

**HIV/AIDS
Pharmaceutical
Management
Training for
Pharmaceutical
Officers in
Namibia**

Training Report

Management Sciences for Health
is a nonprofit organization
strengthening health programs worldwide.



This report was made possible through support provided by the U.S. Agency for International Development, under the terms of Cooperative Agreement Number HRN-A-00-00-00016-00. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the U.S. Agency for International Development.

Jude Nwokike

December 2006

HIV/AIDS Pharmaceutical Management Training for Pharmaceutical Officers in Namibia: Training Report

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Strategic Objective 4

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About RPM Plus

RPM Plus works in more than 20 developing and transitional countries to provide technical assistance to strengthen pharmaceutical 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.

Abstract

The HIV/AIDS Pharmaceutical Management Training for pharmaceutical officers in Namibia had the overall goal of ensuring the efficient and effective supply and use of antiretroviral (ART) medicines and related commodities required in an ART program. The training was undertaken as a critical intervention to help provide quality services supporting the Namibia ART programs. The HIV/AIDS pharmaceutical management training materials were adapted from generic modular materials developed by Management Sciences for Health (MSH) Rational Pharmaceutical Management (RPM) Plus Program. The sessions in the curriculum were developed and reviewed by MSH/RPM Plus consultants involved in the different HIV/AIDS programs and projects in developing countries. The adapted materials were used for training the national core group of trainers. These trainers subsequently participated in the first HIV/AIDS pharmaceutical management training for Namibia public sector pharmaceutical officers.

Recommended Citation

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ACRONYMS

AIDS	acquired immunodeficiency syndrome
ART	antiretroviral therapy
ARV	antiretroviral
FDC	fixed-dose combination
HIV	Human Immunodeficiency Virus
M&E	monitoring and evaluation
MIS	Management information systems
MSH	Management Sciences for Health
MoHSS	Ministry of Health and Social Services
MTP	Monitoring Training and Planning
NHTC	National Health Training Center
PMIS	Pharmacy Management Information Systems
PMTCT	prevention of mother to child transmission
STI	sexually transmitted infection
THC and CSS	Tertiary Health Care and Clinical Support Services
VCT	voluntary counseling and testing
WHO	World Health Organization

BACKGROUND

Purpose of Training

The Management Sciences for Health (MSH) Rational Pharmaceutical Management (RPM) Plus Program assessment of the public sector pharmaceutical supply system of Namibia¹ highlighted problems with the pharmaceutical management of medicines at health facilities. The assessment noted that there was no uniform system for recording antiretroviral (ARV) medicines dispensed and for keeping patient information. Dispensing protocols were not uniformly practiced and most facilities did not have standard operating procedures or systems for monitoring use of medicines in facilities. These deficiencies, when added to the challenges of scaling up HIV/AIDS services, stretched the ability and capacity of Namibia's health care workers to the limit. HIV/AIDS also demands that health care workers learn new skills in managing medications and attending to HIV/AIDS patients.

MSH/RPM Plus in Namibia planned HIV/AIDS pharmaceutical management training for health care workers as part of its mandate to strengthen pharmaceutical management for an effective delivery of antiretroviral therapy (ART) and prevention of mother to child transmission (PMTCT). The goal was to improve their skills in pharmaceutical management to meet the challenges of scaling up HIV/AIDS programs.

MSH/RPM Plus therefore developed generic modular training materials for pharmaceutical management of HIV/AIDS programs. These materials were designed to train pharmaceutical personnel and other health care workers in Namibia and improve pharmaceutical management in health facilities. The goal of this training was to ensure the efficient and effective supply and use of ART medicines and related commodities required in an ART program. The objectives of HIV/AIDS pharmaceutical management training included—

- Explaining the elements of pharmaceutical management that are specific to the provision of ART services
- Demonstrating the application of pharmaceutical management practices to support ART services
- Building knowledge and comprehension of good dispensing practices, including the counseling and monitoring necessary for rational ART use

In collaboration with the National Health Training Center (NHTC), MSH/RPM Plus adapted local training materials and directed the training of the national core group of trainers. It also conducted the first HIV/AIDS pharmaceutical management training for Namibia public sector pharmaceutical officers.

¹ Aboagye-Nyame, F., L. Akhlaghi, and V. Dias. 2004. *Assessment of the Public Sector Pharmaceutical Supply System of Namibia, November 2003*. Submitted to the U.S. Agency for International Development by the Rational Pharmaceutical Management Plus Program. Arlington, VA: Management Sciences for Health.

Scope of Work

1. Collaborate with NHTC to develop implementation plans for the HIV/AIDS pharmaceutical management training
2. Direct the adaptation of the HIV/AIDS pharmaceutical management training materials for Namibia
3. Direct the training of a national core group of trainers in the HIV/AIDS pharmaceutical management training materials
4. Direct HIV/AIDS pharmaceutical management training
5. Provide feedback to the NHTC on the HIV/AIDS pharmaceutical management training

ACTIVITIES

Planning

Planning for training activities began with the development of an implementation plan. The implementation plan was shared with the MSH/RPM Plus Project Steering Committee (PSC). The PSC approved the plan and requested that the Ministry of Health and Social Services (MoHSS) be formally informed of the training activities plans. A letter was therefore sent to the Permanent Secretary, MoHSS, requesting approval to conduct the HIV/AIDS pharmaceutical management training. Approval was received from the office of the Permanent Secretary on October 17, 2005, which also indicated MoHSS's interest in collaborating with MSH on the training activities. To leverage opportunities and guarantee sustainability of the effort, the NHTC was invited to participate in the planning and execution of the HIV/AIDS pharmaceutical management training activities. The NHTC welcomed the idea and designated officers to work closely with MSH/RPM Plus.

Collaboration with the NHTC

RPM Plus met frequently with the NHTC to plan the training activities. The meetings were attended by the training center management headed by Ms. E. Sam (Chief, Health Programmes, and head of the training network). Also representing the NHTC on some occasions were Mr. Weyulu (representing Head of In-service training), Ms A. Kutandokwa (Head of Pre-service training), and Ms. Leboa. During these meetings the following resolutions were reached—

- The training implementation matrix (Annex 1) developed by RPM Plus was ratified
- MSH/RPM Plus provided NHTC with the initial training materials for the adaptation workshop
- MSH/RPM Plus provided NHTC with the training session plan (Annex 2)
- Members chose February 2006 as the time for the adaptation workshop, the training of the national core group of trainers, and the timing of the training as
- The NHTC identified staff who would work with RPM Plus on the training activities
- Initially, training was designed as in-service but materials were eventually adapted for use as part of pre-service curriculum.

Adapt HIV/AIDS Training Materials

The HIV/AIDS pharmaceutical management training material was developed by RPM Plus office in Arlington, VA. Previously, RPM Plus training activities held in Kenya, Zambia, and

Rwanda, and training material from other organizations working on HIV/AIDS programs formed the basis for the development of these materials. A first draft of this version was tested in a training course in Kenya and reviewed by a panel of university teachers and trainers from Makerere University, Uganda; University of Nairobi, Kenya; Muhimbili College of Health Sciences, Tanzania; and National University of Rwanda, Butare. The HIV/AIDS pharmaceutical management training materials were prepared as generic and modular to allow for prioritization of topics and local adaptation. Trainers can choose as many or as few of the sessions as a particular group of trainees needs, or they can prioritize the topics within a session and include only what time allows or the situation requires within the context of their country or program.

To help make the materials locally relevant to the pharmaceutical management needs of Namibia, a local adaptation workshop was held on February 2 and 3, 2006, at Heja Lodge near Windhoek. The workshop had seven participants from Pharmaceutical Services Division, health facilities, NHTC, and MSH/RPM Plus. The workshop began with an introductory presentation. As outlined in the introductory presentation (Annex 3), the workshop's objective was to use local examples, case studies, protocols, MoHSS ART Guidelines, Pharmaceutical Services Division SOPs, etc., to make the training truly relevant to trainees in Namibia. Participants were specifically requested and encouraged to use those local examples where necessary.

Training the national core group of trainers

The national core group of trainers for the HIV/AIDS training was envisioned as the group who would roll out the training materials at the national level and, in collaboration with RPM Plus, serve as a resource for updating them. Therefore, the national core group needed a thorough understanding of the training material and the local adaptation process it had gone through.

National core group training was conducted on February 13 and 14, 2006, at the Okapuka Lodge near Windhoek. Eight participants including national core group members and MSH/RPM Plus staff attended. In addition to reviewing the training material, the session was an opportunity for the core group to develop presentation skills and observe each other's presentations. The workshop also provided an opportunity for final updating of the training materials.

HIV/AIDS pharmaceutical management training

The HIV/AIDS pharmaceutical management training was conducted between February 20 and 24, 2006 at Heja Lodge near Windhoek. The training included more than 20 pharmaceutical officers (mainly pharmacists' assistants, pharmacists, and regional pharmacist) (Annex 4). Speaking on behalf of Dr. Norbert Forster, the acting director of the Tertiary Health Care and Clinical Support Services (THC and CCS), Ms. P. Nghipandulwa officially opened the training by acknowledging that the session was the first of its kind since the roll out of the Namibia ART program. The course agenda is attached as Annex 5.

The training course introduction (Annex 6) was an overview of the goals, objectives, and key features of the HIV/AIDS pharmaceutical management training materials. The session started with a pre-test and ended with test and course evaluation (Annex 7).

