Malaysia Health Technology Assessment Section

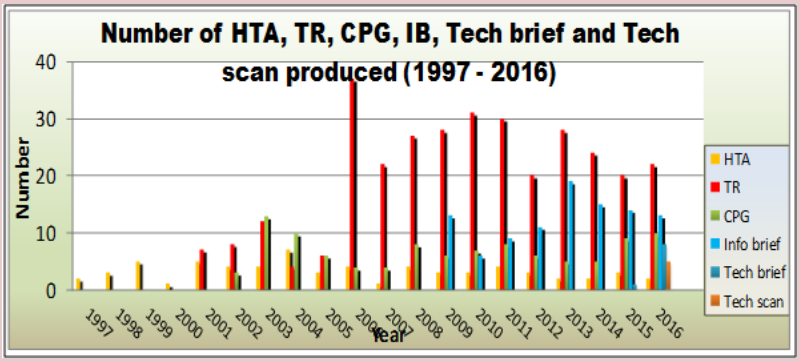
MaHTAS e-Newsletter

HTA & Informed Decision Making:

How successful are we?

Malaysian Health Technology Assessment Section (MaHTAS) was established since 1995 to provide input for decision / policy making on health technologies and clinical practice. Since its establishment, MaHTAS has produced 65 in-depth assessments (HTA reports), 326 Technology Review (Mini-HTA) and 100 Information Brief (Rapid Review) reports.

Based on the reports produced from 2004-2016, 34.2% of the health technologies assessed were recommended for routine or selected use, 26.8% for research purpose or use in a research environment while 39.0% of the health technologies assessed were not recommended due to lack of evidence on safety or effectiveness.



What's Inside

#IMPACT

Apart from conducting assessment of the technologies, it is essential to know whether the reports served their purpose as input for decision/ policy-making. For that purpose, a survey on the impact of full HTA reports produced from 1997 to 2013 was conducted in December 2014 and January 2015. Since 2016, survey on the impact of the HTA/TR reports was routinely conducted twice a year. The results showed that the three main indications of impact and level of impact are as follows:

Three main indications of impact

HTA/TR recommendations accepted (95.7%)
Use as reference material (88.2%)
Link to change in procedure/practice (58.1%)

Three main level of impact (policy/decision maker opinion)

Major influence on decision (55.9%)
Informed decision (34.4%)
Some considerations of HTA/TR by policy/ decision maker (9.7%)

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What we achieved so far?

Feedback from stakeholders showed that reports have been used in policy/ decision making which included: initiation of programme, providing basis for CPG development, decision on procurement, decision on service provision, pricing negotiation and reimbursement. Some examples are as follow:

Initiation Of Programmes

-National Thalassaemia Prevention and Control Programme
-National Cancer Control Programme
-Childhood Immunisation Programme

Provision Of Services

-Management of Haemophilia
-Enzyme Replacement Therapy (ERT) for metabolic diseases
-Continuous Intrathecal Baclofen (ITB) Infusion for severe spasticity and dystonia
-Screening for congenital hypothyroidism
-School scoliosis screening programme
-HPV DNA based screening for cervical cancer
-Prostate cancer screening (for high risk group)
-IFOBT for colorectal cancer screening

Clinical Practices

-Intraocular lens implantation (IOL) hydrophilic acrylic versus hydrophobic acrylic
-Insulin analogues
-Bronchial thermoplasty

Procurement

-Endobronchial ultrasound (EBUS)

Pricing and reimbursement decision

-Tyrosine Kinase Inhibitors as first line treatment for Advanced Non-small cell lung cancer

What's in the future?

It is envisaged that HTA will play a bigger role in determining the Benefit Package Coverage (included healthcare services, appropriate procedures, list of drugs and new technology proposed) especially when the Voluntary Health insurance is introduced and also for pricing negotiation.

C.O.N.C.L.U.S.I.O.N

Health Technology Assesment Programme in Malaysia has a major impact on policies and decisions in our healthcare system related to health technologies and clinical practices. The impact of HTA on the health system hinges on optimised utilisation of resources as decision are informed by the best evidence. Maximization of HTA will enhance decision that capture the benefit of new technologies, overcome uncertainties, recognise value of innovation within the constraints of the overall health care resources.

Mdm Ros Aziah

HTA & CPG COUNCIL MEETING

BIL. 1/2017

The first meeting of HTA and CPG council for this year was held on the 21st June 2017. This meeting was chaired by the Director General of Health YBhg Datuk Dr Noor Hisham bin Abdullah. One HTA report, four CPGs, ten TR (Mini-HTA) and three Horizon Scanning Techbrief reports were presented at the meeting as listed below:

HTA

Chinese Herbal Medicine as an adjunct for the management of fatigue and muscle weakness in cancer patients receiving chemotherapy

CPG

1. Primary & Secondary Prevention of Cardiovascular Disease
2. Management of Dyslipidemia (Fifth Edition)
3. Management of Osteoporosis (Second Edition)
4. Management of Glaucoma (Second Edition)

Mini-HTA

Neoplasm

1. Selective Internal Radiation Therapy (SIRT) using Yttrium-90 Microspheres for Hepatocellular Carcinoma
2. Trastuzumab as an adjuvant therapy for early breast cancer and economic evaluation
3. Trastuzumab for metastatic breast cancer and economic evaluation
4. Sunitinib/Pazopanib as first-line treatment and Everolimus/Axitinib as second-line treatment for metastatic renal cell carcinoma and economic evaluation
5. Iodine-131-Rituximab Radioimmunotherapy for Non-Hodgkin's Lymphoma

