

**International
Training Course on
Drug and
Therapeutics
Committees and
Training of
Trainers, Penang,
Malaysia,
November 28–
December 10, 2005:
Course Report**

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International Training Course on Drug and Therapeutics Committees and Training of Trainers, Penang, Malaysia, November 28–December 10, 2005: Course Report

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Abstract

As a part of its commitment to strengthen management of pharmaceuticals, including antimicrobials, the Management Sciences for Health (MSH) Rational Pharmaceutical Management (RPM) Plus Program has been collaborating for several years with World Health Organization (WHO) and in-country partners to provide training courses on drug and therapeutics committees (DTCs) in developing countries. Continuing with this objective, in 2005 RPM Plus supported an international training course on DTC coupled with a full training of trainers (TOT) component. The course was held in Penang, Malaysia, November–December 2005, and was organized by the University of Science Malaysia (USM) and RPM Plus in collaboration with WHO. Thirty-two participants from 16 countries, who were mainly pharmacists and physicians, attended this two-week course. The participants perceived the course to be valuable as evidenced by their evaluation of and comments on the course. This report describes in detail the preparation before the course, activities during the course, and follow-up strategies with the participants of the course. The report also contains several annexes that may serve as useful templates for organizing training courses in any technical area.

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CONTENTS

ACRONYMS	v
BACKGROUND	1
Objectives of Detailed Report.....	2
Purpose of Trip to Penang, Malaysia.....	2
Scope of Work	3
COURSE PREPARATION	5
COURSE ACTIVITIES	7
Participant Field Study.....	8
Course Participants	9
Course Evaluations	9
Workplans	10
Opening and Closing Ceremonies	11
FOLLOW-UP STRATEGIES	13
Immediate Follow-up Activities	13
Recommendations.....	14
ANNEX 1. COURSE ANNOUNCEMENT	15
ANNEX 2. REQUEST FOR COUNTRY CLEARANCE	21
ANNEX 3. COURSE APPLICATION FORM	25
ANNEX 4. REQUEST FOR INFORMATION ON FORMULARY, PROCUREMENT, AND HOSPITAL STATISTICS	29
ANNEX 5. GENERAL INFORMATION LETTER FOR PARTICIPANTS	31
ANNEX 6. FACILITATORS' CONTACT INFORMATION.....	35
International Facilitators	35
Local Facilitators	36
ANNEX 7. DTC-TOT PROGRAM SCHEDULE.....	37
ANNEX 8. FIELD VISIT GUIDELINES	43
ANNEX 9. PARTICIPANTS' PROFILES.....	47
ANNEX 10. PARTICIPANTS' EVALUATION OF DTC COMPONENT	57
Individual Session Rating	57
Length of Individual DTC Sessions.....	58
Level of difficulty of the training course	58

Overall DTC Training Course Evaluation 59
Recommendations for Improving Training Course 59
ANNEX 11. PARTICIPANTS' EVALUATION OF TOT COMPONENT 63
ANNEX 12. SAMPLE OF DTC-TOT WORKPLAN CREATED BY PARTICIPANT 65
ANNEX 13. COURSE CERTIFICATE 71

ACRONYMS

AMR	antimicrobial resistance
ANE	Asia and Near East [USAID]
DTC	Drug and Therapeutics Committee
DUE	drug use evaluation
EMRO	Regional Office for the East Mediterranean [WHO]
ERC	Electronic Resource Center [MSH]
HIDN	Health Infectious Diseases and Nutrition [USAID]
HPSR	Health Policy and Sector Reform [USAID]
ICIUM	International Conference on Improving Use of Medicines [WHO]
INRUD	International Network for Rational Use of Drugs
LOC	Local Organizing Committee
MOH	Ministry of Health
MSH	Management Sciences for Health
OPH	Office of Public Health [USAID]
PHNO	Population, Health and Nutrition Officer [USAID]
RACHA	Reproductive and Child Health Alliance
RDM	Regional Development Mission [USAID]
RPM Plus	Rational Pharmaceutical Management Plus Program [MSH]
RTRC	Regional Technical Resources Collaboration
SEARO	South-East Asia Regional Office [WHO]
STGs	standard treatment guidelines
TOT	training of trainers
UN	United Nations
USAID	U.S. Agency for International Development
USAINS	(The commercial arm of Universiti Sains Malaysia)
USM	University of Science Malaysia
VEN	vital, essential, nonessential (method for categorizing medicines)
WHO	World Health Organization
WPRO	Regional Office for the Western Pacific [WHO]

BACKGROUND

Infectious diseases continue to present a serious threat to countries worldwide where scarcity of resources is complicated by lack of medicine availability and inappropriate use of the available medicines. The situation is compounded by the steadily growing problem of antimicrobial resistance (AMR). Inappropriate prescribing and use of antimicrobials are major contributors to the development of AMR. Management Sciences for Health (MSH) Rational Pharmaceutical (RPM) Plus Program has been working in developing countries worldwide to introduce Drug and Therapeutics Committees (DTCs) as a method of managing the selection of appropriate medicines and improving use of medicines, including antimicrobials. These committees will serve as a means to improve medicine management including selection, prescribing, identification of medicine use problems, and implementing strategies to improve medicine use. The results of these activities will help control the use of antimicrobials and decrease or contain the spread of AMR.

DTCs are considered a key intervention in the World Health Organization (WHO) Global Strategy to contain antimicrobial resistance in hospitals. In 2004, the Second International Conference on Improving Use of Medicines (ICIUM) recommended that DTCs be established at all levels in institutional settings to help improve use of medicines and contain costs. There is a need in developing countries to establish more DTCs with sufficient qualified health care staff, improve the effectiveness of existing committees, and build capacity to present high-quality DTC training programs.

RPM Plus has recently developed a Training of Trainers (TOT) Course to complement the existing DTC course. The purpose of this additional initiative is to build in-country and regional capacities to organize and present DTC training programs and provide follow-up technical assistance. The TOT focuses on key training-related aspects to enhance participants' skills as DTC trainers. This activity is expected to contribute to the U.S. Agency for International Development (USAID)/RPM Plus efforts toward strengthening the concept of Regional Technical Resources Collaboration (RTRC). A full two-and-a-half day TOT Course was formally implemented for the first time in the Uganda DTC course in 2004. RPM Plus has produced a detailed technical report of that trial.¹

Between 2001 and 2004, many DTC training courses were conducted in different parts of the world (Table 1). In 2005, an international DTC training course was conducted in Penang, Malaysia, from November 28 to December 10. As in the Uganda course, this course contained a full TOT component. The Malaysian course was organized by the University of Science Malaysia (USM) and the MSH/RPM Plus Program in collaboration with the WHO Department of Medicines Policies and Standards. The course announcement can be found in Annex 1.

¹ Joshi M., P. Arnou, and S. Paige. 2005. *Detailed Report of the Training of Trainers Component of the DTC-TOT Course, Kampala, Uganda, September 2004*. Published for the U.S. Agency for International Development by the Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

Objectives of Detailed Report

This report describes in detail the 2005 Malaysia DTC-TOT course. The description is divided into (1) the preparations involved before the course, (2) activities during the course, and (3) the course follow-up strategies. The report is detailed with several annexes that may serve as useful templates for organizing training courses in any technical area.

Table 1. Summary of DTC Courses Held to Date

DTC Course	Month/Year	No. of Participants	No. of Countries	No. of New Countries
Indonesia	June 2001	42	24	24
Kenya	Oct. 2001	36	15	10
Philippines	Feb. 2001	39	1	1
Turkey	July 2001	28	1	1
Nepal	Dec. 2001	32	1	0
Bolivia	Dec. 2001	23	3	3
Guatemala	Feb. 2002	27	2	2
South Africa	Feb. 2002	38	1	0
Moldova	June 2002	27	3	2
India	Oct. 2002	28	9	5
Peru	Oct. 2002	35	1	0
Jordan	Dec. 2002	41	10	8
Nicaragua	Mar. 2003	31	4	4
Uganda*	Sept. 2004	37	11	3
Malaysia*	Nov. 2005	32	16	3
Total		496		66

* Full two-and-a-half-day Training of Trainers (TOT) component included with the DTC course

Purpose of Trip to Penang, Malaysia

Mohan Joshi, Terry Green, Olya Duzey, Niranjana Konduri, and Lindsay Gibbs traveled to Penang, Malaysia, to help coordinate and facilitate the International Course on DTCs and TOT held from November 28 to December 10, 2005. The Request for Country Clearance (RFCC) detailing the anticipated contacts, travel and lodging logistics, and funding source can be found in Annex 2.

Scope of Work

Scope of work for the team was as follows—

Dr. Mohan Joshi

- As RPM Plus DTC-TOT Activity Leader, coordinated the technical aspects and the overall management of the course along with the Local Organizing Committee (LOC) in Penang
- Acted as a key international facilitator for some of the DTC and TOT sessions in the course
- Participated in the field trip and helped participants collect, compile, analyze, and present their data

Terry Green

- Facilitated the coordination of the technical aspects of the course
- Acted as a key international facilitator for some of the DTC and TOT sessions in the course
- Participated in the field trip and helped participants collect, compile, analyze, and present their data

Olya Duzey

- Acted as a key international facilitator for some of the TOT sessions in the course

Niranjan Konduri

- Assisted in the organizational and technical aspects of the training course along with the RPM Plus DTC-TOT Activity Leader and the LOC in Penang
- Helped facilitate all evaluation sessions in the course
- Participated in the field trip and helped participants collect, compile, analyze, and present their data

Lindsay Gibbs

- Assisted in the organizational aspects of the course along with the RPM Plus DTC-TOT Activity Leader and the LOC in Penang
- Along with the LOC staff, assisted in executing administrative responsibilities for the smooth operation of the course, including those related to the sessions, course materials, participants, facilitators, field work, and other logistics

COURSE PREPARATION

Effective partnership with the local partner, University of Science Malaysia (USM), was initiated from the course planning stages. Guidelines were provided in a DTC-TOT preparation checklist. As a first step, a LOC was established at USM. The LOC comprised of staff from the USM's National Poison Centre and USAINS (the commercial arm of Universiti Sains Malaysia).

At all stages, efforts were made to ensure that USM took ownership and leadership before and during the DTC-TOT course. Logistical aspects such as communicating with participants, course material printing and binding, staging events, etc., were coordinated by USM. The LOC first reviewed all completed course application forms and provided initial recommendations on potentially suitable candidates for the course. These were then reviewed by RPM Plus and collaboratively finalized. The course application form can be seen in Annex 3. The process of reviewing and selecting applicants took place over three months and can be seen in Table 2, which provides an outline of preparatory activities carried out by the LOC at USM and the RPM Plus staff.