Feedback to the NHTC on the HIV/AIDS pharmaceutical management training

A meeting was held on Monday, March 6, 2006, to provide feedback on the HIV/AIDS pharmaceutical management training session. In attendance were the acting director, THC and CSS; the NHTC management; Pharmaceutical Services Division; and MSH/RPM Plus. Feedback indicated that the HIV/AIDS pharmaceutical management training activities were successful, largely in part because of the collaboration between NHTC, Pharmaceutical Services Division, and MSH/RPM Plus. Preliminary plans for the roll out of the training to other regions within the country were discussed. Dr. Forster was asked to appoint a focus person from Pharmaceutical Services Division who would coordinate activities for subsequent training sessions. RPM Plus's Laila Akhlaghi who had led the initial training course compiled recommendations on how to improve the adaptation and training activities (Annex 8). MSH/RPM Plus made a commitment to continue providing technical assistance for updating the materials. MSH/RPM Plus also planned to deliver the training materials to MoHSS, the Allied Health Councils, and the NHTC so that they could be used for in-service training programs and continuing professional development activities.

NEXT STEPS

- Update and compile a final version of the HIV/AIDS pharmaceutical management training material and re-circulate to members of the national core group of trainers
- Update the training material as needed, and inform MoHSS HIV/AIDS pharmaceutical management training focus person of the updates
- Provide technical assistance and support to MoHSS for the delivery of the next set of HIV/AIDS pharmaceutical management training sessions
- Deliver the training material to MoHSS, the Allied Health Councils, and the NHTC so that they can be used for in-service training programs and continuing professional development activities.

ANNEX 1. IMPLEMENTATION PLAN

Implementation Plan for Pharmaceutical Management Training						
#	<u>Activity</u>	<u>Sub-activities</u>	<u>Timelines</u>	<u>Lead person/Partners</u>	<u>Resources</u>	<u>Deliverables</u>
1	Obtain training approval	Draft letter to the Permanent Secretary for Training Organizing Committee (TOC) to review	26-Sept.-7-Oct.	RPM Plus	Staff time	Approval letter from PS
		Incorporate comments from TOC				
		Send final letter to PS				
		Follow up and inform TOC of approval				
		Identify NHTC human and material resources for training	10-Oct.	NHTC Mgt.	Staff time	
2	Produce training session plan and activity plan	Produce training session plan	7-Oct.	RPM Plus	Staff time	Session plan
		Produce training activity plan				Activity plan
		Review and adopt session plan and activity plan	14-Oct	TOC, RPM Plus	Staff time	Session plan and activity plan ready
3	Provide training module for local adaptation	Send module to TOC	14-Nov	RPM Plus	Staff time	
		Send module to Interim Pharmacy Council				
		Send module to Division; Pharmaceutical Services, MoHSS				
		Adapt module for Namibia	28-30 Nov	All	Money	Module
4	Print final training module	Determine number and quantity of modules to print	16-27 Jan	RPM Plus	Money	Training materials ready
		Arrange all necessary training materials				
		Engage printers				

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5	Conduct Training of Trainers (TOT)	Choose TOT dates	16-Jan	NHTC, MoHSS, RPM Plus	Staff time	Dates
		Identify venue		NHTC		Venue
		Identify TOTs		NHTC, MoHSS, RPM Plus		TOTs
		Deliver training	13-17 Feb?	NHTC, RPM Plus	Money	TOT training report
6	Conduct Regional/Facilities training	Choose dates	27 Feb-10 March	NHTC, RPM Plus	Staff time and money	Dates
Identify venue	Venue					
Identify participants	Participants					
Deliver training	Training report					

ANNEX 2. SESSION PLAN

Module I: HIV/AIDS overview and ART Commodity Management				
Session	Objectives	Brief description of the module's content	Activities	Duration
Course Introduction	Introduce the course, the participants and the plan of training activities	<ul style="list-style-type: none"> ✓ Training and Rationale ✓ Objectives of Training ✓ The Trainers ✓ The Trainees ✓ Schedule ✓ AOB 		30 min
Overview of the Global and National Effort to fight HIV/AIDS epidemic	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Describe the HIV/AIDS epidemic in the World and in the country ✓ Contextualize their role in the global effort of managing HIV/AIDS 	<ul style="list-style-type: none"> ✓ Epidemic Update (Globally, In-country) ✓ Global efforts to Fight HIV/AIDS and challenges ✓ country's effort to fight HIV/AIDS and the challenges ✓ Trainees' effort to fight HIV/AIDS 	Discussion /PowerPoint (PPT) presentation	45 min
HIV/AIDS: Natural Progress, Care, and Treatment	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Discuss the pathophysiology of HIV/AIDS, and preventive measures ✓ Discuss the diagnosis and testing for HIV infection ✓ Describe the disease progression, staging, care, and treatment HIV infection 	<ul style="list-style-type: none"> ✓ Disease progression ✓ HIV/AIDS transmission ✓ HIV prevention ✓ The 5 phases of HIV infection cycle ✓ HIV subtypes distribution and impact on diagnosis and treatment ✓ Testing/diagnosis ✓ WHO staging system ✓ Opportunistic infections in HIV disease ✓ HIV/AIDS treatment <ul style="list-style-type: none"> ▪ Overview of ARVs ▪ WHO guidelines ▪ Country's guidelines 	Discussion/ PPT	1h:30 min
Commodity Management for ART Services	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Explain the drug management cycle as it relates to the country's context in general; province 	<p>Challenges met in the drug management cycle in the context of ART programs:</p> <ul style="list-style-type: none"> ✓ ARV selection (In general and in-country) ✓ Drugs/ARVs procurement: drug quality and supplier 	Discussion/ examples/PPT	1h:30 min

	<p>and the ART program in particular.</p> <ul style="list-style-type: none"> ✓ Discuss the importance of commodity management in controlling costs and reducing HIV/AIDS morbidity and mortality. 	<p>selection (In general and in-country)</p> <ul style="list-style-type: none"> ✓ Enabling policy and legal framework for ART in-country ✓ Management support for ART program in-country ✓ Distribution for the ART program in-country ✓ Drug management information systems (overview and MIS in ART programs) 		
Module II : Store and Inventory Management				
Session	Objectives	Brief description of the module's content	Activities	Duration
Inventory Management and Record Keeping	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Describe good inventory management ✓ Outline the flow of stock when inventory arrives ✓ Describe management information system in the context of inventory management 	<ul style="list-style-type: none"> ✓ Necessity of good inventory management ✓ Ordering and stock rotation (in general and in-country practices) ✓ Inventory flow ✓ Recording information to manage inventory ✓ Activity reports ✓ Performance indicators ✓ Apply tools used in record keeping for inventory management ✓ Apply tools used for activity reports ✓ Apply tools used for monitoring and evaluation 	Discussion/ case studies- examples/ PPT	<p>1h:30 min to 2h</p> <p>Suggest mini-sessions</p>
Store and Facility Management	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Describe best practices for storing drugs and medical supplies ✓ Describe how practices can reduce wastage of stock ✓ Describe special precautions for ARVs and related commodities 	<ul style="list-style-type: none"> ✓ Stock arrangement ✓ Temperature control ✓ Security 	Discussion/ examples/PPT	30

Annex 2. Session Plan

Quantification of ARVs	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Differentiate the quantification requirements for HIV/AIDS ✓ Identify the application of and uses for the tools available to determine quantities for pharmaceutical procurement 	<ul style="list-style-type: none"> ✓ Different quantification method applicable for ARVs ✓ Special considerations for quantifying ARVs ✓ Special considerations for quantifying rapid test HIV test kits (RTKs) ✓ Special considerations for quantifying opportunistic infection medicines and other HIV/AIDS-related commodities 	Discussion/ PPT/exercises	45 min
Module III: Rational Drug Use				
Session	Objectives	Brief description of the module's content	Activities	Duration
Rational Use of ARVs and Related Health Commodities	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Identify the five basic elements of appropriate medicine use: accurate diagnosis, rational prescription, correct dispensing, suitable packaging, and proper patient use ✓ Identify problems commonly encountered in the use of pharmaceuticals ✓ Describe options for promoting appropriate medicine use 	<ul style="list-style-type: none"> ✓ The medicine use process ✓ Types of irrational medicine use ✓ Factors influencing medicine use ✓ Strategies to improve medicine use with focus on the role of the dispenser 	Discussion/ examples/ PPT	30 to 45 min
Dispensing Practices and Medication Use Counseling in ART Programs	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Define the dispensing process ✓ Describe the role of the dispenser in stock maintenance 	<ul style="list-style-type: none"> ✓ Good dispensing practices ✓ Dispensing environment ✓ Dispensing person ✓ Dispensing process ✓ Patient counseling checklist ✓ Listening ✓ Empathetic responding ✓ HIV/AIDS medication 	Discussion/ PPT/ role play (one role play can include two aspects such as dispensing and counseling)	30 to 45 min