Rehabilitation

6. Transcranial Direct Current Stimulation (tDCS) for stroke rehabilitation

Miscellaneous

7. Hyperbaric Oxygen Therapy (HBOT) - An Update

Alternative Medicine

8. Autohemotherapy (Autologous Blood Transfusion) Ozone Therapy—An Update

Surgery

9. Male Circumcision

Infectious Disease

10. Integrated Notification for Tuberculosis

Horizon Scanning (HS) Techbrief

1. Glucowise
2. Malaria Vaccine
3. Padeliporfin Vascular Targeted Photodynamic Therapy for Localized Prostate Cancer

"Chinese Herbal Medicine as an adjunct for the management of fatigue and muscle weakness in cancer patients receiving chemotherapy"

Mdm Noormah

Chinese herbal medicines originated in ancient China and have evolved over thousands of years. The basic concept of traditional Chinese medicines is to help patients achieve balance with the application of essence-*qi*-spirit theory, *yin-yang* theory and five elements theory. Throughout the years, large number of Chinese herbal medicines was used to treat different health conditions including cancer.

Adjunct treatment for cancer is define as a supporting treatment for chemotherapy and radiotherapy. The aim of herbal treatment is usually to improve well being. There are four categories of cancer patients that will be referred for the herbal therapy. i.) Newly diagnosed cancer patients on radiotherapy or chemotherapy or surgery. ii.) Patients completed chemotherapy with recurrence. iii.) Advanced stage cancer on palliative treatment. iv.) Cancer patients who refused medical treatment.

Bojungikki-tang

Panax Ginseng

Six studies were included in this review: one systematic review, four randomised controlled trial (RCT's), and one pre and post interventional study. A systematic review by Wu X et al, had most of the articles included in the study from the Chinese database (Wan Fang Digital Journals, Chinese Biomedical Databases, and Taiwan Periodical Literature Databases). All papers were from China and studies were done on the chinese population. Based on the review, most of the studies suggested that Chinese herbal medicines such as Yi-fei-bai-du decoction, Fei-liu-ping extract, Hai-shen-su, Fu-zheng-jie-du decoction Kang-la-te injection, Shen-qi-fu-zheng injection, compound ku-shen injection, Kang-ai injection, Zi-jin-long tablet, Xiao-ai-ping injection, Shen-fu injection, American ginseng, Ren Shen Yangrong Tang (RSYRT), Bojungikki-tang and Panax Ginseng may have potential benefit for the management of fatigue in cancer patients receiving chemotherapy. However, the evidence retrieved was limited and had biases.

More rigorous and well-designed clinical trials are needed. Hence, chinese herbal medicine may be used in a research environment by certified and registered practitioners.

TR in BRIEF

Accessing value of CANCER therapy

Escalating cost of health technologies in the field of oncology has been a major issue encountered by majority of the countries including Malaysia. Apart from the constant struggle in maintaining the universal health coverage, the stakeholders are now facing with more challenges in the context of ensuring value for money.

The key element for access of health technologies have now evolved from choosing the best treatment to the most valuable treatment for the patient. Therefore, health technology assessment and rapid reviews by MaHTAS may provide useful information in determining the value of cancer therapy through the inclusion of economic evaluation. Until the year of 2017, MaHTAS has produced four mini-HTA with economic evaluation for cancer therapy.

TOPIC 1:

TYROSINE KINASE INHIBITORS AS FIRST LINE TREATMENT FOR ADVANCED NON SMALL CELL LUNG CANCER AND ECONOMIC EVALUATION

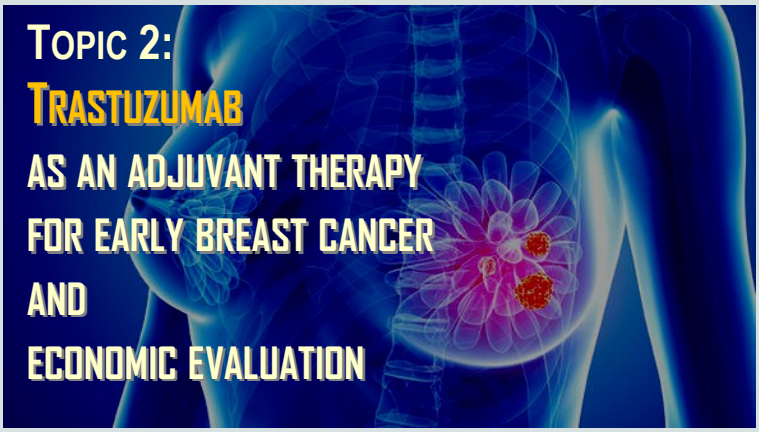
Non-small cell lung cancer (NSCLC) accounts for nearly 80% to 85% lung cancer cases, which can be further classified into three histological sub-types of adenocarcinoma, squamous cell carcinoma and large-cell undifferentiated carcinoma. Since most of the patients were diagnosed at an advanced stage (IIIB or IV), systemic platinum-based doublet chemotherapy remains the standard care despite marginal improvement in survival. However, the development of Tyrosine Kinase Inhibitors (TKIs) which was discovered to exhibit epidermal growth factor receptor (EGFR) inhibitory activity offered more choice of treatment for these patients. TKIs were indicated for patients who failed the standard treatment, but have been extended as the first-line treatment for NSCLC patients. In this technology review report, the TKIs assessed were Erlotinib and Gefitinib.

