#### **CHAPTER V**

#### Presentation

On 1<sup>st</sup> of June, 1998, the examination committee was held to evaluate my thesis. The overall view of the thesis study on the topic of "Detection of high-risk pregnancies using Home-Based Prenatal Record through Traditional Birth Attendants: An intervention to increase antenatal coverage in Nepal" was presented. The presentation was divided into 4 main parts: introduction. essay, proposal and data exercise.

In the introduction part, I presented a glance on problem related to maternal health in Nepal. In the essay part, I discussed about identification of problem related to pregnancy and clarified various factors related with ANC utilization and coverage with a concept of some alternative solution as to provide effective antenatal service. In the proposal section, I discussed about implementation of my proposed study in Siraha district, Nepal in order to provide ANC service using HBPR for evaluation scheme to evaluate the ongoing processi n the 4<sup>th</sup> part of the high risk pregnant. After the implementation, I presented my study, I discussed about result of pre-test of evaluation indicators of FGD done in Phahurat, Thailand and indicators were presented with other parts in data exercise result as limitations, discussion and lesson learned. I concluded that this result could not be generalized because of geographical, socio-cultural, economical, educational and political variations of different countries. During the presentation, committee member asked me questions about my project, to which I tried to answer. The

overhead transparencies were prepared and used for the presentation. The content is given below sequentially as shown to the examination committee.

### TITLE OF THESIS

DETECTION OF HIGH-RISK PREGNANCIES USING HOME-BASED PRENATAL RECORD THROUGH TRADITIONAL BIRTH ATTENDANTS: AN INTERVENTION TO INCREASE ANTENATAL COVERAGE IN SIRAHA DISTRICT, NEPAL

### **CONTENTS**

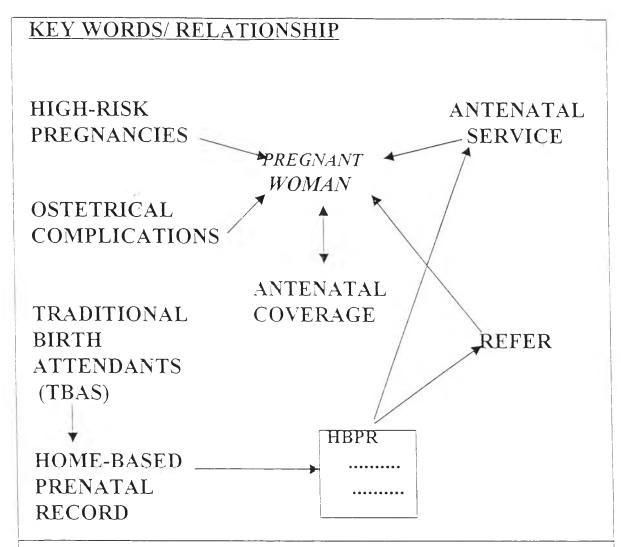
#### 1. ESSAY

- IDENTIFICATION OF THE PROBLEM
- CLARIFICATION OF THE PROBLEM
- APPROPRIATE SOLUTIONS

#### 2. PROPOSAL

- DEVELOPMENT OF HOME-BASED PRENATAL RECORD (HBPR)
- TRAINING
- IMPLEMENTATION OF HBPR
- MONITORING
- SUPERVISION
- EVALUATION

#### 3. DATA EXERCISE



#### MAGNITUDE OF THE PROBLEM

- AT PRESENT, NEPAL'S MATERNAL MORTALITY RATE (MMR) IS 539 PER 100,000 LIVE BIRTHS
- CAUSES ARE RELATED TO PREGNANCY AND CHILD BIRTH
- AT RISK PREGNANCIES ARE ABOUT 40% OUT OF 370,890 TOTAL PREGNANCIES
- MORE THAN 80% OF PREGNANT WOMEN DO NOT GET ANTENATAL SERVICE.