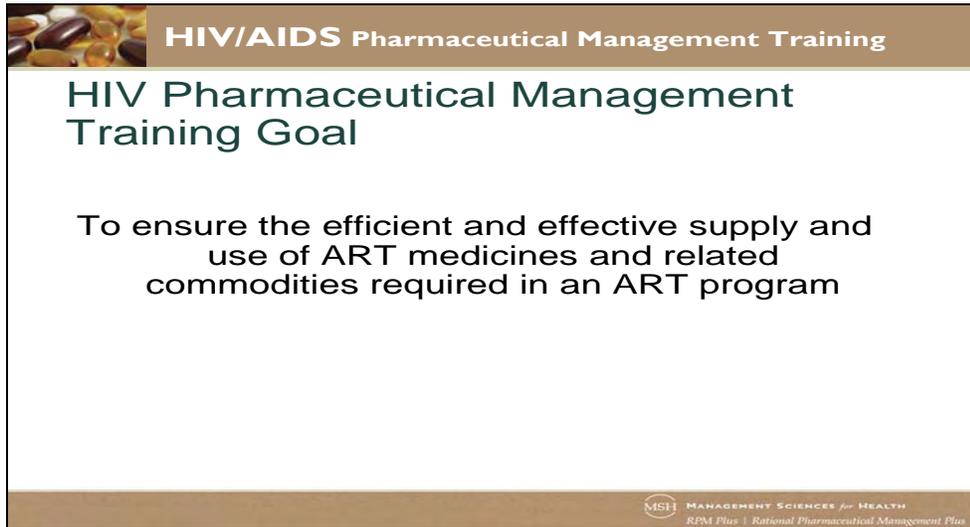
	<p>and promotion of rational drug use</p> <ul style="list-style-type: none"> ✓ Discuss the factors that influence dispensing practices ✓ Describe techniques used in counseling ✓ Identify steps in the patient counseling checklist ✓ Describe steps in institutionalizing counseling in an ART program 	<p>counseling</p> <ul style="list-style-type: none"> ✓ Stigma ✓ Confidentiality 		
Adherence Monitoring	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Explain why adherence is necessary for a successful treatment outcome ✓ Explain factors that affect adherence ✓ Explain the multidisciplinary roles in adherence monitoring ✓ Apply methods used for adherence measurement 	<ul style="list-style-type: none"> ✓ Adherence definition ✓ Consequences of non-adherence on the treatment outcome ✓ Factors associated with non-adherence ✓ Multidisciplinary roles in monitoring adherence (doctors, social work officers, nurses, and pharmacy staff) ✓ Methods to measure adherence 	Discussion/ Examples/ PPT/case studies	30 to 45 min
ARV Drug-Drug Interactions	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Explain the importance of monitoring ART patients for drug interactions ✓ Explain basic concepts regarding ART drug interactions ✓ Identify examples of common drug interactions 	<ul style="list-style-type: none"> ✓ Drug interactions defined ✓ Consequences of drug interaction on the patient ✓ Drug metabolism and interactions ✓ Drug interaction and CYP450 enzyme ✓ Reference material to investigate drug interaction ✓ In-country procedure to handle a serious drug interaction cases 	Discussion/ case studies /Examples/PPT	30 to 45 min

Annex 2. Session Plan

	<p>involving ART</p> <ul style="list-style-type: none"> ✓ Use reference materials to investigate potential or actual drug interactions ✓ Discuss what to do if a drug interaction is suspected 			
ART and Children	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Explain routes of infection, diagnosis, and disease progression in children ✓ Recognize pharmaceutical challenges in pediatric ART and understand measures for disease prevention and treatment recommendations ✓ Build participant skills to calculate pediatric doses and requirements of ARV 	<ul style="list-style-type: none"> ✓ Natural history of HIV in children ✓ Challenges of pediatric ART in small children: diagnostic and monitoring role of pharmacy staff in the pediatric ART <ul style="list-style-type: none"> ○ Ensuring adequacy of regimen prescribed ○ Ensuring supply of ART commodity ○ Promoting adherence and information management ✓ Overview of international guidelines in ART and post-exposure prophylaxis ✓ Discuss the use of ART after PMTCT ✓ Practical training in dose calculation and counseling 	Discussion/ examples/PPT/ case studies	30 to 45 min
ART and Nutrition	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Describe the effects of HIV and nutrition on one another. ✓ Discuss the impact of ART and nutrition on one another. ✓ Describe special concerns with nutrition and HIV (pregnancy and children) ✓ Discuss pharmacist's role in counseling patients 	<ul style="list-style-type: none"> ✓ HIV affects nutrition and nutrition affects HIV ✓ Determining nutritional needs ✓ Nutritional notes for protease inhibitors, NRTIs, NNRTIs ✓ Special concerns with nutrition and HIV and pregnancy ✓ Special concerns with nutrition and HIV and children ✓ Pharmacy staff's role in nutrition management 	Discussion/ examples/PPT/ case studies	30 to 45 min

	regarding nutrition and facilitation patient access to nutritional products			
Course Related Activities				
Session	Objectives	Brief description of the module's content	Activities	Duration
Monitoring, Training, Planning (MTP)	<p><i>By the end of this session the trainees will be able to:</i></p> <ul style="list-style-type: none"> ✓ Describe the key components of MTP ✓ Identify MTP as a combination of adult learning and managerial strategies ✓ Describe how to use MTP approach of self-initiated, self-planned, self-executed and self-evaluated in improving work skills 	<ul style="list-style-type: none"> ✓ Components of MTP ✓ Flow of MTP activities ✓ MTP's combination of education and managerial strategies ✓ Use MTP to improve pharmaceutical management in health facilities 	Discussion/ examples PPT/ case studies	1hr

ANNEX 3. LOCAL ADAPTATION INTRODUCTION PRESENTATION

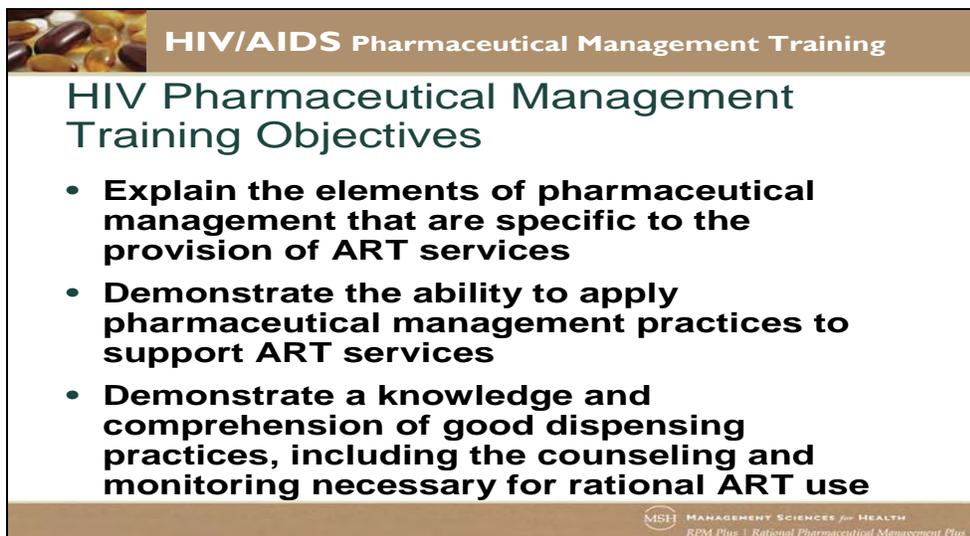


HIV/AIDS Pharmaceutical Management Training

HIV Pharmaceutical Management Training Goal

To ensure the efficient and effective supply and use of ART medicines and related commodities required in an ART program

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HIV/AIDS Pharmaceutical Management Training

HIV Pharmaceutical Management Training Objectives

- **Explain the elements of pharmaceutical management that are specific to the provision of ART services**
- **Demonstrate the ability to apply pharmaceutical management practices to support ART services**
- **Demonstrate a knowledge and comprehension of good dispensing practices, including the counseling and monitoring necessary for rational ART use**

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HIV/AIDS Pharmaceutical Management Training

Training activities program

Activity	Dates
Training materials adaptation workshop	February 2&3
Trainers of National Core group of Trainers workshop	13-14
Training of National Core group of Trainers	15-17
Training of Pharmaceutical Officers (Trainees)	20-24

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HIV/AIDS Pharmaceutical Management Training

Training materials adaptation workshop

- The local adaptation process is an opportunity to *use locally* relevant examples, case studies, protocols, MoHSS ART Guidelines, pharmaceutical services division SOPs, etc to make the training relevant to trainees in Namibia. Therefore adaptors are specifically requested and encouraged to use those local examples where necessary**

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HIV/AIDS Pharmaceutical Management Training

Training materials adaptation workshop -Procedures

- For every Session there will be:
 - Quick review/harmonization of comments on the Session's workbook
 - Updating of the PPT
 - Allocation of time for that session in the session plan
 - Identification of the minimum sets of handouts for that session

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HIV/AIDS Pharmaceutical Management Training

Session Plan

Overview of the Session Plan



HIV/AIDS Pharmaceutical Management Training

Assignments for facilitating: JN/ML

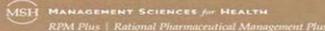
- 2.1: Pharmaceutical Management Cycle in the context of the ART Program in Namibia***
- 3.1: Rational Use of HIV/AIDS related Medicines***
- 3.4: Adherence to ART***
- 3.6: ART Side effects and adverse reactions***



HIV/AIDS Pharmaceutical Management Training

Assignments for facilitating: JL

- 2.2: Inventory management***
- 2.3: Store and facility management***
- 2.6: M&E and PMIS***

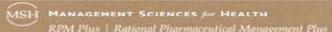




HIV/AIDS Pharmaceutical Management Training

Assignments for facilitating: KFS

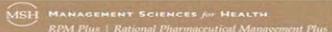
3.2: Dispensing of HIV/AIDS-Related Medicines
3.3: Counseling for ART
3.7: Pediatric ART



HIV/AIDS Pharmaceutical Management Training

Assignments for facilitating: Aina

3.8: Nutrition and HIV/AIDS
4.1: Implementation of ART Pharmaceutical Management Systems in Namibia: Monitoring, Training and Planning

