Rational Pharmaceutical Management Plus
African Regional Training Course on Promoting Rational Drug Use, Okahandja, Namibia, April 18th – 30th, 2005: Trip Report

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About RPM Plus

RPM Plus works in more than 20 developing countries to provide technical assistance to strengthen drug and health commodity management systems. The program offers technical guidance and assists in strategy development and program implementation both in improving the availability of health commodities—pharmaceuticals, vaccines, supplies, and basic medical equipment—of assured quality for maternal and child health, HIV/AIDS, infectious diseases, and family planning and in promoting the appropriate use of health commodities in the public and private sectors.

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ACRONYMS

AMR	antimicrobial resistance
ARV	Anti Retroviral Therapy
CSSD	Central Sterile Supply Department
DTC	Drug and Therapeutics Committee
EDL	Essential Drug List
ICIUM	International Conference on Improving Use of Medicines [WHO]
INRUD	International Network for Rational Use of Drugs
MSH	Management Sciences for Health
PRDU	Promoting Rational Drug Use
RPM Plus	Rational Pharmaceutical Management Plus (Program) [MSH]
RUD	rational use of drugs
STGs	standard treatment guidelines
TORs	Terms of Reference
TOT	Training of Trainers
USAID	U.S. Agency for International Development
WHO/EDM	World Health Organization, Essential Drugs and Medicine Policy

BACKGROUND

The shortage of technical expertise in the field of pharmaceutical management is a significant factor contributing to the worldwide misuse of medicines and the subsequent development and dissemination of antimicrobial resistance. Improving the use of drugs is one of the key components of the drug management cycle, which is the core guideline to the work of RPM Plus. In our ongoing activities to develop human resources and capacity to improve drug management, both the conveying of skills to measure drug use and design interventions to change it, and the teaching of training skills to pass this information on more widely provides the relevant foundation to our work in many spheres, including the containment of AMR, and the control of infectious diseases.

Since 1992, the Promoting Rational Drug Use (PRDU) course has been transferring those very skills. The two-week course provides the information, practice and testing of skills required to create an environment in a healthcare setting that intends to use its pharmaceutical stock safely and effectively. RPM Plus has recently developed a Training of Trainers (TOT) modules to complement the PRDU course. The aim of this added TOT dimension to the existing PRDU course is to build in-country/regional capacity to design and stage national or regional PRDU courses.

This year's PRDU course was held April 18–30, 2005 at the Midgard Lodge in Okahandja, Namibia. The course was organized by the Ministry of Health and Social Services (MoHSS) of the Republic of Namibia and the Rational Pharmaceutical Management Plus (RPM Plus) Program of Management Sciences for Health (MSH) in collaboration with the WHO Department of Essential Drugs and Medicines Policy and the International Network for the Rational Use of Drugs (INRUD), with support from the United States Government's Emergency Plan for AIDS Relief administered through the United States Agency for International Development (USAID).

PURPOSE OF TRIP

The MSH Namibia group working for the United States Government's Emergency Plan for AIDS Relief and the Antimicrobial Resistance (AMR) Portfolio of the Rational Pharmaceutical Management Plus (RPM Plus) requested the INRUD Coordinator, John Chalker to oversee the course coordination and to facilitate the PRDU course along with Mohan Joshi (RPM Plus AMR), Francis Aboagye-Nyame (MSH/RPM Plus) and Dr Steve Lonsdale (consultant for WHO/EDM).

This workshop also included a one and a half day training of trainers (TOT) module to improve the likelihood of effective teaching of the course by participants in their own locations. This had been tried the previous year in Kenya.

SCOPE OF WORK

1. Scope of Work for Dr. John Chalker during this visit:

- Act as the key international coordinator and facilitator during the course.
- Facilitate, in particular, sessions on: a) Problems of Irrational Drug Use, b) Sampling to Study Drug Use, c) Framework for Changing Drug Use Practice, d) financial interventions and e) half of the TOT module.
- Participate in the field trip and help participants collect, compile and analyze their data.
- Brief and/or debrief USAID officials, as requested.

2. Scope of Work for Dr. Mohan Joshi during this visit:

- Act as a key international facilitator during the course.
- Facilitate, in particular, sessions on: a) Learning about a Drug Use Problem, b) Implementing a Drug Use Indicators Study, c) Role of DTC d) Rational antiretroviral use for the treatment of HIV/AIDS and e) half of the TOT module.
- Participate in the field trip and help participants collect, compile and analyze their data.
- Brief and/or debrief USAID officials, as requested.

3. Scope of Work for Francis Aboagye-Nyame during this visit:

- Act as an organizer and key international facilitator during the course.
- Facilitate, in particular, sessions on: The Role of the Dispenser; Managerial and Regulatory Interventions. Printed Educational Materials.
- Participate in the field trip and help participants collect, compile and analyze their data.
- Brief and/or debrief USAID officials, as requested.

ACTIVITIES

Dr. John Chalker during this visit:

- Acted as the key international coordinator helping the Local Organizing Committee to finalize all arrangements.
- Facilitated the opening and closing sessions as well as sessions on: a) Problems of Irrational Drug Use, b) Sampling to Study Drug Use, c) Framework for Changing Drug Use Practice, d) financial interventions and e) half of the TOT module and f) Designing country projects.
- Participated in the field trip and helped participants collect, compile and analyze their data.

- Re-adapted the draft Training of Trainers sessions to fit with the course.
- Facilitated two of the four half day Training of Trainers sessions.
- Participated in an in-briefing of USAID Namibia mission

Dr. Mohan Joshi during this visit:

- Facilitated sessions on: a) Problems of Irrational Drug Use, b) Implementing a Drug Use Indicators Study, c). Drug & Therapeutics Committees, and d) Rational Use of Antiretroviral Drugs in the Treatment of HIV/AIDS (new session in the PRDU Course).
- Participated in the field trip and helped participants collect, compile and analyze their data.
- Facilitated two of the four half day Training of Trainers sessions.

