

Report to the International Medical Corps (IMC)

IMC Georgian Primary Health Care Project

Training Program for Primary Care Doctors in Western Georgia

Dr. Irina Karosanidze

**Honorary Overseas GP tutor at Themes Postgraduate Medical and Dental Education
University of London
Director of Family Doctors Training Center**

June 2000

**Family Doctors Training Center
51 Javakhishvili street
Tbilisi
Georgia
Tel:+995(32)959866**

Contents		Page
	Abbreviations and Acronyms	2
	Introduction	3
	Acknowledgements	4
1.	Implementation of the training program	5
	Evaluation of the training program	
2.	Assessment	6
3.	Methodology for an assessment	6
4.	Conclusions	9
5.	Evaluation the course by the trainees	10
Annexes		
1.	Schedule of educational sessions undertaken by trainers ..	11
2.	Abstracts	12
3.	Results of pre and post testing	16
4.	The final marks	34
5.	Results of course evaluation (trainees' survey)	39

Abbreviations and Acronyms

IMC	International Medical Corps
USAID	United States Agency for International Development
SCF	Save the Children Federation
GAI	Georgia Assistance Initiative
FDTC	Family Doctors Training Center
PHC	Primary Health Care
MCQ	Multiple choice question
MEQ	Modified essay question
OEQ	Open ended question
GP	General practitioner
STD	Sexually Transmitted Diseases
BEOC	Basic Essential Obstetrics care

Introduction:

International Medical Corps(IMC) is financed by the United States Agency for International Development (USAID) through umbrella grant to Save the Children Federation (SCF) under the Georgia Assistance Initiative(GAI) to implement Primary Health care Project in 3 regions of Western Georgia(Guria, Imereti, Samegrelo).

The project goal is to improve health status of population in selected target communities in Western Georgia, through improved access to, utilization and quality of Primary Health care services and improved capacity of local communities to participate and make informed health decisions.

In cooperation with FDTC, IMC has designed and implemented training program for primary care doctors in Western Georgia.

The aim of the program was to improve the quality of services provided by PHC doctors with focus on control of common infectious and non-infectious diseases among the most vulnerable groups in aforementioned communities.

This training has been tailored to existing needs and is consistent with the Georgian Ministry of Health strategy on primary health care in Georgia.

Acknowledgements

FDTC and its representatives would like to acknowledge the following for their considerable help and assistance during the training program.

- (a) Mr. Naim Ismail**
Country director of IMC

- (b) Mr. Mamuka Jibuti**
Mrs. Nino Chelidze
Representatives of the central and the regional offices of IMC

- (c) Dr. Tamar Gabunia**
Honorary Overseas GP tutor at Themes Postgraduate Medical and Dental Education
Universtity of London
Consultant in Family Medicine at FDTC

- (d) All GP trainers, who are Honorary Overseas GP tutor at Themes Postgraduate Medical**
and Dental Education University of London, involved in the training program

Eteri Jajanidze
Natela Jajanidze
David Kuchava
Marekhi Cherkesishvili
Luiza Shalamberidze
Marina Shikhashvili
David Gogoladze
Tamar Shanidze
Maya Jojishvili
Nino Kurashvili
Nato Shengelia
Mariam Supatashvili

Implementation of the training program

1. The training program for PHC doctors took place from 18th April 2000 until 9th June 2000.
2. The training course was run for 16 days. The program consisted of an eight-week period, but with a week of training for each doctor altering with a week of work in his or her respective ambulatory care setting.
3. The curriculum has been divided into four weeks with Monday of each week used for travel and class preparation, and the schedule was organized as outlined below.(table1)

Table1

Schedule for 16-day training sessions

Topics	Duration	Target Beneficiaries
Control of Common infectious Diseases	32hours	127doctors
Chronic Diseases	32hours	
RH/FP	32hours	
STD/HIV	28hours	
BEOC	8 hours	
Total training 16 with 8 hours in each hours=128hours		

4. 127 trainees were trained within this program.
5. 14 GP trainers were taken part in this training. Training schedule, where the names of trainers and the place of training are indicated is presented in annex1.
6. Training program's objectives, outlines of content, methods of assessment are located in the annex 2.
7. The educational program has been fully implemented, and it is reasonable to mention here, that the trainees' commitment and enthusiasm to learn is remarkable.
8. Training was based on methodology developed for small group teaching. Trainers conducted case based teaching seminars with the trainees, spent tutorial time with them in a review their individual learning needs.
9. The pre and post-testing in each module were undertaken.
10. In order to identify trainee's satisfaction with training program trainees survey was carried out.
11. As the training program has been completed the course evaluation has been conducted. The outcomes were evaluated by analyzing the results of the assessment (pre post=testing).