# OBST. COMPLICATIONS AFFECTING HEALTH OF MOTHER/ BABY

PROBLEMS OR	MOST SERIOUS	MOST
SERIOUS COMPLICATIONS	EFFECTS ON MOTHER	EFFECTS ON FETUS BABY/
1. SEVERE ANEMIA	- CARDIAC FAILURE - INFECTION	- LOW BIRTH WEIGHT - ASPHYXIA - STILL BIRTH
2. HEMORRHAGE	- SHOCK - CARDIAC FAILU - INFECTION	- ASPHYXLA - STILL BIRTH
3. HYPERTENSIVE DISORDERS	- ECLAMPSIA CEREBRO-VASCULAR ACCIDENT	- LOW BIRTH WEIGHT - ASPHYXLA - STILLBIRTH
4. HEPATITIS	- POST PARTUM HEMORRHAGE	- HEPATITIS
5. MALARIA	- SEVERE ANEMI - CEREBRAL THROMBOSIS	- PREMATURITY - INTRA-UTERINE GROWTH RETARDATION
6. INFECTION DURING PREGNANCY, SEXUALLY TRANSMITTED DISEASES (STD)	- PREMATURE ONSET OF LABOR - PELVIC INFLAMMA TORY DISEASES	- PREMATURE DELIVERY - NEONATAL EYE INFECTION - BLINDNESS

# OBST. COMPLICATIONS AFFECTING HEALTH OF MOTHER/BABY

- PNEUMONIA - STILL BIRTH - CONGENITAL SYPHILIS

# ISSUE

HOW TO REDUCE OBSTETRICAL COMPLICATIONS AMONG HIGH-RISK PREGNANT WOMEN IN NEPAL?

### **CONCLUSION**

OBSTETRICAL COMPLICATIONS CAN BE REDUCED BY INCREASING ANTENATAL COVERAGE

# **REASONS**

- AT PRESENT, NATIONAL ANTENATAL COVERAGE IS ONLY 19% (ANC 1<sup>ST</sup> VISITS EXPRESSED AS A % OF EXPECTED PREGNANCIES)
- CONTINUITY OF ANTENATAL SERVICE IS 1.8 (EXPRESSED AS NUMBERS OF TOTAL VISITS DIVIDED BY 1<sup>ST</sup> ANTENATAL VISIT)
- AT PRESENT, VISITS OF COMPLICATED PREGNANCIES ARE NOT REPORTED ON ROUTINE SERVICE STATISTICS
- LACK OF FEMALE HEALTH STAFFS IN ATLEAST HALF OF THE HEALTH POSTS IN NEPAL

(DOHS, 1996)

### IMPORTANCE OF ANTENATAL CARE

- PREGNANCY IS A PERIOD OF POTENTIAL RISK
- ANY PREGNANT WOMAN CAN HAVE COMPLICATIONS AND DIE
- ACCURATELY PREDICTING WHICH WOMAN WILL DEVELOP COMPLICATIONS IS NOT POSSIBLE
- EARLY DÉTECTION AND MANAGEMENT OF COMPLICATIONS IS VITAL.

(Safe motherhood, Mother Baby Package, WHO, 1994)

#### **EVIDENCES**

• 15% OF ALL PREGNANT WOMEN REQUIRE SKILLED OBSTETRIC CARE, WITHOUT WHICH THEY SUFFER SERIOUS AND LONG TERM MORBIDITIES, DISABILITIES AND EVEN DEATH

(WHO, 1994)

• 80-90% OF ALL ILLNESSESS RELATED TO PREGNANCY AND CHILD BIRTH CAN BE PREVENTED BY RELATIVELY SIMPLE MEANS WITHOUT ANY NEES FOR HIGH TECHNOLOGY OR HOSPITAL FACILITIES

(Lumbiganon, 1988)

#### GENERAL OBJECTIVES

1. TO INCREASE ANTENATAL COVERAGE THROUGH THE TRADITIONAL BIRTH ATTENDANTS BY PROVIDING EDUCATION TO IMPROVE THEIR KNOWLEDGE, ATTITUDES AND PRACTICES IN PROVIDING ANTENATAL CARE AND DETECTION OF HIGH-RISK PREGNANCIES. 2. INTRODUCTION OF HOME-BASED PRENATAL RECORD (HBPR) AS A TOOL TO DETECT THE HIGH-RISK PREGNANCIES IN ORDER TO REDUCE OBSTETRICAL COMPLICATIONS IN SIRAHA DISTRICT, NEPAL.