Francis Aboagye-Nyame during this visit:

- Facilitated sessions on: a) The Role of the Dispenser; b) Managerial and Regulatory Interventions and c) Printed Educational Materials.
- Participated in the field trip and helped participants collect, compile and analyze their data.
- Participated in both in and out briefing of USAID Namibia mission

The PRDU course

Thirty-five paying participants took part in the workshop which took place at the Midgard Lodge, Okahandja, Namibia. The list of participants is in Annex 2.

The ice breaking sessions started on Sunday evening and the opening ceremony was held on Monday morning, the 18th of April 2005, which was attended and addressed by Ms. Petrina Haingura, the Deputy Minister from the Namibian Ministry of Health and Social Services and Mr. Gary Newton, the Head of the USAID Namibia Mission.

The timetable of the course is shown in Annex 1. WHO sent one international facilitator, Dr. Steve Lonsdale who took several important sessions and helped throughout.

Field trips

A key component of the PRDU courses is the field trip. The purpose of the field trip is to give participants the opportunity to immediately practice the data collection and analysis skills being taught. Each of the six groups visited one facility. Field visits occurred on both Wednesday (20th April 2005) and Friday (22nd April 2004). The six facilities were: 1. Okahandja District Hospital, 2. Nau Aib Health Center, 3. Katutura Health Center, 4. Wanaheda Clinic, 5. Hakahana Clinic, and 6. Okuryangava Clinic. Using standardized indicators, groups collected data from the sources available. They subsequently compiled and analyzed the data in order to come up with

an overview on prescription practices and drug use in the different facilities (table of results Annex 3). The results were also compared to a Private Pharmacy which was also visited.

Training of Trainers Module

The Training of Trainers material was successfully carried out after having been tried last year in Kenya. The course consisted of a series of well structured activities and mini lectures, along with comprehensive hand-outs.

The Training of Trainers timetable was as follows:

	Wednesday a.m.
11.15-12.30 Session I	Orientation Adult Learning and Role of the teacher/trainer
	Wednesday p.m.
1.30-3.30 Session II Session III 4.00-evening	Communication skills Teaching & Learning Method Setting Objectives Preparing an oral presentation-intro Preparing a facilitation session-intro Preparation of oral presentation Preparing a facilitation session
	Thursday a.m.
9.00-10.30 Session IV 11.00-12.30 Session V	Practice oral presentation sessions Practice Facilitation sessions
	Thursday p.m.
1.30- 4.30 Session VI	Practice Facilitation sessions Preparing PRDU course

The evaluation of the TOT course is included in Annex 6. Those for the main PRDU course individual sessions and for the PRDU course overall are included in Annexes 4 and 5, respectively. Comments on the TOT course included the desire for more exercises. Comments on the course overall are included at the end of Annex 5.

KEY COLLABORATORS

The MSH Namibia group and the representatives from the Ministry of Health and Social Services were central to the success of the course. Together they formed the Local Organizing Committee, with Jude Nwokikie acting as chair and Ruusa Iita doing most of the actual work. Other member of the local organizing committee included Dawn Pereko, Jennie Lates, Lazarus Indongo and Lwansa.

The USAID Mission in Namibia, particularly with Gary Newton, Kirk Lazell, Cathy Thompson and Lahya Shiimi and the Ministry of Health and Social Services, particularly Ms. Dinah Tjihon and Johannes Gaeseb, all gave close and useful collaboration.

The MSH Namibia program sponsored 19 participants who developed five country projects. MSH Ethiopia sent two participants who we hope will follow through their projects. Similarly the participants from Rwanda, Pakistan, Ghana, Uganda, Kenya, Tanzania and Zambia have designed projects and have local organizations to follow them up.

WHO/EDM from Geneva sent a consultant Dr Steve Lonsdale to facilitate as well as supplying a large amount of materials for the participants to take home

The Deputy Minister of Health and Social Services, Ms. Petrina Haingura and Mr. Gary Newton, Head of the USAID Namibia Mission opened the workshop

The WHO Representative in Namibia, Dr. Custodia Mandlhate closed the workshop and gave out certificates, supported by the Acting Director of the Tertiary Health Care and Clinical Support Services Directorate of the Ministry of Health and Social Services, Ms. Dinah Tjiho.

The Acting Deputy Director of the Pharmaceutical Services Division, Johannes Gaeseb and the Acting Director of Tertiary Health Care and Clinical Support Services, Ms. Dinah Tjiho both acted as co-facilitators and attended a lot of the course. There collaboration was very useful.

NEXT STEPS

Immediate Follow-up Activities and Recommendations

1. Serve as a technical resource for participants who follow up the course with country activities.
2. Give continuing advice and support on the programs that the Namibia group are putting together and aid them in forming a local INRUD group.

Agreement or Understandings with Counterparts

None

Lessons Learned

The course is still highly relevant to participants whose main interest is HIV AIDS and the rational use of antiretrovirals