Evaluation:

I. Assessment:

(a) The purpose of the assessment:

The training program for PHC doctors includes four modules. The assessment, which was carried out on a regular basis within the program, has been an integral part of the training. The assessment-pre-test before starting and post-test after completing each module has been conducted.

The purpose of this assessment has been as follows:

The purpose of pre-tests:

- Judging mastery of essential skills and knowledge
- Diagnosing trainees difficulties

The purpose of post-tests:

- Measuring improvements over time;
- Ranking trainees;
- Evaluation the teaching methods
- Evaluation the effectiveness of the course;
- Motivating trainees to study;

Methods used for an assessment:

1. Multiple choice questions(MCQ simple(module 2 post test) and multiple type)
2. Open ended questions
3. Modified essay questions

(b) Methodology for an assessment:

- ❑ In order to assess trainees essential knowledge, patient management and problem solving skills open ended questions, MCQs and MEQ were used for pre and post testing. The assessment papers for pre and post testing in first module were the same. There were some reasons for using same tests in pre and post-testing.
 - Our intention was to make the assessment less stressful for trainees.
 - Most of the trainees have had no training (accordingly any assessment) since their undergraduate education so it is high likely that this assessment may cause an overall anxiety that might affect outcomes.
 - It was very important to make sure that the trainees properly understood the purpose of the assessment and acquired certain skills for answering of MCQs and MEQs.
- ❑ The tools used for the pre and post testing in modules 2,3,4 were the same but the content of assessment papers was different. It has to be considered that tests used for pre and post testing

were equivalent in term of difficulty (the difficulty index for each question previously was calculated). To make the content different gives us an opportunity to avoid any uncertainty which might affect test's validity and reliability (The chance for trainee to remember and to answer questions correctly without good understanding of the meaning is quite high when the test is used repeatedly).

- MCQs used in pre and post testing were equally difficult and because of it for ranking trainees according to their marks the following standards were set.

marks(correct answers)	>60%	60-80%	>80%
Trainees knowledge	POOR	SATISFACTORY	GOOD

- MEQ was used to assess how trainees can apply their knowledge in practice, how good are their patient-management skills and problem solving ability. The trainee was expected to demonstrate knowledge of diagnosis, management and where appropriate, the prevention of diseases of importance in primary health care.
- The MEQ has been designed to assess in a variety of ways the skills of the trainee in:
 1. History taking and information gathering;
 2. Selecting examinations using investigations and procedures
 3. Recording information
 4. Interpreting information
 5. Problem definition and hypothesis formation
 6. Early diagnosis
 7. Defining the range of intervention
 8. Selecting therapy
 9. Providing continuing care
 10. Interventive and preventive medicine in relation to patient, the family and the community
 11. The organization of the practice where he/she works

Methodology for marking MEQ and open-ended questions:

BAD	0-	No mention is made at all, even by implication, of the particular construct. The trainee seems not to have considered it.
	1-	The trainee appears to acknowledge the construct's existence by implication or in passing, but does not develop it to any degree. Its meaning may have been misunderstood, its significance not perceived, or responses to it may be inappropriate.
	2	The construct is explicitly mentioned, but there is little evidence that it is really understood. Discussion may be sketchy or jargon-ridden. Examples may be too few or too non-specific to display an acceptable level of understanding.
SATISFACTORY	3	The construct is clearly formulated and it seems that trainee adequately understands it.
GOOD	4	The trainee clearly demonstrates a better grasp of the construct than most. There is good detail and description, though a few relatively minor points may be omitted.
	5	The trainee shows a superior coverage of the construct, both in principle and in detail. Though not necessarily perfect, consideration of the construct is as good and full as anyone could expect under examination condition

In order to ensure the reliability of MEQ test each paper were marked independently by two trainers. When the difference between their marks was just one, an average figure was calculated. The difference more then one was discussed again and final mark was decided by consensus.

