

**RAPID APPRAISAL OF
IPP-VI TRAINING OF ANMS
IN UTTAR PRADESH**

M.E. Khan
Saumya RamaRao
R.B. Gupta
Sulbha Swaroop
Leila Caleb
Anoop K. Saxena
Anil Mishra

The Population Council, India

SIFPSA, Lucknow, India

August 1996

CONTENTS

EXECUTIVE SUMMARY	v
CHAPTER I: INTRODUCTION	
Introduction	1
Objectives of the study	2
Methodology	3
Study Sites	3
Sampling	4
Research team	4
Presentation of the report	5
CHAPTER II: ORGANIZATIONAL ASPECTS OF IPP-VI TRAINING	
6	
Overview	6
Preparatory work	7
Selection procedure of trainees	9
Briefing on purpose of training	10
Batch size	11
Facilities for stay	11
Training Procedure	12
Grouping of ANMs	14
Behaviour of trainers	14
Training content	15
Topics learnt the most	18
Opportunities for practical training	19

LIST OF TABLES

2.1	Coverage of topics/subjects during training	16
3.1	Knowledge about ante-natal care	22
3.2	Knowledge of management of high risk cases before and after delivery	24
3.3	Knowledge about required facilities at a First Referral Units (FRU)	26
3.4	Knowledge of identification of high risk new borns	28
3.5	Knowledge about vaccine dosage and administration	29
3.6	Knowledge about the medical and reproductive history of clients for IUD insertion	32
3.7	Knowledge about contra-indications for IUD insertion	33
3.8	Knowledge of complications requiring return to clinic	34

LIST OF FIGURES

2.1	Training procedures	12
2.2	Grouping of ANMs during training	14
2.3	Opinion on training procedure	14
2.4	Topics learnt the most	18
2.5	Topics covered by practical training	19
3.1	Correct knowledge of the time from onset to death in different maternal complications	24
3.2	Reported reasons for puerperal pyrexia	26
3.3	Reported treatment of blue baby	27
3.4	Percentage reporting correct symptoms of pneumonia	30
3.5	Percentage reporting correct action to be taken for child with ARI	30
3.6	Correct food administration to child with diarrhoea	31
3.7	Knowledge about information to be provided to the IUD client	31
3.8	Assessment of pelvic infection	33
3.9	Post-acceptance instruction to IUD users	34

EXECUTIVE SUMMARY

The present report provides findings of a rapid appraisal of the ANM training programme in Uttar Pradesh, organized under the IPP-VI project of the GOI and the World Bank. This was undertaken jointly by the Population Council and the State Innovations in Family Planning Agency (SIFPSA). As SIFPSA is in the process of planning a training programme to strengthen the technical skills and competence of ANMs and update their contraceptive knowledge, it was felt that a rapid appraisal of the IPP-VI training programme would help in understanding the strengths and weaknesses of previous training efforts. The ANM training initiatives of SIFPSA would then build upon the experiences gained from earlier training programmes and the existing training needs of ANMs.

According to the IPP-VI training programme, the emphasis of the training was on improving ANMs' technical and counselling skills by providing on-the-job practical training. The programme was a three week skill-based training of ANMs, during which they were attached to a CHC/PPC or a district hospital. This was followed by one-week of training at an ANM Training Centre (ANMTC) in IEC and counselling.

The objective of the present appraisal is to objectively review how the training programme was organized and how it helped to improve the technical skills and competence of ANMs.

The study was conducted in three districts of Uttar Pradesh namely: Agra, Sitapur and Jhansi, and covered 9 PHCs. Both qualitative and quantitative approaches were used to collect relevant information. To assess ANMs' perceptions about the training - the way the training programme was organized and structured, topics covered and usefulness and limitations of the training - seven focus group discussions (FGDs) with ANMs were organized in these districts. Apart from FGDs, informal discussions with trainers and other selected State officials were also conducted. To obtain quantitative data, 48 ANMs trained under IPP-VI and 45 ANMs who did not receive training from the programme were interviewed using a structured questionnaire, specially developed for this study.

The appraisal concentrated on two main aspects:

- The organizational and operational details of programme implementation.
- Impact of the training on ANMs' technical knowledge

The appraisal found major gaps in planning and implementation of the training programme. The study reveals that:

1. Although a training manual was prepared and sent to the Districts, it was not provided to trainers. As a result the trainers did not have standard instructions as how to organise the training and what they should aim to achieve.
2. Although in the programme a training of master trainers as well as training of trainers (TOT) was planned, it was never carried out. This also contributed to the lack of standardization of the training programme. Many trainers felt unsure of the tasks the ANMs should complete for the scheduled 21 day training.
3. In the absence of proper communication and lack of planning of operational details, the quality of training provided varied widely from good to extremely poor. The quality of training depended largely on the initiative taken by individual trainers, rather than on an institutionalized process, as planned or envisaged by the programme.
4. No monitoring was done to ensure adherence to training standards.
5. Generally ANMs received very short notice, often only 12 hours, to attend the training. Such last moment instruction to go for training was quite disruptive for their family life and many ANMs demanded that advance information should have been given so that alternate arrangements for child care and domestic assistance could be made.
6. Lack of adequate accommodation at the training site was mentioned by many ANMs and is identified as a major problem for the trainees. Many ANMs commuted daily from their residence, sometimes as far as 25 kms., this costed them Rs. 10-40 per day. As their travel allowance did not cover daily commuting, they had to spend this money themselves. They felt that this was a disincentive for attending training.

Even though the programme had a provision of Rs. 40 per day per ANM for food during their training period and Rs. 35 per ANM for stationery, neither food nor stationery was generally provided. One exceptional ANMTC, however, was found, where ANMs were provided with both lodging and food. Most of the ANMs requested that in future training programmes, accommodation must be ensured.

7. The structure, content and opportunities for practical training for ANMs varied considerably, depending on the interest of the individual trainer and location of training. Training at smaller institutions like CHCs and PPCs seemed to be better than at larger facilities like district hospitals. In district hospitals, with a heavier workload, the trainers could not give enough attention to the training programme. Despite the better opportunity for practical training in such institutions, because of the lack of interest among trainers, the trainees did not generally receive the required practical training.

The social distance between trainers and trainees was wider in district hospitals than in CHCs/PPCs. As a result, ANMs posted at district hospitals often felt that

they were not treated properly. All this suggests that, in future, the ANM training should be preferably organized at PPC/CHC and not at the district hospitals. During training of trainers (TOT) an orientation on interpersonal interaction and small group dynamics would create a more encouraging environment for better quality interactive training.

A study of the technical competence of both trained and untrained ANMs repeatedly underlined the following points:

1. Overall the technical knowledge of the ANMs, irrespective of their training status, is poor. This is true in all the areas covered by the training curriculum -pre and post natal care, care of new born and children, as well as family planning.
2. While ANMs were able to recognize the symptoms of complications, they failed to acquire the knowledge needed for their management. For instance less than 50 percent agreed that ergometrine injection had to be administered to control postpartum haemorrhage. Very few had correct knowledge of the time from onset to death under different maternal complications.

Similar observations were made in the case of treatment of a blue baby, or the administration of vaccines in the case of children suffering from mild fever or diarrhoea. While a majority of the ANMs knew that woman suffering from PID should not be provided with an IUD, a majority were unaware of the symptoms of PID or what contraindications they should look for during a pelvic examination before the insertion of an IUD.

3. A comparison of the responses of trained and untrained ANMs on several aspects did not show any significant difference, indicating largely no impact of training. Disaggregation of data by training sites indicates that ANMs of training centres where trainers had taken an interest in the programme, encouraged trainees to ask questions and ensured that they had the opportunity for practical training, performed marginally better than others. However, in their case also the pattern was not always constant.
4. The data suggests that even a good training programme may not yield the desired impact unless the ANMs have the proper environment and required facilities to use their newly acquired knowledge and skills. Many ANMs said that the equipment and facilities which were available during the training period were just not available at their sub-centre. Under these conditions, following the same service procedures is difficult.

Qualitative analysis also shows that the resistance to change practices often comes from the community. For instance putting a new born on breast milk within two hours of birth is often not accepted by influential elderly women. This indicates the

need for a sustained educational campaign from different channels to support efforts by ANMs to facilitate changes in practices at the community level.

Finally, there is enough evidence that one-time training may not be very useful unless follow-up training is provided at regular intervals. Retention of knowledge and skills gained, particularly if they are not used and practiced, is difficult. Hence a continuous reorientation training programme in the system would be more effective. One such avenue is the monthly meeting of ANMs at PHC headquarters. Introduction of a two hour training session every month, along with strong supportive supervision by LHVs and the PHC doctor, would contribute substantially in further improving the competence of the ANMs.

The training strategy developed by SIFPSA should acknowledge these problems, identify the processes involved and take the necessary steps to ensure adequate quality for the skill development training of ANMs planned in the future.

CHAPTER I

INTRODUCTION

In the Indian Health and Family Welfare Programme, the Auxiliary Nurse Midwife (ANM) is a crucial grass-root level worker for delivering MCH and family planning services in rural areas. An ANM is responsible for a sub-centre which generally covers a population of 5000. Her work responsibilities include provision of primary health care, antenatal care, post-natal care, immunization, care of children, and counselling and promotion of family planning. She is expected to deliver many of these services in villages during her field visit.

Despite the fact that the 18-24 months training for ANMs covers both theoretical and practical aspects of primary health care, MCH and family planning, most training assessments carried out over the last 15 years in the area of health and family planning, repeatedly point out the lack of competence among ANMs to deliver the services efficiently (Population Council, 1995; CORT, 1992). The limitations have been identified both in technical knowledge as well as in counselling and communication skills. The Ministry of Health and Family Welfare (MOH&FW) also recognizes it as one of the main bottlenecks in providing good quality services (ICMR, 1991; AVSC International & JHPIEGO, 1995). To tackle these problems, the MOH&FW has planned and supported several reorientation training programmes of varying durations of ANMs. International agencies, such as the World Bank, UNICEF, UNFPA, USAID, SIDA, DANIDA, ODA and others who are supporting GOI in strengthening its health and family planning facilities, have also encouraged and supported such training initiatives.

The World Bank has actively collaborated with the GOI in its effort to strengthen and expand health and family planning facilities particularly in rural India. Under its IPP-VI project, training of health staff is a major component. According to the project document, emphasis of the training has been on improving skills of all levels of health and family welfare staff — from Medical Officers to ANMs.

