU/ SIS-1 Forms which were sent to the Occupational Health Unit, Ministry of Health following the occurrence of sharps injuries in Ministry of Health facilities. OHU/SIS-1 Forms are used to collect epidemiological data on sharps injuries. There were a total of 1,405 cases of sharps injuries notified to the Occupational Health Unit, Ministry of Health Malaysia from 1st January 2011 until 14th January 2012.

Table 1: Sharp Injury Surveillance by State For Year 2011

No.	State	Cases (%)
1.	Selangor	228 (16.2)
2.	Johor	198 (14.1)
3.	Perak	134 (9.5)

Selangor recorded a higher occurrence of sharps injuries, 228 cases (16.2%), followed by Johor 198 cases (14.1%) and Perak 134 cases (9.5%) which is shown in Table 1. The population of female workers who were injured was 951 cases (67.7%) higher than the males 454 cases (32.3%).

Table 2: Sharp Injury Surveillance by Age Group For Year 2011

No	Age Group	Cases (%)
1	Below 20	27 (1.9)
2	20 - 29	1,006 (71.6)
3	30-39	237 (16.9)
4	40-49	76 (5.4)
5	50 and above	55 (3.9)
6	Unknown	4 (0.3)

The incident of sharps injury decreased with age, with the highest incident of sharps injuries among those aged 20-29 years (71.6%) and lowest incident among those aged below 20 years (1.9%). [See Table 2]

Table 3: Sharp Injury Surveillance by Place of Occurrences For Year 2011

No	Place Of Occurrence	Cases (%)
1	Ward	763 (54.3)
2	Operating Theatre	155 (11.0)
3	Accident & Emergency Department	140 (10.0)
4	Dental Clinic	82 (5.8)
5	Labour Room	58 (4.1)
6	Health Clinic/ Polyclinic	43 (3.1)
7	Laboratory	35 (2.5)
8	Intensive Care Unit	19 (1.4)
9	Specialist Clinic	15 (1.1)
10	School/ College/ Faculty	6 (0.4)
11	Others	89 (6.3)
	TOTAL	1,405 (100.0)

The place of occurrences that contributed the largest proportion of sharps injury was in the ward, 763 cases (54.3%), followed by 155 cases in operating theatre (11.0%) and 140 cases at the Accident & Emergency Department (10.0%). [See Table 3]

Table 4: Sharp Injury Surveillance by Job Categories For Year 2011

No	Job Categories	Cases (%)
1	House Officer	445 (31.7)
2	Staff Nurse/ Matron/ Sister	245 (17.4)
3	Trainee Nurse	187 (13.3)
4	Hospital Support Service	150 (10.7)

Between different job categories, the highest number of sharps injuries were sustained by 445 cases of House Officers (31.7%), followed by 245 cases of Staff Nurses (17.4%), 187 cases of Trainee Nurses (13.3%) and 150 cases of Hospital Support Service Staff (10.7%). [See Table 4]

Table 5: Sharp Injury Surveillance by Procedure Conducted For Year 2011

No	Procedure Conducted	Cases (%)
1	Injection – IV/ IM/ SC	301 (21.4)
2	Drawing venous blood sample	242 (17.2)
3	Collecting Clinical Waste (Non-Medical Procedures)	200 (14.2)
4	Suturing	185 (13.2)
5	Starting IV or setting up Heparin block	123 (8.8)
6	Finger Stick/ Heel Stick (eg. Glucometer)	60 (4.3)
7	Drawing arterial blood sampel	52 (3.7)
8	Connecting IV line (intermittent IV line/ piggy back/ other IV)	37 (2.6)
9	Others	205 (14.6)
	Total	1,405 (100.0)

The largest proportion of sharps injuries had occurred during Injection – IV/IM/SC (18.4%), followed by drawing venous blood sample (16.7%) and starting IV or setting up Heparin block (9.6%). [See Table 5]

 Table 6: Sharp Injury Surveillance by Type of Sharps For Year 2011

No	Type of Sharps	Cases (%)
1	Needle	1,097 (78.1)
2	Surgical Instrument / Others item	292 (20.8)
3	Glass	16 (1.1)
	Total	1,405 (100.0)

Majority of the sharps injury occurred involved needle which is 1,097 cases (78.1%), followed by 292 cases (20.8%) of surgical instruments/others items and 16 cases (1.1%) of glass item. [See Table 6]