For the final assessment of open-ended questions' paper an average figure from total mark was calculated.

In order to summarize the results of MEQ, MCQ and OEQ papers the following method for calculating the final mark has been developed.

- The marks 1,2 and 3 mean that the trainee's competence is bad, satisfactory and good accordingly.
 - For calculating the final mark the results of each assessment paper have been summarized.
 - For ranking trainees according to their final marks the following standards were set.
- (a) Three tools of assessment were used for pre and post testing of first module. The best result of assessment paper in first module is 9. So the standards were set in accordance with this.

Marks	9-8	7-6	≤5
Standard	GOOD	SATISFACTORY	BAD

(b) The best expected result is 6 in second, third and forth modules. The standards set are as follows

Marks	5-6	4	≤3
Standard	GOOD	SATISFACTORY	BAD

The results of the assessment are attached to this document (see annex 3 and annex 4)

Conclusions:

By analyzing the results of the assessment the following conclusions have been made:

1. Trainee's competence in regard to specific issues discussed within the training program has been raised. Namely **85%** of trainees in first module, **57%** of trainees in second module, **94%** in third module and **67%** of trainees in fourth module have improved their results since pre-testing. (See Annex 4, Table 3)

2. Trainees have improved their technical skills of doing MCQ, MEQ and OEQ papers. Table 2 in annex shows the results of each assessment paper and demonstrates that results since pre-testing in each module have been improved.

3. As it is presented in table 2(Annex 4) the results of post-testing in second module have been improved since pre-testing, however the figures are not very impressive. The results have got worse in 9% and have still been bad in 21% of cases since pre-testing. There should be number of reasons for this.

-Chronic disease management is most important and difficult area of general practice. The time devoted to this module probably was not enough for getting familiar with key issues of this field, particularly for pediatricians. There were approximately 25% of pediatricians among trainees.

-The simple type MCQ paper was used in post-testing of second module. Trainees were not familiar with this tool of assessment as the multiple type MCQ papers were used previously. The different technique for answering probably was the reason for their confusion and making mistakes, even if they knew correct answers.

6. By considering the results of data analyzing in some cases it seems that the training course has had no impact on trainees competence. Namely **15%** of trainees in first module, **33%** of them in second module, **5%** in third and **29%** in fourth modules have reached the same standards in pre and post-testing. (See table 3, Annex 4). It is difficult to judge now what are the reasons for this. Trainer's thought about it consists of number of different aspects. We tried to put it in the following way.

I. The opportunity for the trainers to consider trainee's individual learning needs has been limited. This was due to the following:

(a) Large number of trainees in some groups (9-10)

(b) Few time for arranging tutorials

(c) Mixed groups with Internists and Pediatricians in it. (*Note: It is an important experience on the way of the development of family medicine institution in Georgia but the course was very short for providing a successful cross learning*)

II. Trainees have been selected randomly without going through selection procedures (interview, testing before selection). There was a great difference between trainee's age, their level of competence and ability of learning (implication of social environment on trainees behavior have to be considered).

III. Trainee's willing to learn and to be taught was overwhelming. It is surprising that the 27% of trainees in forth module have reached highest standard in pre-testing. The forth module was focused on STD and BEOC. Most of trainees were not familiar with these problems, as they are internists and pediatricians and are not expected to provide an antenatal care or deal with STD. Despite this the results of pre-testing showed quite high level of trainees competence in this field. We think that it was due to the trainees chance to use handouts, which were given to them previously and to get familiar with the themes, which were planned for teaching in next modules. It seems they used this chance quite successfully.

II. Evaluation the course by the trainees- Results of trainees survey

- (a) The results of trainee's survey are presented in annex 5.
- (b) Most of trainees assessed the course and its key elements such as training curriculum, handouts, cases, pre and posttests, allocation of time as good.(see annex 5 Figures 1. 2. 3. 4)
- (c) Most of the trainees think that the work done by the trainers has been very good.(Annex 5 Figures 1. 2. 3. 4)
- (d) There are some very interesting recommendations presented in questioners, which deserve to be considered in future. (Annex 5 Fig. 5)