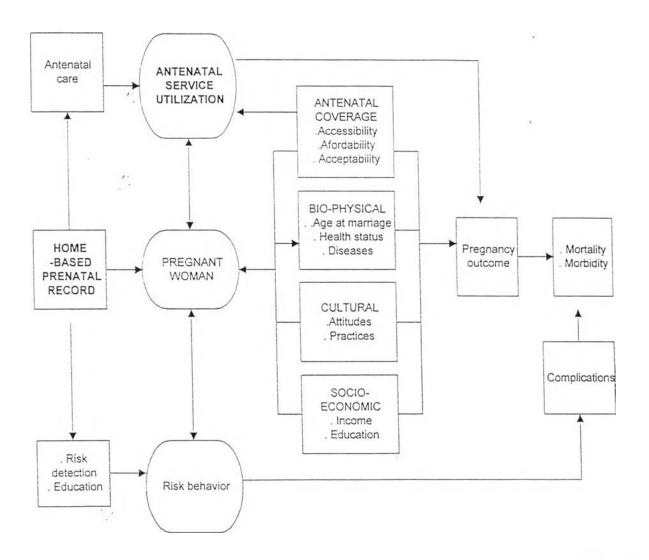
#### **SPECIFIC OBJECTIVES:**

- 1. TO DEVELOP THE TRAINING CURRICULUM FOR TRADITIONAL BIRTH ATTENDANTS (TBAS) ON HOME-BASED PRENATAL RECORD (HBPR)
- 2. TO TRAIN TBAS IN PROVIDING ANC AND DETECTION OF HIGH-RISK PREGNANCIES USING HBPR
- 3. TO EVALUATE THE IMPACT OF THE TRAINING BY MEASURING KAP OF TBAS IN PROVIDING ANC AND HIGH-RISK DETECTION USING HBPR
- 4. TO EVALUATE THE IMPACT OF SERVICE ON WOMEN BY MEASURING;

I KAP ON ANC UTILIZATION
II THE % OF 1<sup>ST</sup> VISIT AND CONTINUITY OF ANC SERVICE

5. TO MAKE RECOMMENDATION TO DECISION
MAKERS AND POLICY MAKING BODIES IN
APPROPRIATE LEVEL FOR USING HBPR BY TBAS AS
A TOOL FOR DETECTION OF HIGH-RISK PREGNANCIES.

Figure 2.2. Analytical framework of casual relationship of antenatal service utilization and risk reduction: /



Source: Brandly and Martin, (1994). "The impact of home visits on enrollment pattern in pregnancy-related services among low-income women". Public Health Nursing. pp. 392-398..

# INDRODUCTION OF STUDY AREA: SIRAHA DISTRICT. NEPAL.

POPULATION

539,923

- TARGET POPULATION OF MCH PROGRAM FOR MARRIED WOMEN OF REPRODUCTIVE AGE 15-49 ARE 107,578
- NUMBER OF EXPECTED PREGNANCIES 23,454
- ANC COVERAGE

19.69%

(DOHS, 1996)

- DELIVERY BY TRAINED HEALTH PERSONNEL INCLUDING TBAS IS 2%
- FEMALE LITERACY RATE IS

16.7%

(DOHS, 1993)

### **HEALTH FACILITIES:**

HOSPITAL	-	2
PHC/HC	-	2
HP	-	12
SUB-HP	( <del>-</del> 0	97
NUMBER OF TBAS	-	197
		(DOHS, 1996)

# TRAINING OBJECTIVES: (EXPECTED OUTCOME OF THE TRAINING)

1. TBAS WILL DEMENSTRATE ABILITY TO TALK WITH WOMEN IN A FRIENDLY MANNER AND SHOW WARMTH AND CONCERN.

#### TRAINING APPROACH:

COMPETENCY-BASED, NON FORMAL, ADULT EDUCATION

#### TRAINING METHODS:

- DISCUSSION
- PROBLEM SOLVING
- CASE STUDY
- ROLE PLAY
- DEMONSTRATION AND RE-DEMONSTRATION
- EDUCATIONAL GAME, DRAMS, SONG, AND STORIES