Table 7: Sharp Injury Surveillance by Type of Needles For Year 2011

No	Type of Needles	Cases (%)
1	Hypodermic needle	750 (68.4)
2	IV Catheter stylet	248 (22.6)
3	Butterfly needle	36 (3.3)
4	Needle on IV line	22 (2.0)
5	Central line catheter introducer	12 (1.1)
6	Spin al/ epidural	5 (0.5)
7	Bone marrow needle	1 (0.1)
8	Biopsy needle	1 (0.1)
9	Others	22 (2.0)
	TOTAL	1,097 (100.0)

Out of the 1,405 sharps injury cases, there is 78.1% cases involved needle. Hypodermic needles caused the highest number of sharps injury which is 751 cases (68.4%), followed by 248 cases (22.6%) for IV Catheter Stylet and 36 cases (3.3%) for Butterfly Needles. [See Table 7]

With extensive campaigns on prevention of sharps injuries in Ministry of Health, it is hoped that there will be a decrease in the number of sharps injury in MOH in the future. A comprehensive program that addresses institutional, behavioral, and device-related factors is essential to prevent sharps injuries and its tragic consequences among healthcare workers.

### Surveillance of Pesticide & Chemical Poisoning

Figure 1: Total Notified Poisoning Cases From 2005-2011

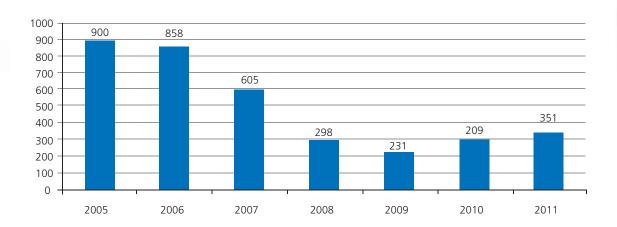


Table 8: Total No of Cases by Type of Poisoning For Year 2011

Type Of Poisoning	Cases (%)	
Pesticide		
Paraquat	44 (34.1)	
O rganophosphate	40 (31.0)	
Glyphosate	20 (15.5)	
Others	25 (19.4)	
Total	129 (36.8)	
Chemical		
Therapeutic Drug	90 (40.5)	
Household Product (eg. Clorox)	65 (29.3)	
Kerosene	9 (4.1)	
Others	58 (26.1)	
Total	222 (63.2)	
GRAND TOTAL	351 (100.0)	

In the year 2011, there are 351 poisoning cases were notified slightly higher than year 2010 [See Figure 1]. From the total 351 cases , there were 129 (36.8%) pesticide poisoning cases and 222 (63.2%) chemical poisoning cases. Most of the pesticide poisoning cases is caused by Paraquat which is 44 cases (34.1%) followed by 40 cases (15.5%) of Organophosphate and 25 cases (15.5%) of Glyphosate. Meanwhile for chemical poisoning, majority cases caused by Therapeutic drugs which is 90 cases (25.4%), followed by 65 cases (29.3%) of household product eg. Clorox and 9 cases (4.1%) of Kerosene. [See Table 8]

### Surveillance of Occupational Injuries Among Ministry of Health Staffs

Figure 2: Total Notified Injury and Accident Cases From 2005-2011

The total number cases of injuries reported in the year 2011 was 1,573, slightly higher than the previous year [See Figure 2].

Table 9: No of Notified Injury and Accident Cases by Type of Health Service and Type of Injury For Year 2011

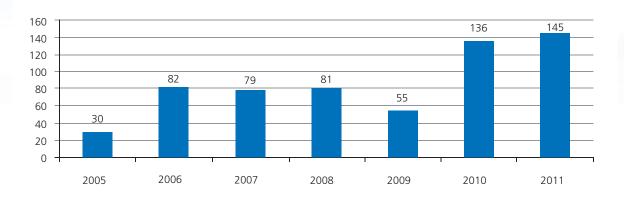
Injury and Accident Cases	Cases (%)	
Type of Health Service		
Hospital	1,348 (85.7)	
Health Clinic	163 (10.3)	
Dental	62 (4.0)	
Total	1,573 (100.0)	
Type of Injury		
Needle stick	940 (59.8)	
Motor Vehicle Accident	145 (9.2)	
Other Sharps Injury	107 (6.8)	

Majority of injuries happened in Hospital which is 1,348 cases (85.7%) followed by 163 cases (10.3%) for Health Clinic and 62 cases (4%) for Dental facilities. Needle stick injuries contributed 940 cases (59.8%) of injuries among the health care workers followed by 145 cases (9.2%) of motor vehicle accident and 107 cases (6.8%) of other sharps. [See Table 9]

# Surveillance of Occupational Lung Diseases

They were 145 cases of occupational lung diseases notified in the year 2011 [See Figure 3]. Majority of the notified cases were Infectious diseases eg. TB which is 130 cases (89.7%), followed by 11 cases (7.6%) occupational asthma and 2 cases (1.4%) bronchitis/emphysema. Despite being diagnosed as having occupational lung diseases, most of the workers still continued to perform the same work with appropriate Personal Protective Equipment (PPE).