The emphasis of the training of ANMs is on improving their technical and counselling skills by providing on-the-job practical training. The programme envisages a three week skill-based training of ANMs during which they are attached to a CHC/PPC or a district hospital. This is followed by a one-week training at the ANM Training Centre (ANMTC) in IEC (IPP-VI, 1987). According to the IPP-VI training curriculum manual, developed by the State Institute for Health and Family Welfare (SIHFW) U.P., the ANMs will improve their expertise through practical training during their stay at selected training institutions (PPC/CHC or district hospital).

The topics which are expected to be covered include:

- Antenatal care and assisting in normal deliveries
- Child care, particularly care of the new born child
- Family planning, mainly IUD insertion

During the IPP-VI period, all ANMs in the selected areas were to be given this on-the-job training. However, how far the objectives of training have been achieved is not known as yet, because no systematic assessment of the training programme has been conducted.

With the changing emphasis of the Family Welfare Programme from a target driven approach to a Reproductive Health and Child Care approach, the role of ANMs and the quality of service provided by them becomes more crucial. The success of the programme will largely depend on accessibility and quality of the services on the one hand, and educational and promotional efforts on the other.

In Uttar Pradesh, USAID under a collaborative agreement with GOI has launched an ambitious programme to strengthen and improve the family welfare programme of the state. State Innovations in Family Planning Service Agency (SIFPSA), the agency responsible for implementing the project, is supporting various innovative programmes which involve NGOs and the private sector to enhance the availability and accessibility of services and strengthen the public sector's capabilities to provide better quality services. In the public sector, one of the important activities of SIFPSA is training of various levels of health and family planning staff to upgrade their technical and counselling skills. Training of ANMs constitutes a major component of this proposed initiative. However, before planning and implementing ANMs' training, it was felt that a quick appraisal of the IPP-VI training programme would help us in understanding the strengths and weaknesses of the previous training programmes. The ANM training initiative of SIFPSA would then be built upon the experience gained from earlier training programmes and existing training needs of the ANMs.

The present rapid appraisal of the IPP-VI training programme of ANMs was conducted with this intention in mind and in no case should it be considered an evaluation of the IPP-VI training programme.

Objectives of the Study

The specific objectives of this rapid appraisal include:

1. Understanding the organizational aspects of the training - what preparatory work was done or advance planning was made to optimize the benefits of this training.

2. Perception of trainees on the organizational aspects of the training, particularly the extent of pre-training briefing received on the curriculum and expectations of the training.
3. Implementation of the training- content of training, style of teaching and opportunities for skill development by demonstration and practice.
4. Competence and level of technical skill of the trained ANMs as compared to those ANMs who had not undergone the IPP-VI training.
5. Perception of the trainers and Medical Officers of Primary Health Centres on the usefulness of the training programme.

Methodology

To collect the relevant information required for answering the above questions, both qualitative and quantitative approaches were used. These included:

1. Structured interviews of selected ANMs who had received IPP-VI training as well as those who had not.
2. Focus group discussions with ANMs who had undergone IPP-VI training to assess their perceptions about the training they received.
3. Informal discussions with trainers and Medical Officers supervising the trained ANM's work, to get their views on the training, both on the organizational aspects and its benefits.

Study Sites

The study was carried out in three districts of Uttar Pradesh namely Sitapur, Agra and Jhansi. Nine Block PHCs were covered across the three districts. From each of the selected PHCs a list of IPP-VI trained ANMs and those who were not trained under the IPP-VI programme was prepared. In each group, 5-10 ANMs were interviewed depending on their availability.

Before conducting the interviews, a focus group discussion (FGD) of the trained ANMs was organized. The focus group discussion (FGD) dealt with organizational aspects of the training and ANMs' perceptions of the usefulness of the training programme. A guideline for conducting the FGD was prepared to ensure coverage of all relevant topics. For the most part, between 7-12 ANMs participated in each FGD. Extensive notes were taken by the moderator and wherever possible the discussion was also taped. Each FGD lasted between 60-80 minutes. Privacy was maintained so that the participating ANMs felt comfortable in voicing their opinion.

The interviews of ANMs, both trained and untrained, were conducted using a structured questionnaire. The survey assessed the ANMs' competence in the area of ante-natal care, child care and family planning. These topics were also the focus of IPP-VI training. It is assumed that the ANMs who have been trained under the IPP-VI programme will have better technical knowledge on all these aspects than those ANMs who have not received this training.

Sampling

The following table gives details about the total number of ANMs interviewed, focus group discussion organized and informal discussion with trainers and or Medical Officers of the PHCs selected.

<i>Site</i>	<i>Interview of ANMs</i>			<i>Focus groups organized</i>	<i>Officials involved in discussions</i>
	<i>Trained</i>	<i>Untrained</i>	<i>Total</i>		
Sitapur	26	25	51	4 (32)*	2
Agra	12	10	22	2 (15)	1
Jhansi	10	10	20	1 (10)	1

* Figure in parentheses show the total number of ANMs who participated in the Focus Group Discussions.

Apart from this, an informal discussion was also held with a senior staff member at SIHFW, Lucknow who was responsible for planning and supporting the IPP-VI training programme. This discussion was particularly useful as it helped in identifying some of the organizational problems in planning and implementing such training programmes.

Research Team

The present appraisal was jointly undertaken by The Population Council and SIFPSA staff. From the Population Council, Dr. M.E. Khan, Dr. R.B. Gupta, Dr. Saumya RamaRao, Dr. Leila Caleb, Dr. Anoop K. Saxena* and Mr. Anil Mishra* actively participated at all stages of the study. They were responsible for covering Agra and Sitapur districts. Appraisal of the training in Jhansi district was undertaken by Dr. Sulbha Swaroop, a senior professional of SIFPSA. Data analysis and the final report was prepared by The Population Council staff with active participation of Dr.Swaroop from SIFPSA.

* Research staff of State Institute of Health and Family Welfare, Lucknow

The report has been divided into four chapters. The first chapter gives the background of the study. The second chapter presents the organizational aspects of the IPP-VI training which is largely based on qualitative data. Some information on organizational aspects which were collected during the interviews of ANMs have also been incorporated in this section. The third chapter of the report, based on quantitative data, assesses the technical competence of the ANMs. A comparison of the answers of trained and untrained ANMs helps in assessing the impact of the IPP-VI training on technical knowledge of the workers. The fourth chapter gives the summary and conclusions.

CHAPTER II

ORGANIZATIONAL ASPECTS OF IPP-VI TRAINING

Overview

"We learnt new things. The training was good. We were asked to do practical things"

"We did not learn as much from theory. But we learnt many thing from practical training"

"We learnt many good things but people (client) do not like new ways of doing things. Now we say just wipe the body and do not bathe the baby immediately after delivery. Women do not like it. Same is the case with breast feeding."

"We were asked to wash surgical instruments, do dusting, prepare patients and watch what they do, no explanation no practical training."

"Only the formality of training was completed. We spent our time in filling forms and the TCR."

"I myself as a trainer did not know what should be taught to the trainees daily for 21 days."

"Nothing was told about the training. We got 12 hours notice. I got the *aadesh* today and tomorrow I join there."

"No arrangement for staying. We were not given any food during training; Not even water"

"No teaching aid, no paper, nothing was given to us"

"Doctor gave us her own book for consultation"

"Doctor encouraged us to ask questions"

"They treated us like Dais"

The present chapter is largely based on the qualitative information which presents the organizational aspect of the training programme. Wherever possible, quantitative data obtained from the interviews of ANMs has also been incorporated.

Preparatory Work

To implement the training programme, several preparatory stages were envisaged. It included:

1. Development of a training manual indicating the topics to be covered during training of different family welfare staff--Medical Officers, Block Education Officers, and Multipurpose Workers (Male and Female). Female MPWs are the ANMs or Auxiliary Nurse Mid-wives.
2. A five day training of the master trainers, generally the lady doctors posted at the district women's hospitals.
3. A three day training of the trainers by the master trainers.

Instructions were also provided on financial issues and the budget allocated for the training. According to the information gathered during the course of this study, the following amounts were made available to the nodal officer of the district to meet the expenses of ANMs' training:

Travel Allowance	Actual
Dearness Allowance	One-quarter of the official rate
Food during training	Rs. 40 per day per ANM
Stationery	Rs. 35 per ANM

The State Institute of Health and Family Welfare (SIHFW), Lucknow co-ordinated the project activities. At the district level a Deputy Chief Medical Officer (Dy. CMO) was designated as the nodal officer of the project.

Our informal discussions with some of the state level officials associated with the project and the trainers at the district level revealed that there were several gaps between planning and implementation of the project. These are discussed below.

1. The training manual developed by SIHFW provides detailed information for each level of staff and the topics to be covered. The information gathered indicates that the manual was widely distributed and copies were provided to all nodal officers and tutors-in-charge of ANM Teaching Centres (ANMTC). However, discussions with the medical officers incharge of the Post Partum Centres and Community Health Centres, and others incharge

of the training revealed that none of them had received the manual. Some of them however had received a letter from the Chief Medical Officer (CMO) informing them that they would be responsible for organizing the ANMs' training and listing the topics which they were expected to cover during the training period.

2. Advance planning and mapping out the operational details to ensure that the objectives of the training are achieved was lacking and is reflected from the following facts.

Trainees were sent in small batches and at random. All ANMs were required to undergo training.

- (a) Most of the trainers did not receive the training manual. Only some of them received a list of the topics which were envisaged to be covered during the training.
- (b) The proposed five day training of master trainers (two lady doctors from each district hospital) was not conducted. However, many of them had participated in another five day training workshop organized by the National Institute of Health and Family Welfare (NIHFW) on the new Reproductive Health and Child Care approach. According to the state authorities this training was similar to the proposed training of master trainers. Hence the programme of organizing a training of master trainers was dropped.
- (c) At the district level the master trainers were supposed to organize a three day training of trainers. In all the three districts covered under the present study, no training of trainers was organized. In one district it was reported that a one day training was planned. Seventeen lady doctors from different PP Centres turned up for the training but the master trainer arrived only at 4 p.m. On arrival, she just distributed a list of topics that the trainers were to cover during the training of the ANMs.
- (d) In the absence of proper guidance and instruction on the topics to be covered, some trainers in one district reported that they were at a loss as to how the ANMs were to be managed and kept occupied during the 21 day training.
- (e) ANMs at one training centre spent ten days of their training without a trainer as the trainer was on leave. They spent their time in filling out different types of registers and doing other routine work.

- (f) Despite the allocation of Rs. 35 per ANM for stationery items, no ANM covered in this study received any stationery. Similarly, although Rs. 40 per ANM per day was provided for food during the training period, most ANMs did not receive food or even tea during the training period. However, the ANMs were provided with food and lodging when they attended the six day IEC classes at the ANMTC and stayed there.
- (g) Many ANMs expressed their unhappiness over the payment of T/DA, which according to them was partial and less than what was due to them.