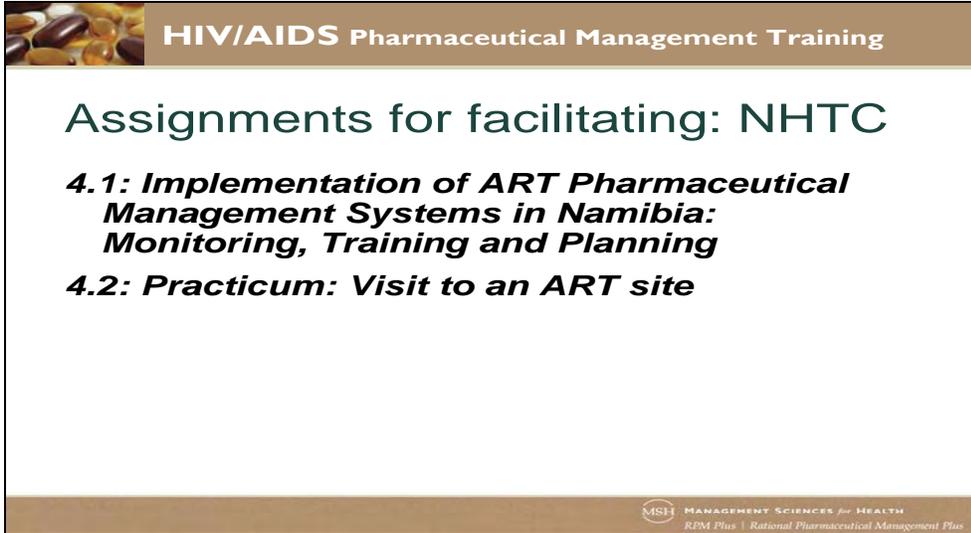


HIV/AIDS Pharmaceutical Management Training

Assignments for facilitating: DP

2.4: Standard Operating Procedures for Pharmaceutical ART
2.5: Quantification of ARVs
3.5: HIV/AIDS related drug-drug interactions





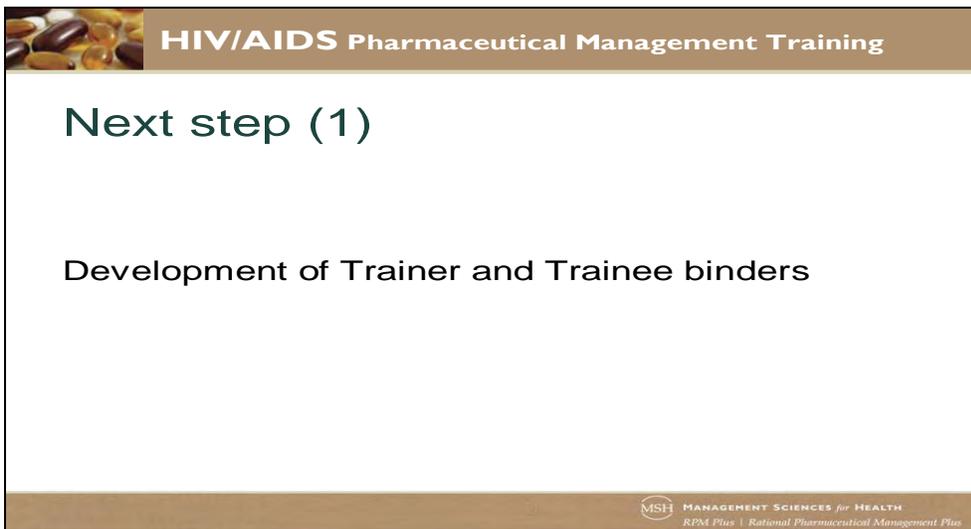
HIV/AIDS Pharmaceutical Management Training

Assignments for facilitating: NHTC

4.1: Implementation of ART Pharmaceutical Management Systems in Namibia: Monitoring, Training and Planning

4.2: Practicum: Visit to an ART site

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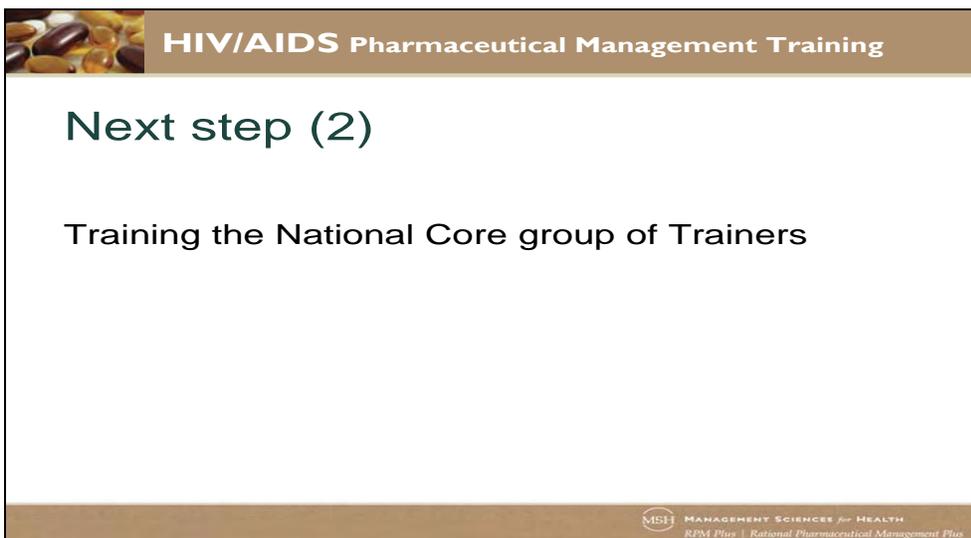


HIV/AIDS Pharmaceutical Management Training

Next step (1)

Development of Trainer and Trainee binders

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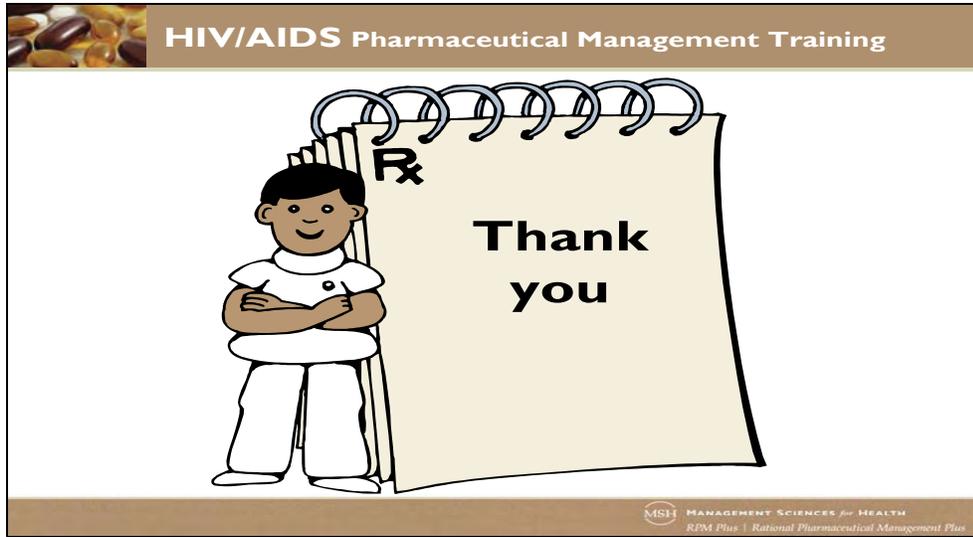


HIV/AIDS Pharmaceutical Management Training

Next step (2)

Training the National Core group of Trainers

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ANNEX 4. LIST OF PARTICIPANTS

List of Participants

<u>No.</u>	<u>Name</u>	<u>Duty station</u>
1	J. Lates	Pharmaceutical Services
2	R. Idris	Pharmaceutical Services
3	D. Sheehama	CMS
4	Monika Ilonga	CMS
5	Elina Veijo	CMS
6	Mulenga Lwansa	Windhoek Central Hospital
7	Jackie Mlambo	Katutura State Hospital
8	Akufuna Inyambo	Windhoek Central Hospital
9	Kennedy Kambyambya	Erongo
10	Otto Tuyeni	Swakopmund Hospital
11	O.C. Udeagha	Walvis Bay Hospital
12	Nico Rutjani	Omaruru Hospital
13	Nickson Muwira	St. Mary's Hospital Rehoboth
14	Andy Anderson	Karas
15	S. O. Eixas	Keetmanshoop Hospital
16	J. Naobeb	Luderitz Hospital
17	Nobetsuthu Sibanda	Katutura State Hospital
18	Akiza Kamuzora	Katutura State Hospital
19	Loide Amukwa	Katutura Health Centre
20	Floriana Kaifuana	Gobabis Hospital
21	Arthur Makaza	Otjiwarongo Hospital
22	G. Mwazi	Okahandja Hospital
23	R. Kalimbo	Grootfontein Hospital
24	A. V. Muti	Okakarara Hospital
25	P. Githendu	Special Programs
26	Emelys Kawerama	NHTC
27	Hiskia Lea-Glenda	NHTC
28	Frieda Katuta	NHTC
29	Margaret Ngororo	Pharmaceutical Services
30	Dawn Pereko	MSH/RPM Plus
31	Laila Akhlaghi	MSH/RPM Plus
32	Jude Nwokike	MSH/RPM Plus