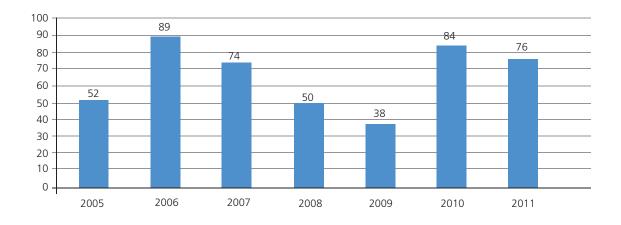
Figure 3: Total Notified Lung Diseases Cases From 2005-2011



# Surveillance of Occupational skin diseases

In the year 2011, 76 cases of occupational skin diseases being notified compared to 84 in the previous year [See Figure 4]. All cases notified is Occupational Dermatitis.

Figure 4: Total Notified Skin Disease Cases From 2005-2011



## Surveillance of Occupational Noise Induced Hearing Loss

The notification of occupational noise induced hearing loss (NIHL) is still low with only 44 cases being notified in the year 2011[See Figure 5]. In majority of the case, 16 cases (36.4%) personal hearing protection devices were partial used by the employees.

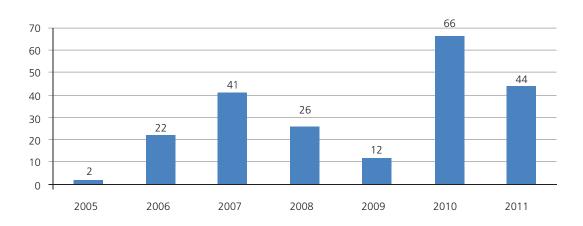


Figure 5: Total Notified NIHL Cases From 2005-2011

Investigation of accidents and occupational diseases

Beginning in 2011, all notification of accidents, injury and occupational diseases must be investigated using a standardized investigation form which has been produced from Occupational Health Unit, Ministry of Health. This investigation format was coded as OHU/ BS-01. This is to ensure all state are using the same format.

#### Total case Investigated by state

For 2011, a total of 1,004 (45.9%) cases of accidents and occupational diseases were investigated from total 2,186 cases notified. Selangor recorded the highest number of investigation, 162 cases (16.1%), followed by Perak, 158 cases (15.7%), Johor, 154 cases (15.3%), Kedah, 121 cases (12.1%) and Kelantan, 117 cases (11.7%). The other state recorded below 10 % [See Figure 6].

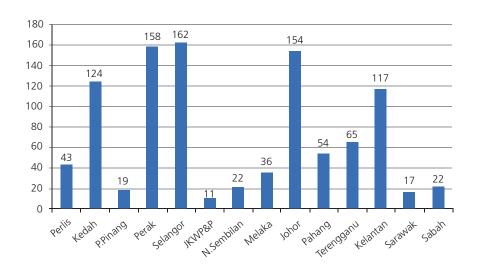


Figure 6: Number of Cases Investigated, 2011

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### Total cases investigated by health facilities

Overall, hospital recorded the highest number of investigation, 795 cases (79.2%), followed by Health Clinic, 120 cases (11.9%), Dental Clinic, 53 cases (5.3%), District Health Office, 32 cases (3.2%) and State Health Department, 4 cases (0.4%) [See Figure 7].

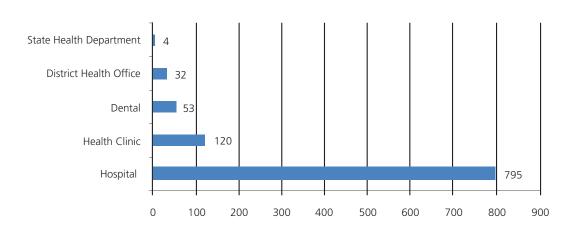


Figure 7: Total Cases Investigated by Health Facilities, 2011

Total cases investigated by category of incidence

For the year 2011, accident and injury cases are contributed 905 cases (90.1%) from the total 1004 cases investigated. This is follow by occupational diseases, 97 cases (9.7%) and occupational poisoning, 2 cases (0.2%) [See Figure 8].