ANNEX 1: TIME TABLE

	PRDU (TOT) NAMIBIA AGENDA		
	Week 1		
Sunday pm		**Facilitator**	**Co-Facilitator**
2-5.30	**Registration**		
6.00-6.30	Oshiyandwa Culture performance	UNAM Choir	
6.30–7.30	Introduction and Gallery of experts – Interviews	All	
7.30-8.30	Dinner	All	
Monday			
8.00-9.00	Introduction and Gallery of experts - Presentations	JC, Kofi, SL and Jude	**DT**
9.00-10.00	*Official Opening ceremony*	All	
10.00- 12.30	Problems of irrational drug use	JC	
12.30-2.00	*Lunch*		
2.00-3.30	Learning about a drug use problems (Part I.)	MJ	
3.30-3.45	*Tea*		
3.45-5.00	Learning about a drug use problems (Part I.)	MJ	
Tuesday			
8.00-8.30	*Committee reports and recap*		
8.30-10.00	Sampling to Study Drug Use	JC	**DT**
10.00-10.15	*Coffee*		
10.15-12.00	Sampling to Study Drug Use	JC	
12.00-1.30	*Lunch*		
1.30-3.00	Learning about a drug use problem (Part II.)	SL	
3.00-3.15	*Tea*		
3.15-4.30	Learning about a drug use problem (Part II.)	SL	
4.30-5.00	Introduction to field visit	SL	
Wednesday depart 7.30			
	Field visit 1	All	**DT**
Wednesday pm			
	Debriefing	SL	
Thursday am			
8.00-8.30	*Committee reports and recap*		
8.30-10.00	Implementing a Drug Use Indicators Study (Part I)	MJ and SL	**LN**
10.00-10.15	*Coffee*		
10.15-12.00	Implementing a Drug Use Indicators Study (Part I cont)	MJ and SL	
12.00-1.30	*Lunch*		
1.30-3.00	Implementing a Drug Use Indicators Study (Part II)	SL and MJ	
3.00-3.15	*Tea*		
3.15-5.00	Implementing a Drug Use Indicators Study (Part II cont)	SL and MJ	
Friday depart 7.30			
	Field visit 2	All	**LN**
Friday pm			
	Analysis and reporting back	SL	

Saturday am			
8.00-8.30	*Committee reports and recap*		
8.30-10.00	Framework for Changing Drug Use Practices	JC	**LN**
10.00-10.15	*Coffee*		
10.15-11.15	Framework for Changing Drug Use Practices (cont)	JC	
11.15-1.15	The Role of the Dispenser	Kofi	
1.15-2.30	*Lunch*		
Saturday pm	*Free and outings*		
Sunday	*Free and outings*		
	WEEK 2		
Monday			
8.00-8.30	*Committee reports and recap*		
8.30-10.00	Managerial , Regulatory and financial Interventions	Kofi and JC	**JG**
10.00-10.15	*Coffee*		
10.15-12.00	Managerial , Regulatory and financial Interventions (cont)	Kofi and JC	
12.00-1.30	*Lunch*		
1.30-3.00	Face-to-face Interventions	SL	
3.00-3.15	*Tea*		
3.15-5.00	Face-to-face Interventions (cont)	SL	
Tuesday			
8.00-8.30	*Committee reports and recap*		
8.30-10.00	Standard Treatment Guidelines and the Role of DTC	MJ and SL	**JG**
10.00-10.15	*Coffee*		
10.15-12.00	Standard Treatment Guidelines and the Role of DTC (cont)	SL and ML	
12.00-1.30	*Lunch*		
1.30-3.00	Effective Public education	SL	
3.00-3.15	*Tea*		
3.15-4.00	Effective Public education (cont)	SL	
4.00-5.00	Printed Educational Material - Part 1(Introduction)	Kofi	
Evening	Printed Educational Material - Part 2 (Design Poster)	Kofi	
Wednesday			
8.00-8.30	*Committee reports and recap*		
8.30-10.30	Rational antiretroviral use in HIV/AIDS (2 hours)	MJ	**JG**
10.30-10.45	*Coffee*		
	TOT		
10.45-12.00	Orientation Adult Learning and Role of the teacher/trainer	JC	
12.00-1.30	*Lunch*		
1.30-3.00	Communication skills, Teaching & Learning Methods Setting Objectives	MJ	

3.00-3.15	*Tea*	SL	
3.15-4.15	Preparing an oral presentation-intro		
4.15-5.00	Preparing a facilitation session-intro	Self Self	
Evening	Preparation of oral presentation Preparing a facilitation session		
Thursday			
8.00-8.30	*Committee reports and recap*		
8.30-10.00	Practice oral presentation sessions (in two separate groups)	Split groups-All	**JG**
10.00-10.15	*Coffee*		
10.15-12.00	Continue Practice oral presentation sessions and Practice Facilitation sessions (in two separate groups)	Split groups-All	
12.00-1.30	*Lunch*		
1.30-2.30	Continue to Practice Facilitation sessions (in two separate groups)	Split groups-All	
2.30-3.30	Preparing PRDU course	JC	
3.30-3.45	*Tea*		
	PROJECTS		
3.45-5.30	Decision Making and Country Projects	SL	
Evening	Group work		
Friday			
8.00-8.30	*Committee reports and recap*		
8.30-12.00	Group work.	SL	**JG**
12.00-1.30	*Lunch*		
1.30-5.00	Group work and Presentations	All	
Saturday			
8.30-10.00	Remaining Presentations and Evaluations	**All**	**DT, LN, JG**
10.00-11.00	Closing Ceremony	**All**	

Abbreviations
MJ = **Mohan Joshi**,
JC = **John Chalker**
SL = **Steve Lonsdale**
Kofi = **Francis Aboagye-Nyame**,
DT= **Dinah Tjiho**
LN= L. **Nelumbu**
JG= **Johannes Gaeseb**

Facilities visited
1. Okahandja District Hospital
2. Nau Aib Health Center
3. Katutura Health Center
4. Wanaheda Clinic
5. Hakahana Clinic
6. Okuryangava Clinic

ANNEX 2: PARTICIPANT LIST

LIST OF PARTICIPANTS					
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ANNEX 3: FIELD TRIP RESULTS

The results of the field trips were as follows: (retro=retrospective, pro=prospective, PP=Private pharmacy)