Based on the systematic review, Erlotinib and Gefitinib have shown to significantly prolonged progression free survival and increased overall response rates when compared with platinum-based doublet chemotherapy in the previously untreated advanced non-small cells lung cancer patients with epidermal growth factor receptor (EGFR) gene mutation. However, there was insufficient evidence to show the differences in overall survival between both TKIs and chemotherapy. In addition, economic evaluation was also conducted to demonstrate the value of these treatments. The

deterministic incremental cost-effectiveness ratio (ICER) of Erlotinib and Gefitinib was RM298,904.98 and RM261,898.27 per QALY gained respectively. The price of TKIs, duration of progression free and number of patients who response to the treatment have shown to be the sensitive parameters for ICER and may be a key determinant before considering the first line treatment for advanced NSCLC.

The common adverse events with TKIs include diarrhoea, rash, acne, dry skin and pruritis. It has also been reported that liver enzyme elevations were also seen in some of the patients. Although interstitial lung disease has been known as EGFR-TKI related lethal disease, less than 1% of patients treated with TKIs would develop it.

Mdm Ku Nurhasni



TOPIC 2: TRASTUZUMAB AS AN ADJUVANT THERAPY FOR EARLY BREAST CANCER AND ECONOMIC EVALUATION

In Malaysia, breast cancer is the most common cancer in females and also the first most common cancer among population regardless of gender. According to the National Cancer Registry Report 2007, the age pattern showed a peak age-standardised rate (ASR) at the 50-59 age groups.

In a study done in Malaysia in year 2014, the percentage of breast cancer detected at stage I and II was 61%, while another 27% have locally advanced cancer and 11% with late stage metastatic cancer. From the total, 65% were found to have Estrogen Receptor (ER) Positive, 57% Progesterone Receptor (PR) Positive, 28% Human Epidermal Growth Factor Receptor 2 (HER2) positive and 12% triple negative. For patients with HER2 positive, access to targeted therapy (trastuzumab) was very limited; only 19% of eligible patients could be treated.

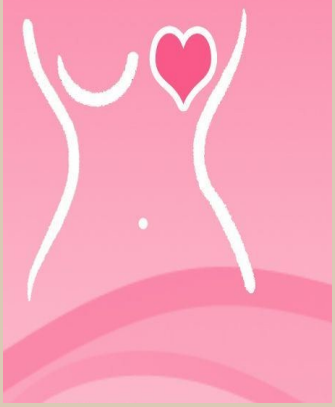
Human epidermal growth factor receptor 2 (HER2) is a member of the human epidermal growth factor receptor (HER/EGFR/ERBB) family. Amplification or over-expression of this oncogene has been shown to play an important role in the development and progression of certain aggressive types of breast cancer. Trastuzumab is used for the treatment of early-stage breast cancer that is HER2 positive, has or has not spread into the lymph nodes. In Malaysia, trastuzumab 440mg injection has been approved by Ministry of Health Formulary to be used only in adjuvant setting for patients with HER2 over-expressed breast cancer, which is HER2 3+ by immunohistochemistry and over-expressed by Fluorescence in situ hybridization (FISH) and high risk group. Oncologist suggested that Echocardiogram (ECHO) should be performed prior to first dose and every three months during treatment. This is due to the evidence that showed that cardiotoxicity, principally congestive heart failure (CHF), was the most important adverse effect of trastuzumab.

The evidence showed that overall survival and disease free survival significantly favour trastuzumab and twelve months adjuvant trastuzumab could be suggested as the standard of care for early HER2 positive breast cancer.

Local economic evaluation using decision analytic modeling for the addition of 1-year treatment with trastuzumab on top of standard adjuvant chemotherapy is considered as a cost-effective strategy for early breast cancer with HER2 positive, yielding an ICER of RM 83,544.59 per QALY gained, which is within the suggested value of cost-effectiveness threshold by WHO (1-3 times GDP per capita). However, if suggested cost-effectiveness threshold for Malaysia is taken into consideration which is ≤1 GDP per capita, this treatment may not be a cost-effective strategy.

Mr Lee Sit Wai

TOPIC 3 : TRASTUZUMAB FOR METASTATIC BREAST CANCER AND ECONOMIC EVALUATION



For HER-2 positive metastatic breast cancer (MBC), trastuzumab (a monoclonal antibody targeted therapy) in combination with taxane is now considered a standard care in many institutions but not in Ministry of Health (MOH) facilities. Currently in the MOH formulary, the use is restricted for early stage breast cancer although the treatment can be optional in MBC under special approval. Given that oncology treatment is costly, available resources needs to be allocated as efficiently as possible.

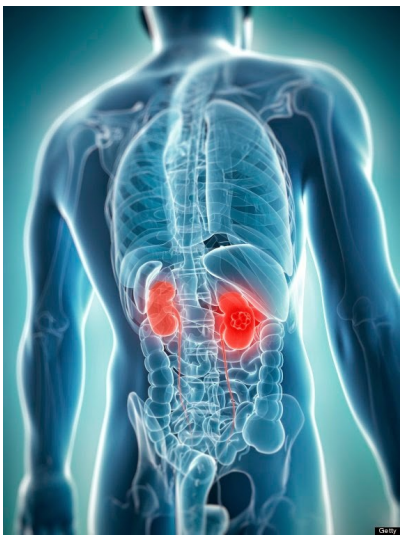
Findings indicated that the concurrent therapy (trastuzumab + docetaxel) was superior either to docetaxel alone or sequential therapy (trastuzumab followed by docetaxel) as first-line treatment of patients with HER-2 positive MBC with regard to response rate (61 to 79%) and overall survival (30.5 to 31.2 months).