Annex1

Schedule of educational sessions undertaken by trainers

	First module	Second module	Third module	Forth module
Chokhatauri	25.04-28.04 M. Jojishvili D. Gogoladze	09.05-12.05. N. Kurashvili M. Cherkezishvili	23.05.26.05. M. Jojishvili N. Shengelia	6.06.-9.06. N. Kurashvili T. Shanidze
Ozurgeti	25.04-28.04 M. Shikhashvili L. Shalamberidze	09.05-12.05. M. Shikhashvili L. Shalamberidze	23.05.26.05. M. Shikhashvili L. Shalamberidze	6.06.-9.06. M. Shikhashvili L. Shalamberidze
Abasha	25.04-28.04 D. Kuchava M. Cherkesishvili	09.05-12.05. D. Kuchava D. Gogoladze	23.05.26.05. D. Kuchava D. Gogoladze	6.06.-9.06. D. Kuchava D. Gogoladze
Chkhorocku	18.04.-21.04. D. Gogoladze M. Cherkezishvili	02.05.-05.05. D. Gogoladze M. Cherkezishvili	16.05-19.05. D. Kuchava M. Cherkezishvili	30.05-02.06. D. Kuchava M. Cherkezishvili
Martvili	18.04.-21.04. N. Kurashvili N. Shengelia	02.05.-05.05. N. Kurashvili N. Shengelia	16.05-19.05. N. Kurashvili D. Gogoladze	30.05-02.06. N. Kurashvili D. Gogoladze
Kutaisi	18.04.-21.04. E. Jajanidze N. Jajanidze D. Kuchava	02.05.-05.05. I. Karosanidze T. Gabunia D. Kuchava	16.05-19.05. E. Jajanidze N. Jajanidze M. Supatashvili	30.05-02.06. I. Karosanidze T. Gabunia M. Supatashvili
Bagdati	18.04.-21.04. M. Jojishvili M. Supatashvili	02.05.-05.05. M. Jojishvili T. Shanidze	16.05-19.05. M. Jojishvili N. Shengelia	30.05-02.06. E. Jajanidze N. Jajanidze
Khoni	25.04-28.04 E. Jajanidze N. Jajanidze	09.05-12.05. I. Karosanidze T. Gabunia	23.05.26.05. E. Jajanidze N. Jajanidze	6.06.-9.06. I. Karosanidze T. Gabunia

Role of primary care in the management of common infectious diseases

Objective:

To clarify the role of primary care in terms of prevention, early diagnosis and treatment of most common and a life threatening infectious diseases such as infectious diarrhoeal diseases, viral hepatitis, tuberculosis and meningococcal infection.

Content:

- Main principles of disease prevention in general practice;
- Role of primary care and primary health care team in the prevention of infectious diseases;
- How to make a diagnosis at an early stage for conditions mentioned above;
- How to develop an action plan when a life threatening infectious condition is suspected;
- Standard treatment schemes for conditions which are possible to manage at primary care level;
- Rational use of antibiotics-The path of least resistance

Methodology:

- Small group teaching;
- Case studies;
- One-to one discussion;
- Short presentations;
- Brainstorming;

Training materials:

- Handouts
- Standard treatment schemes(Infectious diarrhoeal diseases, meningococcal infection, tuberculosis)

Materials have been prepared according to references listed below:

1. Guidelines-summarizing clinical guidelines for primary care, volume 9, October 1999;
2. Treatment of Infectious Diarrhoeal Diseases, 1999 The Norwegian medicine control authority;
3. Rosental Joe, Jeannette Naish, Margaret Lloyd, The Trainee's Companion to General Practice., Edinburgh, London, Madrid, Melbourne, New York and Tokyo. 1994
4. Parveen Kumar&Michael Clark Clinical Medicine., London, Philadelphia, Toronto, Sydney, Tokyo., Third edition 1996.
5. The path of least Resistance, Synopsis, Standing Medical Advisory Committee, Sub-group of Antimicrobial Resistance, UK London 1998

Evaluation plan:

Evaluation will take place at the beginning and after completing of the module (pre-test and post-test)

Time for pre and post-test 60 and 60 minutes

Tool:

- Questionnaire(pre-test 10)
- Multiple Choice Questions(post-test 10)

Continuing care in general practice

Objective:

To describe the ways in which the continuing care for common chronic medical conditions such as CHD, Hypertension and Diabetes should be carried out.