ANNEX 5. TRAINING AGENDA

HIV/AIDS Pharmaceutical Management Training February 20–24, 2006 Agenda

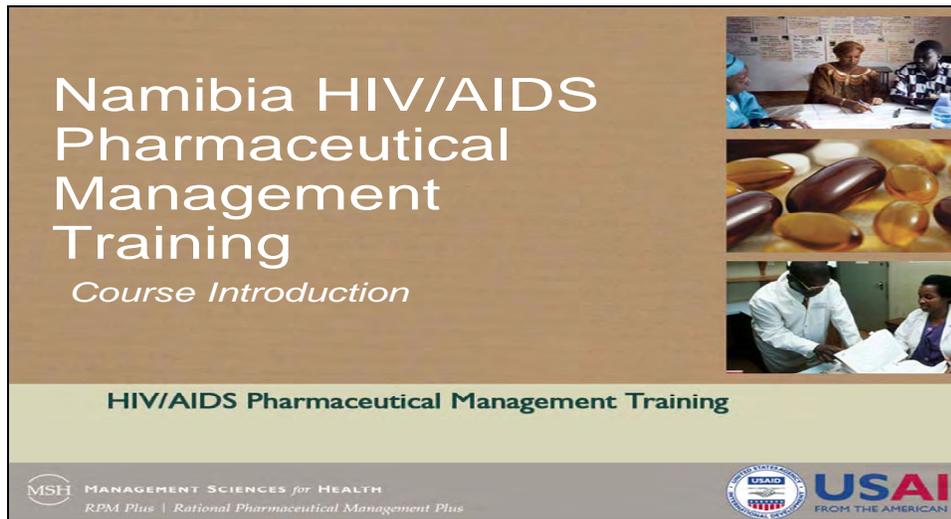
Time	Session	Facilitator(s)
Monday 20th		
14h00 – 14h30	Official Opening	MoHSS Representative, Laila Akhlaghi
14h30-15h00	Session: Course Introduction (Aims and Objectives)	Laila Akhlaghi
15h00 – 15h30	Pre-test	Laila Akhlaghi
15h30 - 16h00	Session 1.1: Overview of the HIV/AIDS Situation in the World and in country	Emelys Kawerama
16h00 – 16h30 (30min)	Break	
16h30 – 18h00	Session 1.2: <i>HIV/AIDS</i>	Hiskia Lea-Glenda Mulenga Lwansa
18h15 – 19h00	Coffee Break / Process Review Meeting for Facilitators	
Tuesday 21st		
8h00 – 9h30	2.1 <i>Pharmaceutical Management Cycle in the Context of the ART Program In Namibia</i>	Mulenga Lwansa, Rafiu Idris
9h30 – 11h00	2.2 <i>Stock Management (first and second sub-sessions)</i> 2.2 <i>Stock Management (third ,fourth, and fifth sub-sessions)</i>	Dawn Pereko
11h00 – 11h15 (15 min)	Break	
11h15 - 12h45	2.3 <i>Store and Facility Management</i>	Mulenga Lwansa
12h45 – 13h45 (60 mins)	Lunch	
13h45 – 16h15	2.4 <i>Standard Operating Procedures for Pharmaceutical ART</i>	Rafiu Idris, Dawn Pereko
16h15 – 16h30 (15min)	Break	

Time	Session	Facilitator(s)
16h30 – 17h30	2.6 Monitoring and Evaluation and Pharmaceutical Information System (M&E and PMIS) to be continued	Rafiu Idris
18h00 – 19h00	Coffee Break / Process Review Meeting for Facilitators	
Wednesday 22nd		
8h00 – 9h30	2.6 Monitoring and Evaluation and Pharmaceutical Information System (M&E and PMIS) continued	Rafiu Idris
9h30 – 10h30	2.5 Quantification of ARVs	Laila Akhlaghi
10h30 – 11h00 (30 min)	Break	
11h00 – 12h15	2.5 Quantification of ARVs	Laila Akhlaghi
12h15 – 13h15	3.1 Rational Use of HIV/AIDS-Related Medicine	Mulenga Lwansa, Jennie Lates
13h15 – 14h15 (60 min)	Lunch	
14h15 – 15h45	3.2 Dispensing of HIV/AIDS-Related Medicines	Jennie Lates
15h45 – 16h00 (15 min)	Break	
16h00 – 17h30	3.3 Counselling for ART	Laila Akhlaghi, Jennie Lates
17h30 – 18h00	Coffee Break / Process Review Meeting for Facilitators	
Thursday 23rd		
8h00 – 9h30	3.4 Adherence to ART	Jude Nwokike
9h30 – 10h30	3.5 HIV/AIDS-Related Drug Interactions	Dawn Pereko
10h30 – 11h00 (30 min)	Break	
11h00 – 13h00	3.6 ART Side Effects and Adverse Reactions	Jude Nwokike
13h00 – 14h00 (60 min)	Lunch	
14h00 – 15h00	3.7 Pediatric ART	Emelys Kawerama
15h00 – 16h00	3.8 Nutrition and HIV/AIDS	Hiskia Lea-Glenda

Annex 5. Training Agenda

Time	Session	Facilitator(s)
16h00 – 16h15 (15 min)	Break	
16h15 – 17h00	4.1 Implementation of ART Pharmaceutical Management Systems In-Country: Monitoring, Training, and Planning (MTP)	Laila Akhlaghi
17h15 – 18h00	Coffee Break / Process Review Meeting for Facilitators	
Friday 24th		
8h00 – 10h30	4.1 Implementation of ART Pharmaceutical Management Systems In-Country: Monitoring, Training, and Planning (MTP)	Laila Akhlaghi
10h30 – 11h00	Break	
11h00 – 12h00	Workshop Closure	MoHSS Representative, USAID Representative, Jude Nwokike
12h00 – 12h30	Post-test	Laila Akhlaghi
12h00 – 13h00	Course Evaluation	Laila Akhlaghi
13h00 – 14h00 (60 min)	Lunch	
14h00 – 15h00	Course Recap Meeting with Facilitators	

ANNEX 6. COURSE INTRODUCTION



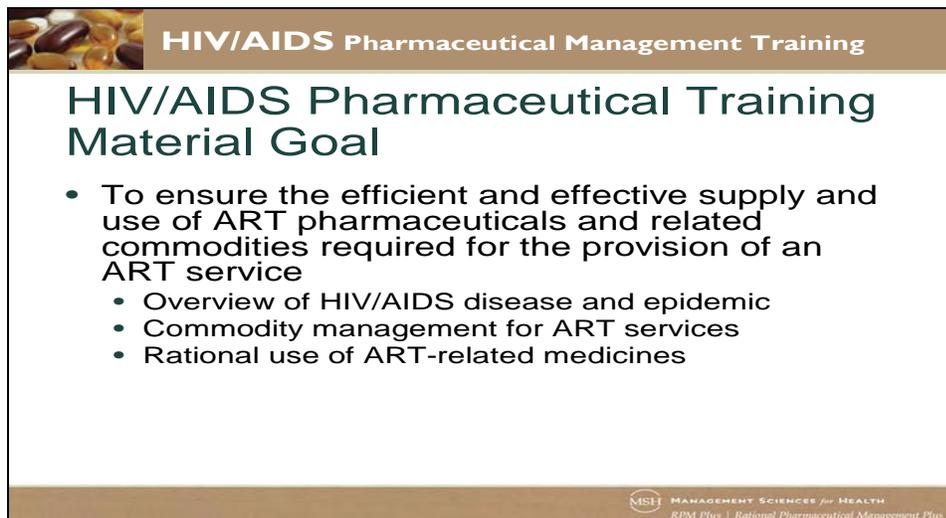
Namibia HIV/AIDS Pharmaceutical Management Training

Course Introduction

HIV/AIDS Pharmaceutical Management Training

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USAID FROM THE AMERICAN PEOPLE

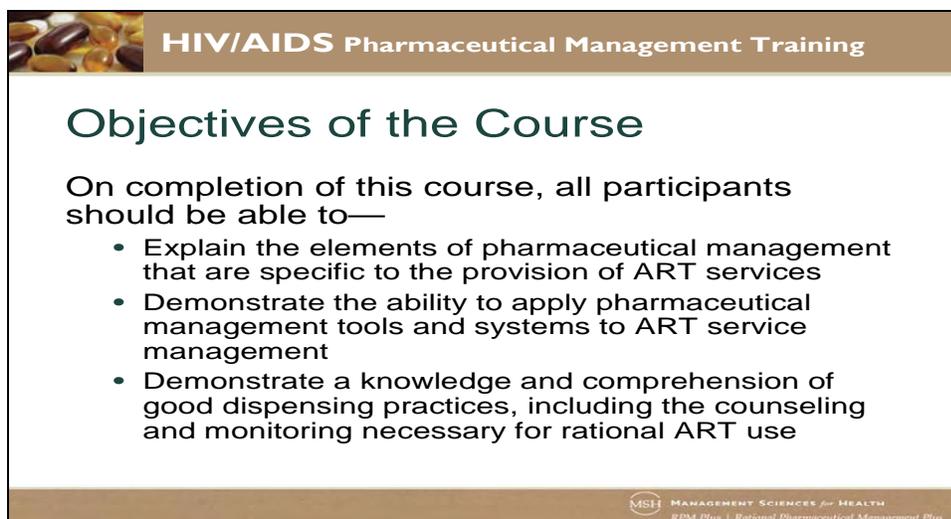


HIV/AIDS Pharmaceutical Management Training

HIV/AIDS Pharmaceutical Training Material Goal

- To ensure the efficient and effective supply and use of ART pharmaceuticals and related commodities required for the provision of an ART service
 - Overview of HIV/AIDS disease and epidemic
 - Commodity management for ART services
 - Rational use of ART-related medicines