Thus in the absence of proper planning, the quality of training provided varied widely from good to extremely poor. To a great extent, the quality of training depended on the initiative taken by the individual trainers and not so much as part of institutionalized process as planned or envisaged by the programme. Many of the observations made above were substantiated by ANMs in the focus group discussions. During the training, no monitoring was done to ensure adherence to training standards.

The sections which follow provide other operational details about the implementation of the project. They are largely based on the qualitative information gathered from ANMs by conducting focus group discussions of ANMs and/or informal discussions with trainers and Medical Officers of the PHCs.

Selection Procedure of Trainees

There is no selection procedure and all ANMs are sent in turn for the training. Not more than 4 ANMs are sent in one batch from one PHC. The MOIC passes on the names of ANMs who need to be trained to the CMO's office. The CMO's office then sends an *order* or *aadesh* letter to the ANM to undergo training. The *order* letter specifies dates and place of training, and person whom the ANM should report to. However, out of the forty-eight trained ANMs interviewed, only seventy-one per cent reported written instructions on where they had to go and to whom they had to report. A further nineteen per cent were given verbal instructions while ten per cent had not received any instructions except the site of the training. Such lapses occurred more frequently in Agra district, where about fifty per cent of the ANMs had not received any written instructions.

On receiving the order they immediately proceed for training. This letter was usually given about a day in advance, though some ANMs did get the order 2-3 days in advance. As reported by the ANMs:

"We get 2-3 days notice for the training."

"We received 12 hours notice. I get the aadesh today and tomorrow I join there."

One ANM reported that she was informed three days after the training had started. She however made up the lost days by extending her stay at the training centre by three days. According to many ANMs, such last moment instructions to go for training was quite disruptive for their family life and suggested adequate advance information so that they could get time to make alternate arrangements at home, if required.

Briefing on Purpose of Training

The ANMs were just informed that they have to proceed to the training site for IPP-VI *prashikshan* (training), but were not told of the training contents. The process is summarized in their words:

"Nothing was told to us about the training. We received the order and that is it."

"We did not even know what is in the training. On reaching the training site the doctor informed us details about the training."

The survey results, however, indicate that about forty per cent of ANMs from Sitapur and Jhansi districts did receive letters with a sentence on the purpose of the training. In the case of Agra district, only two ANMs could recall receiving such an instruction. However while the first batch of trainees were unaware of the contents of the training, subsequent batches were aware of it by talking to other ANMs who had already undergone the training.

Before leaving their headquarters no instructions were given about any material they should take with them; a few (4) ANMs in one FGD reported that *of their own accord they had taken a notebook and a pen*. During training no ANM was provided any stationery (paper or pen) to note down observations or information provided during the theoretical orientation.

Similarly, the ANMs were neither provided with training materials nor a work plan for the training duration at the training site. ANMs reported that the trainer (lady doctor) told them about the topics that they would learn during training. Also, there was no fixed programme for the 21 days and training depended on the flow of clients to the centre.

Batch Size

The size of the batch that underwent training was variable. At one block PHC, one ANM reported that she was one of thirty-three trainees, while another said that she was part of a batch of twenty. Smaller sized batches of 2 and 8 trainees were also reported. In one group discussion, the ANMs reported that though 8 trainees took part in the 21 day skill based training, there were 35-40 ANMs in the IEC training at the ANMTC. It appears that the one week IEC training at the ANMTC was held only for big groups. Two trainees

reported that they had received the three week training but were turned back from an ANMTC since they were the only two for such training. Having missed the opportunity they reported "*We have still not had the one week training*".

Facilities for Stay

ANMs were provided accommodation only during the orientation in IEC at the ANMTCs. They were not provided accommodation while they were on the 21 day training at the district hospital or PPC or CHC. In one group discussion, half the ANMs (5-6) present resided at the training site village, while others resided within a 25 km radius. Thus for the local residents, the 21 day training duration was no problem. For the others it was problematic as they had to commute **every day**. As a result the commuters had to spend money for travel and food, "*we were not given any food but we were also not given any money to come and go*". Commuter ANMs spend between Rs. 10 and Rs. 40 on travel per day. They travel by a combination of bus, tempo and rickshaw. About one quarter of the ANMs interviewed cited commuting as a major problem. The ANMs suggested that arrangements for stay should be made at the location of training so that they did not have to travel every day. On being asked if they could stay away from their families for such an extended period of time, some ANMs responded that they could visit their homes over the weekend and stay the week at the training site.

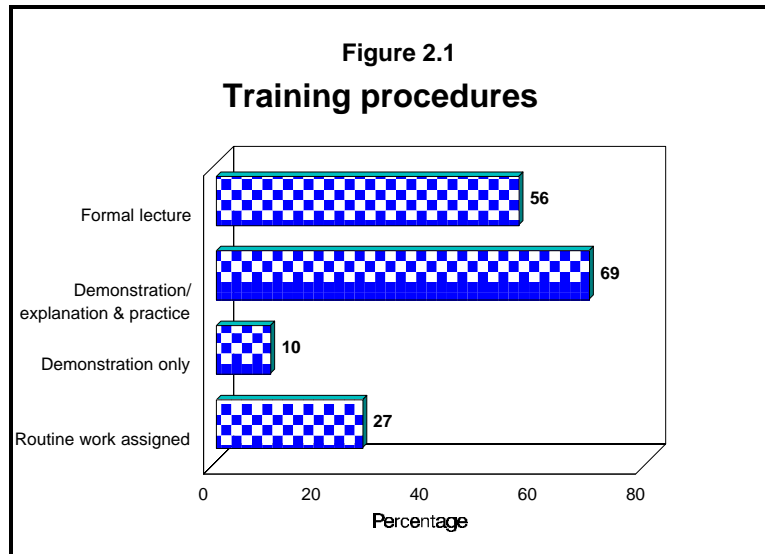
The hostel facilities are available only at the ANMTCs when the trainees go there for the 6 day IEC training. Many participants (three-quarters) of the three group discussions mentioned that accommodation and food were provided free of cost at the ANMTC. All ANMs of one group discussion (12) reported that they found the hostel very safe and comfortable to stay. In another group discussion ANMs reported "*there was no problem there*", compared to the situation when they had to travel daily from home to the training site.

In all three districts, while ANMs reported that food was provided during their training at ANMTC, no ANM was provided food during their training at the PPC or CHC or district hospital. According to one ANM: "*We did not get even water*". This is surprising as under the project, an allowance of Rs. 40 per day per trainee was budgeted for food. Discussions with the trainers about the non-provision of food revealed that they were unaware of the food allowance.

Training Procedure

The training format during the 21 day posting determined the opportunities for skill development. Overall, about 69 per cent of ANMs were exposed to a format of demonstration, explanation and practice (Figure 2.1).

However, it appears that different formats were used in the three districts. Over ninety per cent of ANMs trained in Sitapur district were trained by a combination of demonstration, explanation and practice. On the other hand, just a third of ANMs had this opportunity in Agra district, as over eighty per cent from there reported that they had been assigned only routine duties such as cleaning of instruments, dusting of tables, preparing for operation and filling registers. The experience of ANMs trained in Jhansi district was a little better than those in Agra, with half the ANMs reporting that they had been exposed to demonstrations, explanations and practice. In addition, a greater focus seems to have been given to formal lecture sessions in this district.



The qualitative information highlights the variations in training format used. For example, in two of the training sites in Sitapur district, the training was hands-on and is well reflected in the following verbatim of an ANM:

"The doctor first demonstrated how to measure a pregnant woman's BP. Then she told us to measure. After we had all measured the BP, the doctor remeasured and checked our readings and then told us that we had done it correctly."

The ANMS also informed the study team that they preferred this type of training:

"We do not learn much from theory. We learn more from such practical training and guidance."

It is also clear that ANMs trained at Agra were assigned more routine work with only three of the twelve ANMs interviewed reported having received demonstrations and/or explanations. The qualitative data substantiated the above observations.

"We are not taught anything, just told what to do, they just give us orders and we spend our time helping them. For example, we help the nurses go on rounds with the doctors, help in stitch removals, in preparing patients for operations and help the staff nurses give out medications."

"In the operation theatre we did the cleaning and washing instruments. We did not even know the names of the instruments."

"They told us to clean the gloves; wash them with vim, clean the MTP instruments in a chemical and then wash them. We packed and powdered gloves."

In Jhansi, the interviews of the ANMs revealed that, about half of them got the opportunity of some practical training.

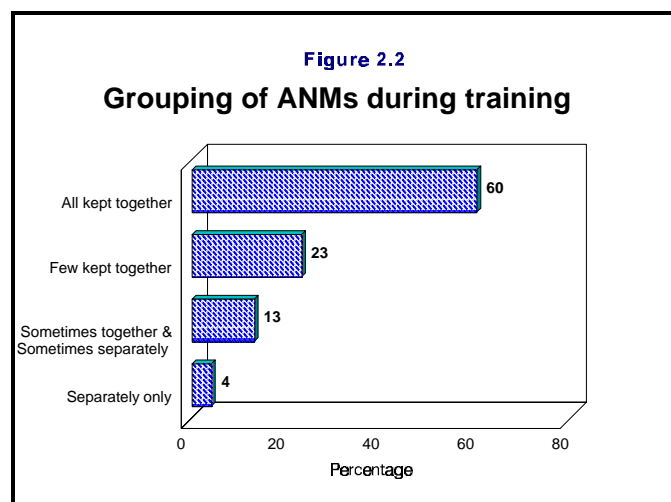
Thus there is a wide range in the types of training formats used with some being didactic, some concentrating on routine activities and, others providing a more comprehensive package with demonstrations and explanations.

We next look at the specific wards and clinics the ANMs were attached to during the training. The interviews with ANMs indicate that during the training period, three-quarters of the ANMs were placed on duties at the operation theatre and in MCH and FP clinics, while sixty-nine per cent were also attached to labour rooms. Once again there are variations by training site. Ninety per cent of the ANMs trained at the big hospital sites, as in case of Agra and Jhansi districts, were posted at operation theatres. On the other hand, fewer trainees (62 per cent) at PHC or CHC in Sitapur district were attached to operation theatres. This is due to the fact that district hospitals tend to use operation theatres much more than smaller facilities such as postpartum centres and community health centres. Due to a greater load of operations, the opportunities and possibilities of working in operation theatres is high. However, posting at operation theatre does not necessarily mean better learning or more practical training. Many ANMs had reported that their job in operation theatres was mainly assisting the nurses, arranging and cleaning equipment without any orientation.