Table 2. Preparation for the DTC-TOT Course

Activity	Time
<ul style="list-style-type: none"> • Initial communication with USM 	April 2005
<ul style="list-style-type: none"> • USM agreement on organizing the DTC-TOT course • Discussion on course budget, course scheduling, etc. 	First two weeks of May 2005
<ul style="list-style-type: none"> • Drafts of course announcement and course application form finalized 	Last two weeks of May 2005
<ul style="list-style-type: none"> • Course announcement advertised through multiple channels, including MSH, WHO offices, USM, e-drugs, 2005 SEAM Conference, and the Internet • Understanding established with USM to house the Secretariat for the course 	June 2005
<ul style="list-style-type: none"> • DTC-TOT course preparation checklist provided to USM 	July 2005
<ul style="list-style-type: none"> • Local Organizing Committee formed at USM • First set of 22 applications reviewed for selection • Draft of acceptance letter and provisional acceptance letter prepared 	August 2005
<ul style="list-style-type: none"> • Second set of 18 applications reviewed • Third set of 9 applications reviewed • Fourth set of 8 applications reviewed 	September 2005
<ul style="list-style-type: none"> • DTC-TOT course materials in a CD with a sample binder sent to USM for mass reproduction • Fifth set of 9 applications reviewed • Sixth set of 7 applications reviewed • Seventh set of 8 applications reviewed • General information letter and request for hospital statistics/formulary information sent to accepted participants 	October 2005
<ul style="list-style-type: none"> • Eighth and final set of 6 applications reviewed • DTC-TOT program schedule finalized 	November 2005

Strong international interest and response for the DTC-TOT training course was clear from the course applications sent by over 90 health professionals from 30 countries.

Participants selected for the course were sent a request for information on formulary, procurement, and hospital statistics (Annex 4). In response to this request, some participants brought data from their hospitals, which were analyzed and presented for discussion during the course. A general information letter was also sent to the selected participants, which detailed information about arrival, accommodation, local transportation, Malaysia country information, etc. (Annex 5).

COURSE ACTIVITIES

Upon arrival in Penang, Mohan Joshi reviewed logistical arrangements, course program schedule, and course materials in collaboration with the LOC and the Secretariat. Subsequently, Terry Green, Niranjana Konduri, and Lindsay Gibbs joined the team and provided support on various aspects of the course. All technical and logistical activities were carried out collaboratively by the LOC staff and the team from RPM Plus. Activities included a wide range of planning steps such as setting up and arranging of the course hall, table grouping of participants to ensure a good mix, and verifying and updating course materials.

The DTC component of the course consisted of 14 sessions over nine days on various topics pertaining to the roles and functions of DTCs. The DTC component of the course was managed by international facilitators from MSH RPM Plus and WHO and by local facilitators from USM. The facilitators' profiles can be found in the course announcement (Annex 1) and their contact information can be found in Annex 6. The TOT component consisted of nine sessions and was held over two-and-a-half days. The TOT component was carried out by MSH RPM Plus facilitators Mohan Joshi and Olya Duzey, and MSH Consultant Terry Green. The detailed Program Schedule for both the DTC and TOT components of the course appears as Annex 7.

The key features of the DTC course included formulary management; assessing medicine efficacy, safety, quality, and cost; identifying and understanding medicine use problems; strategies to improve medicine use including standard treatment guidelines (STGs); and the practical aspects of operating a DTC. The DTC course also included a session on the important components of infection control in hospitals. An entire day was reserved for field visits to hospitals and subsequent analysis of collected data. The key features of the TOT course included adult learning, the role of the teacher, communication skills, teaching and learning methods, and DTC-related presentation and facilitation skills.

The teaching-learning methodologies utilized in the course consisted of interactive presentations, discussions, small group activities, facilitation practice by participants, field study, and workplan development. Active participation from course participants and group discussions were encouraged throughout the course. During the training, the participants were distributed to five round tables in the training hall, each table forming a small group of six or seven participants.

The following criteria were used to ensure a good mix of participants at each round table for the first week of the course: professional background (e.g. physician/ pharmacist/academician), gender, and even distribution of countries. Such efforts to ensure a fair and balanced mix resulted in productive group dynamics and participation. The members of the group were changed for the second week using the same criteria to allow greater interaction among different participants. This process was strengthened in 2005 following a recommendation given in Uganda's 2004 course.

At the end of each day, an evaluation committee consisting of a team of ten participants analyzed the data collected from each session evaluation and prepared for the next morning's recap

session. Each evaluation committee meeting was facilitated by Nirranjan Konduri who helped organize the evaluation results and the discussion for the recap.

The LOC team that provided administrative and secretarial support was led by Lucy Chuah. She was supported by Elsie Kong and Catherine Lee. Lindsay Gibbs collaborated with them throughout the course for administrative and logistical aspects.

Participant Field Study

The Field Study is an important activity in the DTC course as it provides an opportunity to the participant to apply the concepts and use the exercises learned during the first seven days of the course. The field study sites were two government and two private hospitals. As a result, there were four groups of eight participants each. Participants were grouped according to their professional background and experience. Given that there were a majority of pharmacists for this course, it was ensured that there was at least one physician per group. Malaysian participants were also evenly distributed among the four groups. Each group was accompanied by two facilitators (one local and one international) who acted as observers and were available for questions.

Participants were asked to collect data on hospital DTC activities, obtain general consumption and price data for selected medicine classes, and review the use of medications at the hospital. An instruction sheet was prepared to guide the field visit for each group (Annex 8).

At each hospital, information on the structure, functions, and accomplishments of the hospital DTCs was collected through an interview with either the chief pharmacist or the DTC chairperson. During this interview, consumption data was obtained for antihypertensives, nonsteroidal anti-inflammatory drugs, and third-generation cephalosporins. Two drug use evaluations (DUE) that were developed during the course were conducted in two of the four hospitals. One DUE was on the pattern of antibiotic prophylaxis for caesarean section and the other was on the pattern of use of ciprofloxacin among inpatients. Additionally, 20 prescriptions were reviewed at the hospital dispensary to analyze the outpatient prescribing patterns using WHO/International Network for Rational Use of Drugs (INRUD) drug use indicators. In the other two hospitals where DUE could not be conducted, 40 prescriptions were reviewed by the participant groups. Also, an exit interview developed during the course was conducted outside of each pharmacy to determine a patient's knowledge concerning their prescribed medications.

After the data were collected, the participants reassembled in the afternoon to aggregate and analyze their data and then prepare a presentation to share their findings. The next morning the four groups presented their findings in plenary, each followed by a question and answer period and discussion. Representatives of some of the hospitals came to the course to listen to the findings about their hospitals and share feedback.

Course Participants

A total of 32 participants from 16 different countries participated in the training course—4 from Cambodia, 1 from China, 1 from Ethiopia, 3 from Kenya, 8 from Malaysia, 2 from Mongolia, 2 from Nepal, 1 from Nigeria, 1 from the Philippines, 1 from Rwanda, 2 from Samoa, 1 from Singapore, 2 from Sri Lanka, 1 from Swaziland, 1 from Uganda, and 1 from Vietnam.

While the majority of the participants were chief or senior pharmacists working at different locations, nine were senior level medical doctors. They represented diverse organizations—hospitals (both public and private), ministries of health, WHO and other United Nations (UN) organizations, national drug regulatory authority, university, NGOs, clinical research center, and national cancer center. Participants’ profiles with contact information can be found in Annex 9.

Several organizations sponsored the participants for the Malaysia course.

Organization	Participant(s)
WHO, through its WPRO, SEARO, and country offices	10 participants
USAID/RPM Plus	5 candidates (3 from ANE, 1 from AMR, and 1 from South Africa Country Office)
USAID Mission in Cambodia	3 participants through Reproductive and Child Health Alliance (RACHA)
Ministries of Health	6 candidates
Individual hospital	1 participant
UN Health Care Center	1 participant
University of Malaya	1 participant
Clinical Research Center in Malaysia	1 participant
Self-supported	1 participant

Course Evaluations

Participants submitted anonymous written evaluations of each DTC session and an overall evaluation of the DTC course. A Likert scale of 1 to 9 was used in which 1 signified “strongly disagree” and 9 signified “strongly agree.” The DTC course sessions received scores ranging from 7.1 to 8.2 (Annex 10), with 12 out of 14 sessions receiving scores of 7.5 or above. At the end of the DTC component of the training course, an evaluation form was distributed to participants asking them to rate and provide recommendations and comments on the DTC course. The overall DTC course evaluation resulted in an average of 7.5 with useful recommendations and favorable comments related to such issues as the course content, depth of topics, and facilitators (Annex 10).

One of the key components of the TOT part of the course was a self-assessment exercise. Information on this exercise can be found in the detailed TOT report.² The pre-TOT self-assessment form was completed before participants took the TOT course. A post-TOT self-assessment form was completed at the end of the TOT. Participants could then compare their pre- and post-course responses to identify the skills they had developed as a result of the course and the areas they wanted to further develop.

The self-assessment exercise resulted in a variety of responses. Among the skills that participants felt that they developed or improved as a result of the TOT exposure are: presentation skills (n = 8), presentation and course session planning (n = 8), audience engagement (n = 7), using teaching methods (n = 7) and preparing audio visual materials (n = 6). Other areas are confidence (n = 5), communication skills (n = 4), and setting objectives (n = 3). The data suggests that the course influenced the participants' perception of their skills. Data from the self-assessment exercise will be utilized as appropriate to further refine the TOT course materials.

At the end of the TOT session, participants were asked to evaluate the TOT component of the course. The TOT evaluation form consists of four parts and the scoring was based on a Likert scale from 1 (poor) to 5 (excellent). Part I measured educational aspects of the TOT course while part II measured course content aspects of the TOT component. Part III solicited reflective comments from the participants and part IV measured administrative aspects of course. The average of Part I and Part II yielded in a score of 4.2 for the TOT component. Twenty-three participants considered the length of the TOT component to be "just right", while five considered it to be "too short." The details are presented in Annex 11.

Workplans

One training course goal was to help participants develop and implement programs to establish DTCs where absent or improve those existing in their respective health care facilities/institutions. A monitoring and follow-up component in the form of a workplan has been built into this training course. This is intended to help track the progress that participants accomplish and provide technical assistance along the way.

A demonstration of the DTC website (<http://erc.msh.org/dtc>) was provided to describe the technical resources available at the website. The purpose of the website is to serve as an on-line community for participants to share their progress. Examples of participants' workplans from past DTC courses were presented. Participant profiles from the Malaysia course which were already prepared and uploaded to the DTC website during the course were shown. Participants appreciated the fact that their profiles were already on the website even before the course was over. Following this demonstration and subsequent discussion, participants developed their workplans for DTC activity implementation and DTC related training activities. An example of a workplan can be seen in Annex 12. All participant workplans will be posted on the DTC website. See the section on Follow-up Strategies for more information.

² Joshi, M., P. Arnow, S. Paige. 2005. *Detailed Report of the Training of Trainers Component of the DTC-TOT Course, Kampala, Uganda, September 2004*. Published for the U.S. Agency for International Development by the Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

Materials Distributed

Both the DTC and TOT components of the course are supported by well-developed and extensive sets of teaching-learning materials—participants' guides, trainers' guides, and visual aids. At the start of the DTC training, each participant received a binder of course materials which included individual session handouts and copies of PowerPoint slides used by the facilitators. During the course, facilitators distributed more technical handouts such as journal articles, newsletters, etc. In addition to print versions, each participant received electronic versions of the complete set of DTC and TOT course materials and several other useful resource materials on a CD-ROM. The CD-ROM also contained addresses of participants and facilitators as well as digital photos taken during different sessions and the field visit of the course. Additionally, hard copies of relevant WHO publications and the 1997 edition of *Managing Drug Supply* were distributed.³

Opening and Closing Ceremonies

The Guest of Honor for the Opening and Closing Ceremony of the course was the Vice Chancellor of University of Science, Malaysia, Professor Dato' Dzulkifli Abdul Razak. The University's high-level institutional support was evident from its Vice Chancellor's attendance during both the Opening and Certificate Distribution Ceremonies. A sample of the course certificate can be seen in Annex 13.