	Facilities													
INDICATOR	**Gr 6 District Hospital**		**Gr 3 Health Centre**		**Gr 1 Clinic 1**		**Gr 2 Clinic 2**		**Gr 5 Clinic 3**		**Gr 4 Clinic 4**		***Average***	**Gr 4 PP**
	Retro	**Pro**	**Retro**	**Pro**	**Retro**	**Pro**	**Retro**	**Pro**	**Retro**	**Pro**	**Retro**	**Pro**		**Retro**
# Drugs	3.1	2.4	2.9	3.3	2.8	2.9	2.8	3.1	2.8	2.5	2.3	2.4	***2.8***	**2.7**
% Antibiotics	40	40	67	75	86	82	77	68	70	71	57	71	***67***	**33**
% Injectables	3.3	10	10	8	14	0	13	3.6	3.3	21	10	0	***8***	**0**
% Generics	88	96	64	86	51	90	65	56	54	17	71	85	***69***	**1**
% EDL		100	100	100	96	100	100	93	96			97	***98***	
Consultation Time (mins.)		6.5		7.5		5		4		5		6.9	***6***	
Dispensing Time (secs.)		164		13		70		31		14		43	***56***	
% Correct Labelling		55		90		18		89		84		55	***65***	
% Patient Knowledge		86		92		76		86		64		79	***81***	
% Drugs in Stock		100		100		100		100		75		75	***92***	
% Drugs Dispensed		85		79		98		94		84		97	***90***	
EDL Present		Yes		Yes		Yes		Yes		Yes		Yes		
Impartial Information		Yes				No		Yes		Yes		Yes		

ANNEX 4: PRDU SESSION EVALUATIONS

(on a scale of 1 to 9)

PRDU Course - Session Evaluation													
Summary													
	Session	**Objectives were clearly defined at the beginning of the session**	**The amount of material covered in this session was appropriate**	**The depth of the session content was appropriate**	**The "Participant's Guide" was clear and useful**	**The audiovisual materials used in the session were clear and useful**	**The information in this session will be helpful in my work**	**The instructor clearly explained the subject matter of this session**	**The instructor's management of the class**	**Length of Session**			**Overall Average Score**
										Too Short	**Just Right**	**Too Long**	
1	Problems of Irrational Drug Use	**7.9**	**7.9**	**7.5**	**7.9**	**8.1**	**8.1**	**7.5**	**8.2**	**2**	**28**	**0**	**7.9**
2	Learning About A Drug use problem	**8.1**	**7.7**	**7.4**	**7.5**	**7.8**	**8.0**	**7.9**	**8.1**	8	24	0	**7.8**
3	Sampling to Study Drug Use	**8.4**	**8.4**	**8.1**	**8.2**	**8.3**	**8.6**	**8.4**	**8.4**	1	31	0	**8.3**
4	Investigating Drug Use - Part II	**8.4**	**8.3**	**8.4**	**8.1**	**8.1**	**8.5**	**8.4**	**8.1**	0	29	4	**8.3**
5	Field Vist - I	**7.7**	**7.8**	**7.7**	**7.4**	**7.4**	**8.3**	**7.8**	**7.8**	4	28	2	**7.8**
6	Implementing Drug Use Indicator Study I	**8.3**	**8.4**	**8.2**	**8.1**	**8.0**	**8.7**	**8.2**	**8.0**	4	28	3	**8.2**
7	Implementing Drug Use Indicator Study II	**8.2**	**8.2**	**8.0**	**8.0**	**8.0**	**8.5**	**8.3**	**8.2**	1	24	7	**8.2**
8	Feid Visit - II	**8.5**	**8.3**	**8.2**	**8.4**	**8.2**	**8.5**	**8.4**	**8.2**	2	28	4	**8.3**
9	Framework for Change	**8.3**	**8.1**	**7.9**	**8.1**	**8.1**	**8.6**	**8.3**	**8.4**	7	28	0	**8.2**
10	Role of Dispenser	**8.5**	**8.3**	**8.3**	**8.3**	**8.3**	**8.4**	**8.4**	**8.3**	4	27	4	**8.3**
11	Management and Regulatory Strategies	**8.4**	**8.1**	**8.1**	**8.1**	**8.2**	**8.5**	**8.3**	**8.3**	1	26	4	**8.2**
12	Financing	**8.1**	**7.9**	**7.9**	**0.0**	**8.0**	**7.6**	**7.9**	**8.2**	0	28	2	**7.9**
13	Face to Face	**7.8**	**7.7**	**7.8**	**7.9**	**7.9**	**8.4**	**7.9**	**8.2**	2	29	0	**7.9**
14	Standard Treatment Guidelines	**8.3**	**8.2**	**8.0**	**8.0**	**8.2**	**8.4**	**8.3**	**8.4**	2	32	0	**8.2**
15	DTC	**8.2**	**8.0**	**7.7**	**0.0**	**7.9**	**8.1**	**8.1**	**8.0**	9	26	0	**8.0**
16	Effective Public Speaking	**8.0**	**8.0**	**8.0**	**7.9**	**7.8**	**8.1**	**7.8**	**7.6**	1	30	1	**7.9**
17	Printed Materials	**8.5**	**8.3**	**8.2**	**8.2**	**8.3**	**8.3**	**8.4**	**8.4**	2	32	1	**8.3**
18	Rational Use of ARVs	**8.3**	**8.0**	**7.8**	**0.0**	**8.1**	**8.4**	**8.2**	**8.1**	8	24	1	**8.1**

ANNEX 5: PRDU TRAINING COURSE EVALUATION

Score out of nine

Content:

1. The objectives were clearly defined at the beginning of the training course:
Average: 8.2

2. The defined objectives were achieved by the end of the training course:
Average: 8.1

3. The amount of material covered in the two weeks was appropriate:
Average: 7.9

4. The depth of coverage of the material in the training course was appropriate:
Average: 8.2

5. The information in this course will be helpful in my work:
Average: 8.6

6. Overall I would say that the difficulty level of the training course was:
97% just right, 3% too hard

INSTRUCTORS/TRAINERS

7. Overall, I would say the quality of the instruction was:
Average: 8.3

OVERALL OPINION

8. This course was valuable and I will recommend it to my colleagues:
100% Yes

Overall, how satisfied were you with the following:

9. The training facilities:
Average: 8.3

10. The pace of the course:
Average: 7.6

11. The style and format of the sessions:
Average: 8.1

12. The instructional materials:
Average: 8.3

13. The length of the training course:
Average: 7.5

COMMENTS ON THE COURSE OVERALL

No.	Comments	Suggestions
	Include proposal development in the course The course could be improved by different methods of facilitating	
	Everything was well organized for the course in terms of time and materials	
	The training of excellently organized and the trainers are highly resourceful with full of knowledge and experience The way trainers deliver the course was extremely attractive and the effort they paid to enable trainers the required message was to be appreciated. I was eager to take this course and today it came to be true.	John, Steve & Mohan should keep on contacting trainers to see how they are practicing in their own settings, enable to know how effective the course was.
	Allocate at least one day more for TOT and start facilitating on country project by Monday the second week	The organization, venue and reception were excellent.
	The TOT course duration should be increased and more time be spent on practical sessions (oral & facilitating) i.e. More of the practicals	Participants should be told prior to attendance that there will be development of country projects so that they start thinking about it and possibly discuss it wit their won feeling, thoughts which may not be a priority for the country.
	In general the whole course was organized and very well run. I would recommend that the country projects at the end of the course be given more time so that there is adequate preparations since this is the ultimate measure of how well the course was taken	
	Facilitators were very good. I recommend additional and more elaborate coverage of some of the session which were short egg. TOT	Very good
	There should be a consistency in the use of terminology. We must either choose either Rational use of Drugs or Rational use of medicines. The days between “drug and medicines” the definitions of dispensing time has to be reconsidered to reflect the dimensions of quality from the point of view of the service.	

	There is a need to do a follow-up of the trainees after the training to ensure that they actually carry out the designed projects.	
	The course was a bit overloaded; one could perhaps try to reduce the content. It could be advisable to ask the opinion of the participants well in advance regarding sharing accommodation because it was sometime surprising to find someone there without being alerted in advance that someone is being put there.	The course was a success and well appreciated.
	The length of the training should be extended to give time for the participants to so thought what they learn each day	
	Some of the materials presented are old in content, dated some 1991-3-93. Current information and date well be needed to extually appreciate the level of impact of this course on the nations where it has been conducted.	Generally ok, I am more equipped on Promoting Rational Dug use!
	The instructors were very experience; teachers kept to the point and were very accommodating. I have learnt a lot, preparing proposals, basic statistics and oral presentation. The material for the course is very professional.	I really thank the local organizers and the facilitators for a job well done!
	The overall performance of the LOC and facilitators was great and made participations worthwhile	
	Projects should be chosen after one week. There should be a session where you present is going on in your country in health sector and Drug Use Issues. Make your strong recommendations to the country's participants and issues policy statement on above topic.	
	I am very satisfied with everything but for the fact that we just too busy for entire two weeks could be spread out for about three weeks.	

	Participants should be subjected to criticism during oral presentation and facilitation sections.	
	Include proposals development modules. These are useful when preparing projects.	
	More time was required to really understand the content	
	I feel 2 weeks is too short for such an important course, I would suggest a minimum of three weeks. This would allow participants to digest and understand the concept being introduced, because of the short time the pace of the course was too fast, this tended to favor participants who had already done the same type of course, and otherwise the facilitators were high caliber people with very wide knowledge. The local organizers were good and would not hesitate to give help when sought.	The idea of having the course far from the city was good this allowed us to have fewer interruptions through the sessions, however a distance of about 20kms away from the city would have been a ideal e.g. Heja Lodge-we had lunch one time.
	I wish more attention could have been given to making behavioral change.	
	We need more input from other colleagues and facilitators to improve.	

ANNEX 6: TRAINING OF TRAINER'S COURSE EVALUATIONS

(5 = Excellent, 4 = Very Good, 3 = Good, 2 = Needs Improvement, 1 = Poor)

PART I: EDUCATIONAL ASPECTS

Please circle below the rating that most clearly represents your evaluation of the Franchise Training:

Aspects to Evaluate	**Average Rating**
1. How well did we achieve our objectives?	**4.3**
2. How useful was the TOT for my work?	**4.4**
3. How were the teaching and learning methods?	**4.4**
4. How useful were the materials?	**4.6**
5. How clear were the explanations?	**4.1**
6. How well were the facilitators able to lead discussions?	**4.3**

Was the TOT too long, too short or just right? **46% too short, 54% Just right**

ANNEX 7: COURSE FLYER

Republic of Namibia Ministry of Health and Social Services	MSH MANAGEMENT SCIENCES for HEALTH RPM Plus | Rational Pharmaceutical Management Plus	Essential Drugs & Medicines Policy Department World Health Organization	INRUD International Network for Rational Use of Drugs

Announcing a Regional Training Course on

PROMOTING RATIONAL DRUG USE
&
TRAINING OF TRAINERS

April 18–30, 2005
Okahandja, Namibia

The Ministry of Health and Social Services (MoHSS) of the Republic of Namibia and the Rational Pharmaceutical Management Plus (RPM Plus) Program of Management Sciences for Health (MSH) announces a regional training course on Promoting Rational Drug Use and Training of Trainers, to be held April 18–30, 2005, at the Midgard Lodge in Okahandja, Namibia. The course is organized by the Namibia MoHSS and RPM Plus in collaboration with the WHO Department of Essential Drugs and Medicines Policy and the International Network for the Rational Use of Drugs (INRUD), with support from the United States Government's Emergency Plan for AIDS Relief administered through the United States Agency for International Development (USAID).

TARGET AUDIENCE

The two-week course is intended for physicians, pharmacists, health program managers, policy makers, researchers, and representatives of other organizations interested in improving the use of drugs.

COURSE OBJECTIVES

The course will focus on methods of studying and remedying inappropriate drug use, including problems with the ways in which drugs are prescribed, dispensed, and consumed. Participants will learn practical approaches for applying key concepts such as essential drugs lists, indicators of drug use, and methods for changing inappropriate drug use behavior.