Incidence of adverse drug reaction (haematology/non-haematology toxicity) was higher in the concurrent therapy compared to either docetaxel alone or sequential therapy. However, cardiac toxicity was similar in both treatment groups. A total of six mortalities (interstitial lung disease, diarrhoea during febrile neutropaenia-sepsis secondary to neutropaenic infection, cardiac arrest) were reported in concurrent therapy group while 36 patients were discontinued due to treatment related adverse events (cardiac toxicity, allergic infection).

The evidence suggest that the combination therapy of trastuzumab plus docetaxel as first-line treatment of patients with HER-2 positive MBC was found to be cost-effective in studies conducted in Brazil and Sweden. In contrast, local economic evaluation study demonstrated that the combination treatment of trastuzumab and docetaxel produced a high incremental cost-effectiveness ratio (ICER) of RM 322,533 per QALY gained that is not within the suggested value of cost-effectiveness threshold by WHO (1-3 times GDP per capita). Taken into consideration of cost-effectiveness threshold for Malaysia which is ≤ 1 GDP per capita, this treatment is considered to be not cost-effective from the Ministry of Health perspective.

Mr Syful Azlie

"SUNITINIB/PAZOPANIB AS FIRST LINE TREATMENT EVEROLIMUS/AXITINIB AS SECOND LINE TREATMENT FOR METASTATIC RENAL CELL CANCER AND ECONOMIC EVALUATION"

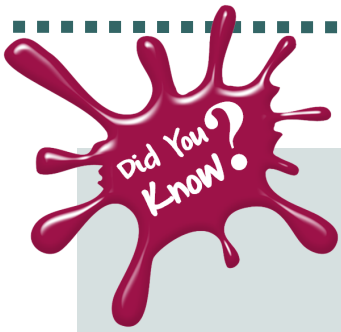


Renal cell carcinoma is known to be the most lethal among the common urological malignancies. It accounts for approximately 3% of all adult cancers and the incidence among both men and women has been rising constantly worldwide since the 1970s. It was ranked as the 14th most common cancer among male and 23rd most common cancer among female in Malaysia. According to a local data around 47% of renal cancer cases were detected late.

The treatment for mRCC has dramatically changed over the last ten years which was driven by clinical trials that demonstrated the efficacy of several targeted therapies including sunitinib, pazopanib, sorafenib, temsirolimus, everolimus, axitinib and bevacizumab for metastatic renal cell carcinoma. These targeted therapies were said to have proven benefit and improve the survival of mRCC patients. These agents have replaced immunotherapies that were previously the standard of care for mRCC patients.

From the review, evidence showed that for first line treatment of metastatic renal cell cancer, sunitinib and pazopanib have similar efficacy and have considerably comparable average healthcare cost per patient. Limited evidence showed that the attenuated dosing schedule for sunitinib may be cost saving compared to the other dosing schedules. For second line treatment of metastatic renal cell cancer, everolimus may be used however, affordability is an issue. Axitinib is considered not to be cost-effective at both suggested value CE threshold by WHO (1-3 GDP per capita) and for Malaysia (≤ 1 GDP per capita).

DR Nurfarhana



We obtained feedback on our reports through MaHTAS user feedback form to ensure their quality, utilisation and implications. The feedback obtained includes:

- how well the report meets the user needs
- how the report influence the user in term of services
- how the user utilised the reports (e.g. input for any policy making, guideline preparation, or for any funding application)
- how well the user rate the report (e.g. excellent, good, fair or poor)

From January to June 2017, the feedbacks of 23 technology review (TR) reports produced by MaHTAS were as follows:

Percentage of report utilisation: 87.04%

Report rate:

Excellent	= 16.7%
Good	= 74.04%
Fair	= 1.85%

There were no specific comments given. Nevertheless, there were users who shared their experience related to their practices.

The feedbacks analysis was presented during the Health Technology Assessment Technical Advisory Committee Meeting twice a year. Your feedbacks are important to us and highly appreciated. Thank you.

HORIZON SCANNING

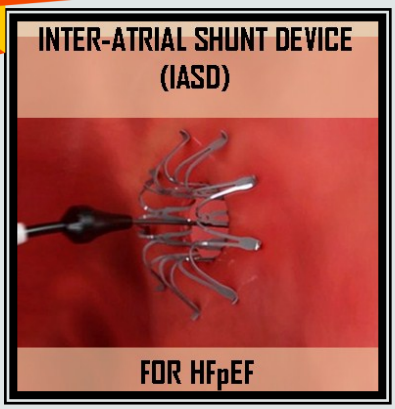
T.E.C.H.B.R.I.E.F

#1

Diabetes is a major public health concern. The prevalence was 16.6% in 2015 which equaled to 3.3 million adult cases of diabetes. Self-monitoring of blood glucose (SMBG) is an important aspect of diabetes self-care. Currently, SMBG requires patients with diabetes to draw blood via a finger prick, then use test strips and a hand-held blood glucose meter to measure their glucose levels. Glucowise is a safe, portable and non-invasive glucose monitoring device that may provide patients with an alternative, painless method to measure blood glucose levels via impedance spectroscopy. A small clinical trial involved ten healthy volunteers showed correlation between glucose readings by GlucoWise™ and those made with standard invasive method. However, the detailed result of this study is not available. Glucowise is relatively safe without adverse events offers flexible and unlimited testing where glucose levels can be monitored as frequent as the patients like, wherever they like, and whenever they feel it is needed.

Dr Khadijah

#2



In Malaysia, about 40% of individuals with heart failure (HF) died within a year of initial diagnosis. Heart failure with preserved ejection fraction is a common cause of HF in the elderly with the prevalence varies between 40-71% depending on the left ventricle ejection fraction (LVEF) criteria that have been used as a cut-off point. The IASD® is a transcatheter device designed to treat HFpEF with aim to lower the left atrial pressure. It is implanted and deployed through an opening created in the atrial septum and formed a passage between the left and right atrium to allow blood flows between the left and right atrium.