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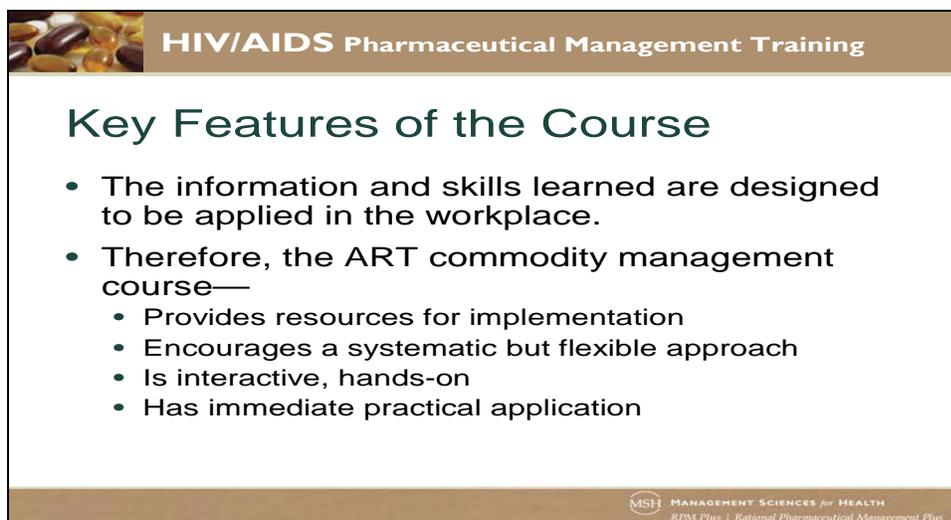
HIV/AIDS Pharmaceutical Management Training

Objectives of the Course

On completion of this course, all participants should be able to—

- Explain the elements of pharmaceutical management that are specific to the provision of ART services
- Demonstrate the ability to apply pharmaceutical management tools and systems to ART service management
- Demonstrate a knowledge and comprehension of good dispensing practices, including the counseling and monitoring necessary for rational ART use

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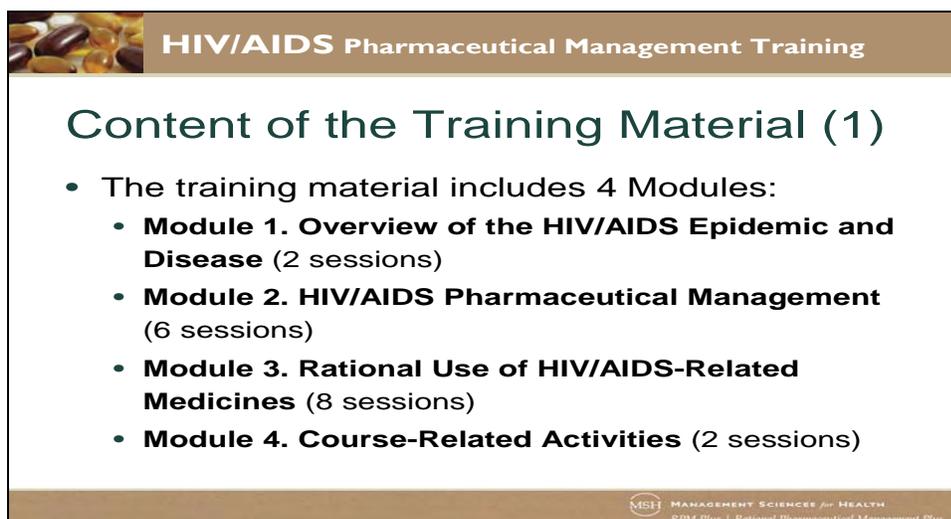


HIV/AIDS Pharmaceutical Management Training

Key Features of the Course

- The information and skills learned are designed to be applied in the workplace.
- Therefore, the ART commodity management course—
 - Provides resources for implementation
 - Encourages a systematic but flexible approach
 - Is interactive, hands-on
 - Has immediate practical application

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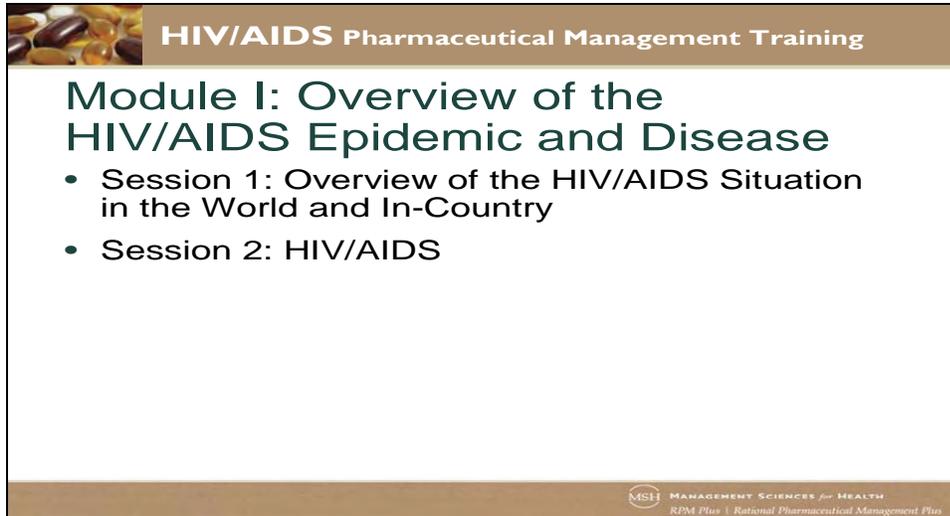


HIV/AIDS Pharmaceutical Management Training

Content of the Training Material (1)

- The training material includes 4 Modules:
 - **Module 1. Overview of the HIV/AIDS Epidemic and Disease** (2 sessions)
 - **Module 2. HIV/AIDS Pharmaceutical Management** (6 sessions)
 - **Module 3. Rational Use of HIV/AIDS-Related Medicines** (8 sessions)
 - **Module 4. Course-Related Activities** (2 sessions)

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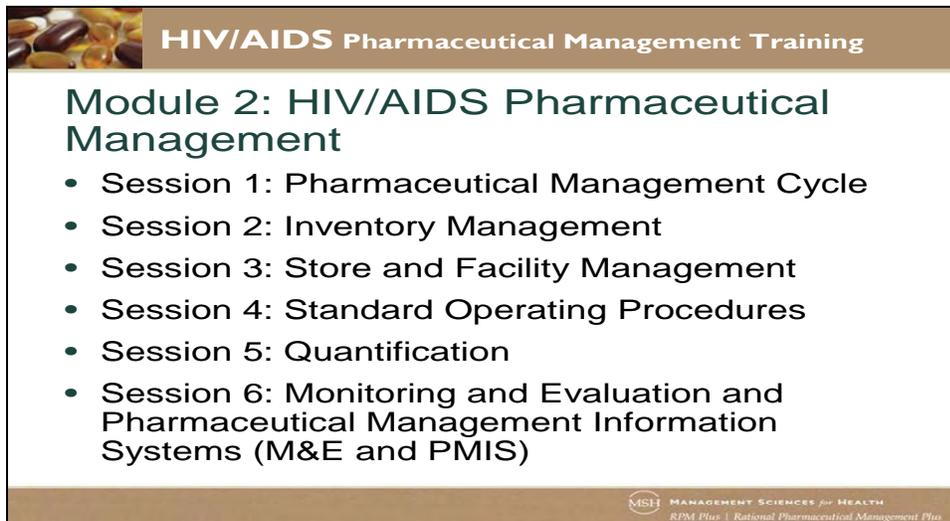


HIV/AIDS Pharmaceutical Management Training

Module 1: Overview of the HIV/AIDS Epidemic and Disease

- Session 1: Overview of the HIV/AIDS Situation in the World and In-Country
- Session 2: HIV/AIDS

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HIV/AIDS Pharmaceutical Management Training

Module 2: HIV/AIDS Pharmaceutical Management

- Session 1: Pharmaceutical Management Cycle
- Session 2: Inventory Management
- Session 3: Store and Facility Management
- Session 4: Standard Operating Procedures
- Session 5: Quantification
- Session 6: Monitoring and Evaluation and Pharmaceutical Management Information Systems (M&E and PMIS)

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HIV/AIDS Pharmaceutical Management Training

Module 3: Rational Use of HIV/AIDS-Related Medicines

- Session 1: Rational Use of HIV/AIDS-Related Medicines
- Session 2: Dispensing of HIV/AIDS-Related Medicines
- Session 3: Counseling for ART
- Session 4: Adherence to ART
- Session 5: HIV/AIDS-Related Drug-Drug Interactions
- Session 6: ART Side Effects and Adverse Reactions
- Session 7: Pediatric ART
- Session 8: Nutrition and HIV/AIDS

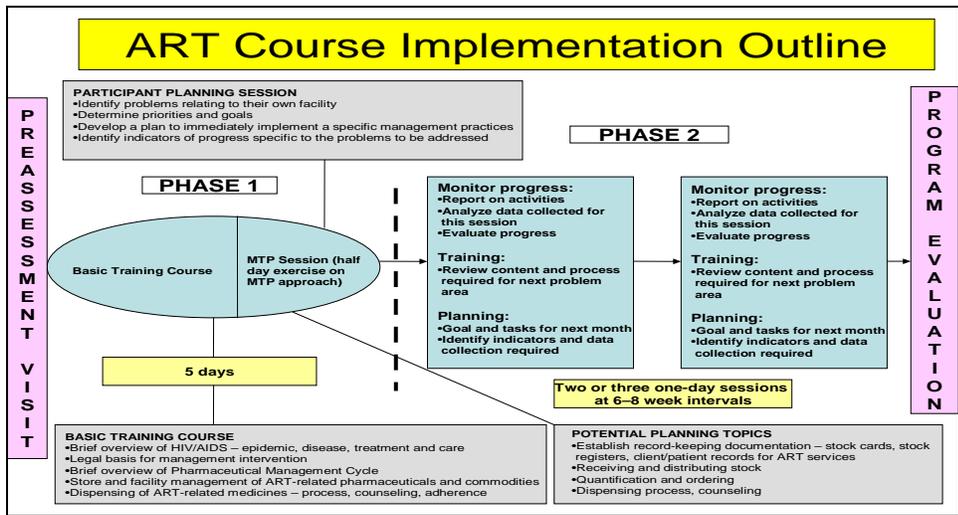
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HIV/AIDS Pharmaceutical Management Training

Module 4: Course-Related Activities

- Module 4, Session 1: Implementation of ART Commodity Management Systems In-Country: Monitoring, Training, and Planning (MTP)**
 - presents a methodology to improve ART commodity management using the MTP process. This process offers an approach that places the tools and responsibility for problem solving in the hands of local staff. The staff learns to mobilize their own resources, carry out the skills-building program, and improve the management of medicines in their own facility.