COURSE CONTENT

- Identification of drug use problems
- Factors that influence prescribing patterns
- Indicators for assessing drug use
- Field exercises to assess drug use
- Methods to evaluate effectiveness of drug use interventions
- Standard treatment for improving quality of care
- Influencing prescribing patterns
- Changing prescriber training
- Public education about drug use
- Planning intervention studies

The last two days of the course will focus on training of the trainers (TOT) aspects and is designed to help the participants to better prepare themselves to provide PRDU-related training to others in their respective countries and regions. Key features of the TOT component will include- Adult learning, Role of teacher, Communication skills, Teaching and learning methods and PRDU-related presentation and facilitation skills.

COURSE DESIGN

The course will be conducted in English and will consist of presentations, discussions, group activities, and field exercises. This course is highly participatory, and the exchange of skills and experience among participants adds depth to the learning process. Course materials are based on those developed by MSH, the Harvard Drug Policy Group, WHO, and INRUD country core groups. The participants will be exposed to a wide range of international experiences and materials.

TRAINERS will include:

Dr. John Chalker is a medical doctor and is currently the International Coordinator for INRUD, working with MSH's Rational Pharmaceutical Management Plus (RPM Plus) Program. RPM Plus actively works at the global and country levels to improve drug use and availability and provide technical leadership, assistance, and training in cooperating countries. Dr. Chalker has 17 years of experience in designing, implementing, and managing health development projects at the local, regional, and national levels in Asia, Africa, and the Middle East. He has worked with key academic institutions in designing and coordinating research on ways to improve rational drug use.

Dr. Kathy Holloway is a medical officer with EDM/WHO in Geneva. Her present responsibility is the promotion of the rational use of drugs 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 UK 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 drugs program that included revolving drug funds, and she conducted research into the effects of different kinds of user fees on the rational use of drugs. Dr. Holloway is particularly interested in financial mechanisms to promote more rational use of drugs and in containing antimicrobial resistance.

Prof. Gilbert Kokwaro is the Professor of Pharmaceutics, University of Nairobi; a Visiting Professor of Pharmacology, University of Liverpool, UK; and Executive Director, Centre for Drug Management and Policy (CEDMAP), Nairobi. He is also the Head of the Clinical Pharmacology, Molecular Biology and Parasitology Research Group, KEMRI/Wellcome Trust Collaborative Research Programme, Nairobi. He has attended short courses on drug metabolism (Stowe Summer School, UK, 1992), clinical pharmacology (Royal Postgraduate Medical School, University of London, 1992), and pharmacokinetic modeling (University of Leiden, The Netherlands, 1992). In 1999–2002, he trained health-care providers from several African countries on effective drug management and rational drug use.

Dr. Mohan P. Joshi is Project Manager for Antimicrobial Resistance (AMR) at the Rational Pharmaceutical Management Plus (RPM Plus) Program of the MSH Center for Pharmaceutical Management. He has his first degree in medicine and post-graduate degrees in clinical pharmacology and pharmacology. Dr. Joshi has more than 20 years of professional experience and was working as Assistant Dean, Professor & Head of Clinical Pharmacology, and Director of Drug Information Center at the Tribhuvan University Institute of Medicine in Nepal prior to joining the MSH. Dr. Joshi has served as a member of the International Health Expert Advisory Panel of the U.S. Pharmacopoeia. He has coordinated/facilitated many training courses on rational use of drugs, including regional courses on Promoting Rational Drug Use (PRDU) and Drug &Therapeutics Committees (DTC) with attached modules on training of trainers.

Other trainers and facilitators will also be present.

COURSE FEE AND APPLICATION

The fee of US$2,000 covers tuition, course materials, and shared hotel accommodations. Those unwilling to share accommodations must be prepared to pay extra US$330 for single rooms. Breakfast, lunch and dinner will be provided. Participants will be provided US$10 per day to partially cover incidental expenses like laundry, postage, telephone calls, souvenirs, and transportation. Additional funds should be carried by participants. Airfare, travel and health insurance are the responsibility of the participant's sponsoring organization. Participants should also expect to receive 26.5 lb (12 kg) of training materials.

Applications and fees are due no later than February 25, 2005.

Participants should plan to arrive in Windhoek latest 4pm on April 17, 2005. The organizing committee will be responsible for hotel accommodation until 10:00 a.m. on May 1, 2005. Those who want to stay longer will have to pay for their accommodation from then on and arrange their own transport from the Hotel.

Places for 35 participants (national and international) will be available. As it is a regional course, preference will be given to participants from the Africa region. Selection will be based on previous experience, interest in promoting rational use of drugs and ability to implement such programs in their own environment.

CLIMATE AND HEALTH ADVICE

Weather in April is warm, and ordinary light clothing is fine. Okahandja is normally cool in the evening. Participants need to arrange for their own health insurance before they leave their countries. A yellow fever vaccination certificate is required from travelers coming from infected areas. Travelers on scheduled flights that originated outside the areas regarded as infected, but who have been in transit through these areas, are not required to possess a certificate provided that they remained at the scheduled airport or in the adjacent town during transit.

Additional information regarding social events and other details will be provided at a later stage.

For further information or to submit an application, please contact:

PRDU Course Committee
PO Box 90027
Klein Windhoek
Windhoek
Namibia
Tel.: +264 (0)61 228 016
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E-mail: prdu2005@msh.org.na

Supported By

The United States President's Emergency Plan for AIDS Relief

The U.S Agency for International Development

ANNEX 8: PARTICIPANT COUNTRY PROJECTS

Namibia

1. Adherence of patients to ART in Namibia.
Akpabio Ebong, Ehiemua Rosemary, Hiskia Lea-Glenda, Komu Patricia.

The project was designed to determine level of adherence to ART by patients and to discover what factors influence this.

Data would be collected from ART registers and pharmacy records at Oshakari, Katutura, and Rundu. Hospitals over a three month period. Structured questionnaires, in-depth interviews and focus group discussions would be used to get qualitative data from the patients attending these hospitals. This data would be analyzed and interventions would be designed to improve compliance, based on the findings.

In the second phase the appropriate interventions would be carried out over a four month period on randomly selected patients. There would be a matching control group. The effect of the intervention would be measured by using the same data sources.