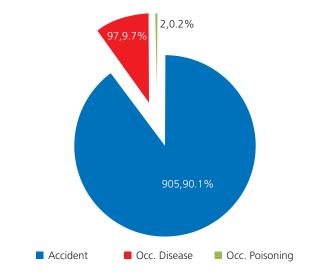


Figure 8: Total Cases Investigated by Category of Incidence, 2011

#### Total case investigated by types of accident and injury

In 2011, there are 905 accident and injury cases were investigated. Needle stick injuries (NSI) contributed 594 cases (65.6%), followed by chemical and physical hazard at the workplace, 193 cases (21.3%), motor vehicle accident, 85 cases (9.5%) and other sharp injury, 33 cases (3.6%) [See Figure 9].

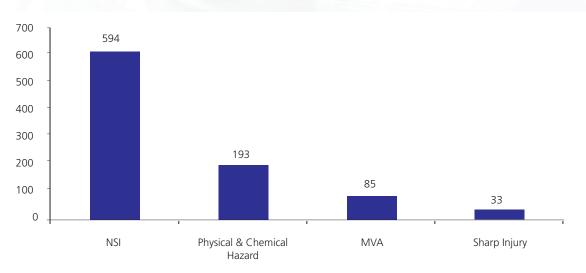


Figure 8: Total Cases Investigated by Category of Incidence, 2011

Total case investigated by types of occupational disease

There are 99 cases of occupational diseases has been investigated in the year 2011. Occupational lung disease are the highest disease been investigated, 88 cases (90.8%) followed by occupation skin disease, 5 cases (5.2%) and noise induced hearing loss, 4 cases (0.4%) [See Figure 10].

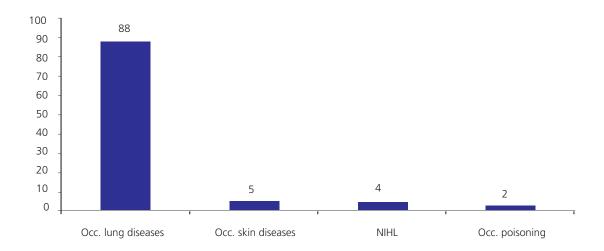


Figure 9: Types of The Accident and Injury At The Workplace, 2011

Non-Communicable Disease Section 7

## Collaborations with inter agencies

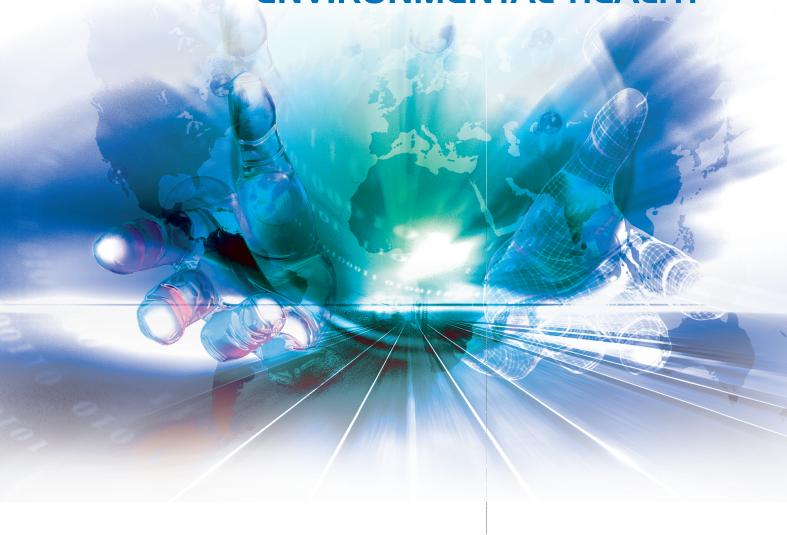
In the year 2011, Occupational Health Unit conducted many activities in collaboration with other agencies such as Ministry of Human Resource, Ministry of Defence, Ministry of Agriculture, National Institute of Occupational Safety & Health (NIOSH), Social Security Organization (SOCSO), and Universiti Malaya.

### Conclusion

The Occupational Health Unit, Ministry of Health Malaysia has endeavoured to conduct various activities pertaining to the dissemination and maintenance of health and safety among the employees of the Ministry of Health staff and other agencies. Thus we need to pool resources and work together to prevent and control occupational health diseases and accidents especially among the health care workers.

