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**A COMPARISON OF UTILIZATION PATTERNS,
THE HEALTH CARE PROCESS and the
EFFECTIVENESS OF FOUR PRENATAL
HEALTH SERVICES in a
PROVINCIAL COMMUNITY**

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by the

**Department of Psychology
University of the Philippines
Diliman, Quezon City
Republic of the Philippines**

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This investigation is done in partnership with the

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Washington, D.C., United States of America

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INTRODUCTION

Despite modern obstetrics, pregnancy and childbirth remain as major causes of death for women and children in the world's poorer countries. A 1988 **Population Report** says that one woman dies every minute as a result of pregnancy, contributing to an estimated 500,000 deaths every year. Some of these deaths may have been unavoidable but many could have been prevented by adequate maternal health care.

The state of maternal health care in the Philippines also needs much attention. One government report in that country estimated in 1984 that around 1,805 mothers die every year. A study in 1986 (De la Paz) shows that many of the deaths of mothers are caused by lack of medical assistance at childbirth and poor prenatal and postnatal care. Inadequate pre- and postnatal care is also a factor identified by the Second Country Program for Filipino children (1983-87) to cause high mortality rate among Filipino children.

Fortunately, the need of pregnant women for prenatal care in the Philippines has started to draw more attention from both government and private agencies. Organizations like the UNICEF, the Department of Health, and La Leche Organization are publishing self-help booklets on prenatal health care. Government health centers are holding seminars on the subject. Concerned organizations such as GABRIELA and Community Medicine Development Foundation are also mobilizing para-professional health workers to help educate and care for pregnant women.

The increasing efforts to improve the quality of maternal health care in the Philippines will benefit from studies which determine the extent of utilization of the existing prenatal programs. So far, studies on maternal health care have treated such topics as nutrition (Casal, 1959; Pascual, 1969; Worthington, 1984) and the treatment of problems in pregnancy and childbirth such as eclampsia and pre-eclampsia (Labio, 1974), pre-maturity (Pascual, 1969; Rivera, 1976; Worthington, op.cit.), and maternal and neo-natal deaths (De la Paz, 1976). There is still a need to do studies on the utilization and process of prenatal care.

At present, Filipino women get prenatal care from the public doctors in government hospitals and health centers, the private doctors in private clinics, the midwife working as a free agent or based in public health centers, and the **hilots** or the traditional birth attendants. Studies on child rearing practices on selected Filipino communities suggest that pregnant mothers prefer to go to the doctors and the hilots (Domingo, 1961; Lagmay, 1974). However, there are no studies about the pregnant mother's

attitudes, perceptions, and extent of utilization of the health care given by each of the mentioned prenatal workers. There are also virtually no studies which evaluate the process and effectiveness of health care given by the four prenatal health workers. The present study is aware of three previous studies on the hilots (Bautista, 1969; Dizon, 1973; Angara, 1976), but these studies did not document the whole consultation process between the hilots and their clients. These studies chose to focus mostly on the massage hilots' give to pregnant women.

This study then, which is in two parts, seeks to determine the utilization pattern, describe the process, and evaluate the effectiveness of prenatal care given by four helpers, namely, the public doctor, the private doctor, the midwife, and the hilot.

It will adopt that assumption from medical anthropology which views health care as a cultural system shaped by social and cultural factors. This implies the belief that for any health program to succeed, insight into the cultural context is necessary. The evaluation and recommendation this study makes assume the need to avoid unnecessary conflict with cultural patterns in the area of research, the positive use of wisdom coming from the local culture, the waving of judgment on local practices which are not clearly detrimental, and the identification of harmful practices which must be changed (see Cominsky, 1976).

OBJECTIVES

Given the observations above, this study seeks to contribute to current knowledge on the use of prenatal health care which will hopefully prove useful for developing prenatal health care programs suited to the Philippines context. It will try to meet the following objectives:

- 1) to determine the pattern of utilization of the services of four types of prenatal health workers in a provincial community in the Philippines;
- 2) to determine if the women's actual choice of prenatal health care worker coincides with their choice of the best type of health worker to go to;
- 3) to determine the importance given by pregnant women to the advice of husband and elderly woman living with them regarding prenatal care;
- 4) to determine if the variables of socio-economic status, educational level, age of the respondent, parity, type of domicile, and religion of respondents have significant influence on the above events;
- 5) to describe the events that take place between the health worker and his client during consultation;

- 6) to assess the relative effectiveness of prenatal health care given by each of the four types of health workers;
- 7) to determine if the variables of type of health worker, client's socio-economic status, parity, and stage of pregnancy during visit significantly influence the process and effectiveness of the health care given;
- 8) to identify distinct, indigenous, and contextualized concepts and methods on prenatal care, and
- 9) to determine problems and difficulties encountered in prenatal care by health workers and clients, and their suggestions on how prenatal care can be improved.

With these objectives, the research proceeds in two phases. Phase I seeks to determine the utilization pattern of the four types of identified prenatal health care givers. Phase II focuses on the description of the process and evaluation of effectiveness of the health care given by the four types of health workers.

CONCEPTUAL FRAMEWORK

Phase I: Pattern of Utilization

The first phase of the study seeks to describe the **utilization pattern** of four types of prenatal health workers. These four are:

- 1) public doctors,
- 2) private doctors,
- 3) licensed midwives working in puericulture and government health centers, and
- 4) the **hilot** or the traditional care givers.

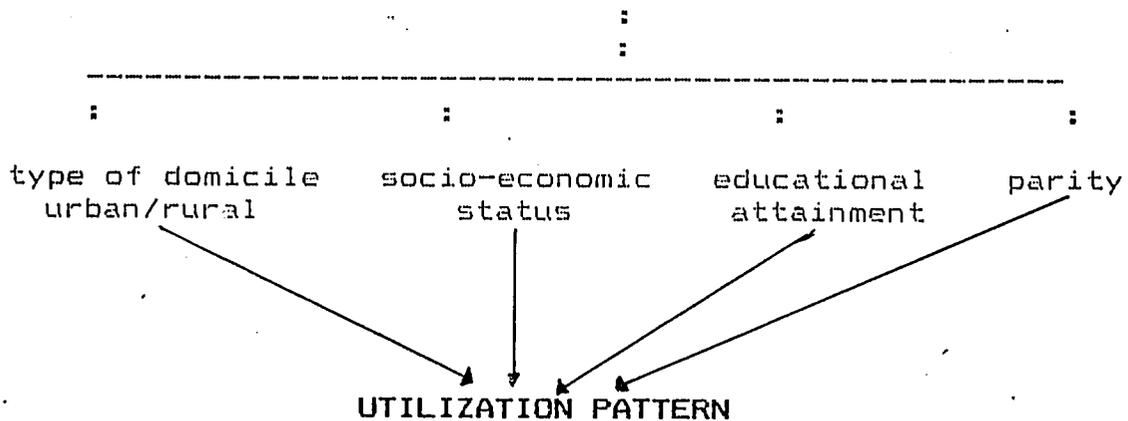
The public doctors are those serving in government health agencies. They are paid by the government to give such service: They do not usually receive any fee from the client. The private doctors, on the other hand, charge fees for every consultation. The midwives* are birth attendant specialists who have some training in scientific medicine and are licensed by government to assist women in childbirth. The term **hilot** refers to the non-formally trained, traditional birth attendant who employs massaging as a principal method in midwifery practice.

* In other literature, **midwife** is used to designate both licensed and unlicensed birth attendants (Gollig and Haley, 1976).

This study also seeks to determine the pattern of utilization of prenatal health care services at various stages of pregnancy. It studies the women's reasons for choosing to go to a particular type of health worker, their reasons for changing health workers across pregnancies, their perceptions of the different types of health workers, and their perception of which type of health worker is best. It also tries to find out at what period of pregnancy women go for prenatal care, the frequency of their visits to their health worker, whether they go to the prenatal worker they think is best (and the reasons if they do not), and who decides on who to consult for prenatal care.

It is a hypothesis of this study that every aspect of prenatal care service utilization mentioned above is influenced by the following variables: the woman's **domicile** (urban or rural), **socio-economic status** (privileged, middle class, and poor), **educational status**, and **parity**. For instance, it is expected that more women living in the city will prefer to go to doctors than to the paramedical and traditional health givers compared to women from the rural communities. The availability of hospitals and clinics in cities should predispose women to use such existing prenatal services. Since the traditional care givers charge minimally, and the midwives in puericulture centers do not charge any fee at all, it is expected that their services will be of greater demand among poorer women. Affluent women, on the other hand, are likely to go to private doctors. Higher education is believed to make women more knowledgeable of the importance of proper health care. Since the educational system in the Philippines still puts high value on the professionalization of services, it is expected that women with higher education will go to professional health workers for prenatal care. On the other hand, the experience of previous pregnancies gives a woman concrete knowledge of pregnancy. Thus, it is expected that the more pregnancies a woman has, the more she learns about prenatal care, and the more prepared she becomes to seek the care of midwives trained by medical people and yet charge minimally for their services. The diagram in the next page presents the conceptual framework for Phase I of the study.

Client Characteristics



- pervasiveness of prenatal consultation
- who are consulted: public doctors, private doctors, midwives, or "hilots"
- reasons for choosing a particular type of health worker
- reasons for changing health worker across pregnancies
- period of pregnancy at which the woman first comes for prenatal check-up
- frequency of prenatal check-up
- perception of different health workers
- perceived best health worker
- reason why one does not eventually go to perceived best health worker for prenatal
- who decides on who to go to for prenatal care

PHASE II: PROCESS AND EFFECTIVENESS OF PRENATAL CARE

Phase I of the study inquires into the utilization pattern of the existing prenatal health services. Phase II, on the other hand, describes the process of health care given by the four different types of health workers and evaluates the effectiveness of prenatal health care given by each type. This data will help in assessing the quality of prenatal health care being given to the women in Laoag City and its surrounding communities.

1. Description of the Process of Health Care

This phase of the study examines the topics covered during prenatal consultation, length of consultation, language used, and manner by which consultation is carried out (with focus on factors such as the beginning and ending of the session, efforts to extend the consultation outside the clinic and formal visits, and how information is elicited and communicated.).

The study assumes that process variables do not merely describe what takes place in prenatal consultations. They also serve as main inputs to the evaluation of the effectiveness of health care being given to pregnant mothers. This brings us to the second main consideration in this phase of the study.

2. Evaluation of the Effectiveness of Prenatal Health Care

The classic method of assessing the effectiveness of prenatal health care is by examining its outcome or, specifically, the changes in the health condition of the mothers, the neonates, or both. Such method is best used to evaluate health care programs which are relatively stable and can therefore be adequately controlled. The present study departs from the usual approach by focusing more on the collection of data about the perceptions and attitudes of health workers and clients, the competence and knowledge of the health worker, and the actual process of health care. It employs what Patton (1980) and Lange (1974) call **formative evaluation**, a method which does not use outcome data alone to assess the merit of a given health care service. It seeks, instead, to also obtain data on the process of health care including subjective perceptions of both clients and health workers. These kinds of data can be used as feedback to the health workers and as a basis for continuing program development.

Using the formative approach for evaluating the effectiveness of prenatal care given by the four different types of health workers, the study assesses, (a) the professional competence of the health workers, (b) the perceptions and attitudes of the clients and the health workers, and (c) the outcome of prenatal care.

2.1 Assessment of Professional Competence

This aspect of the study assumes that there are particular knowledge and skills necessary for effective prenatal care. Professional competence as understood in this study, has three dimensions:

a. Knowledge and Care-Giving Skills. A health worker is deemed competent in caring for his clients if he shows the following: first, **knowledge of the objectives of prenatal care**; second, **knowledge of the content of prenatal care** as evidenced by (a) self reporting of what takes place in prenatal consultations, and (b) correctness of advice and teaching as measured conversely by the number of times harmful advice is given; third, **thoroughness in the care given** as shown by (a) the overall percentage of completeness of care obtained from clients' record and data recorded by an observer in actual consultation sessions and (b) percentage of completeness of health care based

on interview with health worker, and contents of clients' record, and fourth, **ability to teach** as measured by (a) the percentage of what the client remembers of what the health worker said he taught her in the areas of nutrition, care of body, and care of mind and emotion, b) the client's rating of the health worker's ability to give clear instructions, c) the observer's rating of the health worker's ability to communicate ideas, and d) health worker's ability to elicit compliance of client as indicated by (i) the health worker's overall rating of client's compliance, (ii) the client's rating of her compliance to the advice of the health worker, (iii) the system of monitoring the client's compliance, (iv) the manner of giving prescriptions, and (v) the use of instructional materials.

b. Personal Attributes and Skills. This phase of the study assumes that specific personality traits and social skills of the health worker affect the success of health care management. The traits and skills which are examined here are those which have to do with flexibility, empathy, sound overall psychological climate, fairness, and availability to help. **Flexibility** is studied using the observer's rating of the suitability of language used by the health worker, the suitability of advice to the client's financial status, and the appropriateness of care to the client's need. **Empathy** is evaluated using the observer's rating of the health worker's ability to empathize with client and the client's rating of how well the health worker is able to understand her condition as client. The **overall psychological climate** is determined by a) the observer's and client's rating of the health worker's ability to make the client feel comfortable. **Fairness** is evaluated through the client's perception of the worker's equal treatment of clients and of the fairness of fees. **Availability to help** client is to be shown by a) the client's perception of the health worker's willingness to help at any time as well as readiness to allot time to care for her. **Care and concern** is evaluated in terms of the response of the health worker to topics brought up by the client outside prenatal concerns, the initiative of the health worker to take up concerns not directly related to prenatal care, the worker's initiative to inform the client of other prenatal benefits, the client's and health worker's reports of meetings other than the planned prenatal visits and the content of such meetings, and the length of consultation. Lastly, **social awareness** is evaluated in terms of the manner of setting fees (only for private doctor and "hilot"), and the type of payment accepted.

c. Interpersonal Skills. This category includes the health worker's ability to develop rapport, the ability to listen, and communication skills. The health worker's **ability to develop rapport** is measured by the manner of starting consultation sessions or handling preliminaries based on the observer's

rating, the consideration of the seating arrangement of client and worker, and by the manner of conducting physical and laboratory examination based on the observer's rating. The **ability to listen** is evaluated by the observer's rating. The Flanders Modified Interaction Scale is used to measure the worker's **communication skills**.

2.2 Assessment of the Attitudes and Perceptions of Clients and Health Workers:

This part of the evaluation assumes that the client's perceptions of and attitudes toward her health worker provide useful data in the assessment of the latter's effectiveness. In addition to the client's perception of the health worker's professional competence mentioned earlier, this evaluation also measures the client's satisfaction with the actual health care given to her. This is measured by a) the client's readiness, or lack of it, to seek the same health worker in her next pregnancy, b) the mean rating given by the client to her health worker's personality and health care across 9 items using a 5-point scale, and c) her reported reasons for choosing her particular health worker.

The client's and the health worker's descriptions of an effective health worker, their perception of the most common difficulties encountered by pregnant women in prenatal care, and the health worker's suggestions on how to improve prenatal care are also taken and will serve as inputs to the evaluation of existing services and training programs on prenatal care.

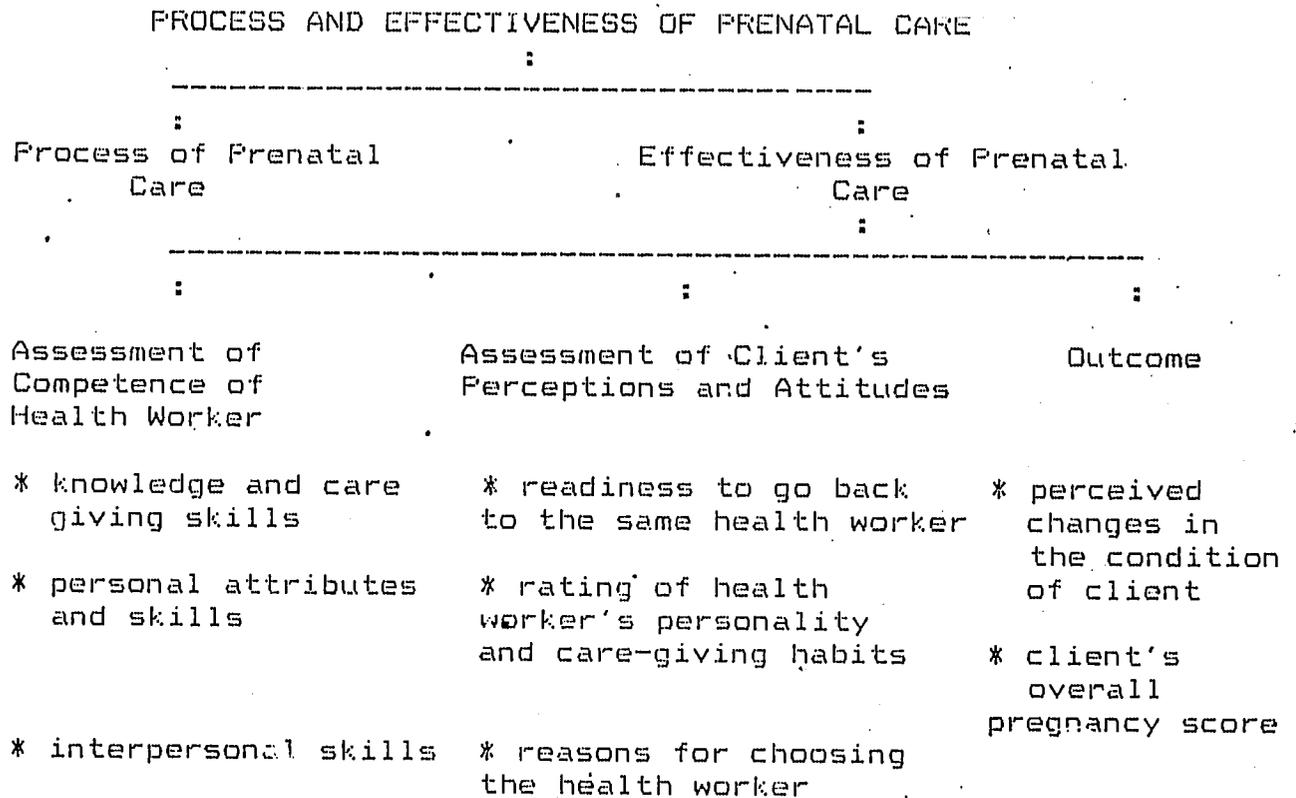
2.3 Assessment of Outcome

Assessments of health care that use a **summative evaluation** technique focus on the product or outcome of the program. Since the present evaluation takes a more **formative** approach, the assessment of process variables, the client's and the health worker's perceptions and attitudes, and the health worker's characteristics take precedence over, but do not exclude, the assessment of the outcome of prenatal care.