³ Management Sciences for Health and World Health Organization. 1997. *Managing Drug Supply*. 2nd ed. West Hartford, CT: Kumarian Press.

FOLLOW-UP STRATEGIES

Training coupled with regular follow-up and monitoring results in more positive outcomes than training alone. Follow-up activities can also be designed to sustain the activity. However, overambitious and complex follow-up and monitoring plans run the risk of remaining under-implemented as increased facilitator time and resources are required. Hence, the strategy to achieve this function is as follows—

- As part of the DTC-TOT course, participants develop two, one-year long workplans— one on DTC implementation and the other on training additional people locally on DTC-related themes.
- Post both the DTC and training workplans on the DTC website maintained by RPM Plus (<http://erc.msh.org/dtc/>) and inform the participants by e-mail.
- Maintain regular e-mail follow-up with individual participants to assess implementation of the proposed workplans and provide advice where needed.
- Update the DTC website with new DTC and rational antimicrobial use materials as they become available and inform the participants.
- Encourage the participants to visit the DTC website and utilize its resources and links.
- Use a continuously updated matrix to document progress on participants' workplans. Help participants post these progresses on the DTC website. Encourage them to share other success stories, big and small, with fellow participants by sending out e-mails and posting stories also on the website. Encourage them to share the underlying factors for their successes and difficulties so that others may benefit from the lessons learned. In addition to regular e-mail follow-ups, send out a six-month survey form to all participants to capture as much information on progress and successes as possible.
- Maintain regular contact with local facilitators of past courses and motivate and support them to follow up on participant work progress and provide technical and other kinds of support feasible in the local context.
- Document all the available lessons learned to know what worked and what did not and to identify opportunities to reinforce factors and reduce barriers to good outcomes.

Immediate Follow-up Activities

With the formation of the DTC follow-up team of Terry Green, Niranjan Konduri, and Mohan Joshi, it is planned that MSH will provide more technical assistance to participants for effective DTC implementation and related activities.

Electronic versions of participant workplans were reviewed in January 2006 and comments with suggestions to edit and clarify the plans were e-mailed to each participant. It is anticipated that this process may result in participant ownership of workplans and set the stage for active dialogue. After participants respond, the final version of their workplan will be uploaded onto the DTC website.

The participants will be notified once their workplans have been posted and will be asked to provide periodic updates as to the progress on the implementation of the workplans.

Recommendations

- Organize another DTC-TOT course in workplan year 6 (October 2005 to September 2006)
- Continue to refine the content and materials of the DTC and TOT courses
- Periodically update the DTC website
- Continue and intensify follow-up activities including regular e-mail communications, provide technical assistance when necessary, monitor workplan implementation, and document success stories on DTC activities

ANNEX 1. COURSE ANNOUNCEMENT



ANNOUNCEMENT

An International Training Course on Drug & Therapeutics Committees and Training of Trainers

November 28 to December 10, 2005
Penang, Malaysia

The National Poison Centre in Malaysia will host an International Training Course on Drug and Therapeutics Committees and Training of Trainers from November 28 to December 10, 2005, in Penang, Malaysia. The course is organized by the University of Science Malaysia (USM) and the Rational Pharmaceutical Management Plus (RPM Plus) Program of Management Sciences for Health (MSH) in collaboration with the World Health Organization (WHO) Department of Medicines Policies and Standards.

Who Should Attend?

The course is designed for physicians; pharmacists; and health officials in hospitals, ministries of health, universities, or private organizations. Those interested in improving formulary management and promoting rational use of medicines through Drug and Therapeutics Committees (DTCs) and who are in a position to provide training and technical assistance to other DTCs are invited to apply. Candidates with some experience with DTCs and who wish to expand their knowledge of pharmaceutical management and train others in their country/region are preferred.

Course Focus

The training course will focus on the role of the DTC and the practical approaches available in promoting rational use of medicines. Key features will include—

- Formulary management
- Standard treatment guidelines
- Essential medicines list
- Indicators of medicine use
- Interventions to change inappropriate medicine use
- Practical aspects of running a DTC

The last two days of the course will focus on training of trainers (TOT) aspect and is designed to help the participants to better prepare themselves to provide DTC-related training to others in their respective countries and regions. Key features of the TOT component will include—

- Adult learning
- Role of the teacher
- Communication skills
- Teaching and learning methods
- DTC-related presentation and facilitation skills

Design and Methods

The highly participatory course will be conducted in English and will consist of—

- Presentations
- Discussions
- Small group activities
- Field visits

The DTC training will be based on materials developed by MSH in collaboration with WHO, and will allow for the exchange of experiences and ideas among participants, adding depth to the learning process. This will expose participants to a wide range of international experiences and materials. The TOT training will be based on the materials recently developed by MSH. The course materials will emphasize—

- Identifying and understanding medicine use problems
- Formulary management and standard treatment guidelines
- Assessing pharmaceutical efficacy, safety, and quality
- Cost evaluation of formulary pharmaceuticals
- Drug utilization reviews
- Strategies to improve medicine use
- Structure and function of a DTC
- Infection control
- Monitoring and evaluating a DTC
- Local hospital field study
- Adult learning and teaching learning methods
- Communication, presentation, and facilitation skills

Faculty

A team of experts from USM, RPM Plus/MSH, and WHO will serve as trainers. They include—

Dr. Budiono Santoso is currently the Regional Advisor in Pharmaceuticals of the Western Pacific Regional Office of the World Health Organization. He is a medical doctor and clinical pharmacologist by training, earning his medical degree at Gadjah Mada University (Yogyakarta, Indonesia) in 1975 and his doctoral degree at University Newcastle Upon Tyne (U.K.) in 1983. Formerly, he was the Director of the WHO Collaborating Centre on Research and Training on Rational Drug Use at the Centre of Drug Policy Studies, Gadjah Mada University, and Head of Clinical Pharmacology at the Medical School of that university until 1999. He was one of the founding members of INRUD and formerly served as the Subcommittee Chairman for Clinical Pharmacology in Developing Countries of the Division of Clinical Pharmacology of the International Union of Pharmacology (IUPHAR) (1996–2004). He has served as an

Advisory Expert Panel Member on International Health of the U.S. Pharmacopeia. His professional expertise and interests include clinical pharmacology, drug utilization, rational use of medicines, and access to medicines. He was previously involved in a number of international training courses related to rational use of medicines and pharmaceuticals undertaken by WHO, INRUD, MSH, and the World Bank.

Dr. Kathleen Holloway is a medical officer with the WHO Department of Medicines Policies and Standards in Geneva. Her present responsibility is the promotion of the rational use of medicines at both global and country levels, and she is actively involved in training programs, research, and capacity building in this area. Her professional experience includes 10 years as a clinician in the U.K. National Health Service, 10 years working in Asia in both clinical medicine and public health, and 5 years working in international health. She spent 1991–1998 in Nepal managing an essential medicines program, and she conducted research into the effects of user fees on rational use of medicines. Dr. Holloway is particularly interested in financial mechanisms to promote more rational use of medicines and in containing antimicrobial resistance.

Dr. Mohan P. Joshi is Program Manager for Antimicrobial Resistance at the RPM Plus Program of MSH's Center for Pharmaceutical Management. He is a medical doctor with postgraduate degrees in clinical pharmacology (MSc) and pharmacology (MD). Dr. Joshi has 22 years of professional experience and worked as Assistant Dean, Professor, and Head of Clinical Pharmacology, as well as Director of the Drug Information Center, at the Tribhuvan University Institute of Medicine in Nepal before joining MSH. Dr. Joshi has served as a member of the International Health Expert Advisory Panel of the U.S. Pharmacopeia. He has coordinated or facilitated many training courses on rational use of medicines, including regional courses on Promoting Rational Drug Use (PRDU) and Drug and Therapeutics Committees that included modules on Training of Trainers. His areas of interest and experience include clinical pharmacology, medical education, rational use of medicines, drug utilization, drug information, drug formularies, DTCs, and antimicrobial resistance.

Dr. Mohd. Baidi Bahari is an Associate Professor and serves as Chairman of the Clinical Pharmacy Program in USM's School of Pharmaceutical Sciences. He obtained his postgraduate degree from the University of Minnesota. Dr. Baidi has more than 20 years of clinical experience, having served as Head of the Aseptic Dispensing Unit, a member of the Pharmacy and Therapeutics Committee, and a member of the Infectious Disease Committee at USM Teaching Hospital. He is also a member of the National Accrediting Board for the School of Pharmacy and a Council Member of the Malaysian Pharmaceutical Society. Dr. Baidi is the current Chairman of the Continuing Pharmacy Development Program of the Malaysian Pharmacy Board.

Ms. Olya Duzey is Program Manager for Asia and the Near East (ANE) with the MSH Center for Pharmaceutical Management, RPM Plus Program, where she has designed, implemented, managed, and evaluated country and regional programs in Asia for the RPM Plus and Strategies for Enhancing Access to Medicines (SEAM) programs, as well as in countries of the Newly Independent States. Ms. Duzey has over 25 years of professional experience, including community health education; hospital, community, and professional association pharmacy practice; and international pharmaceutical management. With RPM Plus, she provides technical assistance in community drug use practices in malaria and child survival, distribution, retail pharmacy management, planning and conducting countrywide and focused pharmaceutical assessments, and facilitating strategy development and policy implementation. Ms. Duzey also conducts training in various pharmaceutical management courses, guest lectures at Georgetown University, and has served on various professional, academic, and community advisory boards and committees, including the U.S. Pharmacopeia Convention's Advisory Panel on Pharmacy Practice.

Professor Rahmat Awang is the Director of the National Poison Centre of Malaysia/WHO Collaborating Centre for Drug Information based at USM. He received his Doctor of Pharmacy degree from the

University of Minnesota in 1985 and was a recipient of the Dean's Award for excellent performance in Clinical Pharmacy in his graduating year. Professor Rahmat pioneered and served as Head of the Drug Information Service at USM's Teaching Hospital. Dr. Rahmat's research interests include the development of a computerized pharmacy-based system, drug utilization studies, and clinical toxicology.

Dr. Syed Azhar Syed Sulaiman is an Associate Professor and Deputy Dean (Student Affairs) in the School of Pharmaceutical Sciences, USM, Penang. A clinical pharmacist by training, Dr. Syed Azhar obtained his Doctor of Pharmacy degree from the University of Michigan, specializing in Infectious Diseases, Geriatrics, and Pharmacoeconomics. He is an associate member of the National Poison Centre of Malaysia and is the current President of the Asian Conference in Clinical Pharmacy. Dr. Syed Azhar actively promotes rational use of medicines in the South East Asia region.

Mr. Terry Green is a Clinical Pharmacist with the U.S. Public Health Service. He has worked with MSH in their antimicrobial resistance activities. This work included the development and implementation of training materials for the International DTC training courses. He has facilitated courses in Thailand, the Philippines, Indonesia, Kenya, Nepal, and Jordan. He has 25 years of experience in public health pharmaceutical programs.

Dr. Yahaya Hassan, Pharm.D., is an Associate Professor in Clinical Pharmacy at USM's School of Pharmaceutical Sciences. He received his Doctor of Pharmacy degree from the University of Minnesota. Dr. Yahaya maintains an active clinical pharmacy practice in the Department of Medicine in the Penang Hospital. He is an active member of the American College of Clinical Pharmacy (ACCP) and European Society for Clinical Pharmacy (ESCP). Dr. Yahaya's research interests include drug utilization studies and pharmaceutical outcomes. He is a consultant to various pharmaceutical manufacturers for generic bioequivalence studies and therapeutic equivalence trials.