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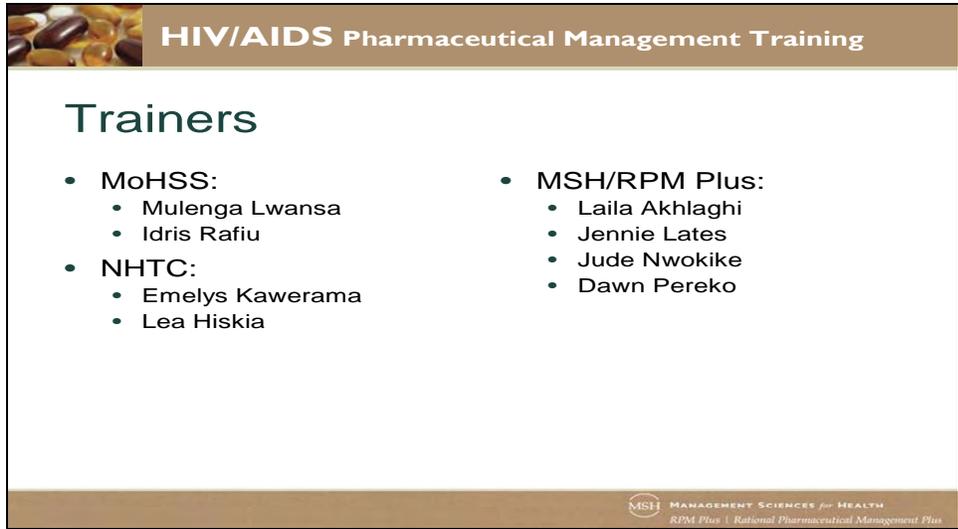


HIV/AIDS Pharmaceutical Management Training

Training Materials

- Power point presentations
- Handouts
 - Reference materials
 - Case studies and exercises
 - SOPs

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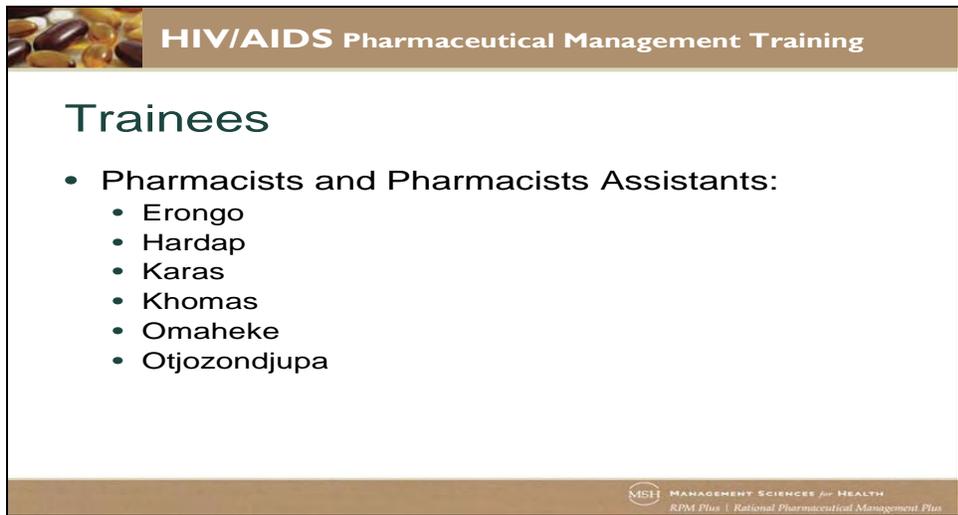


HIV/AIDS Pharmaceutical Management Training

Trainers

- MoHSS:
 - Mulenga Lwansa
 - Idris Rafiu
- NHTC:
 - Emelys Kawerama
 - Lea Hiskia
- MSH/RPM Plus:
 - Laila Akhlaghi
 - Jennie Lates
 - Jude Nwokike
 - Dawn Pereko

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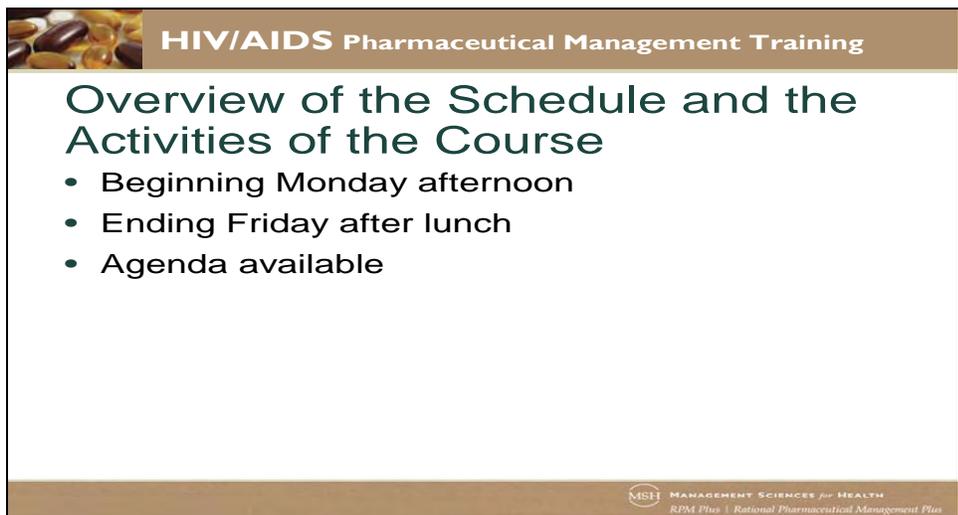


HIV/AIDS Pharmaceutical Management Training

Trainees

- Pharmacists and Pharmacists Assistants:
 - Erongo
 - Hardap
 - Karas
 - Khomas
 - Omaheke
 - Otjozondjupa

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HIV/AIDS Pharmaceutical Management Training

Overview of the Schedule and the Activities of the Course

- Beginning Monday afternoon
- Ending Friday after lunch
- Agenda available

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HIV/AIDS Pharmaceutical Management Training

Miscellaneous

- Ground rules
 - Cell phone use...
- Evaluations
 - Session
 - Overall course
- House-keeping
- Parking questions

ANNEX 7. COURSE EVALUATION

Question	M1S1	M1S2	M2S1	M2S2	M2S3	M2S4	M2S5	M2S6	M3S1	M3S2	M3S3	M3S4	M3S5	M3S6	M3S7	M3S8	M4S1
	<i>(Overall view of HIV/AIDS)</i>	<i>(HIV/AIDS)</i>	<i>(Pharm materia)</i>	<i>(Inventory man...)</i>	<i>(Store & Fr...)</i>	<i>(SOPs for ART)</i>	<i>(Quantification of ARV)</i>	<i>(M & E, PMIS)</i>	<i>(Rational use of ARV)</i>	<i>(Dispensing ARV)</i>	<i>(Counseling for ART)</i>	<i>(Adherence to ART)</i>	<i>(HIV/AIDS related Drug interactions)</i>	<i>(ART Side & ADR)</i>	<i>(Peds ART)</i>	<i>(Nutrition & HIV/Aimc)</i>	<i>(MTP)</i>
1. Overall rating of the session:	3.7	2.8	3.5	3.6	4.1	3.7	3.7	3.2	3.8	3.7	3.9	4.1	4.0	4.3	3.5	3.0	3.9
2. To what extent were the session's objectives met?																	
a	3.5	2.7	3.6	3.6	4.1	3.6	3.8	3.2	3.6	3.8	3.7	4.0	3.8	4.4	3.3	3.1	3.9
b	3.6	2.9	3.5	3.7	3.7	3.6	3.8	3.2	3.7	3.7	3.8	3.9	4.0	4.1	3.3	3.1	3.8
c		2.9		3.6	3.6	3.6	3.8	3.1	3.7	3.8	3.7	3.8	3.8	4.2	3.4	3.1	3.8
d				3.7		3.5	3.8	3.1	3.5	3.8	3.7	4.1	3.9	4.1	3.2	3.0	3.9
e				3.7		3.6		3.1	3.6	3.8		4.1	3.9	4.1			
f												4.0					
g												4.0					
h												3.9					
3. Presented the session clearly an explained concepts sufficiently	3.7	2.8	3.6	4.0	4.1	3.8	4.0	2.7	3.8	4.2	3.9	4.2	3.8	4.1	3.6	2.9	4.1
4. Content and format of the session																	
a. How well were the topics covered	3.4	2.9	3.7	3.8	3.9	3.7	3.8	3.0	3.6	4.1	3.9	4.3	3.8	4.0	3.4	2.9	3.9
b. Was the time allocated to the session adequate?	3.5	2.9	3.4	3.7	3.6	3.4	3.2	3.1	3.6	3.6	3.9	4.0	3.9	3.8	3.1	3.1	3.6
c. How effective was the lecture?	3.4	2.7	3.7	3.8	4.1	3.6	3.8	3.3	3.7	3.9	3.7	4.3	3.8	4.1	3.4	2.8	3.9
d. How effective were the case studies (if any)				3.8	4.1	3.6	3.8	3.4	3.6	3.7	4.0	4.1	4.0	4.1	3.4	2.9	4.1
e. How effective were the exercises and discussions (if any)					4.0	3.8	3.8	3.7	3.7	3.8	4.1	4.1	3.9	4.0	3.4	3.0	3.9
	3.5	2.8	3.6	3.7	3.9	3.6	3.7	3.2	3.7	3.8	3.9	4.1	3.9	4.1	3.4	3.0	3.9