In terms of the opportunities for working in the labour rooms, Sitapur (73 per cent) and Jhansi (90 per cent) districts were considerably better than Agra (42 per cent). On the other hand, ANMs posted in Sitapur (69 per cent) had fewer opportunities for working in MCH and FP clinics than those posted in Agra (75 per cent) and Jhansi (90 per cent).

Grouping of ANMs

An analysis of the grouping of ANMs for training did not show any fixed pattern. However, in 60 per cent of the cases, ANMs reported that all were kept together (Figure 2.2). A wide variation was observed across the districts (25-100 per cent). It is difficult to assess which approach was more efficient. However, apparently the training centres which were large and less prepared to receive the trainees, tried to disperse the ANMs in various



units or simply posted the ANMs where the training centres had less manpower.

Behaviour of Trainers

ANMs were asked about the attitudes and behaviour of the trainers. In particular they were asked whether the trainers encouraged them to ask questions for an interactive training session, remained passive and impersonal or discouraged trainees to ask questions. About 75 per cent of all ANMs felt that the trainers were supportive and encouraging (Figure 2.3). However, wide variation was reported across the districts. For instance, over 96 per cent of the trainees at Sitapur reported that their trainers had been encouraging. Whereas a considerable proportion of ANMs trained in Jhansi (30 per cent) and Agra (68 per cent) districts did report that the trainers were either passive and impersonal at best or rude and discouraging at worst.

Similar responses are available from the group discussions as well. Most of the ANMs from Sitapur district were happy with their trainers--the method of training, their behaviour, and patience. These trainers did not raise their voice, scold the ANMs or treat them ill. They used simple language which was easy to understand. Two of the trainers in particular were mentioned as patient teachers who willingly answered the ANMs' questions and doubts. As one of the ANMs' reported:

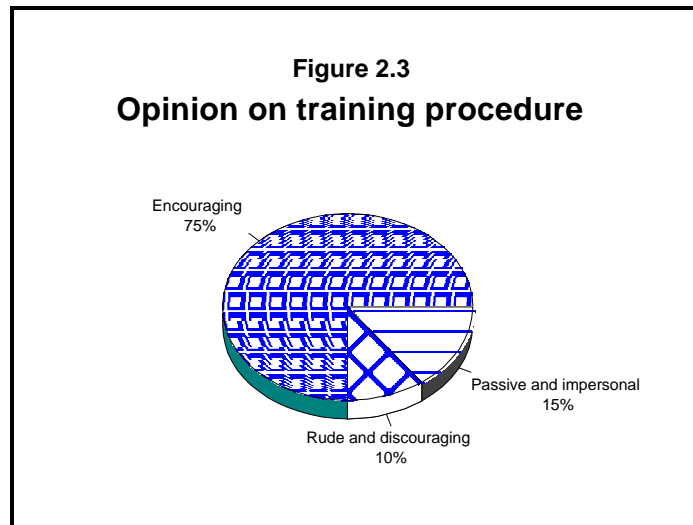
"The doctors were always available to answer our questions even beyond the training period."

"If you want to learn anything you can go to them straight."

In contrast with this type of interaction between trainers and trainees, ANMs from Agra district reported that:

"They treated us very badly, as if we were their servants and they would order us around."

Part of the reason for this poor interaction was that the trainees worked for the greater part with nurses and *ayahs* and not with the doctors. Within the hospital hierarchy, the ANMs were considered "field persons" and thus fitted in the lowest grade. They were considered less as trainees but more as additional hands. It indicates that in future training



programmes, trainers must be trained and sensitized about the need of being polite and encouraging to get the best out of the ANM training.

Training Content

Table 2.1 presents the terms of the topics covered under the training programme. Over fifty per cent of ANMs reported that they had learnt about antenatal (69 per cent) and postnatal (52 per cent) care. Other topics such as family planning in general, sterilization and IUD insertions in particular, immunization and other aspects of MCH care were mentioned to a lesser degree. For example, less than fifty per cent of ANMs reported that they had been taught about family planning (46 per cent) or IUD insertion (44 per cent). Similarly, between a fifth to a third mentioned measurement of blood pressure of pregnant women (23 per cent), identification of high risk antenatal cases (21 per cent), and immunization (27 per cent). It should be mentioned that some of the aspects such as BP measurement and high risk identification are subsumed under the general head of antenatal care and thus may not appear as separate topics (Table 2.1).

The survey data also indicate that some topics were stressed more than others in different training centres. Greater stress seems to have been placed on antenatal and postnatal care in Sitapur and Jhansi, as between sixty to eighty per cent of ANMs spontaneously mentioned these two topics. In addition, in Jhansi district training seems to have focused on the identification of high risk cases, while in Sitapur district training focused on immunization, especially of children. In both these districts, over fifty per cent of ANMs mentioned family planning also. In contrast, in Agra, just two of the twelve ANMs were able to mention any of the above mentioned topics indicating slackness in implementing the training.

Table 2.1: Coverage of topics/subjects during training

<i>Topics covered</i>	<i>Percentage</i>
ANC	69
PNC	52
B.P. Exam,	23
Diarrhoea management	10
MCH	15
Care of new born	10
Blood & Urine Test (Pregnant Women)	6
Childhood infections	8
Breast feeding	6
Identification of high risk cases	21
F.P./Sterilization	46
IUD insertion	44
Immunization	27
About instruments	6
Others	23
Total N	48

The following comments from ANMs mentioned during FGD provide a better sense of the content and focus of the training:

"We were taught how to measure blood pressure, examine ANC cases..."

"Estimate the gestation of the child..."

"We looked at antenatal women with different types of foetal presentation....sometimes we got a patient who had a lot of swelling, and doctor told us such cases have to be referred"

"She told us how we should approach the patient, what we should do, how we should sit, what we should ask, what we should say. She used to tell us all these by demonstration."

"We were also taught how to put a Copper-T and I also practiced putting one or two. Depending on the volume of patients the doctor showed us how to do (insert Copper-T) and also how to remove them."

"The doctor first shows us how to insert Copper-Ts. Then she tells us "Now insert the Copper-T in my presence" and we then insert Copper-Ts."

"The trainer told us that each one of us would insert upto 6 Copper-Ts."

Apart from antenatal checkups and IUD insertions, ANMs also learnt about new born care, though this topic was mentioned less often. Specifically, the following were mentioned:

"We learn about the colour of the new born, its weight and how to care for it."

However not all training sites covered all these topics, nor gave opportunities for practical training. In Sitapur district where the situation was relatively better, the 20 ANMs were divided into four groups and assigned duties in four different clinics or wards: immunization clinic, Out Patient Department (OPD), labour room, and night duty. Each group spent four days of the training at each of these places. During the course of the training the ANMs reported that each was able to insert 4-5 IUDs and assist in 2-3 deliveries.

On the other hand, the qualitative data from Agra district indicate that the content of the training here was sketchy and poor. During the group discussion, information was sought on whether there was any training on antenatal care, delivery or family planning services. Despite being posted at the labour room, OPD, OT and the ward, the scope for training was limited. For example, in the OPD the trainees usually were outside the examination area. Their task was to make outpatient forms, keep the patients in line and maintain order, and give tetanus toxoid injections. The task of those ANMs who were able

to enter the examination area was to help the women on to the examination table for an abdominal and P/V check-up. All of the ANMs were unanimous that they did not get an opportunity to conduct any antenatal examination, nor were they taught anything about antenatal examinations. They said that the antenatal check-ups were done by doctors and they did not let them touch the women.

Neither was anything taught in the area of family planning. The trainees also did not ask questions to their trainers. In words of an ANM:

"No we did not go to them or ask questions. If we say we want to know, they will think that we are looking for cases or we may encroach on their practice."

No demonstration, explanations or instructions were given for Copper-T insertions. The one aspect that some of the ANMs were satisfied about was that some of the trainees had the opportunity to observe tubal ligations. Those trainees who helped in the OT had this opportunity.

"We saw the three stitches type of sterilization, that was something new. At the PHC only laproscopic are done."

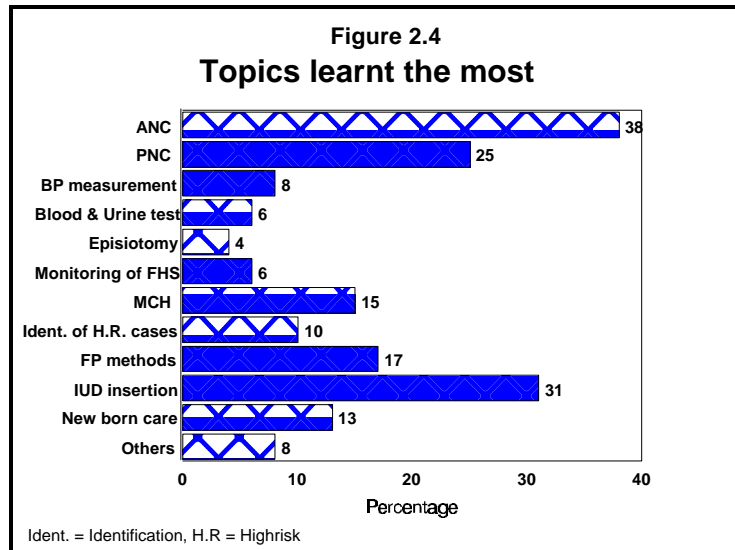
The ANMs were also asked whether they had received training in oral pills, Lactational Amenorrhoea Method (LAM) and infection prevention techniques. While ANMs of one FGD remembered being trained on the oral pill, participants of other group discussions were unable to recall. It is clear, however, that the ANMs did not had detailed information on OCP. Only one could answer, what should be advised if a woman misses one pill.

Information on LAM was also not provided during training. All they had been told about breastfeeding was that it should start immediately after delivery. They were also taught on how to teach women to keep their breasts clean for nursing. Information seems to have been provided on good breastfeeding practices as suggested by the following verbatim:

"No, we were only told that it is good to start breastfeeding as soon as possible and to breastfeed in day as well as at night. We were also told that it is important for mother to give her milk 6-7 times and not less."

Another topic not covered under the training was infection prevention. Apart from the need to wash hands, ANMs were not clear about infection prevention. While one ANM was able to say that before IUD insertion, it was necessary to wash hands and wear gloves, another reported that they were told to boil their instruments for 10-20 minutes for sterilizing them. Apart from this, they did not seem to have been told anything else.