A prospective, cohort study by Søndergaard L, et al. reported IASD® was successfully implanted in all patients and at 30 days of follow-up, the results was promising with LV filling or pulmonary capillary wedge pressure (PCWP) significantly reduced in REDUCE LAP-HF study; about 52% of patients had a reduction in PCWP at rest, 58% had a lower PCWP during exertion, and 39% fulfilled both these criteria. Although the device requires invasive procedures, there were no serious adverse events reported and the procedure appears to be feasible with training. This technology could be a new strategy in the management of HFpEF to improve the QoL of patients.

Mdm Maria

#3

According to 22nd Report of the Malaysia Dialysis and Transplant Register 2014, about 32,767 patients received dialysis in year 2014 which was more than two-times increased from year 2005 (13,356 patients). Scientists invented wearable and portable dialysis device to revolutionise the treatment and quality of life of patients with end-stage renal disease (ESRD) such as Wearable Artificial Kidney (WAK). WAK is an innovative device that allows patients to have dialysis treatment anywhere 24 hours per day providing patients with freedom to work and perform their daily activities while dialysing.

A non-randomized clinical trial by Gura V et al. showed the mean weighted average concentrations of blood urea nitrogen (BUN) during the 24 hours WAK treatment (17±5 mg/dL) were significantly lower compared to 48 hours period before the WAK session where patients underwent conventional haemodialysis treatment (39±18 mg/dL). The device performed well with no serious complication. In general, these wearable dialysis devices may possibly reduce the needs for dialysis centre as well as minimize the healthcare professional involvement as patients may perform the dialysis on their own. However, further study and clinical trial need to be conducted to prove the effectiveness and safety of the devices comprehensively.

Mdm Maria

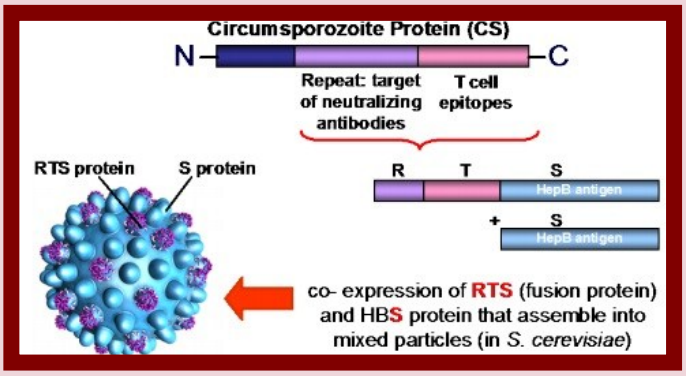
MALARIA VACCINE

Dr Syaharatul Patimah

RTS,S/AS01 is the only malaria vaccine candidate reached phase 3 clinical trials although many are still in the development. PfSPZ malaria vaccine candidate has shown promising results in its early trials. Both vaccines target pre-erythrocytic stage of parasite. However, they only protect against *Plasmodium falciparum* infection, but *Plasmodium vivax and Plasmodium knowlesi* malaria are of high importance in Malaysia.

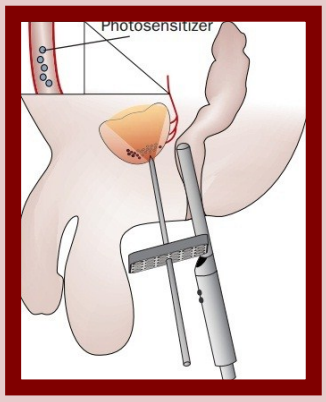
The RTS,S/AS01 has issues of low vaccine protection and serious adverse effects. Less than half of the children may be protected against clinical malaria, but the efficacy became much lower in infants. The occurrence of serious adverse events of meningitis during trial warrants further study to investigate the causality. PfSPZ gave modest protection by time to first infection in adults. Only minimal local and systemic adverse events were reported.

There could be potential for the vaccines to give false sense of security to the population and lead to reduction in the use of other preventive measures such as insecticide treated bed net.



PADELIPORFIN VASCULAR TARGETED PHOTODYNAMIC THERAPY FOR LOCALISED PROSTATE CANCER

Dr Syaharatul Patimah



Padeliporfin Vascular Targeted Photodynamic (VTP) Therapy is a novel therapy which may potentially be included in the list of options for treatment of localised, low risk prostate cancer. It consists of a novel drug (padeliporfin) and a laser illumination device (multichannel diode laser). The padeliporfin acts by forming short-lived toxic molecules (oxygen and nitric oxide radicals) locally once activated by laser light illumination.

These highly reactive molecules initiate rapid occlusion and destruction of the tumour blood vessels, followed by necrotic death of the entire tumour while sparing nearby structures and their functions. It is licensed for commercial use in Mexico in February 2016 and in January 2017, European Medicines Agency (EMA) gave an approval for the adoption of this technology in Europe. However, no information was retrieved on regulatory status by US FDA.

This technology may have potential to reduce morbidity in terms of possibility to cure localised prostate cancer in half of the treated patients. Two-third of patients may have a longer time for disease progression, hence may delay the need to undergo radical treatment. The treatment appeared safe and well tolerated but comes with some temporary urinary and sexual dysfunction.