Content:

The main emphasis is made on primary, secondary and tertiary prevention of CHD. This deserves special attention because coronary heart disease is a major cause of mortality, it is potential preventable and the primary health care team can play a key role in its prevention. Hypertension and Diabetes are considered to be major modifiable risk factors for CHD. There are presented clinical guidelines and standard treatment schemes for those medical conditions in the training materials prepared for module 2.

Methodology:

- Small group teaching;
- Case studies (trainees will be encouraged to develop clinical cases from their own working experience);
- Short presentations;
- Brainstorming;
- One-to one discussion;

Training materials:

- Hand out
- Clinical decision trees (Patient with a raised blood pressure, Thresholds for antihypertensive drug therapy, Symptoms of cardiac dysfunction, Symptoms of diabetes, Diagnostic algorithm for suspected heart failure in primary care etc.)
- Standard treatment schemes (Hypertension, Angina, cardiac failure, myocardial infarction before hospitalization, diabetes)

Materials have been prepared according to references, listed below:

1. Guidelines-summarizing clinical guidelines for primary care, volume 9, October 1999;
2. *Parveen Kumar & Michael Clark* Clinical Medicine., London, Philadelphia, Toronto, Sydney, Tokyo., Third edition 1996.
3. *Redbridge & Waltham Forest Clinical Guidelines Steering Group* Management of Hypertension., Autumn 1998
4. *Rosenthal J., Naish J., Lloyd M.*-The Trainee's Companion to General Practice. Edinburg, London, Madrid, Melbourne, New Yourk, Tokio, 1994.

Evaluation:

Evaluation will take place at the beginning and at the end of the module

Time for pre and post-test -60 and 60 minutes accordingly.

Tool:

- Multiple Choice Questions (10 and 10)
- Modified Essay questions (pre-test 1, post-test 1)

Reproductive health

Objective:

This module aims to cover main principles of women's health care in general practice at different stages of their life.

Content:

- Common medical problems related to reproductive health (Menstrual problems, general management of the menopause, hormone replacement therapy)
- Family planning-how to avoid unwanted pregnancy and abortion. Different methods of contraception, its advantages and disadvantages are discussed.
- The screening programme for cervical cancer and a discussion of the current controversies relating to cervical screening are described.

Training materials:

- Hand outs
- Clinical decision trees
- Standard treatment schemes

References:

1. Guidelines-summarising clinical guidelines for primary care, volume 9, October 1999;
2. *Ann McPherson and Deborah Waller, -Women's Health., Oxford general practice series, Fourth Edition 1997*
3. Parveen Kumar & Michael Clark Clinical Medicine., London, Philadelphia, Toronto, Sydney, Tokyo., Third edition 1996.
4. *Collier J.A.B., Longmore J.M., Hodgetts T.J. Fourth Edition 1997- Oxford handbook of clinical specialities*

Methodology:

- Small group teaching;
- Case studies (trainees will be encouraged to develop clinical cases from their own working experience);
- Short presentations;
- Brainstorming;

Evaluation:

Evaluation will take place at the beginning and at the end of the module

Time for pre and post test- 60 and 60 minutes

Tool:

- Multiple Choice Questions (10 and 10)
- Modified Essay questions (pre-test 1 and post-test 1)

Sexually transmitted diseases and Basic Obstetrics Care

Objectives:

- To describe the principles of antenatal care-how should it ideally be provided at a primary care level?
- Management of vaginal discharge and STD at primary care level;

Content:

1. Antenatal care, This includes a description of physiological changes during pregnancy, management of chronic and a pregnancy-related medical conditions, how to deal with STD during pregnancy.
2. How to manage patients with vaginal discharge at primary care level, how to make a diagnosis, how to prevent the potentially devastating consequences of undiagnosed or inadequately treated cervical chlamydia infection. Indications for referral to a specialized clinic.
3. HIV and AIDS prevention, clinical presentation, ethical considerations.