In the survey, ANMs were also asked to mention those topics about which they had learnt the most. The responses on this question are consistent with the information elicited on the topics covered during the training. Figure 2.4 shows that about a third of the ANMs reported that they had learnt the most in antenatal care (38 per cent), and IUD insertion (31 per cent); a quarter reported post natal care; less than a fifth reported about family planning (17 per cent), general maternal and child health care (15 per cent), and new born care (13 per cent). The data also indicate that BP measurement, monitoring of foetal heart sounds and identification of high risk antenatal cases are topics reported by less than ten per cent of ANMs. It could be that these topics are already well known and understood by most ANMs, and thus only those trainees who were weak in these topics may have gained the most.

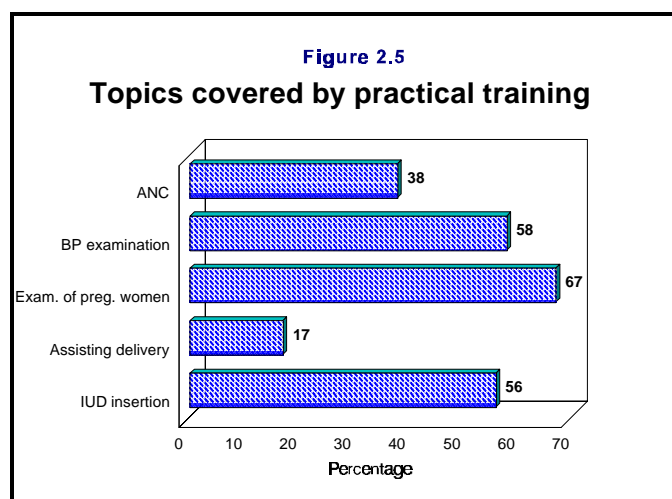


The data also indicate that BP measurement, monitoring of foetal heart sounds and identification of high risk antenatal cases are topics reported by less than ten per cent of ANMs. It could be that these topics are already well known and understood by most ANMs, and thus only those trainees who were weak in these topics may have gained the most.

Opportunities for Practical Training

The information on topics during the training is related to the opportunities that the trainees had to practise their skills. Opportunities for practical training in blood pressure measurement, examination of pregnant women, assistance at deliveries and IUD insertion are critical components of the skill based training.

Figure 2.5 indicates that two-thirds of the ANMs interviewed reported that they had the opportunity to examine pregnant women and a nearly three-fifths were able to measure BP (58 per cent) and insert IUDs (56 per cent). However, the opportunities to assist in deliveries was considerably less, as just 17 per cent of ANMs were able to assist or conduct deliveries which occurred at the training sites during the training period. Once again wide variations were reported across the three study districts. Nearly ninety per cent of ANMs in Sitapur district reported that they had the opportunity to measure blood pressure and examine pregnant women (89 per cent). In contrast, in Jhansi only about 30 per cent of the ANMs reported



reported that they had the opportunity to measure blood pressure and examine pregnant women (89 per cent). In contrast, in Jhansi only about 30 per cent of the ANMs reported

that they had the opportunity to measure blood pressure, though seventy per cent reported that they did examine pregnant women. Opportunities for measuring blood pressure and examining pregnant women were least in Agra as less than twenty per cent of the ANMs reported being able to do so. In terms of IUD insertion, no IUD insertion practice was given in Agra, whereas over seventy per cent of the ANMs in Sitapur and Jhansi districts did insert IUDs during their training. In all the three districts, opportunities to assist during deliveries were limited, with the Jhansi trainees having had the most opportunity.

The number of cases for demonstration and practical training depends upon the number of patients who come to each of the training sites. Some of the sites were hospitals with a high case load of deliveries and operations, while smaller training sites such as PPCs and CHCs provided greater opportunities for antenatal checkups, and in some cases for IUD insertions. The opportunity for training also depended on the trainers. Trainers who took an interest, such as in the PPC/CHC in Sitapur, created opportunities for practical training, despite the protest of clients. As one ANM of one of the groups said:

"The patient tells the doctor that she wants only the doctor to insert the Copper-T. But the doctor stands to one side and makes us insert."

During the interview it was also clear that if the ANM had observed IUD insertion and practiced it, she had better knowledge. For example, one ANM was able to give a step-by-step description of the IUD insertion procedure: *"wash hands, wear gloves, insert the speculum, put in the retractor, measure using the uterine sound, adjust the blue gauge on the inserter for the correct size, set the Copper-T and load it, insert the Copper-T, after insertion tuck the thread in, and tell the woman to avoid intercourse for a week"*.

On the other hand, where trainers showed less interest in training, which often happened more at district hospitals, opportunities for practical training were limited. In such situations, ANMs could merely watch case management without any explanation or teaching. Comments from some of the ANMs who attended the weak training sites revealed their disappointment with the training offered.

"You know how these training are. We were told about blood pressure on just one day."

"What used to happen here? We used to go to the field for immunization. We did our own work. We only did what was normally done."

"Only the formality of the training was completed. And then we used to type, and fill in forms and the TCR."

CHAPTER III

IMPACT OF TRAINING ON TECHNICAL SKILL AND COMPETENCE OF TRAINED ANMS

This chapter compares the technical skill and competence of the ANMs who had received IPP-VI training with those who had not. To obtain this data, 48 trained ANMs and 45 untrained ANMs were interviewed using a structured questionnaire. It is expected that technical knowledge recall of the trained ANMs would be better than untrained ANMs.

The present chapter is divided into three sections. The first section deals with antenatal care, the second analyses responses on child care while the last section deals with family planning.

ANTENATAL CARE

Several questions were asked to assess the knowledge of ANMs about various aspects of antenatal care. These included the ability to recognize complications during pregnancy and delivery, management of the complications, awareness of the requisite services and actions required for a safe delivery.

PROBLEMS DURING PREGNANCY

Anaemia and pre-eclampsia are conditions which should be addressed during prenatal care to avoid complications. Table 3.1 presents the results of ANMs' knowledge of these conditions and their management.

Anaemia

In general, there is no discernible difference in the knowledge of trained and untrained ANMs. For example, about two-thirds of both trained and untrained ANMs reported that they would prescribe 200 IFA tablets for severely anaemic women. A similar picture emerges in the advice provided to pregnant women suffering from high blood pressure. 300 IFA tablets is the recommended regimen for severely anaemic women, however, because of field conditions medical opinion is that 200 IFA tablets can be prescribed.

Pre-eclampsia

ANMs clearly understood the implications of pre-eclampsia. Here, half the trained and untrained ANMs said that they would advise reducing salt intake; over sixty percent would refer the woman to the PHC or CHC (60 per cent of trained ANMs compared to 71 per cent of untrained ANMs); while less than 30 percent would advise taking rest (29 per cent trained and 20 per cent untrained).

Table 3.1: Knowledge about antenatal care

<i>Knowledge of Anaemia and Pre-eclampsia</i>	(Percentage)	
	<i>ANM</i>	
	<i>Trained</i>	<i>Untrained</i>
Dose of IFA tablets to severely anaemic women		
200 tablets	67	62
Advice if systolic BP is more than 140		
Refer to PHC/CHC	60	71
Reduce salt intake	54	56
Take rest	29	20
Symptoms of toxemia (pre-eclampsia)*		
High systolic BP(140+)	50	38
Weight gain of more than 5 kg per month in 3rd trimester is not good (Yes)	90	84
Reasons for abnormal weight gain *		
Water in uterus	48	49
Swelling in body	31	36
Anaemic	8	2
Pregnancy complication	23	24
Pre-eclampsia	2	2
Twin births	2	4
DK	8	9
Total N	48	45

* Multiple answers

It is also clear that high systolic blood pressure is not well recognized as a symptom of pre-eclampsia. However, a slightly larger proportion (50 per cent) of the trained ANMs were able to cite this as a sign of pre-eclampsia as compared to the untrained ANMs (38 per cent). Over eighty percent of ANMs recognized that weight gain of over 5 kgs in one month during the third trimester is a problem with no significant difference between trained and untrained ANMs. However, it is important to note that ANMs did not recognize that such weight gain was related to pre-eclampsia. Just two percent of ANMs related weight gain to pre-eclampsia, while less than a quarter attributed it to some other complication during pregnancy. On probing, the complication was reported as difficulty in delivering big babies. Some other causes attributed by ANMs (trained and untrained) to the sudden

increase in weight include water in the uterus (48 and 49 per cent), swelling in body (31 and 36 per cent), anaemia (8 and 2 per cent), pregnancy complication (23 and 24 per cent) and twins (2 and 4 per cent). No difference was observed across the districts, except in the case of Jhansi district where more trained ANMs (50 per cent) as compared to untrained ANMs (20 per cent) could recognize high systolic BP as a symptom of toxemia.

Management of Labour and Delivery at Home

The five cleans of safe delivery--clean hands, clean surface, clean blade, clean cord tie and clean cord are well known among all the ANMs irrespective of training status. While about ninety percent of ANMs were able to report the first four cleans, about one-third were unable to cite keeping the cord stump clean. Finally, the pattern of reporting was similar across all the three districts.

Problems During Labour and Delivery

Table 3.2 presents data on knowledge of the complications just prior to and during the delivery.

Some symptoms of eclampsia are well recognized by both trained and untrained ANMs such as convulsions (73 per cent) while others such as blurred vision (42 and 40 per cent), vomiting (33 and 24 per cent), headaches (21 and 24 per cent) and stomach burns (6 and 13 per cent) less so. There is also some variation in the reporting of these symptoms by district. In general, a greater proportion of the ANMs interviewed in Sitapur and Jhansi districts were able to report symptoms correctly than those in Agra. For example, over eighty percent of the ANMs interviewed in Sitapur and Jhansi districts were able to cite convulsions as a symptom of eclampsia, while less than forty percent of ANMs in Agra were able to do so. While no significant difference was observed between trained and untrained ANMs in all the three districts, overall performance of the ANMs from Sitapur district (irrespective of training) was better than in the remaining two districts. The performance of ANMs from Agra was poorest.

Management of Complications

ANMs were asked to state their opinion on the management of some complications of labour and delivery such as antenatal and postpartum haemorrhage and prolonged labour. The responses of both trained and untrained ANMs was similar and indicated high levels of knowledge (80-100 per cent gave correct answers). Around ninety percent of both trained (92 per cent) and untrained (89 per cent) ANMs agreed that antepartum and post partum haemorrhage are serious complications which have to be referred and cannot be managed at home by the ANM. They also agreed that multipara women having labour over 18 hours was not a good sign with a minor difference between trained (90 per cent) and untrained ANMs (87 per cent). Finally, post partum bleeding of 500 ml or more was

considered a danger sign by eighty-eight percent of trained ANMs and eighty-two percent of untrained ANMs (Table 3.2).