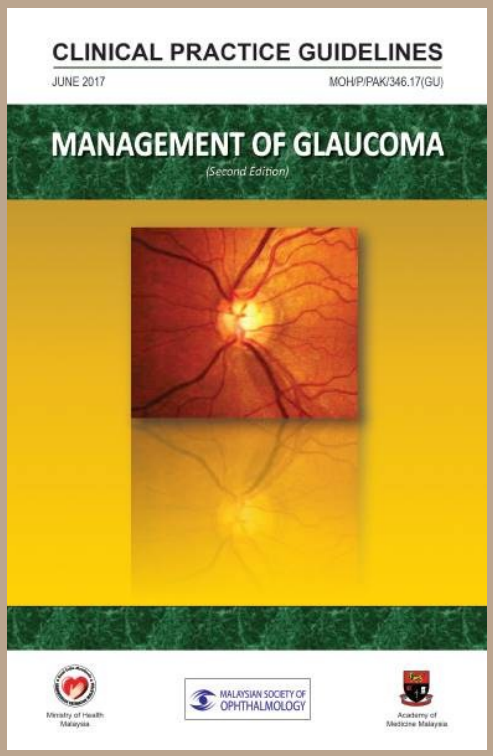
GLAUCOMA

Glaucoma is an important eye disease. It is the second leading cause of blindness worldwide. Individuals with this medical condition are often asymptomatic and present at a late stage. In Malaysia, the 2014 National Eye Survey II showed an estimated prevalence of blindness in those aged ≥50 at 1.2% of which 6.6% was caused by glaucoma. However, blindness from glaucoma is preventable if treatment is instituted early.

Based on the angle configuration, glaucoma is divided into open angle and closed angle/angle closure. The aim of its treatment is to preserve maximal functional vision throughout a patient's lifetime without sacrificing his/her quality of life and at a sustainable cost. Target intraocular pressure (IOP) in glaucoma should be individualised and can be adjusted throughout the management of the condition. Treatment can be in the form of medication, laser treatment or surgery. Medical treatment is usually the initial treatment of choice in glaucoma.

Glaucoma patients need to be followed-up to monitor the effects of treatment. It is done to detect disease progression, any changes in patient's risk profile and systemic health that may affect glaucoma management plan. Both optic nerve structure and function are important to be assessed in detecting progression of the disease.

CPG MANAGEMENT OF GLAUCOMA (SECOND EDITION)



CPG KEY MESSAGES

1. Glaucoma is a chronic eye disease that damages the optic nerve, and can result in serious vision loss and irreversible blindness.
2. Glaucoma diagnosis should be made based on combination of history, ocular examination and investigation.
3. Risk factors should be identified in the management of glaucoma.
4. Medical treatment in glaucoma should be individualised based on patient's characteristics and drug factors, and adjusted according to target IOP.
5. Prostaglandin analogues should be used as first-line treatment in glaucoma.
6. Patient education should be given to patients with glaucoma. This includes benefits and side effects of treatment, proper instillation technique of eye drop and compliance to treatment.
7. Laser iridotomy should be performed in primary angle closure disease when indicated.
8. Peripheral iridoplasty may be considered for initial treatment in acute angle closure.
9. Intraoperative Mitomycin C during trabeculectomy should be used in glaucoma patients at risk of surgical failure.
10. Glaucoma patients with blindness or low vision should be referred for vision rehabilitation which includes vocational, occupational and independent living.

L.O.C.A.L

activity 1

SEMINAR ON HORIZON SCANNING FOR HEALTH TECHNOLOGIES

15 FEBRUARY 2017
NATIONAL CANCER INSTITUTE
PUTRAJAYA

A seminar on Horizon Scanning of Health Technologies marked the official beginning of horizon scanning activity. Horizon Scanning identify new and emerging health technologies that have potential impact on health, health services and/or society. It may inform strategic priorities, help prioritise research, inform guidance development, protect patient and support innovation.

The seminar aimed to create awareness on Horizon Scanning activity and enhance collaboration with various stakeholders which included policy makers, clinicians, researchers, representatives from agencies related to health innovations as well as pharmaceutical and medical devices industries.

The talks were given by Horizon Scanning team members and covered topics on introduction of Horizon Scanning activity, its work processes and how the reports can be used for decision making. YBhg. Datin Seri Dr. Asmah Samat on behalf of YBhg. Dato' Dr. Hj. Azman Abu Bakar delivered the closing speech and emphasised on the importance of collaboration in ensuring the success of horizon scanning activity.

Dr Norrina

activity 2

MS Excel 2010 (Basic to Advance)

13—14 MARCH 2017
NATIONAL CANCER INSTITUTE
PUTRAJAYA

MS Excel 2010 (Basic to Advanced) course was organised by MaHTAS and was conducted by Mdm Norazian Binti Zainal Abidin from Information Management Division, Ministry of Health. Participants were exposed with the basic skills in handling MS Excel like formatting a spreadsheet, text and numbers, to the advanced application of MS Excel like how to do conditional formatting and create macros in spreadsheet.

Mr Lee Sit Wai

After the MS Excel training, we were honoured to have speakers from Universiti Kebangsaan Malaysia, Professor Dr Sharifa Ezat and from Universiti Malaysia Sarawak (UNIMAS), Dr Zafar Ahmed to conduct Application of Decision-Analytic Modeling in Health Economic Evaluations Workshop. This workshop was mainly to teach our staff the concept of developing decision tree from MS Excel. Besides, the skills in conducting local economic evaluations using the appropriate model were taught as well.