As part of its assessment of outcome, this study also inquires about (a) the client's and the health worker's perception of changes in the condition of the client since the time she started to undergo prenatal care, and (b) the client's overall pregnancy score as given by the observer. Because of the time constraints of the current project, the health of the mother and of the infant upon birth cannot be assessed. The record of births in the Provincial Hospital and the record of women's deaths in the municipal registry are studied to get the infant and maternal mortality rate. These records are useful indices of

the adequacy of care given to pregnant women and their babies in their communities.

The diagram of the conceptual framework that guides Phase II appears below:



It is a hypothesis that the four different health workers in the study will be shown to differ in the effectiveness of their prenatal health care. In the Philippines, many believe that private doctors are more competent than public doctors. It should be interesting to find out if this belief is valid. There is a renewal of interest in midwifery in the United States recently which is related to the movement to bring innovations in obstetrics. There is a hint in some quarters there about the possible superiority of trained and traditional health care givers over medical doctors in some specific aspects of health care. Cosminsky (op.cit.) notes that infant mortality rate is higher in the United States than in at least fourteen other countries. Haire (1972) believes the difference to be due to the care given by the highly trained midwives in other countries. According to him, the emotional support given to mothers during the prenatal and labor stages seem to result in a lessened need for obstetrical intervention and medication during labor.

There is also a growing awareness of the dangers of an uncri-

tical acceptance of the assumptions of the "western" practice of obstetrics. There are some quarters suggesting alternative models of prenatal health care making use of ideas from traditional birth attendants. Tan (1988), however, cautions against the opposite error of uncritical adoption of traditional child birth procedures even if he himself is in search of new models. He has made cultural studies on the subject and noted that deficiencies do exist. Among those he mentioned are the problems of sepsis, a belief in certain parts of India that a woman in childbirth is in a particularly polluting period necessitating her isolation, and the use of excessive pressure to hasten labor, a practice harmful to both child and mother. These developments point to the future work still needed to develop health care utilizing different types of health workers and traditions.

Since this study assumes that health care should be understood within the context of culture, it tries to relate the chosen aspects of prenatal health with certain socio-demographic variables such as the **client's age, socio-economic status, stage of pregnancy, and parity**. Still in line with this logic, this project identifies indigenous concepts and methods of prenatal care developed by the health workers in their course of caring for the clients. Sources for these include the recordings of the consultation sessions, the observer's entries in the observation record, and the health worker's responses to the questions (a) "Have you learned anything from your actual practice of prenatal care that were not given in books or training seminars?" and (b) "Have you learned something about prenatal care from other health workers?"

METHODOLOGY

Sources of Data:

The study was conducted in Laoag City and the municipalities of Sarrat and Dingras in the province of Ilocos Norte. The province was selected as the site of research because: a) it has a strong tradition of folk medicine, b) its city, Laoag, has been the recipient of government attention on matters of development projects for the past five years, c) it is not a militarized zone, d) its inhabitants, the Ilocanos, being of migrant character, are found everywhere in the Philippine islands, e) the four different prenatal health givers are accessible to people living within and around Laoag City, f) the social and economic life of the province is typical enough of the life in many of the provinces in the country.

Although the first phase of the research is a logical pre-

lude to the second, each of the phases was considered an independent investigation with its own rationale and methodology. Thus the research followed separate methodologies for the two phases.

PHASE I:

Respondents

The research enlisted an equal number of respondents from the lower, middle, and upper income brackets of the local communities of the Ilocos Province. A total of 150 pregnant women were randomly selected from the urban and rural communities: 75 were taken from Laoag City with the other 75 from the communities of Dingras and Sarrat.

Instruments

A 13-page interview schedule was designed in Filipino, focusing on the utilization pattern of the four identified health workers (See Appendix I.A.1 for sample questionnaire in English). A public school teacher, a native of Laoag, made a translation into Ilocano. To check for accuracy, a college student who is also a native of Laoag made a back translation. The Ilocano version of the interview schedule was pre-tested among 15 pregnant women in Laoag City and later revised based on the results of the pre-test.

Procedure

The project recruited and trained seven local interviewers. Then each was given a list of 21-22 mothers to interview. Guided by the interview schedule, the interviewers obtained answers from the respondents concerning the Phase I research objectives.

Phase II:

Respondents

Forty health workers were selected at random from a list of those who met the research criteria. The table in the next page shows the stratification of the health worker respondents:

Table 1: Sampling Design for Recruitment of Health Worker Respondents

Public Doctor		Private Doctor		Midwife		Hilot	
urban	rural	urban	rural	urban	rural	urban	rural
5	5	5	5	5	5	5	5

The interviewers approached the health workers identified for the study to get their cooperation and to provide them with helpful information on the nature of the study.

120 clients of the cooperating health workers (3 clients for each health worker) were also interviewed to validate the data from interviews with health workers and from observations conducted. One third of the interviews were conducted with clients on their first visit and at any point within the first 7 months of their pregnancy, another third were conducted with clients who were at any point within the 6th-7th month of their pregnancy, and the last third with clients who were at any point within the 8th-9th month of their pregnancy.

Instruments

Two parallel interview schedules (see Appendices I.B.2 and I.B.1), one used in interviewing the health worker and the other the client, and an observation record (see Appendix I.B.3) were constructed. The instruments were in English. They were translated into Ilocano-Laoag and then translated back to English to check for accuracy. The principal investigators went to Laoag to pre-test the instruments and to familiarize themselves with the place for Phase II of the research. The instruments were pre-tested among 12 health workers. They were then revised based on the results of the pre-test and the experiences of the investigators during the field testing.

An additional observation instrument patterned after the Flanders Interaction Matrix was devised to help record the dynamics of the interaction between the client and the health worker (see Appendix I.B.4 for sample).

Procedure

Two local interviewers were recruited to pair off with the two researchers from the home office. This team of interviewers-observers were trained and sent out to gather data in pairs. They observed and recorded consultation proceedings between health worker and client. One researcher took care of noting

down topics and events taking place during the session using the observation record while the other recorded the interaction taking place between the health worker and client using the Flinders Modified Interaction Matrix. At the end of each session, one researcher interviewed the health worker while the other interviewed the client.

Statistical Analysis

Where necessary, the influence of selected independent variables on nominal and ordinal data were analyzed using the Chi-Square Test. For interval data, the possible influence of the identified independent variables were determined using appropriate models of the Analysis of Variance. The Standard Package for Social Science computer program was used to obtain all the required statistical analyses. All the null hypotheses were tested at alpha level less than or equal to .05.

RESULTS SECTION

PHASE I: UTILIZATION PATTERN OF FOUR DIFFERENT PRENATAL HEALTH WORKERS

A: Background Information

Phase I of the study was conducted in Laoag City and the surrounding municipalities of Sarrat and Dingras. These are all in Ilocos Norte, a province which has a strong tradition of folk medicine. It is also the recipient of government efforts for the past five years to improve health services. Appendix III-A describes the organization of health services in the province. Ilocos Norte has four types of health workers who respond to prenatal needs of women residents: the private doctors practicing in their own clinics, the public doctors based in government hospitals or puericulture centers, the midwives who have private practice or who are part of the staff of barangay health centers, and the traditional birth attendants known as **hilots** (Appendix III-A has statistics on public doctors in Laoag City, midwives, and hilots). There are 3 provincial hospitals accessible to residents of the chosen research sites, the provincial hospitals in Laoag City, Dingras, and Sarrat.

The 150 pregnant women interviewed in Phase I of the study are mostly in their twenties, the ideal age for child-bearing. Half of the women (51.3%) are residents of Laoag City while the other half (48.7%) are residents of either Sarrat or Dingras. About 33% of the sample belong to the low income level, 34% to the middle

income level, and 32.7% to the high income level. The majority (79.3%) of the sample population is Roman Catholic with the rest having either Protestant or indigenous religious backgrounds. All the respondents are literate, half of them having gone to college and 22% having attained at least an elementary education. The majority of the respondents had gone through at least one pregnancy experience at the time of the interview and only 28% were on their first pregnancy. Sixty-four women reported having gone through some abnormality or traumatic experiences in their previous pregnancies. Among these were: miscarriage (5.3%); death of neonate (4%); difficult pregnancy (4.7%); abnormalities in the newborn (7%); profuse bleeding, high blood pressure, ovarian cyst and beriberi (6%). The respondents mentioned the following as cause for such abnormalities: health problems of the mother (4%), circumstances beyond control such as abnormal position of the baby, placenta praevia, ectopic pregnancy, etc. (2.7%), financial problems, irresponsibility of health worker (7%), and psychological stresses such as irritability, fatigue, nervousness, etc. (10.7%).

The following discussion of Phase I results is divided into three sections: the first discusses the health practices of women in their present pregnancy with emphasis on the pattern of utilization of the different types of health workers for the prenatal period; the second section focuses on the health care practices of women across their first, middle, and last pregnancies; and the final section deals with the respondents' perception of the best type of health worker and how their ideal choice corresponds with their actual choice of health worker.

B: General Prenatal Care Practice of Women Respondents on Their Present Pregnancy

Data shows that women in Ilocos Norte go to at least one type of health worker for prenatal care. Of the 150 pregnant women interviewed in Laoag City and the surrounding rural communities, almost all (144 or 96%) were availing of some form of prenatal care at the time of the interview and only 6 or 4% were not.

1. Choice of Prenatal Health Worker:

Table 2 shows that more than 50% of the respondents go to doctors for prenatal care. There are more women, however, who go to public than to private doctors. Midwives are more frequented than private doctors. Only a small percent (8%) of the respondents go to "hilots" for prenatal care.

It is significant that quite a few of the respondents go to more than one type of health worker for prenatal consultation.

It is also important to observe the combination of the type of health workers here. Women usually go to the public doctor and the midwife or they go to the midwife and the hilot. The tandem of doctor and midwife is chosen probably because the doctor is trusted for his technical competence while the midwife is usually the one called to help deliver the baby. The midwife and hilot combination is also complementary. The midwife is trusted to help in delivery and is competent in prenatal health care while the hilot is sought for her massage and also for delivery in case the midwife is not eventually chosen to be the one to help in the delivery.

Table 2: Number of Times and Percentages in which Each of the Four Different Health Workers were Reported to be the Prenatal Worker of the Respondents

type of health worker	frequency	percentage
public doctor	36	24.0
private doctor	26	17.3
nurse	01	00.7
midwife	32	21.3
hilot	12	08.0
more than one health worker	42	28.0
public doctor/midwife	(25)	(59.52)
midwife/hilot	(15)	(35.71)
public doctor/hilot	(02)	(04.76)

The study inquired about the respondents' reasons for choosing a particular type of prenatal health worker. Table 3 tells us that in general, professional competence and recommendations by friends and relatives were the most common reasons. The women most often chose the public doctor and they did so for greater convenience and perceived competence. They also frequently chose the private doctors, and the reason is also professional competence. But many women also go to private doctors because of the recommendation of friends and/or relatives. The midwives were chosen for the same reasons that private doctors were chosen. However, the number of women who gave professional competence as reason for choosing a private doctor is much greater (24 vs 14) than the number of women who gave the same reason for choosing a midwife. Of the few women who go to hilots, not one gave professional competence as reason for her choice. The most frequently given reasons why hilots are chosen were greater convenience in seeing them and recommendations by friends or relatives.

Table 3: Reasons for Choosing the Type of Health Worker for Prenatal Care of Present Pregnancy and their Associated Frequencies

Reasons	Type of Health Worker				
	Public Doctor	Private Doctor	Midwife	Hilot	Total
1. Financial	4(9.75)	0	6(13.04)	1(5.88)	11(7.69)
2. Personal char. of health worker	3(7.32)	1(2.0)	1(2.17)	2(11.76)	7(4.89)
3. Professional competence	11(26.83)	24(48)	14(30.43)	0	49(34.27)
4. Recommended by friends & relatives	7(17.07)	17(34)	15(32.61)	5(29.41)	44(30.77)
5. Health worker either friend/relative	3(7.32)	6(12)	3(6.52)	4(23.53)	16(11.19)
6. Convenient	13(31.71)	2(4.0)	7(15.22)	5(29.41)	27(18.98)
Total	41(100)	50(100)	46(100)	17(100)	143(100)

When asked about their opinions of the other health workers they did not choose, the respondents gave the following impressions: public doctors gave free service and were professionally competent; private doctors were described simply as professionally competent; midwives were described most of the times as professionally competent but, in a few occasions, also its reverse; and hilots were regarded primarily as relatives, neighbors, or friends who take care of pregnant women and to a few, somewhat incompetent.

2. Factors Influencing Choice of Health Worker to Consult for Prenatal Care::

The study had a hypothesis that the pregnant women's choice of a health worker is influenced by variables such as their place of residence (whether urban or rural), their socio-economic status (upper, middle class, or poor), educational level and number of previous pregnancies. The following section presents the significant results of correlating choice of health worker with those variables using the Chi-Square test. The insignificant results are not reported in the discussion.

2.1 Type of Domicile

Data shows that public doctors are the most frequented prenatal worker in Laoag City while midwives are the most frequented prenatal worker in Sarrat and Dingras. This may be explained by the greater accessibility of hospitals and their public doctors to women in Laoag than to women in the municipalities. In the municipalities, there are often only health centers to go to, and prenatal care there is provided by midwives. It must be noted though that Sarrat and Dingras are only about a 15-minute ride away from provincial hospitals. The doctors then are still within reach had the women really preferred to see them. The personal nature of consultation and housecall with midwives may be an additional attraction for women in the more rural communities who may prefer a more informal and personal relation with a health worker. The preference for midwives may also be related to the women's plans for delivery. A later section will note that most of the women from the barrio want to give birth in their homes. In Ilocos Norte, and in many parts of the Philippines for that matter, it is not a common practice for doctors to help deliver babies in the patient's home. Midwives and hilots, by contrast, are expected to help in childbirths at the home of the mother.

If the hilot is also a care giver expected to help in deliveries done at home, one might expect that they will also be chosen by women in Dingras and Sarrat. Data points to the opposite, since the women from the more rural communities seldom avail of their services.

2.2 Socio-Economic Status

Results show that women from the lower income bracket go to the midwives, and a few, to the hilots. Those from the middle class prefer to go to public doctors and midwives, although a few of them also go to private doctors for prenatal check-up. On the other hand, the majority of the women from the privileged class go to public and private doctors, with the exception of a few who prefer to go to midwives for prenatal consultation. Contrary to expectations and despite the small fees they charge, hilots are rarely consulted for prenatal care even by women from the low income group.

2.3 Educational Level

Most of the respondents with high educational level (i.e., with college education and above) consult public and private doctors, again confirming a hypothesis of this study. Only a few of them go to midwives and hilots. Those with low education, on the other hand, generally go to midwives, with only a

few to doctors and hilots.

3. Reasons for Shifting to Another Health Worker:

In the course of interviewing respondents, it was found out that there were some respondents who changed their prenatal health worker across pregnancies and also, although less often, within their then present pregnancy. Table 4 lists the reasons given by the respondents for shifting. The Table says that, in general, the most frequent reasons given for shifting are problems related to the personality of the former health worker and also to convenience in the new arrangement. It must be noted that it is women who shifted from a public doctor to some other type of health worker who most often cited personality considerations as their reason for changing. Could this mean that public doctors, lacking incentive, had little motivation for better interpersonal relations with their clients? Considering the number of clients that go to provincial hospitals, the heavy work load it implies, and the low salary given to public doctors (public doctors get P5,000.-6,000 or \$250-\$300 a month), it may not be surprising to find public doctors developing manners not conducive to good patient-doctor relationship. On the other hand, greater convenience and professional competence were the most common reasons given for keeping faith with the same health worker. For those who were consistently seeing doctors, the reason most frequently given was professional competence. Competence was also frequently given by the respondents who remained with the midwives. No dominant reason was given for remaining with the hilot.

Table 4.0 Reasons for Change of Health Worker and Their Associated Frequencies

Reasons	Type of Health Worker				
	Pub.Doc.	Priv.Doc.	Midwife	Hilot	Total
	No. (%)	No. (%)	No. (%)	No. (%)	No. (%)
1. financial consideration	3 (7)	0 (0)	2 (9)	2 (1)	7 (17)
2. personality factors	6 (5)	2 (1)	1 (9)	0 (1)	9 (16)
3. competence factors	3 (12)	1 (7)	0 (8)	0 (3)	4 (30)
4. recommendations	0 (4)	1 (3)	4 (1)	0 (2)	5 (10)
5. relatedness	1 (1)	2 (6)	0 (1)	1 (2)	4 (10)
6. convenience factors	3 (4)	3 (5)	3 (24)	0 (3)	9 (36)

4. Pattern of Decision-Making on Type Of Health Worker to Go to for Prenatal Consultation:

This section seeks to find out the influences in the decision on what type of health worker to go to for prenatal care. Table 5 shows that the number of women who made the decision on their own is almost equal to the number of women who decided on the matter in consultation with their husbands. It was very rare for women to say that the decision was influenced by the husband alone or the elderly woman in the family alone (e.g., the woman's mother, mother-in-law, grandmother). When asked why it had to be either they themselves who must decide or they in consultation with their husbands but never others exclusively, the women respondents invariably answered that it was their own body which was concerned and they were the ones who were pregnant. This shows that pregnant women in the research areas are aware of their prior right to decide over the care of their body and their baby.

In a culture where the opinion of the elderly is highly regarded, there were 29% of the respondents who said that the elderly woman in their family directly intervened or indirectly influenced their decision. Out of the 44 respondents who reported direct or indirect influence of the elderly women in their family, 19 or 43.18% said that they were advised to go to a midwife, 14 or 31.81% were told to go to a public doctor, 7 or 15.9% to a private doctor and only 4 or 9.09% to a hilot. This finding seems contrary to the usual stereotype of older women as favoring more traditional method of health care such as the kind provided by the hilot. It is also possible that in the case of the research area which is a developing province, the active non-formal education promoted by the rural health centers may have accounted for a widespread influence of non-traditional medicine even among the elderly.

On the factor of economic class in the question of influences in the decision on what type of health worker to consult, it is learned that many women from the lower income group (41.5 %) usually resolved the matter by themselves. But a good 34% of the women from that same group also shared the decision-making with their husbands. The majority of the women from the privilege class (53%) made the decision jointly with their husbands while 40% indicated they decided by themselves. Among women from the middle class, personal and joint decision with the husband occurred with equal frequencies. It seems that greater participation of the husbands in the decision-making process is more evident among couples from middle and upper classes. Whether this indicates a trend in the middle and upper classes toward equalization of status between men and women and less traditional role assignments is a good question to pursue for another study.