Fees and Application

The course fee is USD 1,700. This fee covers tuition, training course materials, shared accommodations, breakfast, and lunch. Those who require single room accommodations are required to pay extra charges (information available on request).

Participants will be provided USD 20 per day to cover dinner expenses. Participants should plan to bring sufficient money for incidental expenses like laundry, postage, phone calls, and so on. Travel and health insurance are the responsibility of the sponsoring organization.

The course fee for local participants not requiring accommodations is USD 750. This fee covers tuition, training course materials, and lunch. It does not cover transportation to and from the course, breakfast, dinner, or hotel accommodations.

Participants should arrive in Penang, Malaysia, on November 27, 2005. The Local Organizing Committee will be responsible for hotel accommodations until 10:00 a.m. on December 11, 2005. Those who want to stay longer will have to pay for accommodations after that time.

Places for 35 participants (national and international) will be available. Selection will be based on previous experience, interest in promoting rational use of medicines through a DTC, and ability to implement such programs in their own environment.

Bank Details

Bank drafts (checks) should be made payable to University of Science Malaysia in U.S. dollars.

Wire transfers can be sent to:

Account name: USAINS Holding Sdn. Bhd

Account no: xxx-xx- xx-xxx

Bank Name: BUMIPUTRA COMMERCE BANK

Bank Address: Universiti Sains Malaysia,
Pulau Pinang (018)
Malaysia

Swift Code: xxx-xx- xx-xxx

Deadline for Application

Applications and fees are due no later than **October 24, 2005**. Because the course is limited to 35 participants, applicants are encouraged to apply early.

For a copy of the application and this course flyer, please visit <http://erc.msh.org/dtc>.

For further information, please send an e-mail to Ms. Lucy Chuah at lucyc@notes.usm.my with a copy to Ms. Lindsay Gibbs at lgibbs@msh.org.

ANNEX 2. REQUEST FOR COUNTRY CLEARANCE

Request for Country Clearance

TO: John MacArthur, RDM Asia/OPH

FROM: Management Sciences for Health (MSH)/Rational Pharmaceutical Management (RPM) Plus Program, Cooperative Agreement # HRN-A-00-00-00016-00

SUBJECT: Request for Country Clearance for travel to Malaysia for RPM Plus staff and consultants: Mohan Joshi, Olya Duzey, Terry Green, Niranjan Konduri, and Lindsay Gibbs

COPY: Wanne Kunchornratana, RDM/A/OPH
Thitima Klasnimiti, RDM/A/OPH
Andrew Clements, ANE/ID Advisor
Anthony Boni, Global HPSR/CTO RPM Plus
Kama Garrison, GH/HIDN
Douglas Keene, Director, MSH/RPM Plus
Maria Miralles, Deputy Director, MSH/RPM Plus
Mohan Joshi, Program Manager for AMR, MSH/RPM Plus

1. The RPM Plus Program wishes to request country clearance for proposed travel to Penang, Malaysia by: Dr. Mohan Joshi, Program Manager for Antimicrobial Resistance (AMR); Ms. Olya Duzey, Program Manager for Asia & the Near East (ANE); Mr. Terry Green, Consultant for MSH/RPM Plus; Mr. Niranjan Konduri, Program Associate for RPM Plus; and Ms. Lindsay Gibbs, Administrative Coordinator for RPM Plus, for the period of November 23 to December 10, 2005 for Mohan Joshi, December 6 to 11, 2005 for Olya Duzey, and November 26 to December 11, 2005, for Terry Green, Niranjan Konduri, and Lindsay Gibbs.

2. Background:

Infectious diseases continue to present a serious threat to countries worldwide where scarcity of resources is complicated by lack of drug availability and inappropriate use of the available drugs. The situation is compounded by the steadily growing problem of antimicrobial resistance (AMR). Inappropriate prescribing and use of antimicrobials are major contributors to the development of AMR. USAID-funded Rational Pharmaceutical Plus (RPM Plus) Program of Management Sciences for Health (MSH) has been working in developing countries worldwide to introduce Drug and Therapeutics Committees (DTCs) as a method of managing the selection of appropriate drugs and improving use of medicines, including antimicrobials. These committees will serve as a means to improve drug selection, prescribing, and use and decrease or contain the spread of antimicrobial resistance (AMR). DTCs are considered a key intervention in the WHO Global Strategy to contain antimicrobial resistance in hospitals.

DTC Training courses have been given in Bolivia, Guatemala, India, Indonesia, Jordan, Kenya, Moldova, Nepal, Nicaragua, Peru, Philippines, South Africa, Thailand, Turkey, and Uganda. RPM Plus has recently developed a Training of Trainers (TOT) Course to complement the existing DTC course. The purpose of this additional initiative is to build in-country and regional capacities to organize and present DTC training programs and provide follow-up technical assistance.

The next DTC-TOT course is an international course and will be held from November 28 to December 10, 2005, in Penang, Malaysia. The course is organized by the University of Science Malaysia (USM) and the MSH RPM Plus Program in collaboration with the World Health Organization (WHO) Department of Medicines Policies and Standards. The National Poison Centre in Malaysia will host the course.

3. Purpose of Proposed Visit

The purpose of visit for Dr. Mohan Joshi, Ms. Olya Duzey, Mr. Terry Green, Mr. Niranjana Konduri, and Ms. Lindsay Gibbs is to help coordinate and facilitate the International Course on Drug and Therapeutics Committees and Training of Trainers to take place in Penang, Malaysia, from November 28 to December 10, 2005.

4. Scope of Work

Scope of work for Mohan Joshi

- Coordinate the technical aspects and the overall management of the entire course along with the Local Organizing Committee in Penang, Malaysia
- Act as a key international facilitator for DTC and TOT sessions in the course
- Participate in the field trip and help participants collect, compile, analyze and present their data
- Debrief the Mission, if requested

Scope of work for Olya Duzey

- Act as a key international facilitator for TOT sessions in the course
- Debrief the Mission, if requested

Scope of work for Terry Green

- Facilitate the coordination of all the technical aspects of the whole course
- Act as a key international facilitator for DTC and TOT sessions in the course
- Participate in the field trip and help participants collect, compile, analyze and present their data

Scope of work for Niranjana Konduri

- Assist in the organizational and technical aspects of the training course along with the RPM Plus DTC-TOT Activity Leader and the Local Organizing Committee in Penang
- Assist in the facilitation of all the evaluation sessions in the course
- Participate in the field trip and help participants collect, compile, analyze and present their data

Scope of work for Lindsay Gibbs

- Assist in the organizational aspects of the entire course along with the RPM Plus DTC-TOT Activity Leader and the Local Organizing Committee in Penang
- Along with the Local Organizing Committee staff, assist in executing administrative responsibilities for the smooth operation of the whole course, including those related to the sessions, course materials, participants, facilitators, field work, and other logistics

5. Anticipated Contacts:

- Professor Dzulkifli Abdul Razak, Vice Chancellor, USM
- Dr. Budiono Santoso, Regional Advisor in Pharmaceuticals of the Western Pacific Regional Office of the World Health Organization (WHO/WPRO)
- Dr. Kathy Holloway, Medical Officer, WHO/Geneva
- Professor Rahmat Awang, Director of National Poison Center in Malaysia
- Dr. Syed Azhar Syed Sulaiman, Associate Prof. and Deputy Dean, School of Pharmaceutical Sciences, USM
- Dr. Mohd. Baidi Bahari, Associate Professor and Chairman of the Clinical Pharmacy Program, School of Pharmaceutical Sciences, USM

- 6. Logistics:** Dr. Joshi will arrive in Penang on/about November 23 and depart on/about December 10, 2005, Ms. Duzey will arrive in Penang on/about December 6 and depart on/about December 11, 2005, and Mr. Green, Mr. Konduri, and Ms. Gibbs will arrive in Penang on/about November 26 and depart on/about December 11, 2005. Dr. Joshi, Ms. Duzey, Mr. Green, Mr. Konduri, and Ms. Gibbs will stay at Vistana Hotel in Penang (tel. 604-646-8000).

No Mission assistance is required.

- 7. Funding:** Expenses for Dr. Joshi, Mr. Green, Mr. Konduri, and Ms. Gibbs will be paid for with core SO5 AMR funds, whereas Ms. Duzey's expenses will be paid for with RPM Plus ANE funds.
- 8. Action:** Please inform the RPM Plus Program whether country clearance is granted for the activity to take place as proposed. Please reply via e-mail to the attention of Anthony Boni, USAID/G/PHN/HN/HPSR, e-mail address: aboni@usaid.gov, tel (202) 712-4789, fax (202) 216-3702. Please send carbon copies to Kama Garrison at kgarrison@usaid.gov, Douglas Keene at dkeene@msh.org, Maria Miralles at mmiralles@msh.org, Mohan Joshi at mjoshi@usaid.gov, Olya Duzey at oduzey@msh.org, and Lindsay Gibbs at lgibbs@msh.org.

Thank you for Mission cooperation.

ANNEX 3. COURSE APPLICATION FORM

International Training Course on Drug & Therapeutics Committees and Training of Trainers Penang, Malaysia, November 28 to December 10, 2005

Organized by University of Science Malaysia (USM) and Rational Pharmaceutical Management Plus (RPM Plus) Program of Management Sciences for Health (MSH)
in collaboration with the World Health Organization (WHO)
Department of Medicines Policies and Standards

(Attach additional sheets as necessary)

Title: _____ Surname: _____ First Name: _____

Degree: _____ Organization: _____ Position: _____

Mailing Address: _____

City: _____ Country: _____ Telephone: _____

Postal Code: _____ E-mail: _____ Fax: _____

Are you involved in a Drug and Therapeutics Committee (DTC)? If yes, please explain for how long and in what capacity.

*Is your Drug and Therapeutics Committee involved in promoting rational use of medicines?
If yes, what aspects of rational use of medicines are currently being addressed by the Drug and Therapeutics Committee?*

Have you ever participated in or organized seminars or training courses on Drug and Therapeutics Committees? If yes, please describe.

How much do you think this training course will help you in implementing/promoting the rational use of medicines through the activities of a Drug and Therapeutics Committee in your country?

How do you plan to implement/promote the rational use of medicines through a Drug and Therapeutics Committee upon your return home?

How do you plan to conduct/promote DTC-related training of other health professionals upon your return home?

Please check the appropriate box below to indicate the status of sponsorship for your participation in the course and provide the name of the sponsoring organization.

Sponsor (confirmed) _____

Sponsor (likely) _____

Organization (planning to approach for sponsorship) _____

Applicant's Signature:

Date:

The deadline for receiving completed applications is **October 24, 2005**.

Please send the completed application by e-mail to:

Ms. Lucy Chuah at lucyc@notes.usm.my

with a copy to:

Dr. Mohan P. Joshi at mjoshi@msh.org

Please also send a hard copy of the application to:

Ms. Lucy Chuah
National Poison Centre
University of Science Malaysia
Penang 11800
Malaysia
Telephone: +60 4 6570099
Fax: +60 4 6568417

***Note:** In unusual circumstances, the training course may be postponed. Applicants will be notified as early as possible in such cases.*

ANNEX 4. REQUEST FOR INFORMATION ON FORMULARY, PROCUREMENT, AND HOSPITAL STATISTICS

DTC-TOT Course, Penang, Malaysia

Information on your Formulary, Procurement, and Hospital Statistics

Dear DTC-TOT Malaysia 2005 Course Participant,

For the upcoming Drug and Therapeutics Committee (DTC) Training Course in Penang, Malaysia, November 28 to December 10, 2005, we would like for you to bring some information on your formulary, procurement, and hospital statistics. This information is important for us to develop some of the DTC training presentations, activities and workshops. Please bring as many of the following as possible in both **electronic and hardcopy format**.