2. Dispensing practices of paediatric ARVs and patient compliance.
Mathew Bahonge, Kalapufye Mukumangeni, Weyulu Cornelius, Karl F. Steinhausen

It is believed that there is unsafe prescribing and dispensing practices with paediatric liquid oral ARV's resulting in poor patient compliance. The underlying causes were thought to be incorrect interpretation of guidelines by prescribers, inconsistent labelling and inconvenient packaging of oral liquid ARV's with poor dispensing practices.

Twenty private and public health facilities will be randomly selected (10 study and 10 control). There would be two monthly retrospective/prospective data collections before the intervention and four after the intervention. The following will be measured:
% prescibers adhering to paediatric ARV treatment guidelines
%dispensed paediatric ARV dosage forms with correct labelling
% patients knowing the correct dose
%patients satisfied with treatment (patient exit interviews)
The actual intervention would depend on the base line findings.

3. Effect of educational intervention strategies in improving private doctors' adherence to anti-retroviral therapy (ART) guidelines in Namibia
Nader Ayoub, Juliet bulemela, Fabrice Mbikayi, Joseph Rushubiza

Failure to adhere to ART guidelines will result in an increase of resistance to available drugs, and thus exhaust alternatives to use. It is believed that a section of private doctors does not adhere to ART guidelines. It is therefore important to determine the existence and extent of the problem and to institute corrective measures, if such a problem exists.
A survey would be made to find out which private doctors are attending to ART patients as well as keeping a patient register in their private clinics**.** The determination of the sample size will depend on the number of doctors found to keep patient registers. If the number of those doctors

is more than 30, systematic random sampling technique will be used, if it is less or equal to 30 the whole population will be included. Similarly if the number of patients on ART at each clinic is less than 30 all the patient records will be assessed, if it is more than 30, a systematic random sampling technique will be used.

Determinations will be made of the degree of adherence to ART guidelines at three monthly intervals. Efforts will be made to find out why private prescribers are not following the guidelines. (e.g. lack of knowledge, non-availability of guidelines).
Data will be analyzed manually using the following criteria:

- Patient eligibility to start as per STG
- Appropriateness of combination
- Correctness of line of therapy
- Appropriateness of dosage being prescribed

The intervention will be to target those prescribers not complying with the guide lines. They will be invited to interactive small-group discussions and feedback. In addition ART guidelines will be provided to those who do not have them. Post intervention data will be carried at monthly interval for three months. The success of the project will be based on the percentage increase of private doctors adhering to ART guidelines in the three month period post intervention.

4. Irrational Use of Antibiotics in Katima Hospital Outpatients

Hausiku Martina, Wambugu Maina, Olobanji Nelson

There is an apparent overuse of oral and injectable use of antibiotics in the Katima Hospital Outpatient Department. This project's objectives were to identify the current antibiotic prescribing practices in the Hospital, to design and implement an intervention to improve the current prescribing and to evaluate the impact of the intervention.

The following data will be collected from 100 encounters (prescriptions) selected by systematic random sampling retrospectively at three intervals before and after the intervention.

- Average number of drugs by encounter
- % of prescribing with antibiotics
- % of drugs prescribed from EDL or formulary

The intervention will consist of targeting prescribers (50, doctors and nurses) with a workshop followed by face to face persuasion and supervisory visits The management of the hospital will emphasise STGs usage. The success of the intervention will be judged from the results of the time series.

5. Challenges to efficiently functioning DTCs in Namibia public hospitals

Ben Nwachukwu, Phillipe Tshiteta,Catherine Nhau, Charles Ouma

The object of the project was to establish functional DTCs in 12 districts by Sept 2005. Twelve districts from the 34 in Namibia would be selected by simple random sampling. The source of the data would be retrospective and prospective. It would be obtained from chairperson/

secretaries of DTCs, chief medical officers, prescription audit reports and annual pharmaceutical reports.

The measurable outcomes would be:

- % of hospitals with TORs for DTCs
- % of DTC meetings held and minutes collected out of the total scheduled
- % of scheduled meetings' minutes forwarded to Regional Medical Team (RMT)
- % of districts with at least one prescription audit per year
- average number of drugs per encounter
- % of prescriptions with an antibiotic
- average drugs wastage rate

The intervention would be by:

- producing & circulating TORs
- producing guidelines & conduct training for DTC members
- conducting facilitative support supervisions
- continuous feedback

A time series post intervention study would be done to measure the effects.

Country Projects of Non Namibian Participants

1. To investigate and improve the level of adherence to standard treatment guidelines in malaria treatment in private pharmacies in greater Accra, Ghana.

Anthonia Bannerman-Quist, Saviour Kwame Yevutsey, Rosemond Abadoo-Mensah, Naana Frempong. (all from Ghana)

The first point of call for most patients is the community pharmacy. There are about 525 retail pharmacies in the Greater Accra region, of Ghana manned by pharmacists. Antimalaria treatment policy has changed from chloroquine to amodiaquine-artesunate as first line treatment for uncomplicated malaria. A standard treatment guideline has been issued and this project is designed determine the level of adherance this guideline and to institute appropriate interventions to improve adherance.

Three surveys would be conducted; pre-intervention, one month after intervention and three months after intervention. Out of the 525 retail pharmacies, 40 pharmacies (20 study and 20 control) would be selected by simple random sampling of 20 pharmacies in both control and intervention pharmacies in the community would be made. Data would be obtained from 30 patients from each pharmacy using structured questionnaires and patient exit interviews There would also be an assesment of level of record keeping in the pharmacies and a check availability of malaria treatment protocol in the pharmacies as possible constraints might be inadequate record keeping in the pharmacies, workload, acquired habits, lack of knowledge and non-availability of the standard treatment guidelines.

Possible interventions are face-to-face training of the pharmacists on the treatment of malaria, the design of minimum record keeping requirements and further development and distribution of treatment protocols on malaria.