5. Timing and Frequency of Prenatal Visits

The data shows that women in their present pregnancy generally go for prenatal consultation anytime during their first trimester (37.3%). Only 28.7% went for check-up immediately upon sensing that they were pregnant. The Chi-Square test further reveals that those who submitted themselves for prenatal check-up immediately upon sensing they were pregnant were, as to be expected, mostly women on their first pregnancy (54% of those who consulted immediately), while those who consulted at later periods were mostly women who have had previous pregnancies.

It is interesting that most of the respondents (66.4%) followed the usual standard of going for consultation monthly for the first seven months, fortnightly on the eighth month, and then weekly on the ninth. A few (8.2%) went for check-ups once every two months while some (19.4%) went at least twice for the entire duration of their pregnancy. Only a few respondents (5.97%) went to see a health worker when it was time to deliver or when it occurred to them to do so.

6. Delivery (Present Pregnancy)

When asked who will deliver their baby, 51.3% of the respondents answered "midwife," 22% said "public doctor," 14% "private doctor," and only 12.7% indicated "hilot." It is likely that the respondents' choice of health worker to deliver their baby is related with their choice of place to deliver since 63% said they want to deliver at home, 34.7 in a hospital, and .7% in a clinic. These figures roughly coincide with those on the preferred kind of health worker. It is also significant to note that the type of health worker initially chosen is not always the one who delivers the baby. We must also consider that in the minds of the respondents, the different types of health workers have their own specializations. The doctors are generally regarded as competent in the whole process of caring for pregnant women. However, it is the midwife who is considered the specialist in childbirth. The hilot, on the other hand, is usually associated with post-natal care, especially in giving massage. There will be a further discussion on this in a later section.

The Chi-Square test shows that the type of domicile and socio-economic status of respondents significantly influence their choice of the place of delivery. Thus, it can be seen that the majority (80%) of the women in the rural areas planned to give birth in their own homes while women from the city equally chose the hospital (50%) and the home (48%). Also, more women from the lower income group (84%) and from the middle class (68%) preferred to give birth in their own homes than women from the privileged class (53%).

C: Health Care Practices of Women in Their First, Middle, and Last Pregnancies

It is noted before that many pregnant women in Ilocos Norte have the practice of consulting more than one health worker during the entire duration of their pregnancy. In view of this, it will be helpful to find out what type of health worker they go to at specific stages in their pregnancy (i.e., for prenatal, delivery, and postnatal). This section will also present the health practices of women in their first, middle, and last pregnancies and the variables which significantly influence such practices.

1. Number and Type of Attending Health Worker

1.1 First Pregnancy

Based on data (See Table 5 on page 23) on present first pregnancies and on recall by other respondents about their first pregnancy, it was found out that there are more women on their first pregnancy who are cared for by only one health worker (81 or 54.72%) than those cared for by more than one health worker (67 or 45.27%). Among those who had more than one attending health worker, the combination was usually either public doctor and midwife or midwife and hilot. The possible explanation for this is discussed in section B-1 above. It was also noted that more women from the rural community went to more than one health worker on their first pregnancy than those from the urban.

1.2 Middle Pregnancy

When women who have three or more children were made to recall their pregnancy experience on their middle child, it was found out that the number of those women who had gone to only one distinct health worker (35 or 46.05%) was almost equal to the number of women (41 or 53.94%) who had gone to two or more types of health workers (See Table 5):

1.3 Latest Pregnancy

The data on present pregnancy of women with previous experience of pregnancy shows that there are much more of them (76%) who consult only one type of health worker than those who consult more than one, throughout the whole course of their pregnancy (see Table 5). This seems to indicate that the practice of going to more than one type of health worker for the entire period of pregnancy decreases with more experience in pregnancy. This makes sense since more pregnancy should mean more knowledge about the peculiarities of one's own pregnancy and about the relative competence of health workers and therefore less need for more than one health worker.

2. Choice of Prenatal Health Worker

2.1 First Pregnancy

Table 5 tells us that there is almost equal percentage of women in their first pregnancy who did not have a distinct* prenatal health worker (50.3) compared to the percentage of such women who went to a distinct health worker for prenatal care. Of the 49.7% who went to only one distinct health worker, 66% went to doctors, 25% to midwives, and only 7% to hilot. One notes that the most frequent choice of private doctors for prenatal care is found in the experience of women in their first pregnancy. This figures with the image of competence of the private doctor and the greater need of women in their first pregnancy for an assuring health care.

a. Influence of the Type of Community. The Chi-Square analysis shows that more women from the urban community went to public and private doctors and very few to midwives and hilot. Women from the rural community went to public doctors and midwives for prenatal care.

b. Influence of the Age of Client. The Chi-Square analysis show that significantly more women who are aged 20 years and below went to midwives and public doctors for prenatal care on their first pregnancy. Women over twenty years of age, on the other hand, went to public and private doctors.

2.2 Middle Pregnancy

Table 5 further shows that the percentage of women in their "middle pregnancy" who consulted a distinct health worker (50.65%) is almost equal to the percentage of such women who did not consult a distinct health worker (49.35%). The most frequently chosen distinct prenatal worker by mothers during their middle pregnancy is the midwife, followed by the hilot, and lastly by the doctor. This new pattern almost looks like a reverse of the order of preference of women in their first pregnancy which indicated the doctor as first choice, followed by the midwife, and the the hilot.

*Note: "Distinct" health worker means a health worker who is seen by the client only for a particular stage of her pregnancy, i.e. prenatal, delivery, postnatal.

Table 5: Number and Presence of Distinct Worker and Type of Health Worker Consulted by Pregnant Women Across the Period and the Number of their Pregnancies

Stage of Pregnancy and Type of Health Worker	Number of Pregnancies					
	First Pregnancy		Middle Pregnancy		Latest Pregnancy	
	freq.	%	freq.	%	freq.	%
Number of Attending HW throughout pregnancy						
only one health worker	81	54.72	35	46.05	76	76.00
more than one health worker	67	45.27	41	53.94	24	24.00
Prenatal Period						
without distinct hw	72	50.30	38	49.35	34	32.69
with distinct hw	71	49.07	39	50.65	70	67.30
distinct hw for prenatal:						
public doctor	26	36.61	16	41.02	32	45.71
private doctor	22	30.98	8	20.51	13	18.57
midwife	18	25.35	13	33.33	21	30.00
"hilot"	5	7.04	2	5.12	4	5.71
Delivery						
without distinct hw	68	59.65	45	59.21	27	61.36
with distinct hw	44	40.35	31	40.78	17	38.63
distinct hw for delivery:						
public doctor	7	15.21	4	12.50	7	38.88
private doctor	6	13.04	2	6.25	1	5.55
midwife	21	45.65	16	50.00	7	38.88
"hilot"	12	26.06	10	31.25	3	16.16
Postnatal Period						
without distinct hw	31	43.66	23	46.00	-	-
with distinct hw	40	56.33	27	54.00	-	-
distinct hw for postnatal:						
public doctor	0	0	1	3.34	-	-
private doctor	0	0	0	0	-	-
midwife	13	30.23	11	37.93	-	-
"hilot"	30	69.76	17	58.62	-	-

a. Influence of Type of Community. The result of the Chi-Square test shows that the majority of women from the rural communities went to the midwife for prenatal care in their middle pregnancy while most of the women from the urban community consulted the public doctor.

b. Influence of Educational Background of Clients. The Chi-Square test reveals that most of the women with higher education went to the public doctor while those with lower education generally went to the midwife. While no one among the women with higher educational attainment went to the hilot for prenatal care, a few from the less educated did.

2.3 Latest Pregnancy

The percentage of women in their latest pregnancy who have a distinct prenatal worker (67.3%) is definitely greater than the percentage of such women who do not have such (32.69%). The former's pattern of choosing their prenatal worker is similar to that observed among women in their middle pregnancy.

If more pregnancy experience implies more knowledge of the realities of pregnancy, of one's adaptive capacity to such a condition, and also of the relative competence and suitability of health workers in the community, then women with more pregnancy experience should be in a better position to choose a distinct prenatal health worker most suited to her needs. Thus, such women usually avail of one distinct prenatal worker.

3. Choice of Health Worker for Delivery.

3.1 First Pregnancy

Table 5 further shows that there are many women who delivered or planned to deliver their baby with the help of two health workers, usually the midwife and the hilot (65%). There are a few cases when the hilots were said to have requested the help of a doctor. This was apparently the case when deliveries became abnormally difficult. Among the 40.35% of the respondents who delivered with the help of only one health worker, the most frequent choice was the midwives (45.66%), followed by the doctors (28.25%), and then by the hilots (26.08%). While the hilot was not a popular choice among women for prenatal care, for childbirth she was called upon even more often than the public doctor (15.21%).

The Chi-Square test shows that there were more women from the rural community who delivered or planned to deliver their first baby with the help of more than one health worker than women from the urban area. Among the women in the rural

community who had a distinct health worker for the delivery of their first baby, the hilot was more frequently chosen than the public doctor.

3.2 Middle Pregnancy

We learn from Table 4 that there were more women under the care of more than one health worker (59.21%) than women who were helped by only one distinct health worker (40.75%) for the delivery of their middle child. As in the delivery of the first baby, the most frequently chosen distinct health worker for the delivery of the middle child was the midwife. However, unlike the case of the first delivery, there were more middle children reported to have been delivered by hilots (26.08% = first vs 31.25% = middle) than by the doctors (28.25% vs 18.75%).

The Chi-Square analysis shows that there were more women from the rural community who had more than one health worker for delivery than women from the urban community. The majority of those who had a distinct health worker for delivery in the rural area chose the hilot, while those in the urban area chose the midwife. The doctors (public and private) and the midwife fared equally in terms of women's utilization of their delivery service in the rural community. The hilots and the doctors, on the other hand, fared equally in the urban setting.

3.3 Latest Pregnancy

57.69% of the pregnant women with more than one child-bearing experience did not think about who to go to for delivery on their latest pregnancy. Of the 43.31% who did think on the matter, 61.36% planned to seek the help of both the midwife and the hilot and only 38.63% planned to get help from only one health worker. The most frequently chosen single health worker to help deliver the respondents' latest child was the public doctor (38.88%) and the midwife (also 38.88%).

All women from the urban area planned to have only one distinct health worker during delivery, while only 60% of women from the rural community planned to do the same.

This section finds out that pregnant mothers get assistance in giving birth to their first, middle, and latest children from more than one type of health worker. These health workers are usually the midwife and the hilot. Among the women who ask the help of only one health worker, the midwife is the most frequently chosen. The place of residence of the clients, whether rural or urban, significantly influences their choice whether to get the help of only one or of two health workers to assist in their childbirth.

4. Choice of Health Worker for Postnatal Care

4.1 First Pregnancy

For the postnatal stage of the respondents' first pregnancy, 43.66% reported that they did not go, or had not yet decided on who to go to, or were not sure if they would go at all, for postnatal care. Of the 56.33% who did seek postnatal care after the delivery of their first child, not a single one went to a doctor, whether public or private. Instead, 69.76% went to hilot and 30.23% to midwives. This is understandable, since among the four types of health workers, the hilot and the midwives are the ones traditionally known to give personalized postnatal home service including caring for the baby, helping with some house chores, and giving massage to the mother to restore her faster, as it is believed, to her previous shape.

4.2 Middle Pregnancy

The pattern of choosing the health worker for postnatal care of mothers in their middle pregnancy is similar to that of women in their first pregnancy. The difference is that there is a slight decrease (9%) in the choosing of hilot and a slight increase (8%) in the choosing of midwives.

4.3 Latest Pregnancy

Only 17.3% of the respondents thought of going for postnatal care upon delivery of their latest child. This decline is expected as the women develop skill and confidence in caring for themselves and the baby after previous experiences in child-bearing. Of this small percentage, 75% were thinking of seeing a hilot and 25% of seeing either a public doctor or a midwife. Not one considered going to a private doctor for postnatal care.

This section on postnatal care shows that the women respondents regard the hilot as the specialist on postnatal care. The preference for the hilot in postnatal care is seen among women across their pregnancies. The midwife follows the hilot with the doctors figuring last in the women's choice of postnatal health worker.

D. Perception of the Best Type of Prenatal Health Worker

Table 6 shows that majority of the respondents (72.29%) perceived the doctor as the best health worker for prenatal care. Only a few respondents perceived the midwife and the hilot as the best prenatal workers.

Table 6: Perceived Best Health Worker

Type of Health Worker	Frequency	Percentage
1. Doctors	107	(72.29)
1.1 public doctors	23	(15.54)
1.2 private doctors	29	(19.59)
1.3 doctors in general	55	(37.16)
2. Midwife	29	(19.46)
3. Hilot	12	(8.10)

1. Influence of Educational Attainment of Respondents

Women with higher educational level (i.e., college and above) regarded doctors in general (both public and private) as the best type of health worker. On the other hand, an almost equal number of women with lower educational level regarded midwives and doctors (the private more than the public) as the best types of health worker.

2. Influence of Number of Previous Pregnancies

Women in their first pregnancy generally regarded the private doctor as the best health worker. As the number of their pregnancies increased, however, more mothers began to consider the midwife as the best health worker. The rating of the midwife catches up with the doctors as the number of pregnancies increased.

3. Reasons for Choosing the Best Prenatal Health Worker

When the respondents were asked about the standard they used for choosing the best type of health worker, they often mentioned characteristics related to competence such as good medical knowledge and ability to answer questions (see Table 7 on page 28).

While most of the respondents (72.29%) believed the doctor to be the best health worker to provide prenatal care, only 46.73% did in fact go to them. On the other hand, while only 19.9% said that the midwife is the best, a much bigger percentage (37.89%) actually went to them for prenatal consultation. A similar gap between perception and practice is true in the case of hilots as only 8.10% see them as the best health worker and yet 15.26% actually went to them for regular check-up or occasional massage.

Financial constraint is the most common reason cited by the

women who failed to actually go to the doctor. Those who would have gone to the midwife or hilot but went to the doctor instead often mentioned "lack of adequate facilities" as reason.

Table 7: Reason for Choosing the Best Health Worker

Reasons	Pub.Doc.		Priv.Doc		Midwife		Hilot		Pub/Priv.Doc.		Total
	f	(%)	f	(%)	f	(%)	f	(%)	f	(%)	f (%)
0. no data	16	(10.7)	18	(20)	19	(12.7)	5	(3.3)	25	(16.7)	83(63.4)
financial reasons	7	(4.7)	0		1	(.7)	1	(.7)	0		9 (5.4)
socio-psychological char.	1	(.7)	9	(6.0)	5	(3.5)	3	(2.0)	0		18(12.2)
professional competence	23	(15.4)	28	(18.6)	29	(19.3)	6	(4.0)	59	(39.4)	145(96.7)
recommended	0		0		1	(.7)	1	(.7)	0		2(1.4)
related	1	(.7)	2	(1.3)	0		0		2	(1.4)	5(3.4)
convenience	0		3	(2.0)	2	(1.4)	1	(.7)	0		6(4.1)
can position baby in place	0		0		0		0		0		0
gives post-partum service	0		0		1	(.7)	0		0		1(.7)
others	2	(1.3)	2	(1.3)	5	(3.4)	5	(3.4)	4	(2.7)	18(12.1)

PHASE II: DESCRIPTION OF PROCESS AND EVALUATION OF EFFECTIVENESS OF PRENATAL CARE OF FOUR DIFFERENT HEALTH WORKERS

A: Background Information

Phase II of the study was conducted in Laoag City and the surrounding municipalities of Sarrat, Dingras, and Bacarra in the province of Ilocos Norte. There were forty health workers who participated in the study. Of these 40 there were 10 private doctors, 10 public doctors, 10 midwives, and 10 **hilots** (traditional birth attendant). The study observed 30 consultation sessions of private doctors, 31 of public doctors, 30 of midwives, and 30 of hilots. The majority (97.5%) of the 40 health workers who participated in the study were natives of the province. Only 8 of the health workers were males, the rest of the 32 being females. Most of them were married or had been married at a certain time in their life (77.7%). All of the 10 midwives had finished secondary education and a two-year course in midwifery. Of the 10 hilots, 2 did not have any formal education, 4 had some years in elementary school, 2 finished elementary education, and 2 finished secondary education. All of them were licensed care-givers. Hilots usually had some form of link with the rural health unit or the public hospital because of the training they received from those institutions in order to get the license to practice. The majority of the public doctors were resident physicians in provincial hospitals of Laoag and Dingras. Six of the private doctors had their clinics in Laoag City. The remaining 4 were based in Sarrat and Dingras. The majority of the participating health workers were within or passed their midlife. 19.9% were in their forties, 42.1% were in their fifties and sixties, and 38% were in their late twenties and thirties.

121 clients were interviewed and observed while in consultation with their health worker. Almost all of the clients were literate: 25.6% finished elementary education, 27.3% secondary education, 5.8% vocational, and 23.1% college. Only 1.4% did not have any formal education. The age range of clients was from 18-34 years old. 19% were 20 years old or younger, 66.2% were 21-30 years old, and 10.7 were in their early thirties.

Most of the observation and interview sessions took place in especially designated places for prenatal check-up such as the hospital (16.5%), private clinics (21.5%), and health centers (38.0%). Only 21.5% of the interviews and observations took place in the clients' or the health workers' home.

B: Description of the Process of Prenatal Care

This section gives an overview of the process of prenatal health care as practiced in the research site. This will help later in the evaluation of the effectiveness of the prenatal care in Section C where more details of the process is considered.

1. General Process of Prenatal Care:

Prenatal consultations usually take place in designated places for health care such as the hospital, clinic, and health center. In some cases, sessions are conducted in the clients' or the health workers' home. When done in private clinics, prenatal care is often conducted in a small room where the conversation can take place in total privacy. There is less privacy in health centers, as consultations take place in partial view of the other clients waiting for their turn. In Laoag Provincial Hospital, there are usually two doctors to a room, with both doing consultations at the same time. In Dingras Hospital, doctors have their own rooms where they usually see their clients individually. In these places, the health worker is seated behind a small table, with the client sitting on a chair by its side.

Prenatal sessions are usually brief, averaging only 8.33 minutes. Around one third of the observed sessions lasted for only 5 minutes or less. All consultation sessions are in Ilocano, the dialect spoken in the research sites. Health workers often start with formal inquiry into the clients' condition. They then include interviews about the clients' medical and obstetrical history and current pregnancy, routine physical and laboratory exams, and basic teachings on nutrition and care of the body. Indigenous beliefs on health care and pregnancy are clearly manifested in the advice given by both medical and paramedical workers. The health workers are generally courteous in their routine of physical check-up, but only a few preface the process with explanatory or reassuring talk. Internal and abdominal examinations are conducted inside a small cubicle.