#### **INTRODUCTION OF HBPR:**

- 1. DEVELOPMENT OF HBPR, AS A TOOL FOR RISK DETECTION
- 2. PRE-TEST OF HBPR
- 3. USE AS IEC MATERIAL IN PRENATAL EDUCATION FOR UTILIZING ANTENATAL CARE
- 4. DISTRIBUTION OF HBPR TO USE IN HIGH-RISK DETECTION

# WHAT IS HOME-BASED PRENATAL RECORD (HBPR)?

- 1. SIMPLE TOOL FOR DETECTION OF HIGH-RISK PREGNANCIES TO BE USED BY TBAS
- 2. HBPR WILL REMAIN WITH WOMEN SO AS TO USE WHENEVER SHE NEEDS TO GO TH THE HEALTH FACILITIES

- 3. TOOL AS TO EDUCATE WOMEN WITH "AT-RISK" PREGNANCIES FOR EARLY REFERRAL
- 4. APPROIATE CONTENTS/FIGURES USED AS TO FOLLOW STEPS EASILY BY TBAS AND COVER "AT RISK" CONDITIONS:

STEP-1. HISTORY TAKING

STEP-2. EXAMINATION

STEP-3. PRENATAL ADVICE USING IEC MATERIALS/ HBPR

STEP-4. IDENTIFICATION OF "AT-RISK" PREGNANCIES AND REFERRAL

STEP-5. CORRECT USE OF HBPR/RECORDING

# OTHER ACTIVITIES OF PROPOSED PROGRAM

- 1. PROVISION OF IEC MATERIALS AND HBPR IN PRENATAL TEACHING
- 2. MONITORING OF ANTENATAL SERVICES TO SEE IT'S TRENDS
- 3. SUPERVICION OF TBA'S ACTIVITIES IN PROVIDING
  - I. ANTENATAL CARE
  - II. USE OF HBPR IN DETECTION OF "AT-RISK" PREGNANCIES

# **EVALUATION OF THE PROGRAM:**

- 1. TRAINING PROCESS AND LEARNING OUTCOME EVALUATION
- 2. IMPACT EVALUATION OF TRAINING ON TBAS
- 3. IMPACT EVALUATION OF ANTENATAL SERVICE ON THE WOMEN
- 4. IMPACT EVALUATION ON THE ANTENATAL SERVICES i.e. ANC COVERAGE

# 1. TRAINING PROCESS AND LEARNING OUTCOME EVALUATION

CRITERIA	TOOLS USE	METHODS	
EVALUATOR			
	:)0=:		
- OBJECTIVES	- CASE STUDY	- PRE AND	- TRAINERS
-RESOURCES	FORMAT OF "AT-RISK" CASES	POST TEST	FROM SPECIFIC AREAS
- CAPABILITY OF TRAINEES	QUESTIONNAIRS	- PRACTICAL	
TRAINERS	- CHECK-LISTS	- QUESTIONS/ ANSWERS	

# **IMPACT EVALUATION OF PROGRAM:**

# A. IMPACT EVALUATION OF THE TRAINING ON TBAS

MEASURÉMENT INDICATORS	TOOLS USED	METHOD	EVALUATER
1. KNOWLEDGE 2. ATTITUDES 3. PRACTICES	- CHECH-LIST O - HBPR - IEC MATERIALS	-DIRECT BSERVATION	- ANM AS A SUPERVISOR

#### B. IMPACT EVALUATION OF ANC ON WOMEN *MEASUREMENT* **TOOLS** *METHODS* **EVALUATER INDICATORS USED** - STRUCTURED 1. KNOWLEDGE - SURVEY **ANMS** QUESTIONN **INTRERVIEW** 3. ATTITUDES -AIRES 4. PRACTICES **OF ANC** UTILIZATION

### C. ANTENATAL COVERAGE:

#### **INDICATORS**

- I. ANC FIRST VISIT AS A % OF EXPECTED PREGNANCIES
- II. COTINUITY OF ANC SERVICE AS NUMBER OF TOTAL VISITS DIVIDED BY 1<sup>ST</sup> VISIT