Mr Lee Sit Wai

activity 3

APPLICATION OF DECISION-ANALYTIC MODELLING IN HEALTH ECONOMIC

15—16 MARCH 2017
NATIONAL CANCER INSTITUTE
PUTRAJAYA

activity 4

SYSTEMATIC REVIEW ON EVIDENCED-BASED CPG DEVELOPMENT & IMPLEMENTATION WORKSHOP

20 –22 MARCH 2017
MINISTRY OF HEALTH
PUTRAJAYA

A Systematic Review on Evidence-based CPG Development and Implementation Workshop was successfully conducted by MaHTAS. It was attended mostly by Development Group members of CPG Management of Major Depressive Disorder (Second Edition) and CPG Management of Rheumatoid Arthritis. The objective of this training was to provide related knowledge and skills of developing an evidence-based CPG.

Among lectures delivered during the workshop was CPG work process, critical appraisal, retrieval of evidence, analysis and synthesis of evidence, and also implementation strategies of the CPG. It was a fruitful and dynamic training with enthusiasm and commitments showed by all participants.

Dr Ainol

activity 5

CPG LAUNCHING: MANAGEMENT OF RHINOSINUSITIS IN ADOLESCENTS AND ADULTS & MANAGEMENT OF NASOPHARYNGEAL CARCINOMA

4 MAY 2017
HOLIDAY INN HOTEL
MELAKA

Two national evidence-based CPGs were launched in conjunction with the Opening Ceremony of 9th Malaysian International ORL-HNS Congress and 37th Annual General Meeting of MSORL-HNS.

The launching and opening ceremony was officiated by YBhg. Dato' Dr. Hj. Azman Abu Bakar, Director of Medical Development Division, Ministry of Health Malaysia, representing Director General (DG) of Health. In his launching speech, the DG congratulated those involved in the development of the CPGs and highlighted the importance of CPG implementation at various healthcare facilities in both public and private sector of the country.

Dr Hanin

activity 6

TRAINING OF CORE TRAINERS ON CPG MANAGEMENT OF RHINOSINUSITIS IN ADOLESCENTS AND ADULTS

16 MAY 2017
HOSPITAL REHABILITASI CHERAS

As part of the implementation strategies, MaHTAS conducted a training of core trainers (TOT) on CPG Management of Rhinosinusitis in Adolescents & Adults. A total of 54 participants nationwide consisting of Otolaryngologists and Family Medicine Specialists attended the training. The lectures and case discussions were delivered by the members of CPG Development Group themselves. The core trainers are mandated to conduct echo training at their respective states subsequently.

Dr Chong

MAHTAS INVOLVEMENT AS SPEAKERS/ TRAINERS/ CONSULTANT

The 8th National Thalassemia Seminar in conjunction with the 1st ASEAN Thalassemia Forum

Sunway Putra Hotel, K. Lumpur
21 May 2017

Dr Junainah Sabirin, the Deputy Director of MaHTAS, presented on Health Technology Assessment (HTA) at the seminar.

Course On Critical Appraisal Conducted by Institute for Public Health

22—23 May 2017

Two trainers from MaHTAS were invited to conduct a two-day course on Critical Appraisal. The objective was to enhance the skills of the researchers in critically appraising research papers and eventually enable them to conduct systematic reviews. The training was filled with lectures and group works. Appraisal and risk of bias assessment of various study designs were discussed.

Echo-training CPG Management of Multiple Sclerosis

Hospital Kuala Lumpur
22 May 2017

Briefing on CPG work process

Malaysian Endocrine & Metabolic Syndrome (MEMS) office
4 Feb 2017

I.N.T.E.R.N.A.L

There were nine sessions of internal training conducted from January to June 2017. The internal training is a capacity building strategy in ensuring MaHTAS staff are capable and confident in producing quality reports.

SEARCH STRATEGY
Mdm Zamilah
20 Jan 2017

HTA TRAINING
Dr Junainah
13 Feb 2017

THE BASIC CONCEPT OF ECONOMIC EVALUATION
Mdm Ku Nurhasni Ku Abdul Rahim
20 Feb 2017

OVID TRAINING ON CITATION
Dr Wong Woei Fuh
24 Feb 2017

SEARCH STRATEGY MDD
Mr Tholib
14 April 2017

BLUE OCEAN STRATEGY (BOS)
Mr Lee Sit Wai
26 May 2017

PEMBENTUKAN PICO TABLE
Dr Chong Chin Eu
26 May 2017

PRIORITY SETTING
Dr Junainah
9 Jun 2017

HOW TO WRITE A GOOD REPORT
Dr Mohd Aminuddin
9 Jun 2017

Mr Lee Sit Wai

International Activities

6th HTAsiaLink Annual Conference

Hanoi, Vietnam
17-20th April 2017

The theme of this year conference is "Health Technology Assessment in Designing and Implementing Benefit Package for Universal Health Coverage".

Five MaHTAS staff participated in the conference. Several pre-conference sessions were held in the morning of the first day, followed by opening ceremony by Prof Pham Le Tuan, Vice Minister, Ministry of Health Vietnam. In the afternoon, Dr. Junainah Sabirin, the Head of MaHTAS presented on "Malaysia's experience in Designing Health Benefit Package" in one of the plenary session. She also became one of the commentators of oral session on the second day and moderated one of the sessions on the third day.

Four abstracts from MaHTAS were accepted. Dr Izzuna presented on Potential Impact of Artificial Pancreas for Type 1 DM and HPV Urine Test for cervical cancer screening (on behalf of Mr Syful Azlie). Mdm Maria Ja'afar presented two papers entitled 'Potential efficacy and safety of wearable dialysis device for endstage renal disease' and 'Inter-atrial shunt device (IASD) for heart failure with preserved ejection fraction—potential efficacy and safety'. Whilst, Dr Roza Sarimin presented her topic entitled 'Femtosecond Laser Assisted Cataract Surgery: how safe and effective?'.

Almost 200 participants from 18 countries attended the conference. The 7th HTAsiaLink 2018 will be hosted by HITAP and Mahidol Universisty in Thailand.