Throughout the session, the health worker is observed to be the more verbal party. The clients are generally passive during consultation. Conversation is mainly on the cognitive level, with the topic rarely departing from prenatal care. Both health worker and the client rarely express feelings. It is through this largely one-way and cognitive mode that health workers give advice and prescriptions. The health worker may give prescriptions in either of three ways: (a) verbally, (b) in writing, or (c) verbally and in writing. The health workers check on the compliance of their clients in subsequent visits. Health workers usually charge fees on a sliding scale scheme. Clients also give donations to health centers for the latter's use. Health workers also accept payment in kind. Most of the health workers keep records of their consultation sessions with their clients.

2. Differences in the Process of Prenatal Care Given by the Four Types of Health Workers:

The study observed differences in some aspects of prenatal care given by the four types of health workers.

Consultations with **private doctors** on the average took 10.46 minutes, an average only slightly surpassed by that of the midwives which was 10.8 minutes. Private doctors often began their session with conventional greetings. Their clients usually called them by their title "doctor". They in turn often called their clients by their first names. Initial consultations with private doctors usually started with an inquiry on the clients' last menstrual period and with the measurement of blood pressure and weight. An attendant or secretary took care of the routine physical examinations. The private doctors were the only health workers who conducted regular internal examination. In later consultations, they usually started by checking if the clients complied with previous instructions. They then took up the complaints and problems of the clients, administered some physical or laboratory tests, and gave instructions on prenatal care. The aspects of prenatal care stressed by private doctors were the study of the patients' medical history, the administration of physical and laboratory exams, and the teaching on proper nutrition. At times clients pay their professional fees to a third person following a sliding scale scheme.

Consultations with **public doctors** were short, averaging only 6.83 minutes. Public doctors did not know their clients by name so they addressed them "Mrs.". They also called them "Manang" and "Ading", the polite addresses for older and younger women, respectively. The public doctor's routine seemed to be even more predictable than the private doctor's. For a new client, one could expect a public doctor to start session by asking the client to describe her condition, recall her last menstrual period, relate her gynecological history, and name the vitamins she had been taking. He would also examine her eyes and neck. He then gave her prescriptions and scheduled her tetanus toxoid immunization and follow-up visit. Later consultations usually consisted of routine physical examinations, including test for the size of the abdomen and the position of the fetus. Public doctors rarely conducted internal examinations. Clients were generally passive in consultation with them. Public doctors tended to be mechanical and unaffected in conducting the sessions, and at certain times also rude to their clients. They often ended with a reminder to the client of her next visit. Unlike the private doctors, they tended to schedule their clients' next visit in general terms such as "next month" and "in two weeks' time". Clients did not pay any fee for their consultations with doctors on duty in public hospitals. They may give donations to the hospital. Clients received free vitamins if supplies were available.

Consultation with **midwives** were by average the longest. Midwife and client usually addressed each other as "manang" (older sister), "nana" (mother), or "ading" (younger sister), as the age differences required. The sessions usually started with casual talk about the client's condition, family, etc. These preliminaries often took place while the midwife did routine check-up of blood pressure, weight, etc. But the main concern in the consultation was the medical and obstetrical history of the client. Midwives also taught proper nutrition and the importance of regular check-up, the tetanus toxoid immunization, and the laboratory tests. They gave practical advice especially to those on their first pregnancy. They conducted abdominal examination only after the first trimester of pregnancy. They at times scolded clients who were already known to them and who had not been observing the prescribed health care program.

The consultation ended with prescriptions, and free vitamins or medicine (if available), and reminder of future visits without specific dates. Consultation with the midwife was free, but donations could be given to the midwife or dropped in a box in the health clinic. Midwives did home visitations, especially among clients unable to come for regular consultation. The kind of consultation described above also took place in those home visits. For clients who came regularly to the midwife's clinic, the home visits became opportunities for monitoring the clients' health and compliance with instructions.

The preliminaries in the sessions with the "**hilots**" were usually warm and personal, as in the case of the midwives. The hilot started by exchanging pleasantries with client and her companions. Because the session was usually done in the hilot's home, the client could sit down wherever she felt comfortable in the hilot's receiving room. The focus of the sessions on the care of mind and emotion, of the body, and proper nutrition. The teaching sessions are usually illustrated with stories about the varied experiences of the hilot in prenatal care. Indigenous beliefs on pregnancy and health were very evident in the teachings of the hilots. Abdominal massage became almost a routine procedure with the hilots when the fetus reached 5 or 6 months old. Hilots often reminded of the necessary laboratory examinations and tetanus toxoid immunization from provincial hospitals. They also referred high risk clients to the nearby hospital or physicians. Instead of recommending vitamin pills, hilots advised eating nutritious foods. Hilot clients were active participants in the sessions, asking questions, describing their condition, and sharing their own experiences.

Hilots did not require any specific frequency of prenatal consultations. But the hilot did care closely, doing home visitations especially in the last trimester of pregnancy. Compared with the midwives and public doctors, hilots received payments for their services, the amount depending on the client's ability

to pay or her closeness to the hilot. Relatives and close friends usually give smaller amounts or were simply not billed. Clients often gave cash, either after every consultation session or after the post-partum care of the client (package deal).

C: Evaluation of the Effectiveness of Prenatal Care

This section evaluates the effectiveness of four health workers in terms of three main criteria: professional competence, perceptions and attitudes, and outcome of health care.

1. Assessment of Professional Competence

The plan of assessment adopted in this study assumes that professional competence reflects itself in (1) the health workers' knowledge and care giving skills, (2) in his personal attributes and skills, and (3) in his manner of relating with clients. Sections 1.1-1.3 evaluate the prenatal care given by four different health workers in terms of these three dimensions.

1.1 Knowledge and Care Giving Skills

It is further assumed that knowledge and care giving skills are manifested in terms of the health workers' (a) knowledge of objectives, (b) knowledge of content, (c) correctness of advice, (d) thoroughness of care, and (e) ability to teach clients in matters of prenatal care. Sections 1.1a-e assess the prenatal health care given by four types of health workers using the 5 sub-items mentioned.

a. Objectives of Prenatal Care. The objectives of prenatal care are most often associated with supervision of the mother's and the child's health (45.5%). A far second is the avoidance of complications (14%) through immunizations and other basic health teachings. This is followed by supervision of the baby's health (12.4%) and then by preparation of the mother for the stages of pregnancy (9.9%). Only 6.6% of the interviewed health workers mention the care of mothers without mentioning the health of the baby as the objective of prenatal care.

The Chi-Square test shows that hilots tend to deviate from the modal understanding of objectives cited above. Unlike the others who most often equated prenatal care with care of the mother and her child, the hilots most often mention only the care of the baby in the womb. Unlike the other health workers, they frequently mention answering questions of clients and teaching them how to prepare for pregnancy as objectives of prenatal care. They rarely relate prenatal care with prevention of complications in pregnancy. On the other hand, it is only the private doctors who more than occasionally equated the objectives of prenatal care primarily with the care of the mothers' health.

In summary, the study shows that health workers under-

stand the objectives of prenatal care in a very general way. They see the goal as ensuring the health of the mother and the baby. This points to the need for health workers to also emphasize the complications-avoidance objective as well as the education and skills training part of prenatal health care.

b. Knowledge of the Content of Prenatal Care. This study sees prenatal care as involving seven areas: (1) medical history, (2) obstetrical history, (3) current pregnancy, (4) medical and laboratory exams, (5) nutrition, (6) care of body, and (7) care of mind and emotions. The study considers a health worker as knowing any of these seven areas as part of prenatal care **if he makes even one reference** to that aspect at any time during the consultation session.

Table 8 shows the frequencies and percentages of consultation sessions where the seven areas of prenatal care have been addressed. It shows that the aspect of prenatal care most commonly found in consultation sessions of the four health workers taken together is the consideration of medical history (92.5%). The taking of obstetrical history and inquiry into the state of current pregnancy follow next. Discussion of the care of the client's body is a close third. A considerable percentage of sessions (22.3%) did not inquire into the obstetrical history of the client. Care of the client's mind and emotion is least taken up in the sessions (69.4%).

Table 8: Frequencies and Percentages of Consultation Sessions where Aspects of Prenatal Care have been Addressed

aspect of prenatal care	included		not included	
	freq.	%	freq.	%
medical history	112	(92.5)	9	(7.4)
obstetrical history	94	(77.7)	27	(22.3)
current pregnancy	107	(88.4)	14	(11.6)
physical/lab. exam.	111	(91.7)	10	(8.3)
nutrition	107	(88.4)	14	(11.6)
care of body	106	(87.6)	15	(12.4)
care of mind & emotion	84	(69.4)	37	(30.6)

The next table (Table 9) compares the frequencies and percentages of consultation sessions of four types of health workers where major areas of prenatal care have been noted. It shows that the hilots least stressed medical history and physical & laboratory examinations. But there are more sessions by hilots which address the care of body, mind, and emotion. Hilots and midwives took up care of the client's body in all of their sessions but the private and public doctors took up the same in only 74% and 77% of their sessions, respectively. Many midwives also

addressed the care of the client's mind and emotion.

Table 9: Frequencies and Percentages of Consultation Sessions of Four Different Health Workers where Aspects of Prenatal Care have been Addressed

Aspects of Prenatal Care	Pri. Doc.		Pub. Doc.		Midwife		Hilot	
	freq	%	freq	%	freq	%	freq	%
medical history	29	(96.67)	30	(96.77)	29	(96.67)	24	(80.0)*
obstetrical history	22	(73.33)	21	(67.74)	27	(90.0)	24	(80.0)
current pregnancy	30	(100.0)	31	(100.0)	30	(100.0)	30	(100.0)
physical/lab. exam.	30	(100.0)	31	(100.0)	30	(100.0)	20	(66.67)*
nutrition	27	(90.00)	24	(77.44)	30	(100.0)	26	(86.67)
care of body	23	(76.67)	23	(74.20)	30	(100.0)	30	(100.0)*
care of mind/emotion	15	(50.00)	21	(67.74)	22	(73.33)	26	(86.67)*

*Significant in Chi-Square Test

In summary, the sessions of doctors appear to be weaker in the teaching of the care of the client's body, mind, and emotion but stronger in the matter of obtaining medical history and of physical and laboratory exams. The reverse is true among the hilots. The midwives tend to cover the most ground.

c. Correctness of Advice. The correctness of advice is measured by noting its converse, the **erroneous advice**. An erroneous advice, as it is called in this study, is one which the observer/interviewer judges to be constricting or harmful to the client's life. The observer/interviewer notes the erroneous advice of health workers in consultation sessions and in interviews with them. The next table (Table 10) shows the mean number of erroneous advice given by the health worker in consultation with his clients and also in interviews with them.

Table 10: Mean Number of Erroneous Advice Given by the Health Workers in Four Different Areas of Prenatal Care as Taken from Consultation Sessions and Interviews

aspect of prenatal care	source	
	interview with health worker	consultation sessions
current pregnancy	.033	.083
nutrition	.107	2.595
care of body	.033	.289
care of mind & emotion	.066	.066
general mean	.059	.758

The Table shows that in general the health workers gave only few erroneous advice. They gave more erroneous advice during consultations with their clients than during private interviews with the researchers. There is also a higher mean of erroneous advice, especially in consultations, in the area of nutrition. There were few erroneous advice in other areas of prenatal care.

Some of the erroneous advice given by the health workers noted in actual consultation session with clients and during interview sessions (with health workers) are the following:

c.1 "Do not take vitamins on the last months because it will make delivery difficult." All types of health workers are found in that group which believes that vitamins cause rapid growth of the baby and thus of the mother's abdomen. A private doctor thought a client was not taking vitamins since her abdomen was smaller than usual. A hilot advised her client to stop taking vitamins for her abdomen had grown too large. There were similar beliefs among a few public doctors and midwives.

c.2 "Do not drink cold water or beverage." This is an advice frequently noted among all types of health workers. It is believed that cold drinks may cause problems such as edema and/or *pasma* (a term in native pathology associated with trembling, sweating, pain, and other symptoms of loss of vitality). For the moment, this advice may be considered "erroneous", though such judgment may need further verification.

c.3 "Do not oversleep for this causes edema." This advice is often given by hilots. A related advice by hilots is for the pregnant not to be idle. She must continue working if she wants an easier delivery.

c.4 "Avoid frequent intercourse for it makes the baby dirty". Some hilots think that the white substance sometimes found sticking to the skin of the baby is abnormal and unhealthy. They believe it is a residue of the man's semen.

c.5 Other erroneous advice which are less frequent are the ff.: Do not eat meat so the fetus will not grow too big and cause difficulty in delivery. Have intercourse the day before delivery. Do not take a walk at night to avoid evil spirits. Do not eat sour foods to avoid diarrhea. Do not eat salty food to avoid cramps. Do not eat sweet foods too much to avoid high blood pressure and edema.

The study also asked the clients of the interviewed health workers to enumerate the advice given them and the beliefs corrected by their health worker. There are more erroneous advice gathered from the clients' responses to such questions than from actual observation of sessions and interview with health workers. Some of the erroneous advice not mentioned above

which were said to have been given by the health workers are the following: do not eat amargoso leaves; do not sleep in the afternoon for it would bring up the blood pressure; take a bath daily, but not in the afternoon; do not sit on the stairs to avoid difficult childbirth; and, do not lie down on the floor without a mat so the cold will not enter your stomach.

Most of the erroneous advice noted in interviews with health workers and observed in consultation sessions are also noted in the clients' responses. The erroneous advice mentioned by the clients but not by the health worker may have been attributed by the client to the health worker by mistake, or they may really have come from the health worker but were not mentioned by the latter in the observation and interview sessions.

The mean number of erroneous advice of each of the four types of health workers for each aspect of prenatal care listed in Table 11 based on clients' recall were computed. Comparison of those means show several things: (1) It can be said that based on client's recall, health workers in general rarely give erroneous advice. (2) There seems to be no significant difference in the means of erroneous advice given by the four types of health workers. (3) On nutrition, the hilot has the highest mean of erroneous advice. The midwives and the public doctors follow next. The private doctors did not give a single erroneous advice in nutrition. This observation must be qualified by recalling that it is the hilot who gives the most advice on nutrition. (4) The hilot and the midwives have the lowest mean of erroneous advice on the care of body, in spite of the fact that they give the most number of advice on the subject. (5) Lastly, although the public doctors alone gave erroneous advice on care of mind and emotion, the mean of such errors is negligibly small.

Table 11: Mean Number of Erroneous Advice on Four Aspects of Prenatal Care of Four Types of Health Worker Based on Client's Recall

Aspects of Prenatal Care	Priv.Doc.	Pub.Doc.	Midwife	Hilot
current pregnancy	.000	.000	.066	.0667
nutrition	.000	.070	.066	.121
care of body	.065	.089	.044	.017
care of mind/emotion	.000	.060	.000	.000

d. Thoroughness in the Care Given. Table 12 below shows that the prenatal care given by the four health workers taken together do not even cover 30% of the areas that need attention in standard prenatal consultations. Health workers appear more thorough in their care when rated based on their responses in

interviews than when rated based on actual sessions with clients. This may be because the observation covered only 1 session and the contents of the records of the care givers. On the other hand, the interview is supposed to deal with the care given to the clients throughout the whole time of their pregnancy. Some areas of the standard prenatal care may have been covered by the health worker in sessions other than those observed by the interviewers but were not noted in the client's record. But it is also possible that the discrepancy is due to a gap between the health worker's knowledge and practice of prenatal care.

Table 12: Mean of Percentages of Thoroughness of Health Care For Each of the Seven Aspects of Prenatal Care Identified in the Study

aspect of medical care	source	
	interview with health worker	consultation session
medical history	47.64	46.02
obstetrical history	54.71	46.70
current pregnancy	30.99	27.29
physical/lab. exam.	39.73	37.37
nutrition	47.64	24.37
care of body	25.91	9.45
care of mind & emotion	40.05	5.13
overall	41.35	27.98

Table 12 also shows that health workers in general are most thorough in taking the obstetrical history of the client and then in the taking of medical history. But they tend to be much less thorough in advising on nutrition if one uses the data from observation of sessions instead of the data from interviews. The percentage of thoroughness of teaching on care of mind and emotion is relatively high in the data taken from the interviews. But the percentage of the same drops sharply when one looks at the data from actual observation. This means that if there is indeed lack of advice given for care of mind and emotion, it is not due to lack of knowledge in that area. There is also an alarmingly low percentage of completeness of health care in the aspect of evaluating the client's current pregnancy.

The next table (Table 13) shows certain differences in levels of thoroughness of the four types of health workers on certain aspects of prenatal care.* It shows that the midwife

* Significant F was found on ANOVAs of overall percentage of completeness of health care based on interview data but none on ANOVAs of overall completeness data from observation.

gives the most thorough care. She is followed by the private and public doctors who have almost the same mean of overall thoroughness. The hilot comes last.

Table 13: Mean of Percentages of Thoroughness of Health Care of Four Types of Health Workers for Aspects of Prenatal Care where Significant Differences Exist Based on Interview Data

Aspects of Health Care	Fr. Doc.	Pub. Doc.	Midwife	Hilot
medical history	61.11	55.89	44.43	28.86
obstetrical history	-----no difference-----			
current pregnancy	34.35	33.16	35.04	21.31
phys/lab. exam	54.06	47.66	47.84	9.25
nutrition	47.03	39.78	60.68	43.37
care of body	23.54	19.77	30.77	29.74
care of mind/emotion	26.66	36.18	41.95	55.54
overall mean %	41.95	41.56	46.27	35.57

In the task of taking medical history, private and public doctors tend to be the most thorough, followed by the midwife, with the hilot placing last. There is no difference for the four health workers in the taking of obstetrical history. On inquiring into the clients' current pregnancy and on conducting physical and laboratory exams, the doctors and the midwives are about on the same level of thoroughness. The hilots show little attention to such aspects of prenatal care.

On the aspect of physical examination, one notes that private doctors conduct internal examinations. They, together with public doctors and midwives, usually take the fetal heart-beat and do the Leopold's maneuver. Hilots usually attend to the positioning of the baby and to abdominal massage.

On nutrition, the table points to the midwives to be the most exhaustive. They are followed by the private doctors, the hilots, and the public doctors, in that order. Doctors and midwives consistently emphasize the importance of the regular intake of vitamins. Hilots seldom mention vitamins, but they frequently advise eating specific foods which are nutritious.

On care of the body, the midwives are the most thorough, followed closely by the hilots, with the private and public doctors placing poor third and fourth respectively.