- Hospital or health care organization's formulary list or the country's essential drug list if there is no institutional drug formulary list.
- Lists of Non-steroidal Anti-inflammatory Drugs (NSAIDs), cephalosporins (I, II and III generation), and antihypertensive drugs (diuretics, beta-blockers, ACE inhibitors, vasodilators, calcium channel blockers, etc.) that are included in the formulary or essential drug list. Include the following information for these classes of drugs:
 - Drug and strength
 - Order unit (pack size, i.e. 100's, 250's 1000's)
 - Unit price (per pack, i.e. price per 100, per 250, per 1000)
 - Quantity purchased in past 12 months (or other available period)
 - Value of each drug purchased over the past 12 months (or available period)
- In addition to the above information, if possible, the participant should bring a list (hard copy/print version and electronic/Excel file if possible) of all drugs purchased by the hospital or medical service including:
 - Drug and strength
 - Order unit (pack size, i.e. 100's, 250's 1000's)
 - Unit price (per pack, i.e. price per 100, per 250, per 1000)
 - Quantity purchased in past 12 months (or available period)
 - Value of each drug purchased over the past 12 months (or available period)

Provide the following hospital information if available:

- Occupancy rate
- Number of beds
- Number of outpatient visits over the past 12 months
- Top ten medical conditions treated at the hospital during past 12 months
- Top ten causes of death
- Top ten drugs by value for past 12 months

Thank you very much for obtaining this important data about your hospital and pharmacy.
Please bring this information to the DTC course in Penang.

The National Poison Centre in Malaysia

University of Science Malaysia (USM)

Management Sciences for Health (MSH) and the World Health Organization (WHO)

ANNEX 5. GENERAL INFORMATION LETTER FOR PARTICIPANTS



International Training Course on Drug & Therapeutics Committees and Training of Trainers

Penang, Malaysia, 28th November to 10th December 2005

Organized by University of Science Malaysia (USM) and Rational Pharmaceutical Management Plus (RPM Plus)
Program of Management Sciences for Health (MSH) *in collaboration with the*
World Health Organization (WHO) Department of Medicines Policies and Standards

General Information

We are pleased that you will be participating in the Drug & Therapeutics Committee (DTC) and Training of Trainers (TOT) Course this 28th November - 10th December in Penang, Malaysia. The general information given below is intended to prepare you for your trip to Penang, and, hopefully, make your stay as comfortable as possible.



Travel Itinerary Please plan to arrive in Penang, Malaysia on **Sunday, 27th November**, or no later than 1:00pm on **Monday, 28th November**. Your departure bookings should be on or after 5:00 pm **Saturday, 10th December**. The Local Organizing Committee (LOC) will be responsible for

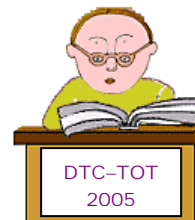
hotel accommodation up to 10:00am on 11th December only. Anyone wishing to stay longer will have to meet the cost of the additional stay at their own expense.

Visa Depending on the country you come from, visa requirement may or may not apply. If in doubt, contact the Malaysian consulate/embassy in your country to obtain further clarification. You can also obtain further information concerning your visa requirement at the Malaysian Immigration website, <http://www.imi.gov.my/>. If you are required to apply for a visa, do include your workshop notices and Offer Letter as supporting document to facilitate your visa application.



At Penang International Airport Participants arriving by air must ensure that their journey ends at the **Penang International Airport**, not Kuala Lumpur. When you exit the Airport via the Arrival Gate, there will be a help desk with the sign "DTC-TOT 2005". Please identify yourself as a participant of the Course and you will be given assistance for transportation to the hotel. The ride to the hotel is provided courtesy of the LOC. You are strongly advised to share information of your arrival time with the Secretariat in order to assure you are included in the airport pick-up.

HELP DESK



If You Miss Our People The LOC will do its best to ensure every participant is met on arrival at the airport and provided with transportation to the hotel. For those who are not met on arrival at the airport on account of early or late arrival, or missed connections, please be aware that airport taxis are available. Fares for airport taxis are fixed according to designated zones (to avoid overcharging) and a coupon can be purchased for the use of the taxi service. The taxi coupon

counter is located on your right as you exit from the Arrival Hall. The standard fare to the Vistana Hotel where you will be staying is approximately US\$7. Tipping is not necessary.



If you encounter any problem at the airport and need to get in touch with the LOC, you may contact the following persons:

- Dr. T.W. Sam : 012-402 2422
- Mrs. Zaila : 012-409 9248
- Ms. Lucy : 019-478 0475

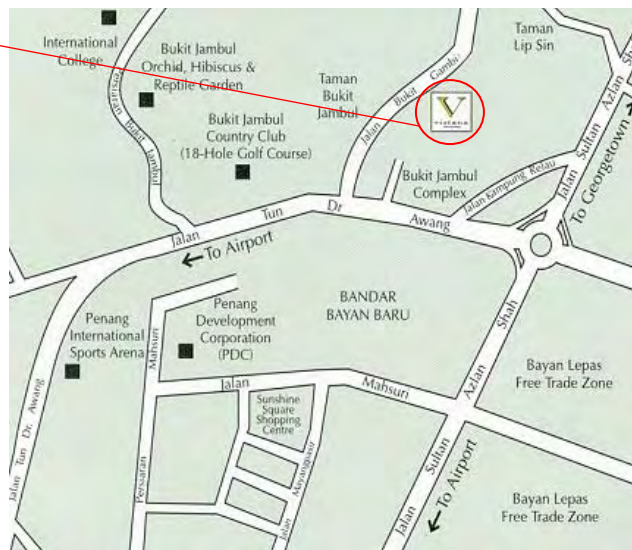
Important!

Inform us your arrival date & time and flight number



Accommodation and Course Venue All foreign participants will be accommodated in Hotel Vistana located approximately 10-minutes drive from the airport and another 10 minutes to the USM campus. The address of the hotel is as follows:

Vistana Hotel
213 Jalan Bukit Gambir
Bukit Jambul
11950 Penang, MALAYSIA
Tel: ++ (604) 646 8000
Fax: ++ (604) 646 1400
website: www.penang-hotels.com/vistana



Please share this information with your home country contacts.

At the Hotel

Students Helpers have been recruited to assist participants on arrival at the airport and will also be present at the hotel lobby to assist participants with their check-in. The hotel will be given a list of names with room assignments.



Course Venue and Transportation The course venue is at the Kompleks CUREKA located in the USM campus. Participants will be transported by bus daily to the course venue. Please note that the bus will depart from the hotel at 7:45 am on Monday, 28th November 2005 and at 8:00 am on all subsequent days. Students Helpers will be at the hotel lobby to assist in marshalling participants for the first three days of the course.

Your Host and Secretariat The host of DTC-TOT Malaysia 2005 is the National Poison Centre of Malaysia located in USM. The Secretariat on site will be manned by Ms. Elsie and Ms. Catherine, who will facilitate course logistics and address participant needs.

The Secretariat will have the support of the following persons: Ms. Lindsay Gibbs, Dr. T.W. Sam, Mrs. Zaila, Mrs. Haslina and Ms. Lucy.



In Case of Emergency If anything arises at the last minute or you have an emergency, let the LOC know as soon as possible. Please contact Lucy at ++ (604) 657 0099 (office) OR Catherine at ++ (604) 658 3655 (office).

What Else to Prepare



When packing your luggage for Penang do take into consideration the required space for course materials. It being a very intensive course, you will be required to take home a lot of reading material to the tune of 6-10 kg. So bring only what you consider absolutely necessary.

It is our objective to make your experience in Penang a pleasant one. If there is any additional information you need or wish to clarify, do not hesitate to contact the course secretariat.

On behalf of the LOC, I wish you a safe and pleasant journey to Penang. We look forward to your arrival.

Lucy Chuah

Coordinator, Local Organizing Committee

ANNEX 6. FACILITATORS' CONTACT INFORMATION

International Facilitators

Budiono Santoso, Dr.

Regional Adviser (Pharmaceuticals)
World Health Organization
Regional Office for the Western Pacific
11800 USM United Nations Avenue
P.O. Box 2932, 1000 Manila, Philippines
santosob@wpro.who.int

Kathleen Holloway, Dr.

Medical Officer
Department of Medicines Policy and Standards
(PSM)
World Health Organization
20 Avenue Appia, CH-1211 Geneva 27,
Switzerland
hollowayk@who.int

Mohan P. Joshi, Dr.

Program Manager for Antimicrobial Resistance (AMR)
Rational Pharmaceutical Management Plus Program
Management Sciences for Health
4301 North Fairfax Drive, Office Suite 400
Arlington, VA 22203-1627, USA
mjoshi@msh.org

Terry Green, Mr.

Consultant Pharmaceutical Management
Management Sciences for Health
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Arlington, VA 22203-1627, USA
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Olya Duzey, Ms.

Program Manager for Asia and the Near East (ANE)
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Niranjan Konduri, Mr.

Program Associate
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Local Facilitators

Rahmat Awang

Director
National Poison Centre of Malaysia
Universiti Sains Malaysia, 11800 USM
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Syed Azhar Syed Sulaiman

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University of Saints Malaysia, 11800 USM
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Mohd. Baidi Bahari, Assoc. Prof. Dr.

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baidi@usm.my

Yahaya Hassan, Assoc. Prof. Dr.

School of Pharmaceutical Sciences
Universiti Sains Malaysia, 11800 USM
Penang, West Malaysia
yahaya@usm.my

ANNEX 7. DTC-TOT PROGRAM SCHEDULE

DTC-TOT MALAYSIA 2005

International Training Course on Drug
& Therapeutics Committees and
Training of Trainers

Program Schedule
28th November – 10th December 2005

DTC PROGRAM SCHEDULE 28TH NOVEMBER – 7TH DECEMBER 2005

28th November 2005 (Monday)		
Time	Topic	Facilitator
8:30 am	Registration	Lucy Chuah, Elsie Kong, Lindsay Gibbs
9:00 am	Gallery of Experts	Mohan Joshi, Terry Green, Haslina Hashim, Niranjan Konduri, Lucy Chuah, Elsie Kong, Lindsay Gibbs
11:30 am	Tea/Coffee Break	
12:00 noon	House Rules, Committee Selection, Announcements	Haslina Hashim, Lucy Chuah, Elsie Kong, Lindsay Gibbs, Niranjan Konduri, Terry Green, Mohan Joshi
12:45 pm	Lunch	
2:00 pm	DTC Overview	Budiono Santoso, Rahmat Awang
5:00 pm	Briefing: Your stay in Hotel Vistana	Sam Teng Wah
5:30 pm – 6:30 pm	Opening Ceremony at USAINS Auditorium 1, Kompleks EUREKA <ul style="list-style-type: none"> - Welcoming Speech by Professor Rahmat Awang, Director, NPC of Malaysia - Remarks by Dr. Mohan P. Joshi, Program Manager for Antimicrobial Resistance, RPM Plus/MSH - Remarks by Dr. Budiono Santoso, Regional Adviser (Pharmaceutical), WHO/WPRO - Speech and Opening by Dato' Professor Dzulkifli Abdul Razak, Vice-Chancellor, USM 	
7:30 pm – 9:30 pm	Welcome Dinner at Function Room 1 (Level 1), Vistana Hotel, Bukit Jambul.	
29th November 2005 (Tuesday)		
Time	Topic	Facilitator
8:30 am	Evaluation and Recap	Committee Members, Niranjan Konduri, Participants, Facilitators
9:00 am	Formulary Management	Terry Green, Rahmat Awang
11:00 am	Tea/Coffee Break	
11:15 am	Formulary Management (cont.)	Terry Green, Rahmat Awang
12:40 pm	Lunch	
2:00 pm	Assessing Drug Efficacy	Budiono Santoso, Mohd. Baidi Bahari
3:30 pm	Tea/Coffee Break	
3:45 pm	Assessing Drug Efficacy (cont.)	Budiono Santoso, Mohd. Baidi Bahari
5:15 pm – 5:45 pm	Administrative Matters for Participants	Lindsay Gibbs, Lucy Chuah, Elsie Kong, Halida