Mdm Maria

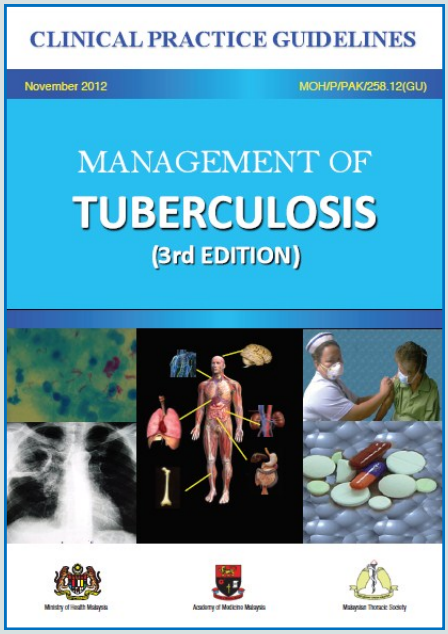
Research Activities

KNOWLEDGE OF DOCTORS IN SELANGOR MINISTRY OF HEALTH HEALTHCARE FACILITIES ON CLINICAL PRACTICE GUIDELINES (CPG) MANAGEMENT OF TUBERCULOSIS (3rd EDITION)

Tuberculosis (TB) continues to pose public health concern both globally and in Malaysia. Detection and treatment gaps need to be addressed to curb the situation. Effort to improve treatment outcome require a better understanding of the diagnosis.

Having adequate knowledge in the management of the disease is a prerequisite for ensuring quality care will be given to patients by practising recommendations stipulated in the guideline. CPG Management of Tuberculosis (3rd edition) was published in 2012 and disseminated nationwide. This CPG provides evidence based guidance to standardise the management of TB at all levels of care in Malaysia in the screening and diagnosis, treatment, follow-up, prevention and referral for patients with confirmed TB, suspected TB and latent TB infection. Utilisation survey conducted on this CPG demonstrated proportion of utilisation was 81.6% among doctors from selected MOH healthcare facilities. However, knowledge of the target users which includes primary care doctors, physicians and those who are involved in managing these cases remain uncertain.

Hence, a cross sectional study was conducted from February to October 2016 among medical officers and specialists in public hospitals and health clinics in Selangor. The aim was to investigate the level of knowledge of this CPG among doctors in selected MOH healthcare facilities. This study was registered with National Medical Research Register (NMRR ID Ref: 16-764-30744) and approved by the Medical Research and Ethics Committee.



Working group members were multidisciplinary specialists from relevant Divisions in Ministry of Health, public hospitals and Ministry of Higher Education. A validated, self-administered questionnaire assessing knowledge (consisted of eight topics on TB management with five knowledge questions for each topic) was used. Participants were said to have demonstrated a good level of knowledge for specific TB topic if they answered correctly all five knowledge questions related to the topic. Proportionate random sampling was used for selecting study population.

A total of 465 doctors from 11 public hospitals and nine district health centres in Selangor participated in the study. Based on eight TB topics which include 40 knowledge questions, 28% of doctors had good level of knowledge. Doctors with clinical specialization/specialist training, who participated in TB CPG training or who were involved in managing TB patients, had demonstrated better knowledge on TB management. The assessment of knowledge on TB management provides valuable baseline information concerning level of knowledge among doctors for treating TB cases.

Dr Erni

Courses & Workshops

Conducted from January until Jun 2017

Seminar on Horizon Scanning for Health Technologies,
National Cancer Institute, Putrajaya
15 Feb 2017

MS Excel 2010 (Basic to Advanced)
National Cancer Institute, Putrajaya
13 -14 March 2017

Application of Decision-Analytic Modelling in Health Economic Evaluations Workshop
National Cancer Institute, Putrajaya
15-16 March 2017

Systematic Review on Evidence-based CPG Development & Implementation Workshop 1/2017
KKM Putrajaya
20-22 March 2017

Training of Core Trainers (ToT) for the CPG Management of Rhinosinusitis in Adolescents and Adults
Cheras Rehabilitation Hospital
16 May 2017

Planned for July until December 2017

Scientific writing & manuscript writing for journal publication workshop
PKD Precinct 11, Putrajaya
9-11 August 2017

Workshop on Economic Evaluation – Tree Age Application
KKM, Putrajaya
27-28 September 2017

Systematic Review on Evidence-based CPG Development & Implementation Workshop 2/2017
KKM Putrajaya
21-23 August 2017

Training of Core Trainers CPG Management of Nasopharyngeal Carcinoma
IKN, Putrajaya
31 October 2017

Horizon Scanning Engagement Session with Universities & Research Institutes
KKM Putrajaya
6 Nov 2017

Malaysian Health Technology Assessment Section (MaHTAS)
Medical Development Division
Ministry of Health Malaysia
Level 4, Block E1, Complex E, Precint 1
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T.U.R.N.O.V.E.R

M.E.M.B.E.R

WELCOMING NEW STAFF

Dr. Chong Chin Eu
Medical Officer UD44
Joined on 3.1.2017

Dr. Aidatul Azura Abdul Rani
Medical Officer UD54
Joined on 3.4.2017

Dr. Asliza Ayub
Medical Officer UD48
Joined on 23.5.2017

THANK YOU OLD STAFF (LEFT MAHTAS)

Dr. Khadijah Abdul Rahim
Medical Officer UD52
Left on 14.4.2017

Mr. Kamarul Azhar Kamaruddin
Pharmacist UF48
Left on 19.5.2017

Thank you for your contributions. You will be missed.