Hilots have a clear lead over the field in the care of mind and emotion. The midwives, the public doctors, and the private doctors follow in that order. The recorded consultations show that hilots also counsel on life problems. Some examples of the hilots' advice to their clients are the following: relax and avoid getting angry for this affects the baby; avoid too much

worry and nervousness; live peacefully with your husband; do not engage in quarrels, take disagreements lightly; avoid fights with husband since this might cause miscarriage; if you must disagree, it is better to leave your house for the moment; pray over problems.

Doctors and midwives seldom give this kind of advice. But they do include advice on family planning while hilots do not. Doctors and midwives often advice their clients with two or more children to undergo ligation after delivery.

A series of ANOVAs indicate that the highest mean percentage of completeness is observed in consultation sessions with clients who are in their last term of pregnancy:

First Trimester:	34.04%
Second Trimester:	41.28%
Third Trimester:	49.54%

This makes sense, since women in their last trimester would have had more sessions with their health worker. If prenatal care had been thorough, one would expect health workers to score at least near 90% mean with clients in their last trimester. But data show that the actual mean scored here is a measly 49.54%. Since many areas of health care should have already been given earlier if effective care is to take place, a mean score of 49.54% shows that many aspects of prenatal care are not being taken up. The series of ANOVAs also show that the variable **stage of pregnancy** does not really affect the completeness of health care in five of the six aspects of prenatal care. It is only in the aspect of medical history where the means of completeness are found to be significantly different from each other in the three trimesters. Also, medical history taking has the highest percentage of completeness in sessions with of women in their second and third trimesters. This implies that medical history is used more for anticipating problems in delivery or for explaining problems in later pregnancy than for orienting clients on the kind of prenatal care they will need.

To sum up, the data in this section suggest that the prenatal care given to women in Ilocos Norte is neither exhaustive nor paced according to the women's stage of pregnancy.

e. Ability to Teach. The health worker's ability to teach is measured in this study in terms of four indicators: (1) the overall percent of client recall, (2) the client's rating of the health worker's clarity in giving instructions, (3) the observer's rating of the health worker's ability to communicate ideas and (4) the health worker's ability to elicit compliance from his clients.

Table 14 below shows that clients recall more than 50%

of the health worker's teaching. Highest recall is on the area of nutrition, followed by objectives of prenatal care, then by care of body, and last by care of mind and emotion. The areas where the health workers' teaching was found to be most and least thorough were also the areas where the client evidenced highest and lowest recall respectively.

Table 14: Mean Percentage of Completeness of Client's Recall in Relation to Teachings of Health Worker

Nutrition	77.03
Care of Body	66.95
Mind/Emotion	53.88
Objectives	72.99
Overall	66.92

When asked to rate the appropriateness of the statement, "My health worker gives instructions very clearly," the clients gave a mean rating of 4.54. This is a high rating, falling between the points "very appropriate" and "appropriate" on the scale. This means that clients in general are satisfied with the clarity of the instructions of their health workers. ANOVA shows that private doctors get the highest ratings followed by public doctors and midwives with the hilots scoring lowest. The ANOVA also shows that clients with less education give lower ratings.

The observers' mean rating of the health workers' ability to communicate ideas (3.6 or between "average" and "above average") is lower compared to the clients' rating of the same. The lower observer's rating may be more reliable since the clients tend to hesitate in giving unfavorable comments about anyone in general and to give answers that put their health workers in a better light. The ANOVA also confirms the differences in the ability of the four different health workers to communicate their ideas reflected by the clients' ratings.

When asked to rate the overall compliance of their clients, the health workers gave a mean rating of 4.33, which means they perceive their clients to follow most of their advice. This rating is close to the clients' mean rating of their own compliance (4.6). Both ratings may need to be qualified by considering the difficulty for both kinds of respondents to make a disinterested rating on the question. A control in this aspect is the observation of method employed by the health workers to encourage client compliance. The observers in the consultation sessions did take note of methods used by health workers in following up and monitoring the clients' compliance to their instructions. Of the 120 consultation sessions observed, 60.3% included time to following up and monitoring clients' response to instructions given in previous sessions. Only 33.9% did not give time to such procedures.

The health workers checked on the health habits of their

clients by asking them to come back for special or regular visits and by asking in subsequent visits if they complied with instructions. The observers noted their patterns of giving prescriptions. 39.7 of the health workers wrote as well as explained their prescriptions. About the same percentage either wrote or verbally explained their prescriptions. This pattern is supported by the clients' and health workers' description of the manner by which prescriptions were given. Observation data also shows that health workers did not use instructional materials or visual aids in teaching their clients. Of the sampled health workers, 77.7% use some kind of recording system and 21.5% do not.

One might ask if the length of consultation is a factor for compliance among clients. Pearson's R says that length of consultation has a near significant inverse correlation (.0597) with compliance of clients. This can be interpreted in more ways than one, but it is safe to say that it is quality of time, more than its mere quantity, that matters in eliciting compliance.

In summary, this study rates health workers as a whole to be "average" in their ability to teach. This rating is based on the observers' ratings of the health workers' skill, the amount of materials recalled by clients, the health workers' perception of client compliance, and the clients' evaluation of their own compliance. This rating suggests the need of health workers for teaching skills, specifically on how to stress important points, explain the logic of prescriptions, and encourage a healthy over-all outlook. Health workers also need to expand their means of monitoring client compliance. The closely knit family structure and relationships of people in a Filipino community gives the health worker existing mechanisms of interaction which can be used for promoting health practices.

1.2 Assessment of Personal Attributes and Skills

In this study, flexibility, empathy, psychological climate, fairness, availability to help, care and concern, and social concern are the attributes and skills regarded as important for an effective health worker.

a. Flexibility. This trait is evaluated in terms of the use of language and manner of giving advice. The health workers in general showed good adjustment in language use. All of them used the local dialect. Using a 5 point scale in measuring flexibility of language used, observers gave health workers a mean rating of 4.851, saying that they adjusted their language well to suit the level of their clients. The observers also judged the health workers to be flexible in the manner that they had given advice, giving them a high mean rating of 4.19 in a 5-point scale. The clients also gave the health workers a high mean of 4.39 in a 5-point scale which measures appropriateness of advice.

b. Empathy. Observers gave the health workers' ability to empathize with their clients' thoughts and emotions a mean rating of 3.5, which was almost "above average." The clients gave them a higher rating of 4.37, which meant a little higher than above average.

c. Psychological Climate. The observers give a mean rating of 3.98 in the scale which measures the health workers' psychological climate. This is a positive evaluation, reflecting the perception that the health workers are attentive and interested in their clients. The clients' mean rating agrees with that of the observers.

The psychological climate of sessions with hilots and midwives is generally calm, pleasant, and personal. Consultations with private doctors is similar and is next in rank. Consultations with public doctors, on the other hand, are usually perfunctory, and occasionally turn unpleasant, with the doctors becoming disrespectful.

d. Fairness. The clients judged their health workers to be generally fair, showing equal treatment of their patients and charging fees fairly.

e. Availability to Help. Clients perceived their health workers as always ready to help and have enough time for them. Observation shows, however, that the mean length of consultation sessions is only 8.33 minutes. Data also shows that 35.5% of the consultation sessions lasted for only 5 minutes or less. These raise the question of the adequacy of time given to clients. These should put in context the high ratings given by the clients. The high ratings may also be partially due to tendencies of the clients to respond favorably to questions. It is also possible that clients do not demand too much from their health workers, thus settling for the short period for consultations.

Midwives (10.80) and private doctors (10.46) have the highest means of length of consultation, followed by the public doctor (6.83) and then by the hilots (5.26). The ANOVA shows that the differences between those means are significant.

f. Care and Concern. Filipinos often show care for others by being interested in their life. The observation shows that it is only in 23.1% of the sampled sessions did health workers bring up topics outside prenatal care. When asked if they see their clients outside consultation sessions, they answered yes for 45.5% of the sampled clients. The clients themselves gave a higher percentage of affirmative answers (50.4%). Thus, even though personal concerns are not often taken up in consultations, life in the research sites affords health workers and clients opportunities outside consultations to meet and talk not only about pregnancy but other concerns as well.

The Chi Square Test shows that it is mostly the midwives

and the hilots who see their clients outside formal consultations. Based on clients' responses, 82.75% of the sampled clients of midwives say that their health worker see them outside consultation hours. Among clients of hilots, 86.67% say the same about their worker. But only 27.59% of those of the public doctors say that their doctors see them outside consultation hours. Interviews with health workers show the same pattern.

Meetings outside consultations take place mostly by chance and purposively at other times especially in the case of midwives and hilots. The midwives visit her clients to strengthen her ties with the people living in the barangay (village) under her supervision and to check the health of her clients. The hilots visit her clients also to monitor their health and, in some cases, in response to requests by the clients. Chance meetings between the health worker and client occasionally happen in the public places. In those meetings outside of the formal sessions, health workers usually go beyond the greetings to inquire about the health of the mother and of the baby. Sometimes personal matters are discussed, including problems in the family, quarrels between the pregnant woman and her husband, and health of the children. On the whole, however, only a few actually included inquiry into the client's personal life. Perhaps the health workers do not consider matters beyond those immediately associated to prenatal care as relevant to the care itself. Such talks, therefore, even if they had benefited the clients and been remembered by them, could have been more easily forgotten by the health workers themselves.

Many health workers (62.8%) also inform their clients of other benefits of their prenatal care program aside from the regular consultations. This is especially true of public doctors and midwives. They usually inform the mothers of free vitamins, medicines, and food supplement they could get from the clinic.

g. Social Concern. Interviews with clients and health workers and observation of consultations show that health workers are often flexible in charging fees. Exceptions come mostly from the private doctors who generally charge fixed fees. None of the public doctors and midwives set fixed fees. There are 5 hilots who have fixed fees. Some midwives accept payment in kind.

The Chi Square Test shows that health workers consider the socio-economic status of clients in determining fees. They fix fees for only 9.8% of poor clients, for 16.27% of middle class clients, and for 32% of rich clients. Very often, it is the clients who decide how much to pay their health workers. 39.7% of the clients decide their own fees according to health workers, 43.8% of them according to the data from clients themselves, and 57% according to observation data. Negotiating on the fees between the health worker and client is rare. Payment

is also given as donation to the clinic in the case of midwives and public doctors. According to report and observation, this donation is more often given in kind and not in cash. The Chi Square Test shows that most of the rich respondents (81.25%), and only a few of the middle class (38.89%) and poor respondents (19.15%), paid in cash.

In general, health workers (about 60%) may be said to manifest social concern when they set fees, or allow the clients to do it, according to the economic status of the clients and also when they accept fees in kind than in cash.

1.3 Assessment of Interpersonal Skills:

Of the 120 sessions observed, it is only in 62 that health workers engaged in 2 to 3 exchanges of pleasantries with their clients before starting the consultation proper. Health workers started the consultation immediately in the other 58 sessions. Of the four types of health workers, the Chi Square indicates that the hilots were the ones who showed the most interest in establishing rapport with clients before actual consultation. This is observed in 72.41% of their sessions. The hilots are followed by the midwives and private doctors who were also seen to exchange pleasantries before starting consultation (46.67% for private doctors, and 60% for midwives). The public doctors show the least interest in preliminaries.

In 60.3% of the sessions the health workers talked to clients seated behind a table, in 26.4% no tables were between them, and in 10.7% the health workers seated themselves beside their clients. It is mostly the hilots who sat besides their clients.

The health workers generally showed polite conduct in administering tests but did not, in the majority of cases, prepare the clients for taking them. But in 35.5% of the sessions, health workers did explain the procedure and gave reassurance before the tests.

The Chi Square Test shows that the observers gave the hilots the highest rating in their manner of conducting physical and laboratory tests in 56.66% of their sessions. The private doctors follow, getting the highest rating in 43.34% of their sessions, then the midwives with 36.67% and the public doctors last with only 6.45%.

On the ability to listen, observers noted that almost all the health workers listened well to what the clients were telling them. Doctors usually conducted their consultations in a brief, question-and-answer style. But hilots often tell stories of other pregnancy cases to illustrate their point.

The Flanders Analysis of social interaction describes in

greater detail the nature of the interaction between health workers and their clients. Flanders analysis makes tallies for certain types of health worker and client responses together with the lengths of time that such responses take up in the consultation session. Therefore more tallies of a type of response means that such response also came up more often or were maintained longer during the consultation.

The Flanders Analysis computed the fraction from the mean total tallies for client responses divided by its counterpart for health worker responses and came up with .495, indicating that health workers talked almost twice as much as clients during the consultation session. The Flanders also gave the quotient of the pair affective-cognitive responses as .066, which means that health workers did not express much of their feelings in consultations. The clients, as their quotient of .198 indicates, expressed their feelings more often, although the frequency of their feeling-responses was still low.

The Flanders further shows that the mean total number of tallies for health worker initiated responses is 28.61, while the mean total tallies for health worker "responding" responses is 14.289. This means that on the whole, health workers tend to initiate conversations rather than simply respond to questions of the clients.

The ANOVA shows that the four types of health workers differ from each other in the total tallies of their self-initiated responses. The private doctors (35.26) and the midwives (35.13) scored the highest in the group, followed by the public doctors (28.77) with the hilots coming last (15.46). These suggest that the midwives and the private doctors are the most active in consultations. The hilots, in contrast, are the most passive. In terms of information-giving type of responses, the midwives (14.96) have the highest mean total number of tallies, followed by the private doctor (13.46), then by the public doctors (11.06), and last by the hilots (9.00). These data imply that the midwives are the most active in the teaching aspect of prenatal care.

On the side of the clients, the Flanders Analysis shows that their mean total tallies of self-initiated response is 2.281 while that of their "responding" responses is 21.488. This means that the clients take the passive role. They may respond well to questions but rarely influence the direction of the discussion.

The ANOVA shows that clients of different types of health workers differ in their degree of being active or passive in consultation sessions. Clients of hilots (3.93) are the most active, followed by those of midwives (2.13), then by the public doctors' (1.8), and last by the private doctors' (1.26). But in terms of asking questions, the clients of private doctors are the

most active (3.96), with other clients trailing way behind (hilots = .900; public doctors = .48, and midwives = .46.).

The greater participation of the hilots' clients is likely due to their greater ease with the hilot. This makes sense when seen with the earlier data on the content of prenatal care and the personal attributes of the hilots. The passive style of the hilots invites clients to take a more active role in sessions.

The frequency of questions from the clients of private doctors, on the other hand, may be due to the higher educational attainment of the clients. The higher fees given to private doctors may also have an emboldening effect on the clients.

The observations in this section (1.3) point to some examples of interpersonal skills useful in the work of prenatal care. Nevertheless there are also important areas which require improvement. The general pattern of helper-client interaction suggests a formal, professional relationship which needs to be complemented by culturally valued traits focusing on the person and on social solidarity. Health workers will profit from a skills training toward a client-centered consultation. As it is right now, the health workers tend to dominate the sessions in defining its agenda and duration. Their style does not encourage clients to initiate. Emphasis on giving and obtaining information has a preventive effect on the verbalizing of client feelings. Improving verbal and non-verbal skills of interaction should build the client's trust and encourage active participation in the consultation process.

2.0 Assessment of the Attitudes and Perceptions of Clients and Health Workers

The framework of evaluation followed in this study assumes that the perceptions of the recipients of the health care and also of the health workers themselves are useful indices of the effectiveness of the identified health care service. Sections 2.1 to 2.7 discuss such perceptions from interviews with prenatal health workers and their clients.

2.1 Client's Readiness to Consult the Same Health Worker in her Next Pregnancy

When asked if they plan to consult the same health worker in their next pregnancy, the majority (82.6%) of the interviewed clients said "yes." The reason for this answer seems to have less to do with professional competence than with the ease in relating with the particular health worker. The most frequent reason of clients for wanting to go back to the same health worker are: (1) client is used to the health worker (38.9%), (2) health worker knows the client's obstetrical history (16.5%), (3) health worker is always available (19.8%), (4) health work-

er's place is accesible (19.8%), and (5) client likes health workers' personality (18.2%). The reasons of the few clients who did not want to go back to the same health worker were opposite those mentioned by the other group.

2.2 Perception of the Health Workers' Personality and Attitudes

The clients rated the personality and attitudes of their health workers with a mean rating of 4.837 in a 5-point scale. This indicates they have higher than average rating of the health workers' positive traits and attitudes. The discussion of the ratings given to the traits and attitudes just mentioned is in section 1.2.

2.3 Characteristics of an Effective Health Worker

The interviews show that many health workers (42.1%) and clients (49.6) describe the effective health worker as a person with good character or personality. For the clients, specifically, an effective health worker is one who is good, kind, patient, and understanding. Compared to the clients' descriptions, the health workers use more terms related to competence (24.8 as against only 7.4 of the clients') in their description of the effective person in their profession. According to the health workers interviewed, an effective prenatal worker, in addition to having good character, must also be good in their work, experienced, and able to give good advice.

2.4 Most Common Difficulties Encountered by Women in Prenatal Care

In general Health workers and clients agree in their reports that going for regular prenatal consultations, following dietary restrictions, submitting for immunizations, procurement of vitamins and medicines, abstaining from sex, and avoiding overfatigue are the most difficult aspects to follow in prenatal care. While health workers say that regular consultations is most difficult (56.2) followed by dietary restrictions (34.7), clients believe the order is the other way around (23.1 and 32.2% respectively).

According to the health workers, clients do not come for regular check-ups due to: laziness, hesitancy to submit to internal examination by male doctors, pressing housework, overconfidence in the normal state of their pregnancy, fear that the travel to the clinic may abort the baby, and lack of money. Clients, on the other hand, list the following reasons: preference to sleep than to go out of the house, health worker is always busy, lack of money to pay the doctor, extreme heat, and much work at home. A client said she did not visit her hilot often because her stomach massage was painful and she does not have the courage to tell her about it.

Failure to observe dietary restrictions and prescriptions, according to clients, is due to their lack of money to buy nutritious food and prescribed medicines. Another reason given is inability to control cravings.

There may be times when the clients could not comply with instructions because of reasons beyond their control. Health workers need to be sensitive to these situations.

2.5 Questions and Problems not Usually Answered and Skills not Usually Taught to Clients in Consultation Sessions

Both health workers and clients believe that all the clients' questions are being answered in consultation sessions. Only one client believes otherwise. Health workers think that they were not able to answer all questions on prenatal care only in the case of 13 of the 120 clients. The questions not answered were about the causes of the breech position of the fetus, of bleeding, and of pains in the stomach. Health workers report that for 31.3% of the sampled clients, their teachings on nutrition and prenatal health care have not been exhaustive because of lack of time.

2.6 Client's Attitude Toward Prenatal Care

The pregnant women's attitude toward prenatal care is reflected in the reasons they give for consulting a prenatal health worker for the first time. Women decide to see a prenatal health worker for the first time to find out if they are indeed pregnant, to consult about abnormalities such as bleeding and stomach pains, and to find out if the fetus is in the right position. A few say they first decide to go for prenatal care because they want advise, they want their blood pressure monitored, they can feel the baby in their womb asking for attention, and they want to be given massage.