30th November 2005 (Wednesday)		
Time	Topic	Facilitator
8:30 am	Assessing Drug Efficacy (cont.)	Budiono Santoso, Mohd. Baidi Bahari
9:30 am	Evaluation and Recap	Committee Members, Niranjan Konduri, Participants, Facilitators
10:00 am	Assessing and Managing Drug Safety	Mohan Joshi, Mohd. Baidi Bahari
11:00 am	Tea/Coffee Break	
11:15 am	Assessing and Managing Drug Safety (cont.)	Mohan Joshi, Mohd. Baidi Bahari
12:40 pm	Lunch	
2:00 pm	Assessing and Managing Drug Safety (cont.)	Mohan Joshi, Mohd. Baidi Bahari
3:15 pm	Tea/Coffee Break	
3:30 pm – 5:30 pm	Drug Quality	Terry Green
1st December 2005 (Thursday)		
Time	Topic	Facilitator
8:30 am	Evaluation and Recap	Committee Members, Niranjan Konduri, Participants, Facilitators
9:00 am	Assessing Drug Cost	Terry Green
11:00 am	Tea/Coffee Break	
11:15 am	Assessing Drug Cost (cont.)	Terry Green
12:00 pm	Lunch	
1:15 pm	Identifying Drug Use Problems (Part 1)	Mohan Joshi, Terry Green, Syed Azhar Syed Sulaiman
3:15 pm	Tea/Coffee Break	
3:30 pm – 5:00 pm	Identifying Drug Use Problems (Part 1 cont.)	Terry Green, Mohan Joshi, Syed Azhar Syed Sulaiman
2nd December 2005 (Friday)		
Time	Topic	Facilitator
8:30 am	Evaluation and Recap	Committee Members, Niranjan Konduri, Participants, Facilitators
9:00 am	Identifying Drug Use Problems (Part 2)	Kathy Holloway, Syed Azhar Syed Sulaiman
11:00 am	Tea/Coffee Break	
11:15 am	Identifying Drug Use Problems (Part 2 cont.)	Kathy Holloway, Syed Azhar Syed Sulaiman
12:15 pm	Free Time/Lunch	
2:45 pm	Why Drug Use Problems Occur	Terry Green, Syed Azhar Syed Sulaiman
4:45 pm	Tea/Coffee Break	
5:00 pm – 6:00 pm	Why Drug Use Problems Occur (cont.)	Terry Green, Syed Azhar Syed Sulaiman
3rd December 2005 (Saturday)		
Time	Topic	Facilitator
8:30 am	Evaluation and Recap	Committee Members, Niranjan Konduri, Participants, Facilitators
9:00 am	Strategies to Improve Drug Use	Kathy Holloway, Yahaya Hassan
11:00 am	Tea/Coffee Break	
11:15 am	Strategies to Improve Drug Use (cont.)	Kathy Holloway, Yahaya Hassan
12:15 pm	Lunch	
1:30 pm	Standard Treatment Guidelines	Mohan Joshi, Yahaya Hassan, Terry Green
3:00 pm	Tea/Coffee Break	
3:15 pm	Standard Treatment Guidelines (cont.)	Terry Green, Yahaya Hassan, Mohan Joshi
4:45 pm – 5:15 pm	Evaluation and Recap	Committee Members, Niranjan Konduri, Participants, Facilitators

4th December 2005 (Sunday)		
8:00 am – 10:00 pm	ROUND ISLAND TOUR OF PENANG (Inclusive of lunch, dinner and cultural performance)	
5th December 2005 (Monday)		
Time	Topic	Facilitator
8:30 am	Drug Use Evaluation	Kathy Holloway
10:30 am	Tea/Coffee Break	
10:45 am	Drug Use Evaluation (cont.)	Kathy Holloway
11:45 am	Infection Control	Terry Green, Syed Azhar Syed Sulaiman
1:00 pm	Lunch	
2:00 pm	Getting Started	Kathy Holloway
4:00 pm	Tea/Coffee Break	
4:15 pm	Field Study Orientation	Terry Green, Kathy Holloway, Mohan Joshi
5:45 pm – 6:15 pm	Evaluation and Recap	Committee Members, Niranjan Konduri, Participants, Facilitators
6th December 2005 (Tuesday)		
Time	Topic	Facilitator
8:00 am – 6:00 pm (from Vistana Hotel)	Field Study	Kathy Holloway, Terry Green, Mohan Joshi, Syed Azhar Syed Sulaiman, Haslina Hashim, Niranjan Konduri
7th December 2005 (Wednesday)		
Time	Topic	Facilitator
8:30 am	Evaluation and Recap	Committee Members, Niranjan Konduri, Participants, Facilitators
9:00 am	Field Study Presentations	Kathy Holloway, Terry Green, Mohan Joshi
11:00 am	Tea/Coffee Break	
11:15 am	Field Study Presentations (cont.)	Terry Green, Kathy Holloway, Mohan Joshi
12:15 pm	DTC Overall Evaluation	Niranjan Konduri, Mohan Joshi, Terry Green
12:30 pm – 1:45 pm	Lunch	

TOT PROGRAM SCHEDULE

7TH DECEMBER – 10TH DECEMBER 2005

7 th December 2005 (Wednesday, cont.)		
Time	Topic	Facilitator
1:45 pm	Introduction to TOT	Mohan Joshi
2:00 pm	Self-Assessment of Competency as a Trainer/Facilitator	Niranjan Konduri, Mohan Joshi
2:15 pm	Preferred Learning Styles	Olya Duzey
2:45 pm	Positive and Negative Learning Experiences	Olya Duzey
3:15 pm	Tea/Coffee Break	
3:30 pm	How Adults Learn	Mohan Joshi
4:00 pm	Roles of the Teacher	Terry Green
4:30 pm – 5:15 pm	Communication Skills	Olya Duzey
8 th December 2005 (Thursday)		
Time	Topic	Facilitator
8:30 am	Teaching and Learning Methods	Mohan Joshi
10:30 am	Tea/Coffee Break	
11:00 am	Teaching and Learning Methods: Illustrative Exercises (Case Study)	Terry Green, Mohan Joshi
11:45 am	Teaching and Learning Methods: Illustrative Exercises (Role Play)	Mohan Joshi, Olya Duzey
12:30 pm	Lunch	
1:45 pm	Teaching and Learning Methods: Illustrative Exercises (Demonstration)	Olya Duzey, Terry Green, Mohan Joshi
2:15 pm	Setting Objectives	Mohan Joshi
3:15 pm	Tea/Coffee Break	
3:30 pm	Setting Objectives (Exercise)	Mohan Joshi, Terry Green, Olya Duzey
5:00 pm	Presentation Techniques	Olya Duzey
5:30 pm – 5:45 pm	Briefing on How to Prepare Presentation/ Facilitation Exercise	Mohan Joshi, Terry Green, Olya Duzey
7:30 pm – 9:30 pm (Leave Vistana Hotel at 6:30 pm)	Appreciation Dinner at Garden Sunset Bar, Grand Plaza Parkroyal, Batu Ferringhi Beach	
9 th December 2005 (Friday)		
Time	Topic	Facilitator
8:30 am	Preparation for Presentation/ Facilitation Exercise	Mohan Joshi, Terry Green, Olya Duzey
10:30 am	Tea/Coffee Break	
10:45 am	Preparation for Presentation/ Facilitation Exercise (cont.)	Terry Green, Olya Duzey, Mohan Joshi
12:00 noon	Free Time/Lunch	
2:30 pm	Presentation/Facilitation Exercise	Mohan Joshi, Olya Duzey, Terry Green
4:30 pm	Tea/Coffee Break	
4:45 pm	Presentation/Facilitation Exercise (cont.)	Mohan Joshi, Terry Green, Olya Duzey
5:15 pm	Organizing a Training Course	Lucy Chuah, Mohan Joshi
5:30 pm	Post-TOT Self-Assessment	Niranjan Konduri, Mohan Joshi
5:45 pm – 6:00 pm	TOT Evaluation	Niranjan Konduri, Mohan Joshi

10th December 2005 (Saturday)		
Time	Topic	Facilitator
8:30 am	Workplans for DTC Implementation and Training Activities	Mohan Joshi, Terry Green, Niranjan Konduri
10:30 am	Tea/Coffee Break	
10:45 am	Workplans for DTC Implementation and Training Activities (cont.)	Niranjan Konduri, Terry Green, Mohan Joshi
11:45 am	Distribution of Remaining Course Materials	Lucy Chuah, Elsie Kong, Lindsay Gibbs
12:00 noon	Certificate Distribution & Closing Ceremony at USAINS Auditorium 1, Kompleks EUREKA <ul style="list-style-type: none"> - Closing Speech by Dato' Professor Dzulkifli Abdul Razak, Vice-Chancellor, USM - Remarks by Professor Rahmat Awang, Director, NPC of Malaysia - Remarks by Dr. Mohan P. Joshi, Program Manager for Antimicrobial Resistance, RPM Plus/MSH - Remarks by Ms. Olya Duzey, Program Manager for Asia and the Near East (ANE), RPM Plus/MSH - Remarks by Mr. Terry Green, Pharmaceutical Management Consultant, MSH - Remarks by Participant's Representative 1 - Remarks by Participant's Representative 2 	
1:30 pm – 2:45 pm	Lunch	

ANNEX 8. FIELD VISIT GUIDELINES



International Training Course on Drug & Therapeutics Committee and Training of Trainers Penang, Malaysia

December 6, 2005

In the morning you will visit a hospital for field visit. At the hospital, please do the following:

1. After introducing yourself to the hospital administration, meet with the Chief Pharmacist and Chairperson/Secretary of the hospital's Drug and Therapeutics Committee.
 - If a DTC exists, obtain a description of the DTC composition and functions. (If no DTC find out who would be responsible for decisions concerning formulary list and procurement).
 - Who are the members of the DTC?
 - How often does the DTC meet?
 - What activities does the DTC carry out?
 - How is the formulary list updated?
 - What have been its achievements in 2004-2005?
 - Determine whether formal agendas are prepared for the meetings.
 - Ask to see the agendas on file.
 - Request permission to review the minutes of the past one or two meetings.
 - Determine what topics have been discussed.
2. If the DTC is charged with updating the hospital drug formulary list, ask for a copy of the drug evaluation report.
 - What is the format and content of the report?