Training materials:

- Hand outs
- Clinical decision trees
- Standard treatment schemes

References:

1. *Chamberlain Geoffrey -ABC of Antenatal care , Second Edition, London 1994*
2. *Ann McPherson and Deborah Waller, -Women's Health., Oxford general practice series, Fourth Edition 1997*
3. *Parveen Kumar&Michael Clark Clinical Medicine., London, Philadelphia, Toronto, Sydney, Tokyo., Third edition 1996.*
4. *Collier J.A.B., Longmore J.M., Hodgetts T.J. Fourth Edition 1997- Oxford handbook of clinical specialities*
5. *Guidance from the General medical Council Duties of a doctor London October, 1995*

Methodology:

- Small group teaching;
- Case studies(trainees will be encouraged to develop clinical cases from their own working experience);
- Short presentations;

Evaluation:

Evaluation will take place at the beginning and at the end of the module

Time for pre and post test- 60 and 60 minutes

Tool:

- Multiple Choice Questions(10 and 20)
- Modified Essay question(pre-test 1 post-test 1)

The results of pre and post-testing

Summary

Table 1 Number of trainees according to their results

	Pre-testing			Post-testing			Pre-testing			Post-testing			Pre-testing			Post-testing		
	MCQ			MCQ			Open ended questions			Open ended questions			MEQ			MEQ		
Standards	<60%	60-80%	>80%	<60%	60-80%	>80%	1-2	3	4-5	1-2	3	4-5	1-2	3	4-5	1-2	3	4-5
	B	S	G	B	S	G	B	S	G	B	S	G	B	S	G	B	S	G
First Module	31	79	12	-	7	115	117	5	-	8	21	93	119	3	-	70	49	3
Standards	<60%	60-80%	>80%	<70%	80%-90%	100%	1-2	3	4-5	1-2	3	4-5	1-2	3	4-5	1-2	3	4-5
Second Module	9	73	44	25	26	76	**	**	**	**	**	**	107	20	-	38	51	38
Standards	<60%	60-80%	>80%	<60%	60-80%	>80%	1-2	3	4-5	1-2	3	4-5	1-2	3	4-5	1-2	3	4-5
Third Module	-	-	-	2	9	115	82	34	10	-	-	-	119	8	-	16	55	55
Standards	<60%	60-80%	>80%	<60%	60-80%	>80%	1-2	3	4-5	1-2	3	4-5	1-2	3	4-5	1-2	3	4-5
Forth Module	2	44	80	-	17	109	***	**	**	**	**	**	81	41	4	11	44	71

Note:

B-Bad

S-Satisfactory

G-Good

**** - Was not used for an assessment**

The table 2 shows difference between results of pre and post-testing according to each module (Percentage of trainees according to their results)

Testing	MCQ						Open ended Questions						MEQ					
	Good		Satisfactory		bad		Good		Satisfactory		bad		Good		Satisfactory		bad	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
First Module	10%	94%	65%	6%	25%	-	-	76%	4%	17%	96%	7%	-	3%	2%	40%	98%	57%
Second Module	35%	60%	57%	44%	20%	20%	**	**	**	**	**	**	-	30%	16%	40%	84%	30%
Third Module	**	91%	**	7%	**	2%	8%	**	27%	**	65%	**	-	44%	6%	44%	94%	12%
Forth Module	63%	87%	35%	13%	2%	-	**	**	**	**	**	**	3%	56%	33%	35%	64%	9%

*Note: 122 trainees out of 124 have taken part in assessment in first module
126 Trainees out of 127 have taken part in assessment in second module
126 Trainees out of 127 have taken part in assessment in third module
126 Trainees out of 127 have taken part in assessment in forth module*

Annex 5

Evaluating the course

The survey of the trainees was carried out after each module. The questioner, which was used for survey, is presented below.

Please tick in an appropriate box, which most closely corresponds to your own view about each component of the training.

	Very bad	Bad	Satisfactory	Good	Very good
1. Process					
Work done by the trainer					
Selecting of subjects					
Allocation of time					
Cases					
Pre and post-tests					
2. Teaching material (handouts)					
Standard treatment and diagnostic schemes					
Video material					
Photos					
3. Training course was					

Fig.1 shows the information gathered by analyzing questioners completed by trainees after first module. (*Management of common infections in PHC*)

Questioners have been completed by 130 trainees out of 130(among those have been 127 participants and 3 free listeners)

	Very bad		Bad		Satisfactory		Good		Very good	
	N	%	N	%	N	%	N	%	N	%
1. Process										
Work done by the trainer	-	-	-	-	-	-	12	9	118	91
Selecting of subjects	-	-	--	--	17	13	85	65	28	21
Allocation of time	2	1,5	4	3	38	29	69	53	16	12
Cases	-	-	-	-	11	9	89	68	29	22
Pre and post-tests	-	-	-	-	13	10	89	68	28	22
2. Teaching material (handouts)	-	-	-	-	31	24	80	62	19	15
Standard treatment and diagnostic schemes	-	-	-	-	11	8	85	65	33	25
Video material	-	-	-	-	-	-	-	-	-	-
Photos	-	-	-	-	-	-	-	-	-	-
3. Training course was			0		1	1	90	69	39	30