The reasons given by the women in general do not show adequate appreciation of the full range of benefits that the prenatal care brings.

2.7 Suggestios on How to Improve Prenatal Care Program

The interviewers asked the health workers their suggestions on how to improve prenatal health care. The doctors made quite a few suggestions: (1) the hilots should be appreciated; (2) the hilots and the midwives should get training from the hospital especially on correct assistance in delivery, hygienic practices during and after delivery, and early detection of pregnancy and its related abnormalities; (3) the midwives needed more cooperation with each other (hinting of an existing problem among midwives in the research site at the time); (4) the government must improve its guidelines on health services; (5) the tradi-

tional care givers should refer high risk clients to doctors; (6) there should be more lectures and information dissemination campaigns on prenatal care; (7) complaints of pregnant women should be specified and discussed; (8) there should be more mothers' classes; (9) regular check-ups should be encouraged; and (9) there should be more assistance to mothers in meeting their nutritional needs.

Many of the doctors' suggestions show their concern for upgrading the skill of para-medical workers in prenatal care. On the other hand, there are no suggestions from the hilots and midwives on how doctors can further improve their prenatal care skills. This is probably because they think that the doctors know best in prenatal care.

Health workers in general think that more must be done to entertain women's complaints during consultation sessions. They also see the need for more systematic information dissemination on diferent aspects of prenatal care. Lastly, they are aware that the government should help further improve prenatal services in the community.

3.0 Assessment of Outcome:

The study assesses the result of prenatal care using the clients' overall pregnancy score and the perceptions of the changes in the clients' condition reported by the observers and interviewers, by the health workers, and by the clients themselves. A leader of the research team conducting the interviews and observations gave the overall pregnancy score for each client. She was guided by the rating scale found in the Observation Record (see Appendix I.B.3). She based her rating on data from the clients' records, the interviews, and the obsevation. This leader was a former practicing nurse. Her ratings were checked by the Research Associate who specialized in Tropical Medicine.

Most of the clients (69.4%) who participated in the study had normal pregnancies. Only 6% were judged to have severe condition, where infection of genital tract, severe anemia, hemorrhage, toxemia, or placental abnormalities may have been involved. 7% were judged to have a moderately severe condition. Borderline conditions, or cases with mild anemia, multipile pregnancy, edema without renal disease, toxemia, or RH incompatibilities, were found in 19% of the participating clients. There are, all in all, 30.6% of the clients who had abnormalities.

Perceptions of the changes in the clients' physical condition by the health workers and the clients themselves point to several things. Of the 97 clients who went for prenatal check-up more than once, 66 (75.76%) said they have noted changes. These clients reported changes that were to be expected from normal growth of pregnancy. These included increase in stomach size and in

weight. 39 of the 66 clients also reported an enhanced feeling of well being. Of these 39 clients, 17 related their enhanced feeling of well being to improved appetite and alleviation of discomfort. The remaining 22 simply said they noted improvement in both their health and the baby's. The answers of the health workers indicate the same trend.

The 39 reports of positive sense of well being after going at least once for prenatal care show that the prenatal services result in felt positive changes aside from those related to normal progression of pregnancy by the clients and health workers for at least 30% of the clients.

D: Indigenous Concepts and Methods in Prenatal Health Care

One of the objectives of the study is to identify indigenous concepts and practices in prenatal health care. For this, the study observed the consultation sessions. It also asked clients and health workers these questions:

For clients: What have you learned from your previous and present experience of pregnancy?

For health workers: What have you learned as a prenatal worker which you had not learned from the books? What have you learned from paramedical workers?

From the observations and answers, the study identified the following emic concepts and methods in prenatal care:

The women from Ilocos Norte attribute some pregnancy-related illnesses to the entry of cold elements in the stomach. Thus, pregnant women are not supposed to sleep on floors without mat, to sleep without cover on their stomach, or to have cold drinks. This same concept is found across all health workers in their advice to clients not to drink cold water or beverage.

Midwives in general, and doctors and midwives at times, stress the advantage of the working or industrious woman. From experience, they gather that delivery is difficult for women who are idle. Walking and other exercises can not be sufficient remedy for this deficiency of idleness. This belief explains why some midwives and doctors warn against oversleeping. It also reflects the Ilocanos' high value for industry.

Health workers seldom advise the pregnant to cease working. What they do is teach how to make working more safe for the pregnant. Thus they advise the pregnant to reduce the time for sweeping the floor, to do laundry sitting down, to wear a binder after delivery to relieve hip pain when working, to raise the feet upon a pillow every now and then during the day, etc. They also advise

clients not to carry heavy loads, an important advice since fetching water by pail is common practice among women in the site.

From experience, some health workers also claim ability to detect abnormalities in pregnancy by looking at the woman's face and posture. Others say they can predict the sex of the fetus by the size and shape of the pregnant's belly. By the use of their hands, many health workers say they can estimate the age of the fetus in the womb. Some use their fingers in to measure fundic height. Some have learned to relate breech presentation with early rupture of the water bag. One health worker said she has learned that urinary tract infection among her clients was usually caused by poor hygiene among couples in their sexual contact.

Health workers also recommend the use of homemade medicines. To prevent edema, they say it is good to place on the stomach poultice made from pepper soaked in vinegar. If the woman has hypertension, they recommend that she eats plenty of garlic. There is also the frequent practice of applying oil on the woman's stomach to facilitate delivery. Some doctors say they learned some skills in prenatal care from paramedical workers. These skills include massaging a woman when giving birth, gathering mothers for health education, and measuring fundic height using fingers.

CONCLUSIONS, RECOMMENDATIONS, and LIMITATIONS OF THE STUDY

A. Conclusions:

The study looks into the utilization pattern, process, and effectiveness of prenatal care of four different types of health workers in Ilocos Norte, a province in northern Philippines. The four types of health workers are the public doctors, the private doctors, the midwives, and the hilots (traditional birth attendant).

Interviews with pregnant women in Phase I of the study lead to the following conclusions:

1. Pregnant women of Ilocos Norte, both in the city and in the municipalities, recognize the importance of prenatal care.
2. Most of the women go for prenatal care anytime during their first trimester. Although clients are aware of the need for them to go for regular prenatal check up, they find it difficult to observe the prescribed frequency by medical practitioners.
3. Clients most often prefer doctors, then midwives, and lastly hilots. The public doctors draw more clients than private doctors.
4. Clients choose doctors mainly for their professional competence, midwives because of competence and also of recommendations of friends and relatives, and hilots because of convenience.
5. There is a considerable number of pregnant women who go to more than one type of health worker for prenatal consultation. In such cases, pregnant women usually report going both to a public doctor and to a midwife or to a midwife and to a hilot.
6. Pregnant women are the ones who decide on who to go to for prenatal care. Their decisions are mostly based on considerations such as professional competence and recommendations by their friends and relatives.
7. There are pregnant women who change their prenatal health worker either within one pregnancy or across pregnancies. They decide to change usually either because of problems with the personality of the health worker or of inconvenience.
8. The pregnant women associate the four types of health workers with different health care specializations. They regard the public and private doctors as the most knowledgeable and skilled. They see the midwives, on the other hand, to be experts in delivering babies. The midwives help them when they deliver their baby at home. Having childbirth at home is still the prevailing

practice in Ilocos Norte. Many women rely on the hilots to help in postnatal care.

9. As the clients see it, the private doctors is the best health worker, followed by the midwife, then by the public doctor, and finally by the hilot.

10. Not all pregnant women consult the health worker they consider the best. There are different reasons for this. Some may not be able to go to the private doctor because they cannot afford his fee. Others may want to go to the midwife or the hilot but have to change mind due to the lack of needed facilities. Still others who might have wanted to see the public doctor might eventually decide against it because the doctor is aloof.

11. The variables socio-economic status, type of domicile, and educational level of clients significantly influence the choice of health worker to consult for prenatal care.

Phase II of the study presents data which describe and evaluate the kind of prenatal care that women in Ilocos Norte get from the four types of health workers. Interviews with health workers and their clients and actual observation of consultation sessions lead to the following conclusions:

1. The health workers and the clients understand the goal of prenatal care as "ensuring the health of the pregnant mother and her baby." This understanding is too general and does not show awareness of essential components of health care such as complications avoidance, knowledge acquisition, and skills training.

2. The assessment of the professional competence of the four different health workers in prenatal care yields the following generalizations:

The four types of health workers have ambiguous score in the aspect of **knowledge and care giving skills**. They often give correct advice but they lack skills in helping clients remember instructions. They also fail to cover other significant aspects of prenatal care in their consultation sessions.

The **personal attributes and skills** of the health workers enhance their effectiveness. Most of them are flexible in their use of language and in the manner they give advice. They show care and concern and at least average empathy in their consultation sessions. They are attentive to their clients, fair in dealing with them, and sensitive to their economic condition.

On the **interpersonal dimension** of prenatal care, the health workers do not spend time in preliminary, rapport building

conversation with their clients. Many are simply perfunctory in giving physical and laboratory examinations. They do not manifest skills which encourage clients to participate actively in consultation sessions. Some interact mainly on the cognitive level only.

3. The assessment of the health workers' and clients' perceptions and attitudes leads to the following generalizations:

a. Clients in general are satisfied with the prenatal health care that they are receiving from their present health workers.

b. Clients do not expect much from their health workers with regards the content and the manner of their prenatal and delivery service;

c. The clients' picture of an effective health worker is primarily a person with good character or personality.

d. The health workers' picture of an effective health worker is one who is a good person and is also competent.

e. The clients' failure to come for regular check up and to observe dietary regulations are the difficulties which health workers often encounter in their prenatal care.

f. Health workers need to better understand why clients' fail to comply with instructions.

h. Clients' go to their first prenatal consultation to confirm suspected pregnancy or to have a health worker check signs of abnormal pregnancy. They are not adequately aware of their need for prenatal care regardless of the normality or abnormality of their pregnancy.

4. The assessment of outcome data suggests that many pregnant women stand to benefit from improved prenatal care services. The outcome data also lead us to our next conclusion.

5. In general, the prenatal health delivery service by the four types of health workers in Ilocos Norte needs to be improved if it is to give adequate care to pregnant women.

6. The process and effectiveness of the prenatal care of the four types of health workers are significantly different from each other along certain dimensions of health care. Such differences are seen by comparing the lists of descriptions below:

a. **Private Doctors**

- i. give relatively enough time for consultation.
- ii. most exhaustive in taking medical history and conducting physical and laboratory exams.
- iii. perfunctory in conducting laboratory and physical exams.
- iv. engage in perfunctory exchange of pleasantries before starting the session.
- v. conduct regular internal examination.

- vi. charge higher fee although flexible about it.
- vii. have clients who are more active in asking questions.
- viii. give specific dates and time for succeeding consultation sessions of client.

b. Public Doctors

- i. do not give enough time for consultation.
- ii. are most thorough in taking medical history and conducting physical and laboratory exams.
- iii. do not give much attention to the care of body and mind.
- iv. are not familiar with their clients.
- v. start consultation session immediately without exchange of pleasantries with clients.
- vi. are most routinary in their consultation sessions.
- vii. are mechanical and cold in conducting physical examinations; seem to maintain a formal climate throughout consultation.
- viii. are sometimes rude to clients.
- ix. have the most passive and inhibited clients.
- x. give consultation without fees.

c. Midwives

- i. give relatively enough time for consultation.
- ii. are most thorough in teaching proper nutrition.
- iii. are almost as thorough as any of the other types of health workers on other aspects of prenatal care.
- iv. engage in warm exchange of pleasantries before starting consultation sessions.
- v. conduct home visitations.
- vi. monitor client compliance through home visitation.
- vii. are respectful in conducting physical examinations.
- ix. provide warm climate for consultation.
- x. give free consultations.

d. Hilots

- i. think of prenatal care more in terms of the care of baby in contrast to other health workers who regard prenatal care as caring for both mother and baby.
- ii. are most thorough in care of mind and emotions and on teaching proper nutrition.
- iii. are least thorough in requiring laboratory and physical examinations.
- iv. exchange warm pleasantries with clients before starting sessions.
- v. are almost always giving abdominal massage.
- vi. encourage intake of nutritious foods rather than vitamin supplements.
- vii. provide warm, pleasant climate for consultation.
- ix. have the shortest consultation sessions.

- x. have clients who are relatively participative in consultation sessions.
- xi. conduct home visitations.
- xii. charge service fees, but flexibly.

7. The variables clients' age, parity, stage of pregnancy, health workers' length of service, and type of domicile have significant influence only on very few dimensions of effectiveness of prenatal health care.

8. There are indigenous concepts related to pregnancy and health care which medical practitioners need to understand and appreciate for their own professional improvement.

B. Recommendations

Based on the findings of the two phases of the study, the following recommendations are offered:

1. Support the position taken by proponents of the primary health care approach to make the midwives and traditional birth attendants (the **hilots**) primary prenatal care givers.
2. Encourage the broadening of the care giving roles attributed to the midwives and the hilots by the public and by the health workers themselves. This is specially important for hilots who are seen by pregnant women primarily for massage and who themselves also emphasize massage in their prenatal care services. For hilots to be accepted as competent prenatal care givers, they need to acquire knowledge and skills on other aspects of prenatal care. There is no reason why they cannot attain dexterity or broaden their concept of themselves as care givers with multiple skills and responsibilities.
3. Review and evaluate the existing training programs and curricula for midwives, hilots, and medical students.
4. The results of the third recommendation, the present study, and other relevant studies should serve as basis for developing a more effective training program for medical students and the four types of health workers.

For the **training of midwives and hilots**, the following directions can be considered:

- a. the development of an approach to teaching paramedical helpers which makes the scientific aspects of prenatal care understandable within their social orientations; this should include the development of teaching strategies to explain the medical side of prenatal care such as the taking of obstetrical history and application to current pregnancy.

b. the identification of indigenous concepts of health and illness implied in their beliefs and practices; there may be insights on health and medicine that are suggested by some of those beliefs which are more suited to their context; some of them might be too easily dismissed as folk, because of lack of study and for the dominance of certain models of medicine.

c. the affirmation of the value of massage in health care and the development of a training module for its safe use.

For the **training of doctors**, the public ones in particular, the following directions can be considered:

a. the development of a teaching approach for the orientation of doctors to the local culture so they may enhance the theory and practice of their profession in serving their clients.

b. the development of modules and teaching strategies that will help deepen their insight into the sociology and psychology of health care.

4. Conduct specialized trainers' seminars for the training of pilots, midwives, and medical students.

5. Improve the situation of public doctors by:

a. increasing their salary.

b. improving the facilities of the hospitals and rural health units pertinent to prenatal care.

c. providing them refresher and inspirational courses.

6. Develop programs for making childbirths at home acceptable and safe. This program can consider the following aspects:

a. Preparation of the mother and the household members;

b. Encouraging the doctors to make deliveries done at home an acceptable option;

c. Developing mechanism for smooth transition from home to hospital deliveries in emergency cases;

d. Improving techniques of teaching paramedical workers on safe procedures for child deliveries at home.

7. Encourage the cooperation in prenatal work of the four types of health workers. This may be fostered through creation of opportunities that bring these people together at work and learning situations, and by creating networks that make cooperative work possible.

C. LIMITATIONS OF THE STUDY:

The conclusions and generalizations in this study are subject, in varying degrees, to the following limitations:

1. The presence of the observer in the consultation session affect to some degree the behavior of both health worker and client. The effect could go either way. The performance of the health worker may either improve or be affected negatively by the constraining effect of being observed.
2. The use of the tape recorder may have effects on the respondents similar to that mentioned above.
3. The clients may be tempted to say what they consider to be socially acceptable.
4. The method of sampling respondents from pregnant women in three stages of their pregnancy to determine the influence of the variable **stage of pregnancy** on effectiveness of health care opens the study to possible confounding effect of individual differences. The option that tries to avoid this, the one which would observe the health care given by the four types of health workers to the same clients across the three stages of their pregnancy, is ruled out because of time constraint.
5. The evaluation approach adopted is process oriented and therefore may tend to deemphasize the emphasis on assessment of outcome. But even the framework adopted could be improved had additional data on the health of the baby and mother upon and after delivery been obtained. Time constraint also prevented this option.

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A P P E N D I C E S

A P P E N D I X

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INTERVIEW SCHEDULE
FOR
PHASE I

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INTERVIEW SCHEDULE
PHASE 1

1.0 Introduction

1.1 Good _____. I am _____.
I am here to conduct a study on how pregnant women take care of their health. May I know if you have a pregnant woman in your place I can interview?

(If there is, go to 1.2)
(If none, go to 1.3)

1.2 Is it okay for you to interview her (referring to pregnant woman)?
(If yes, note the name and address, then ask to see the person.)
(If no, thank the person and take your leave.)

2.0 Personal information

Thank you for your willingness to help me. (Proceed with the following questions:)

May I know your name?
How old are you?
What is your religion?
What grade/level did you finish in school?

2.1 Name : _____

2.2 Age : _____

2.3 Address : _____

Laoag
 Sarrat/Dingras
 Others (specify) _____

2.4 Religion:

Catholic
 Iglesia ni Kristo
 Protestant
 Indigenous religion
 Others (specify) _____

2.5 Educational Attainment:

Did not study
 Took up a few years in elementary
 Finished elementary
 Took up a few years in high school
 Finished high school
 Vocational/diploma course
 Took up a few years in college
 Finished college
 Took graduate studies (Masters', Ph. D.)

3.0 History of Pregnancy

3.1 How many times have you been pregnant?

- First (Proceed to 3.2)
- 2-3 (Proceed to 3.4)
- 4-6 (Proceed to 3.4)
- More than 6 (Proceed to 3.4)

3.2 Who is looking after your health during your pregnancy?

- Doctor in the hospital, public clinic/center
- Private doctor
- Nurse
- Private midwife
- Midwife in hospital/clinic
- Traditional birth attendant/local midwife.
- Not yet seeing any health worker (if this is the answer, ask the next question then proceed to 4.0)

Who is the health worker you are planning to consult with regarding your present pregnancy?

(Name and type of health worker)

Others (specify) _____

3.3 When did you first visit _____

(Name and type of health worker)

for consultation?

- Right away, as soon as I sensed I was pregnant (0-1 months)
- 1-3 months
- 4-6 months
- 7-9 months
- When I was/ I am just about to give birth
- Others (specify)

(Proceed to 4.0)

3.4 (For those who have had two or more pregnancies)

Who took care of you in your previous pregnancies?
(Put a check mark [✓] under the appropriate category and write actual name of health worker under the check mark [✓]. Also indicate particular service by health worker, e.g., prenatal, delivery, postnatal.