ANNEX 8. FOLLOW-UP ADAPTATION/LESSONS LEARNED

1. It is recommended that the training materials should be thoroughly read by all trainers.
2. Printing check list should be part of the introduction;. If a new printing guideline is to be developed it should be adapted from one in the annex; this needs to be in MS-Word.
3. Pre- and post-tests were adapted to reflect local realities. This is very essential.
4. Session evaluation was adapted to include questions about—what did you not understand? And any other comments? (Guidelines should be given for evaluations such as to have each session on one page so that it can be submitted after each session or at the end of the day).
5. Evaluation and pre and post-test analysis worksheets were created in Excel. It is recommended that one worksheet should be created for the overall course evaluations.
6. Facilitators such not putting too many animations in the slide, it takes up too much time and can be distracting. Some of it was nice, but too many can add to the time of the presentation, if using animation, limit to the “appear” option.
7. Describe room set-up and reasons why it was chosen.
8. When printing presentation, limit to three slides on a handout. Also, when using a black/white printer, select color instead of grayscale as pictures print better this way.
9. If making changes to the notes and slides, they should go through editing after adaptations.
10. All PowerPoints for the day need to be placed on the computer attached to the projector, so there is no time wasted in trying to find them.
11. Dedicate some time for re-cap at the beginning of each day in the agenda. Give instructions to facilitators on how to do this and how much time it should take.
12. Discuss the idea of limiting questions to a certain point in the presentation (parking lot) and setting a time limit.
13. Facilitators should be familiar with the handouts and to be able to refer to them during the session.
14. Make sure to have calculators, name tags, notepads and pens available for trainers.
15. Include a copy of Namibia SOPs in the back of the binder.
16. Add table of contents on the first page of the binder.
17. Get the MS-Word version of the handouts and number them (this is particularly necessary for the handouts in PDF format), so they can be referred to by numbers.

18. Changes in the exercises, case studies and handouts were not always reflected in the trainer's notes and should be.
19. New introductory presentation; revise to include what they are getting in the binder and how it is organized (PowerPoint slides and then handouts).
20. Trainers should use trainer's notes when presenting as a tool and highlight their discussion questions so as not forget them.
21. Add into the presentations, that formatting of slides should not be changed; some colors were changed that were not concurrent with the format of the training.
22. Training needs to be full five days, or more materials needs to be cut, or better time management.
23. Parking lot of questions needs to be used more to limit the time.
24. Not all pre-test questions and answers are a part of the notes for trainers, and when they are, they should be bolded to stand out.

M1 S1

1. Some page breaks need to be inserted into the trainer notes.

M1 S2

1. The slides after the various sections of JJ's stories may confuse/be too difficult to challenge lower cadre of students. May be adequate for the pharmacists/regional pharmacists. Consider changing these slides to say this story discusses issues that we will learn about. Not as questions, but as issues.
2. Enzymes question too difficult for the pharmacist assistants.
3. Change all QD to OD in slides. (QD is used in the stated for once a day, but is confused with QID "four times a day"; in Africa, best to use OD).
4. Change all lbs. in JJs story to kg or place kg first and lbs. in parentheses in the story.
5. Need a slide on how to put ART together; or what makes and ART: 2 NRTI's + 1 NNRTI or 1 PI +/- ritonavir. A slide like this can be borrowed from the quantification course. There is nowhere in the slides where there is a discussion on what kinds of combinations are appropriate. This needs to be included to emphasize the point that not any three ARVs can be put together.
6. Some of the hand-out from AIDSinfo are not appropriate; I think these might be a bit dated. I think there can be something better to add. Too many ARVs not being used in the developing

country context and 2 ARVs that are not used at all (old/off the market), consider taking out drugs in development or no longer in use like hydroxyurea.

M2 S1

1. Reminder that this session is meant to be an overview. Some of the slides should not be gone into detail: They will be covered in other sessions.
2. Arrow missing in the Distribution Cycle slide.

M2 S2

1. Change all inventory management to stock management.
2. Insert slides on the exercise; so when summarizing each step of the quantification, it is also posted on the PowerPoint.
3. Re-do the quantification answers for the trainer.
4. Insert Namibia stock card.
5. Group exercise needs longer period of time.
6. Add discrepancy form into the handouts.
7. May need to increase more time, due to increased time needed for exercise.

M2 S3

1. Revised presentation put back two slides (make sure to get this version).
2. Find a picture of a good example for Slide 10 (“how to organize the stock”) and replace one of the pictures.
3. Take out exercise on page 52 in trainers’ notes.
4. Place Namibia policy on use of expired products in trainer’s notes.

M2 S4

1. Presentation was revised; confirm the final version of the presentation.
2. Changes made into the trainer’s notes should be accepted (or latest copy reviewed), review copy was printed for students.

3. Not sure if development of SOPs is supposed to be part of the presentation; make decision with adaptation committee if this should be kept.
4. Include second SOP in the handouts (a second SOP was referred to, but was not handed out, or included in the handouts originally).
5. Include exercise in the binder (different action/SOP) for each group.

M2 S4

No suggestions

M2 S5

1. Quantification exercise took 2.5 hours—may take a little less with facilitators for each table/group; Lecture took 1:15min without pediatric exercise, adult exercise was 15 minutes.
2. Monthly report will need to be updated, once it has been reviewed as per M2 S6.

M2 S6

1. SOPs and monthly report activity needs to be further reworked; exercise should include background information.
2. Case study went very well.

M3 S1

1. Blue circles in slide 16 are too dark, change back to original color (as well as slide 17, all slides have gone through communications and have been formatted to match overall format of the course, animation can be added, but formatting should stay as was).
2. Not all the questions should be asked to limit the time for this presentation; this is just an overview and other sessions will cover in detail.
3. Case study slide (Namibia-based) has been updated, please insert in final version (change 65 to 130 patients per day).
4. Lecture (slide 1-18 took 1:20 minutes; 19-26 and Q and A took 25 minutes; case study took 15 minutes; total session took more than 2 hours).

M3 S2

1. Duration: 1:15 minutes.
2. Add new case studies to slides and handouts.

M3 S3

1. Counseling check list is the what, should develop a how table to go with it, so each item has an example of how.
2. Counseling role-plays should be adapted from adherence, can take out the dispensing and record-keeping and rework the words for local context.

M3 S4

1. Rosa's story, part 1, is not appropriate because MEMS caps are not available in Namibia. If it is to be used, the MEMS intervention should be changed to some other intervention. Rosa's story, part 2, is also not appropriate. It contains beepers and discussion over the phone. They should be adapted for local context. Are there pagers to be given? Are there nutritionists available for referral?
2. Interventions should focus on what the pharmacy staff can actually do themselves, not relying on policy changes and staff resources that might not be available.
3. Second case study was very well; should be formatted to fit with the training notes.

M3 M5

1. Include notes on new slides, and if there is a drug interaction policy in country; get most current presentation.
2. Add new slides into the handouts.
3. Duration, with speed: 50 minutes.

M3 M6

1. Enter symptoms for all side effects and ADRs. Some slides are missing this.
2. Take out medicines/recommendations that are not a part of Namibian guidelines.
3. Accept changes in the notes/delete comments (the notes are still in the review format).
4. Duration: 2:20 with the exercise.

M3 M7

1. Update pediatric percentage rate out of all patients in Namibia.
2. Add to notes that Namibia Institute of Pathology has a PCR machine (slide on diagnosis).
3. Check notes on slide 1; there are two slides here.
4. Add Namibia IPT and co-trimoxazole to the notes and handouts.
5. Calculations example, should be EFV 200mg, bottles of 90.
6. Slide 21 needs to include Namibia recommendations for ART/TB; what do you use if pediatric patient is less than 3 years old?
7. Need to include TB treatment for pediatrics.
8. Needs more time, especially if exercises are to be included.
9. Consider moving counseling slides to the counseling session.

M3 M8

1. Add case study slides back into the presentation. The trainer used it and it doesn't take that much time. It is not an activity, just a story. Case study is not relevant if all the slides on it are taken out.
2. Breastfeeding was covered under pediatrics and the 4 slides should be added to that, since students asked questions under pediatrics, this becomes redundant.
3. Took more than one hour.
4. Animation in slide 12 (Namibia version) covers up the graph.
5. Consider dropping this.

M4 S1

1. Went well, but needs more time.