Fig.2 shows the information gathered by analyzing questioners completed by trainees after second module. (*Chronic disease management in GP*)

Questioners have been completed by 112 trainees out of 127. Response rate was 88%

	Very bad		Bad		Satisfactory		Good		Very good	
	N	%	N	%	N	%	N	%	N	%
1. Process										
Work done by the trainer	-	-	-	-	-	-	6	5	106	95
Selecting of subjects	-	-	-	--	6	6	63	56	43	38
Allocation of time	2	2	2	2	33	29	66	59	9	8
Cases	-	-	-	-	2	2	78	70	32	28
Pre and post-tests	-	-	-	-	4	2,7	77	69	32	28
2. Teaching material (handouts)	-	-	-	-	7	6	77	69	28	25
Standard treatment and diagnostic schemes	-	-	-	-	7	6	68	61	37	33
Video material	-	-	-	-	-	-	-	-	-	-
Photos	-	-	-	-	-	-	-	-	-	-
3. Training course was					5	5	64	57	43	38

Fig. 3. The results of the trainees' survey after completing the third module (Reproductive health)

119 trainees out of 127 have completed questioners. Response rate was 94%

1. Process	Very bad		Bad		Satisfactory		Good		Very good	
	N	%	N	%	N	%	N	%	N	%
Work done by the trainer	-	-	-	-	-	-	9	8	110	92
Selecting of subjects	-	-	-	-	3	3	85	71	31	26
Allocation of time	-	-	2	1	38	32	68	57	11	9
Cases	-	-			2	2	88	74	29	24
Pre and post-tests	-	-	2	1	11	9	80	67	20	17
2. Teaching material (handouts)	-	-	-	-	32	27	61	51	25	21
Standard treatment and diagnostic schemes	1	1	1	1	15	13	75	63	28	23
Video material	-	-	-	-	-	-	-	-	-	-
Photos	-	-	-	-	-	-	-	-	-	-
3. Training course was	-	-	-	-	1	1	77	65	40	34

Fig.4 Shows the information gathered by analyzing questioners completed by trainees after fourth module(STD and Antenatal care))

Questioners have been completed by 97 trainees out of 127 (Response rate was 75%)

1. Process	Very bad		Bad		Satisfactory		Good		Very good	
	N	%	N	%	N	%	N	%	N	%
Work done by the trainer	-	-	-	-	-	-	11	11	86	87
Selecting of subjects	-	-	-	-	3	3	59	60	35	36
Allocation of time	-	-	-	-	29	30	61	63	7	7
Cases	-	-	-	-	2	2	61	63	20	21
Pre and post-tests	-	-	-	-	8	8	69	71	20	21
2. Teaching materials Handouts	-	-	-	-	15	15	60	62	22	23
Standard treatment and diagnostic schemes	-	-	-	-	3	3	64	66	30	31
Video material	-	-	-	-	-	-	-	-	-	-
Photos	-	-	-	-	-	-	-	-	-	-

3. Training course was					-	-	54	65	43	44
-------------------------------	--	--	--	--	---	---	-----------	-----------	-----------	-----------

Fig. 5

Trainee's recommendations about the training course

The following recommendations were identified as main after examining questioners:

	Recommendation	Number of trainees who presents these recommendations							
		I Module		II Module		III Module		IV Module	
		N	%	N	%	N	%	N	%
1.	Continuing of the training	32	25	47	42	43	36	47	49
2.	To include new subjects in the training	18	14	25	22	38	32	33	34
3.	It is desirable to use video materials	2	2	4	4	9	8	5	5
4.	To devote more time to each subject	4	3	10	9	13	11	9	9
5.	To discuss more problems	1	1	1	1	-	-	2	2
6.	To improve tests	2	2	-	-	3	3	6	6
7.	To improve handouts (to develop more comprehensive one)	14	11	7	6	-	-	20	21
8.	To reduce number of trainees in each group	-	-	-	-	7	6	-	-