PROGRAMME ACHIEVEMENT REPORTS 2011

# **ENVIRONMENTAL HEALTH**



## **ENVIRONMENTAL HEALTH PROGRAMME**

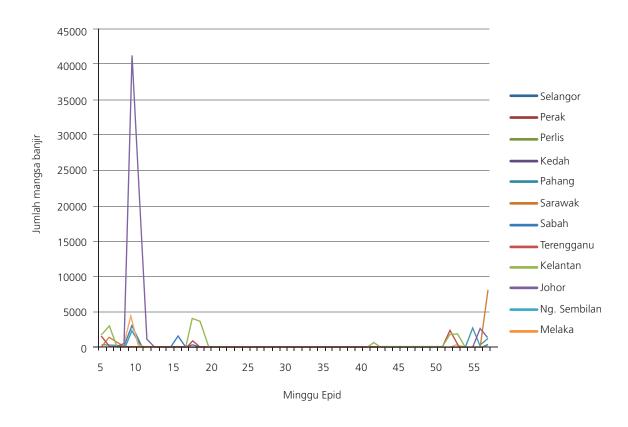
## Disaster - Flood

In the year 2011, several states in Malaysia were affected by floods. It began in the early 2011 affecting Terfall, the high tide effects, and topographic conditions exacerbated by the rising water level in the reservoir dam.

The MOH had mobilised 3,146 teams (1,317 medical teams and 1,829 health teams) for prevention and control of diseases related to the floods.

The types of diseases reported amongst the flood victims, were 5,079 infectious diseases, 8,989 non-communicable diseases and 94 injuries. Four deaths were reported due to the floods last year.

#### Graf Bilangan Mangsa Mengikut Negeri Bagi Malaysia 2011



Non-Communicable Disease Section 77

## National Service Training Centres (PLKN) Risk Assessment And Disease Monitoring Programme

A total of 81 National Service Training Centres (PLKN) camps were operational in 2011 with 243 training sessions being conducted in three consecutive sessions. The MOH implemented several healthcare services to ensure the health of the trainees while in the camps. The services comprised of health risk assessments of the camps, medical services and health education on HIV/AIDS.

The health inspection of the PLKN Camps is a routine activity to ensure the sanitation and hygiene of these premises. A total of 243 health risk assessments were conducted in 2011.

The number of PLKN camps that obtained 80% marks during the inspection before and during the training session is shown in Table 1:

Table 1: Health Risk Assessments of PLKN Camps in 2011

	Session 1		Session 2		Session 3	
	Before	During	Before	During	Before	During
Marks>8 0%	29 camp (36.7%)	39 camp (49.4%)	32 camp (39%)	38 camp (46.3%)	39 camp (47.6%)	56 camp (68.4%)

The health risk assessment objective is to ensure the environmental sanitation and safety of the camp, in addition to avoid unnecessary incident such as accident and communicable disease outbreak.

#### The assessment includes:

- Safety of water supply and recreation environment.
- Vector control.
- Assessment of camp kitchen camp and the dining hall.
- Building safety and comfort.

Water sampling for leptospira detection is carried out in order to ensure the safety of the pool for trainees activities.

Table 2: Water Sampling For Leptospira at PLKN

Leptospira	Session 1	Session 2	Session 3	
Detected	32	39	19	
Not Detected	41	30	46	
Total sample	73	69	65	

## Disease Outbreaks in PLKN Camps in Malaysia 2010

There were 31 episodes of disease outbreaks reported from the PLKN camps in 2011. The highest number of outbreaks was due to food poisoning (16 episodes). Other disease outbreaks were Influenza Like Illness (ILI) (7), Rubella/Measles (5), Chicken Pox (1), Conjunctivitis (1) and TRO Leptospirosis (1).

## Immigration Detention Depot

There are 13 Immigration Detention Depot throughout the country. MOH provide healthcare to inmate as outpatient services, with referrals to the nearest health clinics for further management. Mobile medical teams visit the depots every two weeks to provide treatment and referral if required. In addition, this team also conduct regular cleanliness assessment of the depot. From 13 DTS inspected, 8 (61.5%) of them were found to have high occupant density and congested.

#### Prison

There were 29 prisons in operation for the year 2011. District Health Offices carried out health risk assessment for the prisons in their respective district to improve the health and safety. Out of 25 prisons inspected, 8 prisons (32%) were found to have high occupant density and congested.

Non-Communicable Disease Section 79

## CONCLUSION

The prevention and control programme for Non-Communicable Disease (NCD) was initiated in late 1980s. Since then, NCD Programme has further expanded despite the many challenges encountered and has perceived good collaboration and participation from other agencies and communities. It is hoped that the mortality, morbidity and disability due to NCDs will be controlled and the prevalence reduced in years to come.



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