Table 3.2: Knowledge of management of high risk cases before and after delivery

(Percentage)

<i>Knowledge of High Risk Pregnancy and Delivery Management</i>	<i>ANM</i>	
	<i>Trained</i>	<i>Untrained</i>
Symptoms of Eclampsia *		
Blurred vision	42	40
Convulsions	73	73
Vomiting	33	24
Severe headache	21	24
Stomach burning	6	13
Others	38	51
DK	15	22
Complications which require immediate referral to FRU*		
Bleeding before and during labour	92	89
Prolonged labour (18 hrs+) in multipara women	90	87
500 ml. or more bleeding after birth	88	82
Whether following should be done *		
Vaginal exam, in case of ante-partum haemorrhage (No)	68	82
Ergometrine injection in post-partum haemorrhage (Yes)	48	42
Oxytocin injection in case of prolonged labour/suspected uterus rupture (No)	77	76
Total N	48	45

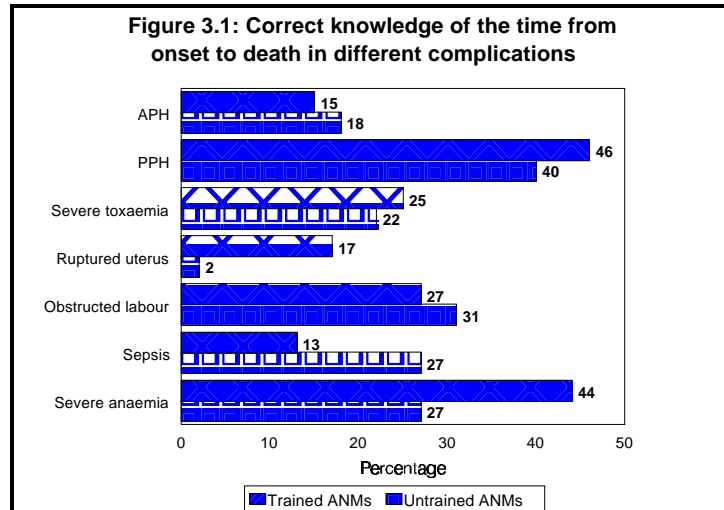
* Multiple answers

Despite these high levels of knowledge on complications, considerably smaller proportions of ANMs were able to indicate the correct management of these complications with little difference between trained and untrained ANMs. For example, less than fifty percent of ANMs agreed that ergometrine injection had to be administered to control post partum haemorrhage; trained ANMs (48 per cent) were marginally better than untrained ANMs (42 per cent) in responding correctly that ergometrine controls post partum haemorrhage. Similarly, over three-quarters of trained ANMs (77 per cent) and untrained ANMs (76 per cent) were able to report correctly that oxytocin injection should not be administered to women suffering from prolonged labour or a suspected ruptured uterus. It is also important to note that considerable numbers of ANMs (20-30 per cent) were not aware that a vaginal examination is not done to investigate ante-partum haemorrhage. In fact, 68 percent of the trained ANMs correctly indicated that a vaginal examination was not to be done in cases of ante partum haemorrhage, compared to eighty-two percent of untrained ANMs. In terms of district variation, ANMs from Agra seem to be more ill-informed than those of Sitapur and Jhansi districts.

Severity of Complications

In order to gauge the depth of knowledge on pregnancy and delivery complications, questions were included on the average time from onset of complications to possible maternal death. Figure 3.1 presents these results.

On all the seven complications, except postpartum haemorrhage (PPH) and severe anaemia, only around one fourth of the ANMs were able to respond correctly. A second point to observe is that the difference in knowledge between the trained and untrained ANMs was small and the ANMs responding correctly were not necessarily always trained (Figure 3.1). For instance, about two-fifths of ANMs were able to respond that women could die within two hours in cases of post partum haemorrhage, with modest differences between trained (46 per cent) and untrained (40 per cent) ANMs. Similarly compared to untrained ANMs (2 per cent) considerably more trained ANMs (17 per cent) indicated that the a woman with a ruptured uterus could die within one day; forty-four percent of trained ANMs reported that severely anaemic women could die during delivery of congestive heart failure (CHF) compared to 27 percent of untrained ANMs who did so. That training may have made little difference is evident from the fact that just thirteen percent of trained ANMs could respond that women suffering from sepsis could die within six days compared to twenty-seven percent of untrained ANMs. Again while no significant difference was observed between trained and untrained ANMs in the three districts, overall ANMs from Sitapur, irrespective of their training status, performed better in answering these questions.



Facilities required at First Referral Unit (FRU)

The knowledge of ANMs on the types of facilities required at a First Referral Unit (FRU) to handle complications was also limited (Table 3.3).

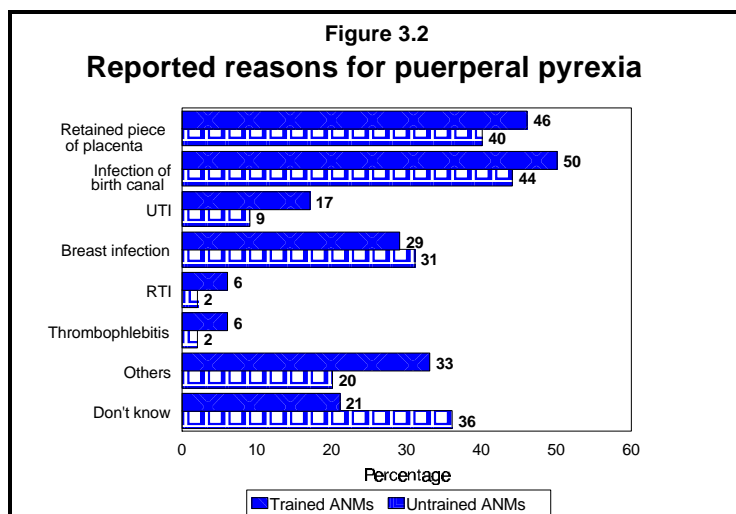
While over three-quarters of ANMs were able to report that a surgeon needed to be present (77 per cent of trained and untrained ANMs), and over three-fifths cited blood transfusion facilities (67 per cent of trained and 59 per cent of untrained), other items such as anaesthesia equipment and emergency drugs were mentioned by less than half the ANMs. The knowledge of trained ANMs was slightly better than the untrained ANMs. No consistent pattern was observable across the three districts.

Required facilities at FRU*	ANM	
	Trained	Untrained
Surgeon (OB/GYN)	77	77
Anaesthetist	46	48
Anaesthesia equipment	38	31
Blood transfusion facility	67	58
Emergency drugs	15	8
Others	40	29
DK	10	10
Total	48	45

* Multiple answers

Puerperal Pyrexia

Surprisingly less than half of the trained ANMs (48 per cent) knew that puerperal fever was an indication of puerperal sepsis, while over three-fifths (64 per cent) of untrained ANMs knew it. As noted earlier in other aspects of knowledge, reasons for pyrexia or puerperal sepsis are largely unknown. General weakness was commonly cited as a possible cause of pyrexia (Figure 3.2). Between forty and fifty per cent of ANMs were able to report that a retained piece of placenta or membranes (46 per cent of trained and 40 per cent of untrained ANMs) or infection of the birth canal (50 per cent of trained and 44 per cent of untrained ANMs) as possible causes of pyrexia. These data also indicate that ANMs trained at Sitapur and Jhansi were considerably more knowledgeable than those trained at Agra. Overall, however, ANMs of Jhansi district, irrespective of their training status, performed better than the other two districts on these items.



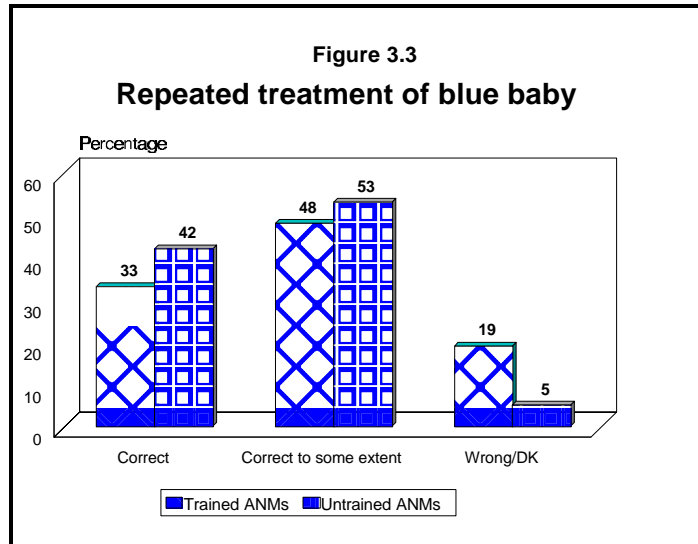
CHILD CARE

Besides the provision of antenatal care and delivery assistance to women, the ANM is also responsible for providing care to children from birth to the first five years of life. These child care services include management of new born, examination and provision of referral services, immunization against six infectious diseases, and management of acute respiratory infections (ARI) and diarrhoea. To assess the extent of ANMs' knowledge

of infant and child care, they were questioned on a few selected subjects. The results of these are presented in the following sections.

Treatment of Blue Babies

The study revealed that only about one-third of the trained and two-fifths (42 per cent) of untrained ANMs were aware of the correct procedure: removal of mucous from the air passage and provision of gentle mouth to mouth resuscitation (Figure 3.3). About half had some but vague knowledge of treating a blue baby. Surprisingly, the proportion of ANMs having no knowledge was much higher among the trained ANMs (19 per cent) than the untrained (5 per cent). The level of knowledge was similar across all the training sites.



Complications of the New Born

The ANMs were further probed about the conditions of new borns which require immediate referral. Table 3.4 indicates that in general, the untrained ANMs were more knowledgeable about when referral was required than trained ANMs. The only exception was in the case of "blue babies", which was mentioned by a significantly higher proportion of trained ANMs (63 per cent) than untrained ANMs (31 per cent). Other frequently mentioned conditions of the new born requiring referral included: low birth weight babies, i.e. birth weights of less than 2000 gms (mentioned by 63 per cent of trained and 73 per cent untrained ANMs), and babies with breathing difficulties (67 per cent of trained and 80 per cent of untrained). Other conditions such as congenital abnormalities, or abnormal head size (too big or too small) were mentioned by only a few ANMs irrespective of their training status. Overall, ANM of Jhansi demonstrated better knowledge than ANMs of the remaining two districts on these items.