The success of the intervention would be measured by observing an increase in the level of adherance to treatment of malaria according to guidelines, one and three months after the intervention.
(This group also presented the Guideline for the treatment of Malaria, a sample patient exit interview questionnaire and a pharmacy structured questionnaire.)

2. Irrational Use of Antibiotics as Prophylaxis in Abdominal Surgery

Evans Sagwa (Rwanda) Khalid Bukhari(Pakistan)

There is overuse of expensive antibiotics such as 2nd and 3rd generation cephalosporins for prophylaxis in abdominal Surgery in Tertiary Level/Teaching Hospitals in both Pakistan and Rwanda. This project will assess the magnitude and nature of the problem, develop and implement STGs for prophylactic use of antibiotics in abdominal surgery based on international standards and introduce these to the heads of surgery and surgical staff.. It will then measure any changes in prescribing habits.

Data will be collected from retrospective studies on appropriate inpatient clinical records. Focus groups discussions would be held with 6 opinion leaders – surgeons to see if their belief is that use of 2nd and 3rd generation cephalosporins for prophylaxis in abdominal surgery yields better treatment outcomes.

The intervention will be to:

- Develop and implement STGs with the help of opinion leaders.
- To conduct face to face persuasion targeting surgical chiefs and the problem prescribers
- Train of surgical and CSSD staff – doctors, nurses etc (in two group of 30)
- Ask the DTC to conduct monitoring

Measurement will be made of the following outcome variables: type of antibiotic, dose frequency and duration of treatment, cost of treatment. This will be done in a time series monthly for three months before and after the intervention. Thirty to 100 IP clinical records will be randomly chosen and examined monthly during the period of the project.
There will be a study and a similar control hospital in Pakistan. In Rwanda there is only one suitable hospital so the time series will hopefully show a change after the intervention.

3. Non adherence of prescribers in the private sector to STGs for ART.

Frehiwot Tadesse, Hailu Tadeg (both Ethiopia) Amanda Mwirotsi, Dorine Kagai, Josephine Muiruri (all from Kenya)

Prescribers in the private hospitals in Kenya and Ethioia are not adhering to the STG for ART. The consequences of this are the development of resistance, loss of therapeutic options and increased costs of therapy.
The object of this project is to:

- increase the availability of STG in private hospitals.
- decrease the number of new patients starting ART that does not fulfill the criteria set on STG
- increase the percentage of ARV drugs prescribed according to the STG
- reduce unnecessary expenditure for expensive ARV drugs for the patient.
- preserve more treatment options for the prescriber.
- delay development of multi-drug resistant HIV in the general public and reduce the
- economic impact for the Government in dealing with the resulting public health catastrophe.
- increase the number of prescribers trained on the STG for ART in the private sector

Three out of five hospitals in the country will be selected on the basis of similarity in service delivery and number of patients being provided ART. The 3 hospitals will be *randomized* to choose the study and control groups A, B and C.

The first intervention will be the implementation of the STG for ART by distribution training, monitoring in hospitals A and B, with hospital C acting as a control. The second intervention was to use interactive group discussions in hospital B, while hospitals A and C will act as controls.
Baseline data would be collected by retrospective prescription audit and by patient treatment card audit. Qualitative data would be collected by structured in depth interviews and focused group discussions.

The following outcome variables would be measured:

- Percentage of prescriptions not following the STG
- Percentage of patients starting ART who do not meet the criteria laid out on the STG.
- Percentage of prescribers having STG
- Percentage of prescribers trained on STG

This data would be collected for three months before and 3 months after the 1st intervention. Then, the second intervention will be carried out and data collected as well as three and six months later. All the data will be analysed using the epi-info program. If successful, the intervention can be rolled out to other private providers.

4. **Intervention study to improve the quality of prescribing, dispensing and adherence to ARTs in Hospitals.**
Loyce Lishimpi, Joseph Mthetwa (Zambia), Emmanuel Umirambe, William Pjathim (Uganda), Lydia Zungufya, (Zanzibar).

HIV/AIDS is a increasingly becoming a major cause of morbidity and mortality in Sub-Saharan Africa in both rural and urban communities. Zambia, Uganda and Zanzibar shares with the rest of Southern Africa what is now referred to as an “an explosive” HIV epidemic. HIV is poorly managed in most hospitals and some of the challenging issues are poor prescribing and dispensing practices, as well as non-adherence to STGs. These are compounded by inadequate number of staff/ trained in HIV/AIDS patient management and limited availability of suitable infrastructure.
This project aims to:

- describe the prescribing and dispensing practice and level of use of STGs for ARVs

- identify available facilities for counseling patients on ARTs
- determine staffing levels and provide training to clinicians and pharmacists
- sensitize prescribers and pharmacists on use and importance of the ART STGs
- improve the quality of prescribing, dispensing and adherence to ARTs in Hospitals

The study will be conducted in Uganda (Masaka Regional Hospital and Hoima Regional Hospital); Zambia (Choma District Hospital, Mazabuka district Hospital); Zanzibar (Mnazi Mmoja Hospital and Micheweni Hospital).

A total of 600 prescription records for ARVs, issued by clinicians and pharmacists from 6 hospitals in 3 countries, Uganda, Zanzibar and Zambia, will be examined. (100 prescriptions per hospital). The selection of prescriptions will be by systematic sampling.

In addition retrospective and prospective data will be collected by using structured questionnaires and forms. Information on the current status of staffing levels and facilities will be collected in all study areas. Computerized data entry will be created for the data collected. The dataset to be created will include the following variables:

- % drugs prescribed by generic,
- % drugs prescribed according to the ART STGs,
- average consultation time,
- average dispensing time,
- % drugs adequately labeled after dispensing, patient knowledge of correct dosage,
- % drugs actually dispensed,
- availability of copy of essential ARVs list and STG
- availability of essential key ARVs.

The intervention would be some form of training of clinicians and dispensers. One of the two hospitals in each country would act as a control. Data will be collected pre and post intervention and analyzed.