Number of: Dr. Clinic/: Private:Nurse :Hospital/: Local Midwife
pregnancy: hospital : Doctor : :Clinic :
: : : :Midwife :
1st. : : : : :
: : : : :
: : : : :

Number of pregnancy:	Dr. Clinic/hospital	Private Doctor	Nurse	Hospital/Clinic/Midwife	Local Midwife
2nd					
3rd					
4th					
5th					
6th					
Now					

3.5 Have you had any unfortunate experience or difficulty in your pregnancy?

- Yes (Proceed to 3.6)
 No (Proceed to 4.0)

3.6 What is this?/ What are these?

- miscarriage
 still birth
 difficulty in delivery/pregnancy (long labor, caesarian, etc.)
 the baby was born with abnormalities/deformities
 others (specify)_____

3.7 What do you think is the cause of this/these difficulty / ies?

- negligence/fault of birth attendant/health worker
 unavoidable reasons (abnormal position of the baby, low uterus, placenta praevia, ectopic pregnancy)
 inadequate resources (no specialist available, no money)
 physical problem of mother
 others (specify)_____

(Proceed to 4.5)

4.0 Reasons for Choice

4.1 What is your reason for going to/for your plan to go to (in the case of those who have not yet consulted)

_____?
 (Type of health worker and name if known)

- Financial reasons
 _____ Low fees/free consultation

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_____ Reasonable fees

[] Personality of health worker (write down qualities client liked in health worker of her choice)

[] Sex of health worker

_____female
_____male

[] Civil status

_____married
_____single

[] Competence/knowledge/experience

[] Familiarity with health worker

_____ recommended by an acquaintance/relative
_____ friend
_____ relative

[] Location of clinic/health worker's residence

_____ accessible
_____ inaccessible

[] Willingness/readiness to help (Maybe called upon anytime even when one can not afford to pay)

[] Health worker happened to be the one on duty or available at that time

[] Heard/read about

[] My husband's choice

[] Others (specify) _____

4.2 How about _____

(Type of health worker)

What do you think of this type of health worker? _____

4.3 When others consult you to advice a _____,

(Type of HW)

what comes to your mind/how do you react to the suggestion? _____

4.4 If others were to come to you for advice on whether or not they should consult with _____,

(Type of health worker)

what would you tell them? _____

4.5 How about _____? What do you
(Type of health worker)
think of this type of health worker? _____

(Proceed to 5.0)

4.6 (Only for those who have had two or more pregnancies)

Examine the answers to 3.4. If there is a significant variation in the choice of health worker, proceed to 4.6.1; if none, proceed to 4.6.3.

By "variation" is meant either a change in type of health worker or a change in person.

4.6.1 I have noticed you seem to change health workers for your prenatal care rather frequently. What are some of your reasons for this?

Financial reasons
 Personality of health worker (Write down qualities client dislikes in health worker) _____

Sex of health worker
_____ female
_____ male

Civil Status
_____ Married
_____ Single

Lack of competence/expertise/experience

Health worker not known to me

Location of clinic/residence

_____ inaccessible

_____ accessible

Lack of willingness/readiness to help
(Not available especially when one has no money)

Others(specify) _____

4.6.2 Why did you choose to consult with _____
(Type and name of health worker)

for your present pregnancy?

Financial reasons
_____ Low fees/free consultation
_____ Reasonable fees

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[] Personality of health worker (write down qualities client liked in health worker of her choice)

[] Sex of health worker

_____female
_____male

[] Civil status

_____married
_____single

[] Competence/knowledge/experience

[] Familiarity with health worker

_____ recommended by an
acquaintance/relative
_____ friend
_____ relative

[] Location of clinic/health worker's residence

_____ accessible
_____ inaccessible

[] Willingness/readiness to help (Maybe called upon anytime even when one can not afford to pay)

[] Health worker happened to be the one on duty or available at that time

[] My husband's choice

[] Others (specify) _____

(Proceed to 4.6.4)

4.6.3 (In cases where there is not much difference in choice of health worker) I have noticed you always go to _____

(Type and name of health worker)

for your prenatal consultation. May I know why you seem to like this person in particular?

[] Financial reasons

_____ Low fees/free consultation
_____ Reasonable fees

[] Personality of health worker (write down qualities client liked in health worker of her choice)

- Sex of health worker
 -female
 -male
- Civil status
 -married
 -single
- Competence/knowledge/experience
- Familiarity with health worker
 - recommended by an acquaintance/relative
 - friend
 - relative
- Location of clinic/health worker's residence
 - accessible
 - inaccessible
- Willingness/readiness to help (Maybe called upon anytime even when one can not afford to pay)
- Health worker happened to be the one on duty or available at that time
- My husband's choice
- Others (specify).....

4.6.4 What about _____
 (Type and name of health worker)
 what do you think of this type of health worker?

4.6.5 When others advice you to consult with _____
 _____ what comes to your mind/how
 (Type of HW) _____
 do you react to the suggestion?

4.6.6 If others were to come to you for advice on
 whether or not they should consult with _____
 _____ what would you tell them?
 (Type of health worker)

4.6.7 What do you think of _____?
 (Type of health worker)

5.0 Knowledge on Health :

5.1 How often do you go for consultation?

- regularly (once in two weeks on the 8th month of pregnancy and once a week on the 9th month)...
- once a month
- once in 2 months
- once in 3 months
- once in 4-6 months
- at the onset of pregnancy and period of delivery,
- only during time of delivery
- whenever the health worker says so (Ask how often she is made to go by the health worker)
- others (specify).....

5.2 Do you think a regular consultation with your health worker is important?

- No (Proceed to 5.3)
- Yes (Proceed to 5.4)

5.3 Why do you say it is not important to go for a regular consultation with your health worker? Write down the answer?

.....
.....
.....

5.4 Why do you think it is important for a pregnant woman to go for a regular consultation with a health worker?

- to avoid problems/complications
- to ensure health of baby
- for health worker to supervise development of baby inside mother's womb
- so one can be taught by health worker on what to do
- others (specify)

5.5 What dangers of pregnancy and delivery are you aware of?

- malnutrition of baby
- mental retardation
- breech
- ectopic pregnancy
- inverted fetus
- infection
- asphyxia (baby unable to breath)
- coiling of umbilical cord
- still birth
- death of mother
- others (specify)

For those pregnant for the first time, proceed to 6.2; for those with more than one pregnancy, proceed to 6.1.a)

6.0 Process of Choosing

6.1a (For those who have had more than one pregnancy)

Going back to your first pregnancy, who made the decision on where or to whom you should go for consultation?

- I myself
- My husband
- Both my husband and I
- My mother/mother-in-law
- Others (specify) _____

(Proceed to 6.2)

6.2 For your present pregnancy, who made the decision on where or to whom you should go for consultation?

- I myself
- My husband
- Both my husband and I
- My mother/mother-in-law
- Others (specify) _____

(If the respondent is on her first pregnancy and her answer in 6.2 is "my mother/mother-in-law", skip 6.3 - 6.8 and proceed to 7.2. If she is on her second (or more) pregnancy and gives a different answer for 6.2, go ahead with 6.3; but if the same respondent gives the same answer in 6.2 as in 6.1a, proceed to 7.2)

6.3 Do you have the same choice of health worker as your husband?

- Yes (Proceed to 7.1)
- No (Proceed to 6.4)

6.4 Who would you have preferred to consult?

- Doctor in hospital/public clinic
- Private doctor
- Midwife
- Hilot
- Nurse

Refer to the answers in 3.2 (for respondents in their first pregnancies) or 3.4 (for those who have had more than one pregnancy). If the health worker currently looking after them is different from the health worker of their choice, proceed to 6.5 and if the present health worker is the same as the health worker of their choice, skip 6.5 and proceed to 6.6.

6.5 Why should you want to consult with _____
(Type of H W)

- Financial reasons
 - _____ Low fees/free consultation
 - _____ Reasonable fees

- Personality of health worker (write down qualities client liked in health worker of her choice)

- Sex of health worker
 - _____ female
 - _____ male

- Civil status
 - _____ married
 - _____ single

- Competence/knowledge/experience
- Familiarity with health worker
 - _____ recommended by an acquaintance/relative
 - _____ friend
 - _____ relative

- Location of clinic/health worker's residence
 - _____ accessible
 - _____ inaccessible

- Willingness/readiness to help (Maybe called upon anytime even when one can not afford to pay)
- Health worker happened to be the one on duty or available at that time
- My husband's choice
- Others (specify)_____

6.6 Who does your husband prefer to consult?

- Doctor in hospital/public clinic
- Private doctor
- Midwife
- Hilot
- Nurse
- Others (specify)_____

Refer to answers in 3.2 (for those who are on their first pregnancies) or 3.4 (for those who have had more than one pregnancy) and find out if the health worker they are currently consulting with is the health worker of their choice. But if the answer given is " it's my husband's choice" (from the answers given in 4.1 for those on their first pregnancies and 4.6.2 and 4.6.3

for those who have had previous pregnancies) proceed to 6.7. If the reason given is something else, skip 6.7 and proceed to 6.8.

6.7 Why does your husband prefer that you consult with _____? (Referring to answer in 6.6)
(Type of health worker)

Financial reasons
 _____ low fees/free consultation
 _____ Reasonable fees

Personality of health worker (write down qualities client like in health worker of her choice)

Sex of health worker
 _____ female
 _____ male

Civil status
 _____ married
 _____ single

Competence/knowledge/experience

Familiarity with health worker
 _____ recommended by an acquaintance/relative
 _____ friend
 _____ relative

Location of clinic/health worker's residence
 _____ accessible
 _____ inaccessible

Willingness/readiness to help (Maybe called upon anytime even when one can not afford to pay)

Health worker happened to be the one on duty or available at that time

My husband's choice

Others (specify) _____

6.8 In cases where you differ in your choice of health worker to consult, whose decision is followed?

Wife

Husband

Others (specify) _____

6.9 Why? (Referring to answer in 6.8) _____

(Aside from 6.2; compare the answer to 6.1a; if there is a difference, ask 6.10. If none, proceed to 7.1)

6.10 You mentioned that in your first pregnancy, the one who made the decision on who to go to for consultation was _____, and in your current pregnancy was _____. May I know what accounts for the difference?

7.0 Influence of older women who have had experience in child bearing

7.1 Are you being advised by your mother/mother-in-law/grandmother on who to go to for consultation?

- Yes (Proceed to 7.2)
 No (Proceed to 8.0)

7.2 To whom do they want you to go?

- Doctor in hospital/public clinic
 Private doctor
 Midwife
 Hilot
 Nurse
 Others (specify)_____

7.3 Why would they want you to go to _____?
(Type of health worker)

- Financial reasons
 _____ Low fees/free consultation
 _____ Reasonable fees

Personality of health worker (write down qualities client liked in health worker of her choice)

Sex of health worker
 _____ female
 _____ male

Civil status
 _____ married
 _____ single

Competence/knowledge/experience

Familiarity with health worker
 _____ recommended by an acquaintance/relative

_____ friend
_____ relative

- Location of clinic/health worker's residence
_____ accessible
_____ inaccessible
- Willingness/readiness to help (Maybe called upon anytime even when one can not afford to pay)
- Health worker happened to be the one on duty or available at that time
- My husband's choice
- Others (specify)_____

7.4 What do they think of _____
(Type of health worker)

7.5 How about _____? What do they say
(Type of health worker)
about this _____?
(Type of health worker)

7.6 And _____? What do they think of this
(Type of health worker)
type of health worker?

7.7 What do they think of _____
(Type of health worker)

7.8 Is the advice of your _____
(refer to answer in 7.0)
important to you?

- Yes (Proceed to 7.9)
- No (Proceed to 8.0)

7.9 Why do you consider it important?_____

8.0 Other health workers

8.1 Do you know of any other hilot, midwife here in _____? (Place of resident of respondent i. e. Laoag City/Sarrat/ Dingras)?

- Yes (Proceed to 8.2)
- No (Proceed to 9.0)

8.2 May we know their respective names and address?

Name	Address

9.0 Attitude Towards Current Pregnancy

9.1 Who do you want to assist you in delivering your baby?
_____ (Type of health worker)

9.2 Where would you prefer to give birth? (Write down answer)_____

9.3 Do you have plans of having another baby after this one?

Yes. Why? (Write down answer/s)_____

No. Why not? (Write down answer/s)_____

9.4 Best health worker

9.4.1 If you are ask to choose, who do you think is the best health worker (specify that you are referring to the health worker who gives maternal health care or who is in-charge in midwifery practice).

- Doctor in hospital/public clinic
- Private doctor
- Midwife
- Hilot
- Nurse
- Others (specify)_____

9.4.2 What is/are your reason/s for choosing _____ as the best health worker?
(Type of health worker)

9.5. (Check if the chosen type of health worker is the same health worker the respondent is consulting with at the time of interview, if not, ask 9.5 question)

Why did you not go to _____?
(Type of health worker chosen as best)

INTERVIEW SCHEDULE
FOR
CLIENTS PHASE II

INTERVIEW SCHEDULE FOR THE CLIENTS
PHASE II

I.D. Number

Name of Client: _____
Civil Status : _____
Age : _____
Address : _____
Place of Birth: _____
Occupation : _____

Religion:

- No data
- Roman Catholic
- Iglesia ni Kristo
- Aglipay
- Others, specify _____

Educational Attainment:

- No data
- Could not go to school
- Grade 1 - 1V
- Grade V - High School II
- Third Year High School - Second Year College
- Third Year College - College graduate with
some units in graduate program
- Only thesis writing - Ph.D. graduate
- Others, please specify _____

Place of Interview:

- No data
- Hospital
- Private Clinic
- Home
- Center
- Others, specify _____

Date of Interview : _____
Length of Interview: _____
Time Started : _____
Time Finished : _____

Number of Pregnancies:

- No data
- First
- 2-3
- 4-6
- more than 6

Month of Pregnancy at the time of interview:

- No data
- First Trimester (1-3 mos.)
- Second Trimester (4-6 mos.)
- Last Trimester (7-9 mos.)

1.0 What was your reason for going for prenatal consultation the first time?

No data

2.0 Why do you think a pregnant woman should go for prenatal consultation?

No data

Relate client's answer in 2.0 to the following questions. Use such introductory phrases as:

You mentioned.....

Regarding.....

You said.....

Be sure to remember the following items that need to be asked. Start probing into those aspects mentioned, then proceed to those not mentioned.

2.1 Medical History

You mentioned that you were asked by your health worker about: your past illnesses/diseases

Yes

No

Other illnesses/diseases of your family/among your relatives

- Yes
- No

Menstruation (regularity, last occurrence)

- Yes
- No

What were these illnesses/diseases?

-
-
-

2.2 Obstetrical History:

Regarding your past pregnancy/ies, what information about this/these did your health worker try to find out from you?

- No data
- Experience in prenatal care
- Type of pregnancy (high risk, normal, abnormal)
- Length of pregnancy (7 mos., 40 weeks)
- Duration of labor (30 mins., 1 hour, etc.)
- Outcome of pregnancy (full-term, abortion, still birth)
- Condition of baby upon delivery (underweight, normal weight, with physical defect, etc.)
- Type of delivery (caesarian, normal)
- Place of delivery
- Any complication/s
- Date of last delivery
- Attending health worker during delivery
- Others, specify _____

2.3 Present Pregnancy:

2.2.1 High-risk Pregnancy

What signs of a high-risk pregnancy did your health worker ask you about or teach you?

- No data
- Swelling
- High blood pressure

- Heavy weight
- Others, specify _____

2.3.2 Abnormal Pregnancy:

- No data
- Dizziness
- Vomiting
- Bleeding
- Black-out
- Others, specify _____

2.3.3 Normal Pregnancy

Did your health worker tell you about the symptoms of normal pregnancy? What are these?

- No data
- Constant urination
- Constipation
- Increased vaginal discharge
- Pain at the back and hips
- Confused feeling
- Others, specify _____

2.4 Physical and Laboratory Examination:

You mentioned that you were put under physical and laboratory examination, what were these?

- No data
- Blood pressure
- Weight
- EENT and Dental
- Heart and lungs
- CBC (complete blood count)
- Urinalysis
- Others, specify _____

2.5 Nutrition

With regards to nutrition, what kind of food did your health worker say you should eat or increase in your diet?

- No data
- Increase water intake
- Food rich in protein
- Calcium and mineral
- Iron

- Vitamins (Vit. C, etc.)
- Others, specify _____

You should avoid?

- No data
- Sweets
- Salty
- Coffee, softdrinks
- Others, specify _____

2.6 Care of the Body

Concerning the care of your body, what did your health worker advise you regarding:

2.6.1 Cleanliness

- No data
- Keep breast clean
- Take a bath everyday
- Change undergarments everyday
- Keep vaginal area clean; wash it regularly
- Others, specify _____

2.6.2 Work and Exercise

- No data
- Continue with usual chores/routine
- Take afternoon naps
- Put up legs when resting
- Avoid long-distance travels
- Avoid standing for long periods
- Avoid getting overworked
- Avoid smoking
- Avoid wearing high heels
- When it's advisable and not advisable to have sex
- Others, specify _____

2.7 Care of mind and emotion

What did your health worker tell you about the care of mind and emotions?

- No data
-
-

What were you asked to avoid?

- No data
- Anger and fighting
- Worry and tension
- Others, specify _____

What thing were you asked to do?

- No data
- Relax
- Have a positive attitude toward baby
- Maintain a cheerful attitude
- Others, specify _____

2.8 Family Planning:

What did your health worker tell you about family planning?

- No data
-
-
-

2.9 Superstitious/Wrong beliefs

Do you have any superstitious or wrong beliefs that your health worker corrected in the course of your conversation?

- No data
- None
- There is/are

What are these?

- No data
- Massaging the stomach
- Wearing of binders
- No sex allowed
- Others, specify _____

3.0 Is there anything you know about caring for pregnant women that you did not learn from books or from others but instead learned from your own experience?

- No data
- None
- There is, specify _____

4.0 Based on your experience, what part/aspect of prenatal care is the hardest to follow?

- No data
-
-
-

Why do you think this is hard to follow?

- No data
-
-
-

5.0 What do you think are the qualities of a good prenatal health worker?

- No data
-
-
-

In the case of unusual answer/s, ask: Why do you think so?