(Note: Plan to spend a maximum of 15 minutes for questions 1 and 2.)
3. Ask the DTC to see any drug studies that are intended to identify drug use problems in the hospital. These might include:

- ABC analysis
 - Drug Use Evaluation or Drug Utilization Review studies
 - Drug indicator studies
 - Qualitative studies to identify why drug use problems occur
4. Inquire about interventions to improve drug use. Do they utilize any education programs to improve drug use, standard treatment guidelines or protocols, drug use evaluation, regulatory interventions, or others?
5. Ask for a copy of the hospital drug formulary list.
- How many drugs are on the list?
 - How many different chemical entities are there?
 - Prepare a list of all third generation cephalosporins and non-steroidal antiinflammatory drugs (NSAIDs)
6. Ask the Chief Pharmacist to provide the following information:
- Unit price (acquisition price) of each drug in the following therapeutic categories: (1) third-generation cephalosporins, (2) NSAIDs (get information for each drug product, i.e., each brand of the same drug), and (3) antihypertensives
 - Quantities of each drug that were consumed for the past 12 months (each brand of the same drug, if possible)
 - Total of **all** drug expenditures for the previous 12 months.
7. Ask the Chief Pharmacist the following questions:
- Is there a drug information center?
 - Does the drug information center or pharmacy department produce a newsletter or drug bulletin? What information does it provide?
 - What drug information resources are available for the DTC?
 - Reference texts (for example, Martindale, Meyler's Side Effects of Drugs, USP DI, AHFS Drug Information, etc.)
 - Drug bulletins (for example, The Medical Letter, Drug and Therapeutics Bulletin, national drug bulletin)
 - Journals (for example, Annals of Pharmacotherapy, Journal of the American Society of Health-System Pharmacists, Drugs)

8. Review 15 charts of in-patients (from medical records) that have been prescribed ciprofloxacin. Review these charts and collect the data that is listed on your DUE form.
9. Review 15 charts of patients (from medical records) with the diagnosis of Cesarean Section delivery. Collect and record the data on the Cesarean Section DUE form.
10. At the Pharmacy: Evaluate 20 prescriptions for:
 - Prescribing Indicators:
 - # of drugs per prescription
 - % of prescriptions with antibiotics
 - % of prescriptions with injections
 - % of drugs prescribed by generic names
 - Patient Care Indicator
 - Observe dispensing time (secs/min)
11. Outside the hospital compound: Conduct patient exit interviews
 - Use the form developed on December 6.
 - Try to interview a minimum of 10 and a maximum of 20 exiting patients.

On Tuesday afternoon, you will analyze the collected information and prepare a 10-15 minute presentation for Wednesday morning. The presentation should include:

- A brief presentation on the status of the DTC in the hospital that you visited.
- An analysis of the hospital drug evaluation process for additions to the formulary and report.
- An analysis of the three therapeutic groups utilizing data you collected at the hospitals.
- ABC analysis of all formulary items (if possible).
- Analysis of the charts reviewed by your group for the ciprofloxacin DUE and Cesarean Section antibiotic prophylaxis DUE form (appropriate drug, dose, duration, timing and cost saving if appropriate drugs are used). Compare the drugs used in the chart reviews to the standard treatment guideline recommendation and to the DUE developed during the course.
- Analysis of prescribing indicators and exit interviews.
- What potential problems have you identified?
- What would you recommend to do about the problems?

Important Note:

- Facilitators are only there as observers, do not rely on them for moving the process.
- Please invite appropriate hospital administration and staff to the presentations on Wednesday.

ANNEX 9. PARTICIPANTS' PROFILES

CAMBODIA

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Kingdom of Cambodia

Professional Background: Pharmacist

Work Experience: Worked as Drug Management Supervisor of Essential Drug Bureau; RACHA organization as Logistics Team Leader

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Phnom Penh
Kingdom of Cambodia

Professional Background: Pharmacist, Chief Essential Drugs Bureau

Work Experience: 12 years: responsible for Drug Management and Drug store in one province in Cambodia for Provincial Department, Ministry of Health, Cambodia; 9 years: responsible for procurement of drugs for Ministry of Health Cambodia; 3 years: responsible for Essential Drugs Bureau Department of Drugs and Food, Ministry of Health, Cambodia

Name: Dr. Srun Sok
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Professional Background: Medical Doctor

Work Experience: 10 years: local trainer on RUD and Supervisor at Referral Hospitals and Health Centers

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Professional Background: Physician, Ministry of Health, Preventive Medicine Dept.
(Deputy Director)

Work Experience: 20 years of experience; involved in drug use since 1995; provincial hospital 1985 – 1994; currently Head of MTP (monitoring, training and planning) group that improves drug use in public hospitals.

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Professional Background: Clinical Doctor, Clinical Pharmacologist

Work Experience: 20 years of work on infection

ETHIOPIA

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Addis Ababa, Ethiopia

Professional Background: Pharmacist

Work Experience: 20 years as a pharmacist; UN Health Care Centre of UNECA; EDP (Essential Drug Program); Ethiopian Red Cross; Ministry of Health

KENYA

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Professional Background: Pharmacist in civil service

Work Experience: 22 years; Eldoret District Hospital (4 years); Nakuru Provincial Hospital (5 years); Thika District Hospital (3 months); Nyeri P.G.H. (10 years); Nairobi (3 years); Regulatory Authority (1 year)

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Professional Background: Pharmacist

Work Experience: Medicines Advisor: WHO Kenya (1 year); Pharmaceutical Supplies Management: Mission sector (9 years)

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Professional Background: Chief Pharmacist

Work Experience: 15 years; Middlesex Hospital, UK (3 years); Nairobi Hospital, Kenya (4 years); Aga Khan University Hospital, Kenya (8 years)

MALAYSIA

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Professional Background: Chief Pharmacist – Duchess of Kent Hospital

Work Experience: 20 years of experience; B. Pharm. Egypt; Masters in Clinical Pharmacy at USM

Name: Asma Bt. Murshid
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Professional Background: Chief Pharmacist, Penang Hospital

Work Experience: 25 years in service (1 ½ years in present post)

Name: Azman Mat
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16150 Kubang Kerian
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Professional Background: Pharmacist

Work Experience: 17 working experience in patient pharmacy, lab pharmacy, procurement, out patient pharmacy in Hosp. USM

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Professional Background: Hospital Pharmacist

Work Experience: 3 years: Government Hospital, Klang Malaysia

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Professional Background: 1980 – Pharmacist

Work Experience: 1 year (internship); pharmacist in District Hospital: 20 years; pharmacist in Kuala Lumpur Hospital: (now) in charge of Drug Information Unit

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Professional Background: Pharmacist

Work Experience: Worked in medical stores, various hospitals as pharmacist; now at Ministry of Health, Pharmaceutical Services Division as Principal Assistant Director

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Professional Background: Pharmacist

Work Experience: Pharmacy; lecturer since 1987; member of Pharmacy Board, Ministry of Health, Malaysia; Member of Drug Control Authority, Ministry of Health, Malaysia

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Professional Background: Medical Doctor (Head of Clinical Trial Unit, Clinical Research Centre)

Work Experience: 21 years with Ministry of Health (Hospital, Rural Health Clinic, Headquarters and now CRC)

MONGOLIA

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Professional Background: Medical Doctor

Work Experience: Ministry of Health: five years

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Professional Background: Head of Clinical Pharmacy Department, National Cancer Centre, Mongolia

Work Experience: 17 years service (6 years in present post)

NEPAL

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Professional Background: Senior Pharmacist

Work Experience: 3 years as production pharmacist in private sector; 10 years in government/HMG/NEP

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Professional Background: Senior Pharmacist in Government of Nepal (Chief Pharmacist)

Work Experience: MSc in Pharm. Tech. (UK), Kings College London, University of London; 20 years in Dept. of Drug Administration; 10 months in Bir Hospital

NIGERIA

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Professional Background: Head of Pharmaceutical Care Services

Work Experience: Graduated in 1985; Internship for one year; National Youth Service: 1 year; Private Practice – Pharmacist 11 years; Posting: 8 years – Pharmacist 1/c Wuse General Hospital; Pharmacist 1/c Asokoro General Hospital; Pharmacist 1/c Central Medical Stores; Head Pharmaceutical Care Services – Hospital Management Board; AG Head Pharmaceutical Services F.C.T.A. Abuja, Nigeria

PHILIPPINES

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Professional Background: Chief of Hospital

Work Experience: 15 years government service

RWANDA

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Professional Background: Chief Pharmacist, B. Pharm, MBA, Kenyan citizen

Work Experience: 7 years of work; 1 ½ years as Chief Pharmacist

SAMOA

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Professional Background: Tupua Tamases II Hospital (Government Hospital)

Work Experience: Wellington University, New Zealand; University of Kansas, USA; 15 years of experience

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Professional Background: Pharmacist (1998) – Fiji School of Medicine

Work Experience: Senior store RPL – Govt hospital with 300 beds; involved in dispensing; currently working on formulating EDL

SINGAPORE

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Professional Background: Pharmacist

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Professional Background: Physician, consultant with I.D. Hospital
Work

Experience: 14 years – Ministry of Health, Sri Lanka; Medical officer and PG trainer (7 years); Grantham Hospital, UK for 2 ½ years; Clinical fellow, staff grade; MOH for 4 ½ years – Consultant physician

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Professional Background: Pharmacist, Public Health Specialist

Work Experience: Head of Pharmaceutical Services based at MOH headquarters; has worked for government for 26 years

UGANDA

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Professional Background: Pharmacist

Work Experience: Public Health with a specialization in health economics; currently a senior pharmacist in MOH (District Drug Management Program); in the past was a hospital pharmacist

VIETNAM

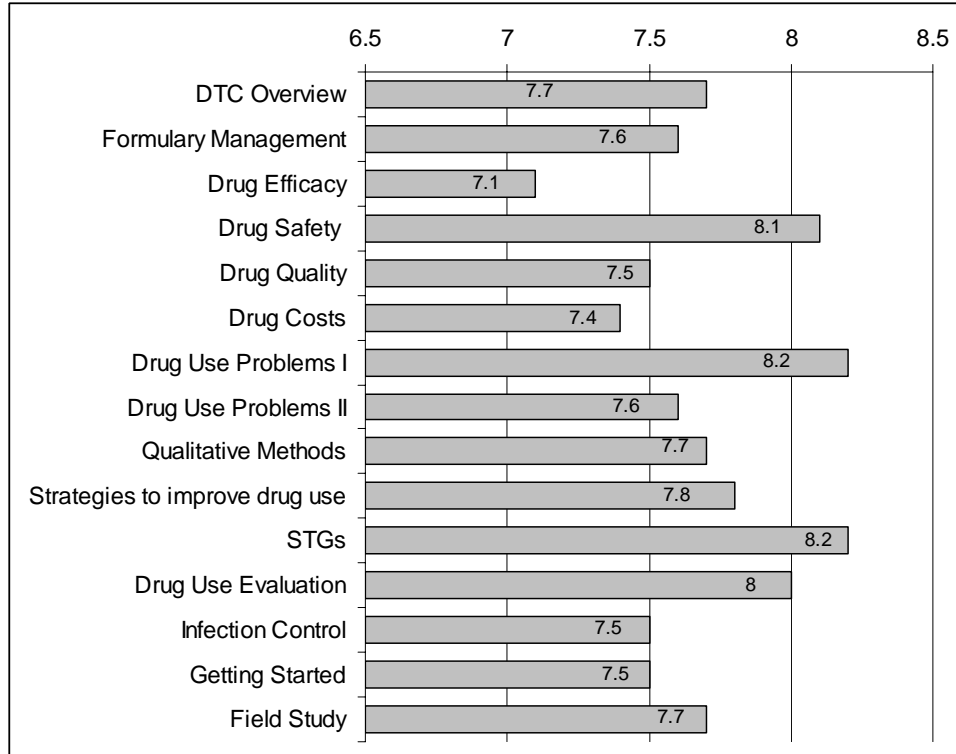
Name: Nguyen Huong Giang
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Tan Mai, Hoang Mai District
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Work Experience: Hanoi University of Pharmacy (Clinical)