Table 3.4: Knowledge of identification of high risk newborns

(Percentage)

<i>Condition *</i>	<i>ANM</i>	
	<i>Trained</i>	<i>Untrained</i>
Birth weight less than 2000 gms	63	73
Baby's head is too big or too small	10	22
Congenital abnormality	27	18
Breathing difficulty	67	80
Blue baby	63	31
Other reasons	35	20
Total N	48	45

* Multiple answers

Breastfeeding Practices

A question on when a new born baby should be put to the breast revealed that about sixty percent of trained and seventy percent of untrained ANMs had correct knowledge, i.e. immediately or within two hours of birth. A comparison across the districts showed that while in Sitapur a higher proportion of trained ANMs (85 per cent) as compared to untrained ANMs (76 per cent) gave a correct response, in Agra and Jhansi the untrained workers were better informed. In general, the study reveals that majority of the ANMs had poor knowledge about care of new born and management of complications. The trained ANMs in general were not better than the untrained ones--except in Sitapur district where the trained ANMs performed marginally better than untrained ANMs.

Immunization of Children

A question on immunization revealed that while about 85-90 percent of ANMs knew the correct dose of DPT, only around forty percent knew the correct quantity of BCG to be given (Table 3.5). Discussions with the ANMs, however, later revealed that they did have correct knowledge about the BCG dosage as well and could point it out correctly on a syringe which is used for giving BCG vaccine but did not know the correct quantity (0.1 ml). However, they were confused while reporting during the interview. They often mentioned 0.01 ml instead of 0.1 ml. No significant variation was observed either between trained and untrained ANMs or across the three districts. It is also surprising to note that only a small proportion of trained (15 per cent) and untrained (26 per cent) ANMs knew that children suffering from mild fever or diarrhoea could be immunized (Table 3.5).

Table 3.5: Knowledge about vaccine dosage and administration

(Percentage)

	ANM	
	Trained	Untrained
Quantity of*		
DPT doses (0.5cc)	85	93
BCG doses (0.1 ml.)	38	35
Can Vaccine be administrated, if child has:*		
Mild fever (Yes)	15	29
Mild diarrhoea (Yes)	13	24
In which layer of skin is BCG administered ?		
Intra-dermal	77	100
Symptom of wrong administration of BCG*		
- vaccine goes in easily	33	9
- skin does not swell	79	91
Effect of wrong administration of BCG*		
Abscess	79	67
Enlarged glands	25	27
DK	6	16
Total N	48	45

* Multiple answers

ANMs knowledge of administration of BCG vaccine was gauged through several questions. While all the untrained ANMs in the three districts knew correctly as to which layer of the skin the BCG vaccine had to be administered, only about three quarters of the trained ANMs answered correctly. Similarly, a larger proportion of untrained ANMs (91 per cent) as compared to trained ones (79 per cent) mentioned the absence of swelling at the site of the injection as a sign of wrong administration of BCG. However, the other sign of wrong administration of the BCG vaccine, i.e. the smooth passage into the skin was mentioned more by trained ANMs (33 per cent), in particular those trained at Sitapur (50 per cent) than the untrained ANMs (9 per cent).

Generally both trained (79 per cent) and untrained (67 per cent) ANMs were aware that the wrong administration of BCG could lead to abscess. However, only about a quarter of both trained and untrained ANMs mentioned enlarged glands as a side effect.

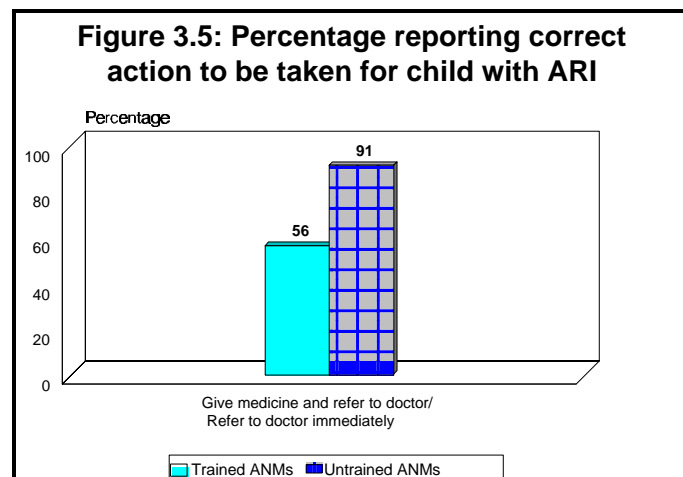
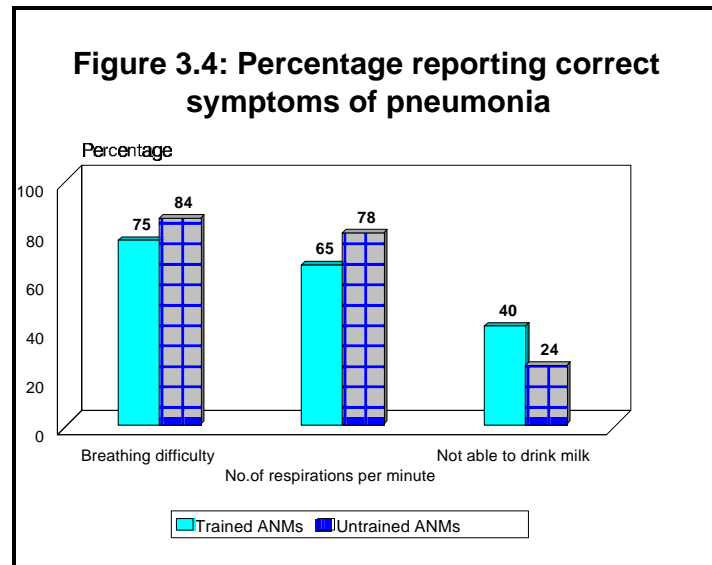
Maintenance of Cold Chain

While most ANMs are aware that the polio vaccine should be kept in ice packs, it was observed that they are not sure about the temperature at which the DPT and TT vaccines should be stored. On being questioned whether these vaccines could be stored in the freezer, 50 percent of the trained ANMs as against 69 percent of the untrained correctly answered that the vaccines should not be stored in the freezer. Most of them believed that "vaccine will get spoilt" if kept in freezer but they could not give a precise reason as to why or what will happen to the vaccine if kept in a freezing chamber.

Similarly, only about fifteen percent of trained and seven percent of untrained ANMs were able to respond correctly that the measles vaccine had to be used within two hours of opening. There is some variation in responses by training site with ANMs trained in Sitapur (27 per cent) doing relatively better than those from Agra and Jhansi (none in both districts).

Acute Respiratory Infection (ARI)

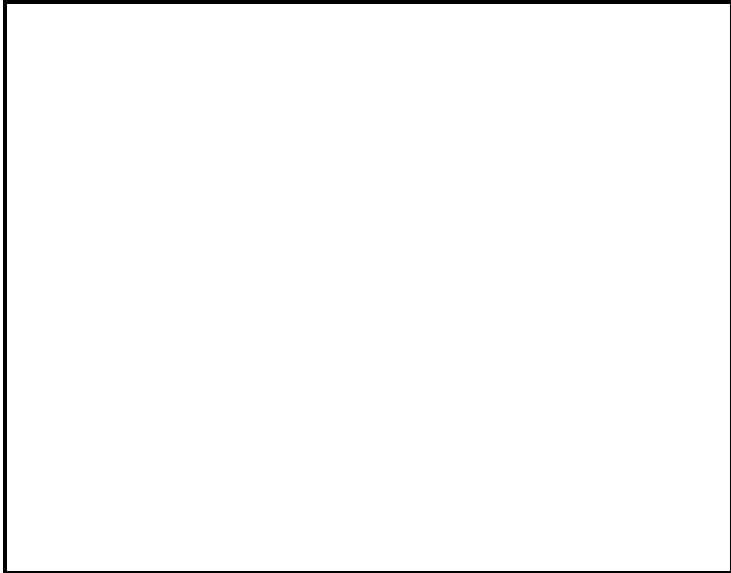
ARI is one of two most frequent diseases from which infants and children under three years commonly suffer. Identification and management of ARI is an important function of ANMs. Questioning on the signs and symptoms of pneumonia and ARI revealed that breathing difficulty (75-84 per cent) and abnormal respiratory count per minute (65-78 per cent) were the most frequently known symptoms of ARI (Figure 3.4). A smaller proportion of ANMs (24-40 per cent) mentioned the inability of the baby to drink milk also as yet another symptom of ARI. Further probing on the number of respiratory counts per minute for children of different ages suffering from pneumonia revealed that only between 20-37 percent of the ANMs had correct knowledge. Further, in the case of ARI, it is expected that ANMs, after identifying the disease, give medicine and refer the case to a doctor immediately. However, only 56 per cent of the trained ANMs as against 91 per cent of the untrained ones mentioned the correct care management procedures (Figure 3.5). It clearly appears that overall trained ANMs were less knowledgeable in the management of ARI than the untrained ones.



Diet for Children with Diarrhoea

Management of diarrhoea is a critical function of ANMs. Probing on food items that a child suffering from diarrhoea could consume reveals that most ANMs were fairly knowledgeable about the diet (Figure 3.6). For instance, significant proportions of both

trained and untrained ANMs knew that a child suffering from diarrhoea, could be fed mother's milk (84-90 per cent), cow's milk (56-62 per cent), curd (69-76 per cent), and rice and dal (71-75 per cent). The knowledge of trained ANMs in this regard was slightly better than the untrained ANMs.

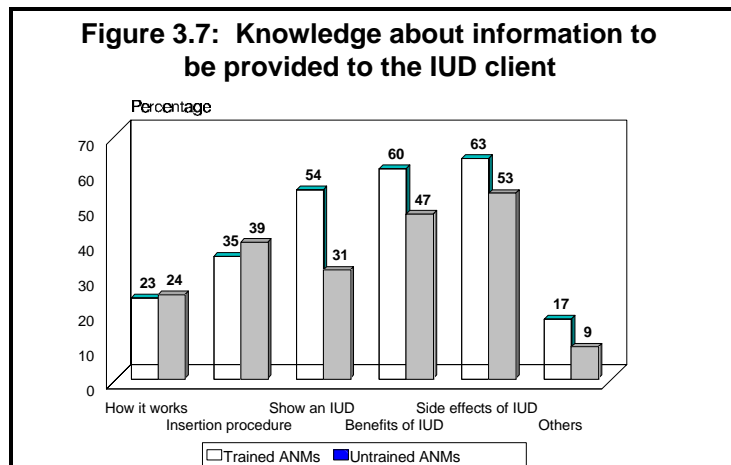


FAMILY PLANNING

The training curriculum included IUD insertion and development of family planning counselling skills. The training envisaged that ANMs, during their stay at the training institutions, would be able to observe the screening process to assess whether the client is suffering from an RTI, how the counselling is done, the information to be provided to a prospective client, and the process of IUD insertion. Finally, the ANMs were expected to get practical training in insertion of IUD under the supervision of their trainers. Several questions were asked on these aspects during ANM interviews. Their answers are presented in the following sections.