SOURCE: OFFICIAL STATISTICS	INFORMATION
1. MASTER REGISTER 2. MONTHLY REPORT FORM	- ANC COVERAGE, INCLUDING DEMOGRAPHIC CHARACTE RISTICS OF PREGNANT WOMEN
3. CONSOLIDATING REPORTFROM HBPR	- NUMBERS OF "AT-RISK" PREGNANT WOMEN REFERRED BY TBAS - PREGNANCY OUTCOME

# **SOURCES OF DATA COLLECTION:**

- 1. FOCUS GROUP DISCUSSION (KNOWLEDGE, ATTITUDES, AND PRACTICES)
- 2. HOUSE HOLD SURVEY

#### 3. REVIEW OF OFFICIAL STATISTICS

### **OBJECTIVES OF DATA EXERCISE:**

- 1. TO REFINE DATA COLLECTION TECHNIQUES
- 2. TO TEST THE DATA COLLECTION INSTRUMENTS

#### **DATA EXERCISE:**

PLACE OF DATA PHAHURAT, PHARANAKHON

EXERCISE: DISTRICT, BANGKOK

27<sup>TH</sup> OF DECEMBER, 1997 DATE/TIME:

DATA COLLECTION: FOCUS GROUP DISCSSION (FGD)

10 MARRIED WOMEN INCLUDING *PARTICIPANTS:* 

**3 PREGNANTS OF AGE 18-37 YEARS** 

INSTRUMENT USED: **FGD INDICATORS** 

**COMPONENTS:** 1. KNOWLEDGE OF ANC

(KNOWLEDGE, 2. USE OF ANC

ATTITUDES, AND 3. DECISION TO SEEK CARE

PRACTICES OF ANC 4. SOURCE OF INFORMATION SERVICES)

5. KNOWLEDGE OF RISK SYMPTOMS

6. PREFERENCES OF PLACE/PERSON

7. TIME AND FREQUENCY OF ANC

**VISITS** 

#### FINDINGS OF FOCUS GROUP DISCUSSION:

- 1. MOST OF THE WOMEN KNEW ABOUT ANTENATAL SERVICE
- 2. LACK OF KNOWLEDGE ON PROPER UTILIZATION OF ANC i.e.
  - A. AT THE TIME OF "AT-RISK" CONDITIONS
  - B. VISIT AT LEAST ONCE IN EVERY TRIMESTER
- 3. STRONGLY PREFERRED FEMALE HEALTH WORKER TO GET SERVICE
- 4. MOST OF THE WOMEN PREFERRED TO GET SERVICE FROM HOSPITAL
- 5. COMMUNITY-BABED FEMALE HEALTH WORKERS, AND FRIENDS ARE THE MAJOR SOURCE OF GETTING INFORMATION ABOUT THE SERVICES
- 6. MASS MEDIAS AND COMMUNICATIONS FOUND SIGNIFICANT IN DISSESSMINATING THE MESSAGES OF ANC IN TH ECOMMUNITY.

### **LESSON LEARNED FROM FGD:**

- 1. FGD IS INCORPORATED IN THE PROPOSAL
- 2. FEMALE HEALTH STAFFS FOR DATA COLLECTION
- 3. PRIVACY HAS TO BE MAINTAINED
- 4. TIME MANAGEMENT IS NECESSARY
- 5. CULTURAL VALUES TO BE CONSIDERED IN INSTRUMENTS

# PLANNED STRATEGIES TO INCREASE ANC COVERAGE:

- 1. INCREASING ACCESS TO ANTENATAL SERVICES IN RURAL NEPAL.
- 2. PROVIDING ANC THROUGH FEMALE TO FEMALE APPROACH
- 3. IMPROVING EXISTING KNOWLEDGE, ATTITUDES, AND PRACTICES OF TBAS PROVIDING ANC.
- 4. USING THE SIMPLE TECHNOLOGY (HBPR) FOR DETECTION OF HIGH-RISK PREGNANCIES
- 5. EMPHASIZING IEC ACTIVITIES TO RAISE AWARENESS OF COMMUNITY ABOUT "AT-RISK" PREGNANCIES
- 6. CO-ORDINATION AMONG THE HEALTH WORKERS TO IMPROVE REFERRAL.