ANNEX 10. PARTICIPANTS' EVALUATION OF DTC COMPONENT

Individual Session Rating



Scale: 1 = strongly disagree; 9 = strongly agree (n = 32)

Length of Individual DTC Sessions

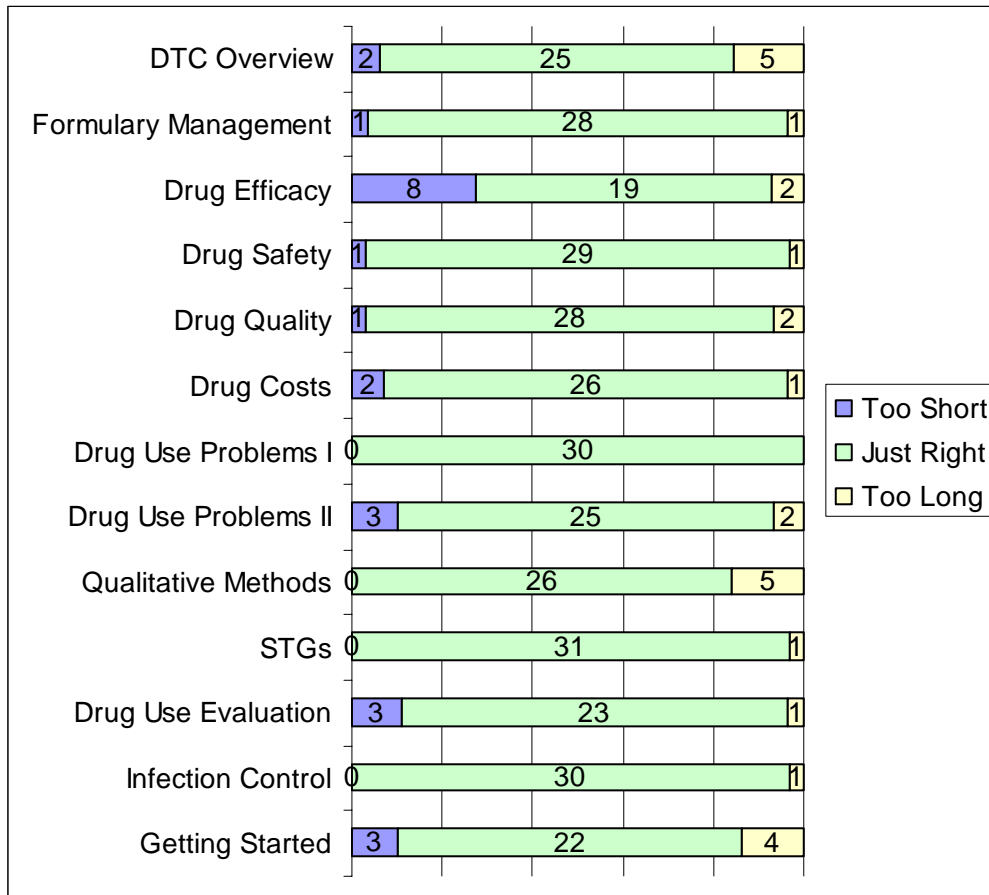


Figure on bar chart indicates number of participants. For example, 8 participants felt that the session on drug efficacy was “Too Short” whereas 19 participants felt it was “Just Right.”

Level of difficulty of the training course

- Too Easy = 2
- Just Right = 25
- Too Hard = 5

Overall DTC Training Course Evaluation

(scale of 1–9)*

Content

The objectives were clearly defined at the beginning of the training course	7.8
The defined objectives were achieved by the end of the training course:	7.5
The amount of material covered during the course was appropriate:	7.8
The depth of coverage of the material in the training course was appropriate:	7.6
How useful will the knowledge and skills obtained in this course be to my work?	8.1

Facilitators/Trainers

Overall, I would say the quality of the facilitation was:	7.6
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Overall Opinion

This course was valuable and I will recommend it to my colleagues:	yes	32
	no	0

Overall Satisfaction with Training Logistics

The pace of the course:	7.0
The style and format of the sessions:	7.6
The instructional materials:	7.8
The length of the training course:	6.7

Overall Score for DTC Course **7.5**

* 1 = strongly disagree; 9 = strongly agree

Recommendations for Improving Training Course

Given below is a summary of participant feedback grouped under various sub-headings.

DTC course related

- More use of a participatory/exercise approach to introduce difficult topics, e.g. drug efficacy and drug costs
- Scope of topics covered is very broad. Based on past experience of conducting other DTC workshops, prioritization may be done. For example, certain topics may require only readings and those topics should be just skimmed through. Those that require facilitators' input should be given more time allocation
- We people are from different countries and share many burning problems on better health care system. The first session must cover all the individual countries' exact scenarios of DTC implementation and find out what exact solution you can make to operate DTC throughout

health facilities in your country. Practical problems always overcome the theoretical knowledge

- Perhaps it may be good to hold a work up DTC meeting or superficially on formulary even (addition/deletion of drug) if time allows
- Should have mentioned how DTCs have changed the practices with illustrative examples, so the importance is felt. If possible in the private sector also
- Include some participants from the private sector for the training course
- Maybe a pre and post test would be of help to the organizers of the course
- Materials should be provided before course for participants' preparedness

DTC course scheduling aspects

- Reduce long hours of lectures which cause sleepiness
- The time given is so tight it needs to be reviewed.
- Ensure that the day is completed by 5:30 pm.
- Holiday on Saturday
- Rate should be well spread: i.e. course period to be three weeks
- Training schedule is compact. Probably better to increase duration of course so that certain topics can be addressed more in depth

Individual sessions

- Longer hands on training on DUE.
- More examples of reference materials and how to access them
- More time for the methods to review the articles and websites.
- Need to analyze more pros and cons for noncompliance to STG and EDL as innovation may be stifled
- Show more data and results from DUE Data from real life situation, hospitals and countries

Facilitators

- Facilitators to discuss more in depth the topics by giving examples and experiences
- Keeping up this quality, i.e., the facilitators has a paramount importance.
- Some facilitators need to make their presentations more lively with more participation
- Facilitators should have firm control over time used for each session – allocated time for each session should be abided so that it won't be extended to late afternoon/evening.

Positive Feedback

- A lot of thought and technical input has gone into the course; very systematic
- It was well planned, organized and executed.
- Excellent organization. The hospitality of the hosts is marvelous.
- Please follow up and try to help us in our activities related to DTC.
- Would be good if MSH can work with participants; Act as an expert panel to help monitor progress in individual countries.
- To continue the DTC-TOT next time and support members of staff to implementation of DTC.

ANNEX 11. PARTICIPANTS' EVALUATION OF TOT COMPONENT

(scale of 1-5)*

Part I: Educational Aspects

How well did the TOT course achieve its objectives	4.2
How useful was the TOT for your work?	4.5
How were the teaching and learning methods?	4.2
How useful were the materials?	4.0
How clear were the explanations?	4.2
How well were the facilitators able to lead discussions?	4.2

Part II: Course Content

Overview and Orientation	4.1
Adult Learning	4.3
Role of the Teacher	4.1
Communication Skills	4.1
Presentation Techniques	4.2
Teaching & Learning Methods	4.1
Setting SMART Objectives	4.2
Facilitating DTC Trainings	4.1
Designing & Conducting Field Studies	4.1

Overall TOT Score 4.2

Part III: Overall Administrative aspects of DTC-TOT course

Training Room	4.1
Accommodations	4.5
Food	3.9
Breaks	3.9
Transportation	4.5
Administrative Support	4.7

*1 = poor; 5 = excellent

Further Reflections on TOT course

- Combining DTC and TOT courses is a very good approach, and very complementary
- Very well conducted. Congratulations to the facilitators. A very necessary component/section of a DTC training course. Any course will involve a participant who will need to do presentations and echo trainings.

If you would prefer a longer or shorter TOT, please explain what you would change, add or remove from the course content.

- Would have preferred a break after the DTC session in ½ day and then start a fresh on the next day with the TOT.
- More time should have been allocated for participants presentations. So that each participant has a chance to present or facilitate.
- Providing more handouts/document
- Adding some more skills about presentation before large audience
- The training session was just right.
- More details about training programs at national level
- The TOT should be a little longer to include more psychological aspects of personal interaction. Perhaps, a more business like approach addressing emotional intelligence.

ANNEX 12. SAMPLE OF DTC-TOT WORKPLAN CREATED BY PARTICIPANT

**DTC-TOT, Penang, Malaysia,
November 28 to December 10, 2005**

Part A: Workplan for DTC Implementation

&

Part B: Workplan for DTC related Training Activity

Country/Team: _____

Names: _____

Goals: To Improve Rational Drug Use in Major Hospitals

Part A: Workplan for DTC Implementation (for Jan 1, 2006 to Dec 31, 2006)

Activity 1: Establish DTC in Four Hospitals			
Process Indicator or Milestones	Completion Date	Completed? Y/N	Notes
Meeting with the MOH policy and planning committee to solicit approval	February 2006		
Conduct ABC/VEN analysis studies	February 2006		
Present findings to the national DTC for support	March 2006		
Identify and train committee members	April 2006		
Develop policies and procedures	April 2006		
Implement	May 2006		

Activity 2: Develop National Standard Treatment Guidelines (STGs)			
Process Indicator or Milestones	Completion Date	Completed? Y/N	Notes
Meeting with National DTC for approval	June 2006		
Establish a committee (comprising – Medical Officers pharmacists, and nurses)	June 2006		
Conduct a workshop for the committee to work on the development of the STGs	July 2006		
Write evidence based treatment guidelines	August 2006		
Conduct seminars to educate the health care professionals and build consensus	September 2006		
Print, publish and disseminate national STGs	October 2006		

**If you plan to have more than 2 activities, please use and attach an additional sheet.
Thanks.**

**Part B: Workplan for DTC related Training Activity
(for Jan 1, 2006 to Dec 31, 2006)**

Activity 1: Training for DTC members			
Process Indicator or Milestones	Completion Date	Completed? Y/N	Notes
Get approval from the Director of health services	January 2006		
Prepare training material and identify venue for training	February 2006		
Send out invitations for the training to all DTC Committee members	March 2006		
Conduct training (3 days training)	April 2006		

Activity 2:			
Process Indicator or Milestones	Completion Date	Completed? Y/N	Notes

**If you plan to have more than 2 activities, please use and attach an additional sheet.
Thanks.**

ANNEX 13. COURSE CERTIFICATE



Certificate of Acknowledgement

This is to Acknowledge the Contribution of

.....

as a Participant in the
International Training Course on Drug and Therapeutics Committee and
Training of Trainers

Penang, Malaysia, November 28 to December 10, 2005

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Organized by the University of Science Malaysia (USM) and the Rational Pharmaceutical Management Plus (RPM Plus) Program of Management Sciences for Health (MSH) in collaboration with the World Health Organization (WHO) Department of Medicines Policies and Standards