Information for IUD Clients

The analysis shows that overall, the trained ANMs were marginally better oriented in counselling of prospective IUD clients than the untrained ANMs (Figure 3.7). For instance, a greater proportions of trained ANMs (54 per cent) as compared to untrained ones (31 per cent) mentioned that they would show IUD to their prospective clients while explaining about the method.



Similarly, a higher proportion of the trained ANMs reported that they would inform the women about the benefits (60 per cent) and side effects (63 per cent) of the method. However, it is important to note that there was no observable difference between trained and untrained ANMs on explaining "how the method works" or "how the IUD would be inserted", two crucial points of counselling. A comparison of the answers of the ANMs from the three districts shows a much better performance of trained ANMs in Sitapur, followed by Agra. In Jhansi, no difference was observed between trained and untrained ANMs.

Medical and reproductive history taking of IUD clients

Probing on what medical and reproductive history they would collect from a prospective client, demonstrated poor knowledge of the ANMs on the subject, with no significant difference between trained and untrained ANMs observed (Table 3.6). For instance, less than half of the ANMs were able to mention one or two contraindications which could help in assessing if the woman is suffering from an RTI. As Table 3.6 shows, only 36-44 percent mentioned pain in lower abdomen, 15-16 percent heavy and abnormal bleeding and 44-53 percent mentioned excessive foul smelling vaginal discharge as a contraindication needing management before IUD insertion.

Table 3.6: Knowledge about the medical and reproductive history of clients for IUD insertion
(Percentage)

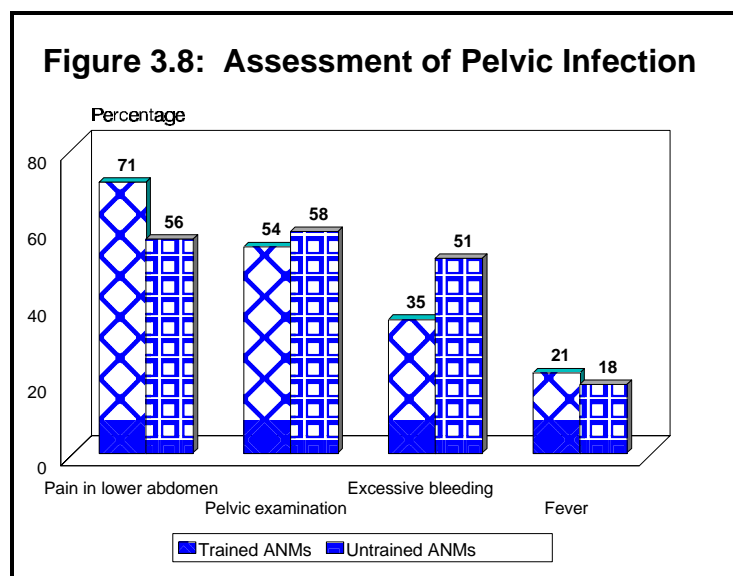
Questions asked	ANM	
	Trained	Untrained
Diabetes	8	16
History of heart disease	33	22
Last full term pregnancy	19	16
Pain in lower abdomen	44	36
Date of last menstrual period	67	69
Excessive foul smelling vaginal discharge	44	53
Heavy/abnormal bleeding for past few months	15	16
Total N	48	45

* Multiple answers

The same pattern was observed across all three districts. However, the ANMs of Jhansi and Sitapur districts, irrespective of their training status, were more knowledgeable than those from Agra.

Assessment of Pelvic Infection and IUD contraindications

Questioning on how to assess a pelvic infection reveals that in general ANMs had poor knowledge and only about half of the ANMs were able to mention one or more symptoms. It is also important to note that only about half the ANMs mentioned the need for pelvic examination to ascertain whether the woman is suffering from PID (Figure 3.8). This proportion however varied widely



across the districts from about 18 percent in Agra district to 65 per cent in Sitapur district and 75 percent in Jhansi district.

Further probing on what contraindications of IUDs they would look for while conducting pelvic examinations reveals that trained ANMs were slightly more knowledgeable than untrained ANMs. For instance, discharge from the cervix (65 per cent), swollen vaginal walls (56 per cent), enlarged uterus indicating pregnancy or fibroid (38 per cent), ulcers on the external genitalia (33 per cent), and enlarged glands in the groin area (22 per cent) were some of the frequently mentioned contraindications by trained ANMs. A lower proportion of untrained ANMs mentioned these contraindications (Table 3.7). Comparison across districts shows that the performance of ANMs from Jhansi district was relatively better than those interviewed in the other two districts. The performance of ANMs from Agra district was poorest.

Table 3.7: Knowledge about contra-indications for IUD insertion

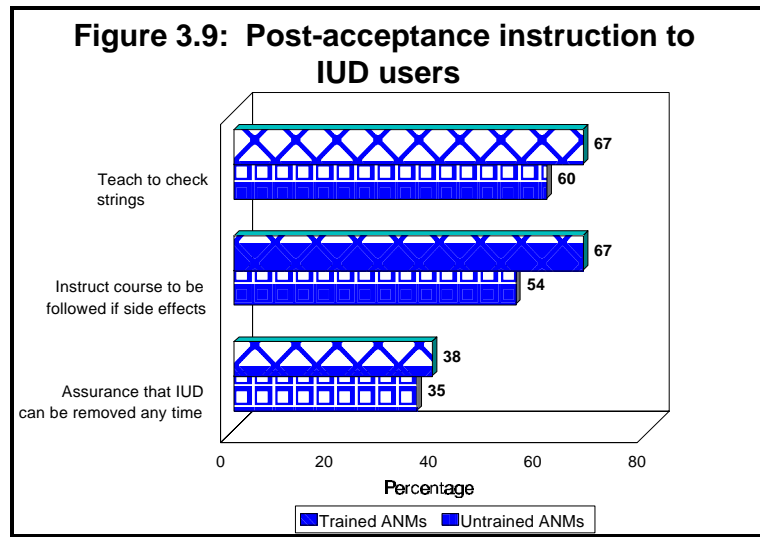
(Percentage)

<i>Contra-indication for IUD insertion*</i>	<i>ANM</i>	
	<i>Trained</i>	<i>Untrained</i>
Discharge from cervix	65	58
Ulcer on external genitals	33	18
Enlarged glands in groin area	23	13
Swollen vaginal walls	56	49
Pain in lower abdomen	38	53
Tenderness of cervix, uterus	8	18
Uterus enlarged (pregnancy)	38	18
Palpable mass in adnexal area	6	0
Mass, ulcer or bleeding on contact with cervix	17	20
Total N	48	45

*Multiple answers

Post-insertion Instructions

Probing on the instructions to be given to clients after IUD insertion revealed that overall the trained ANMs were relatively better informed than untrained ANMs as a higher proportion of them could spontaneously mention checking of strings (67 per cent versus 60 per cent), action to be taken in case of side effects (67 per cent versus 54 per cent), and assurance that the device would be taken out on the client's request (38 per cent versus 35 per cent) (Figure 3.9).



Further probing on problems after insertion of IUD, which require a return visit by women to the clinic, however, showed an overall poor knowledge of ANMs with no significant difference between trained and untrained ANMs. For instance, between half and two-third ANMs mentioned heavy discharge, abnormal spotting/bleeding and abnormal pain after insertion of IUD as symptoms which need medical attention. However, less than 20 per cent of the ANMs could list other symptoms like pain during intercourse, PID, fever with chills and shorter or longer thread as a condition when the client should contact the ANM or return to clinic (Table 3.8).

Table 3.8: Knowledge of complications requiring return to clinic

(Percentage)

Complication for which client should come back to clinic*	ANM	
	Trained	Untrained
Heavy discharge	67	48
Abnormal spotting/bleeding	58	67
Abnormal pain/cramps	54	60
Pain during intercourse	15	25
Infection/PID	10	4
Fever/chills	10	17
Shorter or longer thread	17	6
IUD expulsion	10	2
Total N	48	45

* Multiple answers

No significant difference was observed in the response pattern of the ANMs across the three districts.

CHAPTER IV

SUMMARY AND CONCLUSIONS

A rapid appraisal of the IPP-VI training program of ANMs in Uttar Pradesh was undertaken by the Population Council and the State Innovations in Family Planning Services Agency (SIFPSA). The purpose was to learn about previous training efforts as SIFPSA is planning a training programme to strengthen the knowledge, technical skills and competence of ANMs. The study covered 9 block PHCs in Agra, Sitapur and Jhansi districts. Individual interviews and focus group discussions with ANMs and informal discussion with medical officers will held to collect the relevant information. The specific findings are provided in the executive summary of the report.

The study provided several insights in the development and execution of training programmes. It highlighted that a well designed training programme may fail in its objectives, if it is not properly executed. Four critical factors were identified for the success of a training programme.

- It is crucial to undertake preparatory work such as detailed descriptions of the roles and responsibilities of various participants, development and distribution of manuals, and provision of full information on the administrative procedures to all levels of participants.
- The second critical step is to inform the trainers of the objectives of the training so that they are clear about the desired end product. Efforts should be made that the conditions at the training sites as far as possible closely resemble the actual service sites. This ensures that the trainees are able to practise their new skills after the training.
- Continuous monitoring of the training is required to ensure adherence to training standards. This also ensures standardization of the training provided.
- Finally a supportive environment for the trainees post training is essential for the retention of knowledge and skills. Supportive environment ranges from the availability of requisite equipment and supplies, regular monitoring of service delivery, to refresher programmes.

It is hoped that this rapid appraisal will be useful for planning future training programmes.

References

AVSC International & JHPIEGO. 1995. Family Planning Service Delivery in the Public Sector in Uttar Pradesh.

Centre for Operations Research and Training (CORT). 1992. Use of risk approach in comprehensive MCH care: Evaluation of a multi-centric ICMR study in Gujarat, Maharashtra, Madhya Pradesh, Rajasthan and Uttar Pradesh. CORT: Baroda.

ICMR. 1991. Evaluation of Quality of Family Planning Services at Primary Health Centre Level: An ICMR Task Force Study.

India Population Project - VI (IPP-VI). 1987. Basic project document, Ministry of Health and Family Welfare, Government of India.

Population Council, 1995. Situation Analysis of Family Welfare Program in Uttar Pradesh. Report on Agra and Sitapur districts. ANE OR/TA Project.