- No data
-
-
-

6.0 Why would you rather consult with _____
(Name of health worker)
than some other health worker?

[] No data

[]

[]

[]

7.0 If you were to rate the compliance to the advice of your
health worker, what rating will you give yourself?

0 - Health worker gives no advice

1 - I refuse to comply

2 - I am not interested

3 - I follow some of the advice

4 - I follow most of the advice

5 - I follow all of the advice

8.0 (Explain the use of the numbers below and show the flash
cards:)

I'll be mentioning to you certain qualities/descriptions
pertaining to your health worker. State whether the
quality/description is:

0 - No data from my health worker

1 - Totally inappropriate

2 - Inappropriate

3 - Slightly appropriate

4 - Appropriate

5 - Totally appropriate

- a. Very encouraging _____
- b. Difficult to understand _____
- c. Does not understand condition of patient _____
- d. Health care suited to needs of patient _____
- e. Charges fairly _____
- f. Does not treat clients equally _____
- g. May be counted upon to help anytime _____
- h. Inaccessible _____
- i. Does not have much time for clients _____

9.0 What do you do when your health worker gives you advice which is contrary to your belief?

- 0 - No data
- 1 - Follow opinions of others
- 2 - Do not comply with advice of health worker
- 3 - Consult others before complying with advice of health worker
- 4 - Follow with reservations
- 5 - Follow all advice of health worker

10.0 Aside from those that you have already mentioned, what other benefits do you get from consulting with your health worker? (Find out first all the benefits given by each type of health worker)

No data

Rate client according to knowledge/awareness of the benefits of prenatal service using the scale below:

- 0 - No data
- 1 - No comment
- 2 - No knowledge
- 3 - Know some
- 4 - Know most of the benefits
- 5 - Know all the benefits that can be obtained from prenatal care

11.0 Have you noticed any changes in your condition ever since you started consulting with your health worker?

No data

None

Yes, there are (specify) _____

12.0 How does your health worker give you advice/prescription?

No data

Gives it verbally

Explains it

Writes it down and explains

Simply writes it down without any explanation

Others, specify _____

13.0 What is your mode of payment to your health worker for services he/she has rendered? How do you pay your health worker for services rendered?

- No data
- In cash
- In kind (food, vegetables, etc.)
- In cheque
- Others, specify _____

14.0 How do you give your payment to your health worker?

- No data
- Personally handed to health worker after consultation: fixed rate
- Personally handed to health worker after consultation: depending on agreement
- Coursed through the secretary after consultation: fixed rate
- Coursed through the secretary after consultation: depending on agreement
- Credit
- Free
- Others, specify, _____

15.0 Do you have any questions or doubts that were not answered or resolved by your health worker?

- No data
- None
- Yes, there are (specify) _____

16.0 Do you have other opportunities to met with your health worker outside of scheduled visits?

- No data
- None
- Yes, (what are these opportunities/occasion?)

What do you take-up in these scheduled meetings?

- No data
-
-
-

17.0 In case you have subsequent pregnancies, do you plan to go
back to _____ for consultation?
(Name of health worker)

No data

Yes, why?

No, why?

INTERVIEW SCHEDULE
FOR
HEALTH WORKERS PHASE II

af

INTERVIEW SCHEDULE FOR HEALTH WORKERS
PHASE II

I.D. No. _____

Name of Health Worker: _____
Civil Status : _____
Age : _____
Address : _____
Birthplace : _____
Employment : _____

Religion:

- No data
- Roman Catholic
- Iglesia ni Cristo
- Aglipay
- Others (specify) _____

Educational Attainment:

- No data
- Could not study
- Grade I - IV
- Grade V - High School II
- High School III - College II
- College III - Graduate with some graduate units
- Only thesis left - Ph.D. graduate
- Vocational
- Others (specify) _____

Place of Interview:

- No data
- Hospital
- Private clinic
- Residence
- Center
- Others (specify) _____

Date of Interview: _____

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(Ask Health Worker the following questions after having interviewed 3 clients)

1.0 Based on your experience, what reasons do pregnant women usually give on why they go for consultation the first time?

- No data
-
-
-

2.0 In your opinion, why should pregnant women go for prenatal consultation?

- No data
-
-
-

3.0 What things do you do and teach your client in order to achieve the goals of prenatal care that you just mentioned?

- No data
-
-
-

(Relate the following questions to client's answers to 2.0 and use varying introductory phrases like:)

- "You mentioned...."
- "With regard....."
- "Concerning....."

(Be sure to remember the following questions that need to be asked the client. Start probing into those aspects mentioned, then proceed to those that weren't.)

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3.1 Medical History:

You mentioned that you asked your clients about their diseases. Did you also asked them about....

- diseases in their family relatives
- menstruation (regularity/ last occurrence)

- No data
- Yes
- No
- Does not apply

3.2 Obstetrical History

Concerning your clients experience of past pregnancies, what information about this did you find out?

- No data
- Experience of prenatal care
- Type of pregnancy (high risk, normal, abnormal)
- length of pregnancy (7 months, 40 weeks)
- Duration of pregnancy (30 minutes, 1 hour, etc.)
- Outcome of pregnancy (full-term, abortion, still birth)
- Condition of baby upon delivery (underweight, normal weight, with physical defects, etc.)
- Type of delivery (caesarian, normal)
- Place of delivery
- Complications
- Date of last delivery
- Attending health worker/person
- Others (specify) _____
- Does not apply

3.3 Present Pregnancy

3.3.1 Delicate/sensitive pregnancy

What signs of delicate pregnancy did you find out from or informed your client about?

- No data
- Swelling
- High blood pressure
- Heavy weight
- Others (specify) _____

3.3.2 Abnormal pregnancy:

- No Data
- Dizziness
- Vomiting
- Spotting
- Blackout
- Others (specify)

3.4 Physical and Laboratory Examination

You said that you conducted physical and laboratory examination to your client. What kind of examinations are these?

- No data
- Blood pressure
- Weight
- EENT and dental
- Heart and lungs
- CBC (complete blood count)
- Urinalysis
- Others (specify) _____

3.5 Nutrition

With regard to nutrition, what food did you tell your clients they should eat or have more in their diet?

- No data
- Increase water intake
- Eat protein-rich foods
- Food rich in calcium and mineral
- Food rich in iron
- Food rich in vitamins (vit. C, etc.)
- Others (specify) _____

How about things to avoid?

- No data
- Sweets
- Salty foods
- Coffee, soft drinks
- Others (specify) _____

3.6 Care of the Body

Concerning the care of the body, what advice did you give your clients in this regard?

3.6.1 Cleanliness

- No data
- Always see to it that the breasts are clean
- Take a bath everyday
- Change underwears everyday
- Always keep genital area clean
- Others, (specify)

3.6.2 Work and Exercise

- No data
- Regular routine maybe continued
- Take afternoon siesta
- Put up legs when resting
- Avoid distant travel
- Avoid standing for long period of time
- Avoid excess tiredness
- Avoid smoking
- Avoid wearing high heels
- When it is and when it's not safe to have Intercourse
- Others (specify)

3.7 Care of Mind and Emotions

What did you teach your clients concerning the care of mind and emotions?

- No data
-
-

What did you advice them to avoid?

- No data
- Getting angry and quarreling
- Worry and tension
- Anxiety
- Others (specify)

And what did you advice them to do?

- No data

- Relax
- Have a positive attitude towards baby
- Always be cheerful
- Others (specify) _____

3.8 Family Planning

What did you advise your clients concerning family planning?

- No data
-
-
-

3.9 Superstitious/Wrong Beliefs

Were there any wrong or superstitious beliefs that your clients had which you corrected?

- No data
- None
- Yes, there were

What are those?

- No data
- Massaging the abdomen
- Wearing of binders
- No sex allowed during pregnancy
- Others (specify) _____

4.0 Have you learned anything from your actual practice of prenatal care that was not given in books/training seminars?

- No data
- None
- Yes, there is/are (specify) _____

5.0 Based on your experience, what aspect of prenatal care do your clients find the most difficult to follow?

- No data

[]

[]

[]

Why do you think these are/this is difficult to follow?

[] No data

[]

[]

[]

6.0 What do you think are the qualities of a good prenatal care giver?

[] No data

[]

[]

[]

For unusual answers, ask: Why did you say this?

[] No data

[]

[]

[]

7.0 Aside from those that you already mentioned, are there other benefits that your clients get from you?

[] No data

[]

[]

[]

8.0 From your experience, do pregnant women have questions or doubts that are usually not answered or resolved?

- No data
- None
- Yes, there are (specify) _____

Why?

9.0 Are there things you learned from your clients that are helpful in making prenatal care more effective and suited to the needs of pregnant women?

- No data
-
-
-

10.0 How do you give advice/prescription to your clients?

- No data
- Instructions given verbally
- Instruction explained verbally
- Instruction written and explained
- Instructions written only, not explained
- Others (specify) _____

11.0 In what form your clients pay you in exchange for the services you render?

- No data
- In cash
- In kind (food, vegetables, etc.)
- In checks
- Others (specify) _____

12.0 Can you describe the manner in which payment is made?

- No data
- Personally given to health worker himself/herself after consultation.

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- Personally given to health worker himself/herself after consultation depending on rate agreed upon.
- Courred through the secretary after consultation, fixed rate
- Courred through the secretary after consultation, depending on the rate agreed upon
- I owe you
- Free
- Other (specify)

13.0 Have you learned something about prenatal care from other health workers (specify other types)?

- No data
-
-
-

14.0 What else, in your opinion, can _____ do to further improve their prenatal care services to pregnant women?

- No data
-
-
-

(Ask the following only if needed)

15.0 Why did you use Ilocano (or whatever was the language used) in talking to your client/s?

- No data
-
-
-

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(Ask health worker the following after interview with each client.)

16.0 If you were to rate your client's compliance to your advice, what rating will you give?

- Health worker didn't give any advice
- Client refuses to comply
- Client is not interested
- Client follow some of the advice
- Client follow most of the advice
- Client follow all of the advice given

17.0 If you give advice to your client that is contrary to their personal belief, what is their usual reaction?

- No data
- Client don't follow advice of health worker
- Clients consult others first before following advice of health worker
- Clients follow but with hesitation
- Clients follow all health worker's advice
- Don not apply

18.0 Have you noticed any change in your client's condition ever since she started consulting with you?

- No data
- None
- Yes, there is (specify) _____

19.0 Aside from the scheduled visits, do you have other opportunities to meet with your client?

- No data
- None
- Yes, there is/are (specify) _____

What do you talk about during these meetings?

- No data
-
-

20.0 Are there skills or information which are normally part of prenatal care that for one reason or another you don't get to share with your client?

No data

None

Yes, there are (specify) _____

What are your reasons for not being able to share these (skills/information)?

No data

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OBSERVATION RECORD
FOR
PHASE II

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OBSERVATION RECORD FOR PHASE II

I.D. NO.

Name of Health Worker: _____

Type of Health Worker

- Public doctor
- Private doctor
- Midwife
- Hilot

Length of Actual Service: _____

Place of Observation:

- No data
- Private clinic/hospital
- Public hospital/health center
- Home of patient
- Home of health worker
- Others, please specify _____

Date of Visit : _____

Length of Consultation: _____

Time Started : _____

Time Finished : _____

Name of Client: _____

Number of Pregnancies (including present):

- No data
- First
- Second
- Third
- Fourth or more

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Stage of pregnancy during visit:

- No data
- First Trimester (1-3 mos.)
- Second Trimester (4-6 mos.)
- Third (last) Trimester (7-9 mos.)

Number of Client's Visit:

- No data
- First Visit
- Follow-up visit (encircle the appropriate number)

2 3 4 5 6 7 8
 9 10 11 12 13 14

- Can't remember
- No way of obtaining data

"PROFESSIONAL COMPETENCE":

1.0 Medical History

1.1 Contents:

Check appropriate box to indicate how the data was obtained:

Source of Information:

- 1 Taken-up during the observation session
- 2 Checked form record of the client
- 3 No record available
- 4 No way of obtaining data during observation session

1 2 3 4

- 1.1.1 Diseases in the family
- 1.1.2 Past diseases of the client
- 1.1.3 Menstrual history

1.2 Manner in which interview was conducted:

Evaluation of how the health worker discussed/ explained/examined the medical history (1.0) of his client. Check appropriate box that best describe the transaction:

- 0. No data
- 1. Health worker conducted interview in a way that elicited equal participation from the client.
- 2. Health worker had to ask many questions to obtain necessary information.
- 3. Health worker did not give client the opportunity to initiate discussion
- 4. Health worker did not need to ask many questions but client volunteered most of the information
- 5. No occasion to observe.

2.0 Obstetrical History:

Check appropriate box to indicate how the data was obtained:

Source of Information:

- 1 Taken-up during the observation session
- 2 Checked from record of the client
- 3 No record available
- 4 No way of obtaining data during observation session

	1	2	3	4
2.1 Experience of prenatal care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.2 Experience of pregnancy (high risk, normal, abnormal)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.3 Duration of previous gestation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.4 Duration of labor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- | | 1 | 2 | 3 | 4 |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| 2.5 Type of termination.
(e.g., full term, abortion,
miscarriage) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.6 Outcome of infant
(i.e., normal, premature) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.7 Place of delivery
(i.e., house, hospital,
clinic, etc.) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.8 Attending worker | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.9 Presence of complication
anytime during and after
pregnancy or while giving birth. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2.10 Date of last delivery | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Evaluation of how the health worker discussed/explained/
examined the obstetrical history (2.0) of his client.
Check appropriate box that best describes the
transaction:

- No data
- Health worker conducted interview in a way
that elicited equal participation from the
client.
- Health worker had to ask many questions to
obtain necessary information.
- Health worker did not give client the
opportunity to initiate discussion.
- Health worker did not need to ask many
question but client volunteered most of the
information.
- No occasion to observe.

3.0 Development of current/present pregnancy

Information regarding current pregnancy. Use check mark [/]
if the data given below are discussed during the process of

observation or an asterisk [*] if recorded previously. Place the marks under the appropriate column indicating the particular time/period when data were discussed/obtained.

P E R I O D

	1st visit 1-5 mos	Any pt. frm 6-7 mos	Any pt. frm 7-9 mos
3.1 Signs to watch out for and what to do:			
3.1.1. abnormal pregnancy (count and indicate total)			
- edema			
- hypertension			
- overweight			
- bleeding			
- headache			
- nausea and vomiting			
- blurring of vision			
3.1.2 High risk pregnancy:			
- (count and indicate total)			
- history of successive miscarriage			
- Unexplained still			
- birth premature deliveries, and abortion, etc.			
3.1.3 Normal signs of pregnancy:			
- dyspepsia			
- excessive vaginal discharge			
- constipation			
- dysuria			
- backaches			
- lumbar pains			
- Onset of quickening			
- Subjective feelings			

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P E R I O D

1st visit	Any pt. frm	Any pt. frm
1-5 mos	6-7 mos	7-9 mos

3.1.4. Gives erroneous advice on the above items, specify:

3.2 Manner in which interview was conducted:

Evaluation of how the health worker discussed/explained/examined the development of current/present pregnancy (3.0) of his client. Check appropriate box that best describes the transaction:

- No. data
- Health worker conducted interview in a way that elicited equal participation from the client.
- Health worker had to ask many questions to obtain necessary information
- Health worker did not give client the opportunity to initiate discussion.
- Health worker did not need to ask many questions but client volunteered most of the information.
- No occasion to observe.

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1.0 Physical Examination:

Use check mark [/] if the data given below are discussed during the process of observation or an asterisk [*] if recorded previously. Place the marks under the appropriate column indicating the particular time/period when data were discussed/obtained.

P E R I O D

	1st visit 1-5 mos	Any pt. frm 6-7 mos	Any pt. fr. 8-9 mos
4.1 Blood pressure			
4.2 Weight			
4.3 EENT and dental			
4.4 Head and neck			
4.5 Heart and lungs			
(Refer to records if physical examination was conducted previously.)			
4.6 Breast and genitalia			
4.7 Abdomen (Leopold's maneuver)			
4.8 Vaginal Examination (Did health worker conduct Internal Examination?)			
5.0 Laboratory Examinations			
5.1 Urine			
5.2 Hemoglobin count			
6.0 Nutrition			
(Check appropriate box and indicate time when discussed.)			
6.1 [] Teaches Nutrition			
[] Does not teach nutrition			

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P E R I O D

	1st visit 1-5 mos	Any pt. frm 6-7 mos	Any pt. frm 7-9 mos
6.2 Content of discussion regarding nutrition (count and indicate total)			
[] Gives only general advice			
[] Gives specific advice			
6.3 Specific advice given:			
6.3.1 Increase in food and liquid intake			
6.3.2 Foods to avoid:			
6.3.2.1 overly sweet			
6.3.2.2 caffeine or carbonated (i.e. tea, coke, coffee)			
6.3.2.3 salty foods			
6.3.2.4 others, please indicate _____			
6.3.3 Foods to add in the diet			
6.3.3.1 Calcium rich (e.g. milk, cheese)			
6.3.3.2 Protein-rich (i.e. meat, eggs, chicken, beans, tokwa, etc.)			
6.3.3.3 Iron-rich (i.e. malunggay, etc daily)			

P E R I O D

1st visit 1-5 mos	Any pt. frm 6-7 mos	Any pt. frm 8-9 mos

6.3.3.4 Others, please
Indicate _____

6.4 Discussed/Answered questions
regarding food fallacies

- Yes
 No

6.5 Prescribed supplementary,
vitamins

- written
 verbal

6.6 Gave erroneous advice on the
above items.
Specify _____

6.7 Manner in which discussion on nutrition was conducted:

Evaluation of how the health worker discussed/explained
the value of nutrition (6.0) to his client. Check
appropriate box that best describe the transaction:

0. No data
1. Health worker conducted interview in a
way that elicited equal participation
from the client.
2. Health worker had to ask many questions
to obtain necessary information.
3. Health worker did not give client the
opportunity to initiate discussion.

[] 4: Health worker did not need to ask many questions but client volunteered most of the information

[] 5. No occasion to observe.

7.0 Care of the body:

Use check mark [/] if the data given below are discussed during the process of observation or an asterisk [*] if recorded previously. Place the marks, under the appropriate column indicating the particular time/period when data were discussed/obtained.

P E R I O D

	1st visit 1-5 mos	Any pt. frm 6-7 mos	Any pt. frm 8-9 mos
7.1 Hygiene			
7.1.1 Daily bath			
7.1.2 Change of undergarments			
7.1.3 Cleanliness of the nipples			
7.1.4 Washing of genitalia			
7.2 Activity and exercise			
7.2.1 Normal activity allowed			
7.2.2 Standing for a long period of time to be avoided			
7.2.3 Habit of putting up legs when resting good			
7.2.4 Travels to be limited (exhausting long travel to be avoided)			
7.2.5 Sexual activity (Health workers teaches when and how)			
7.2.6 Have adequate sleep and rest needed			
7.3 Certain misconceptions e.g., beliefs/practices re corrected during pregnancy			

P E R I O D

1st visit 1-5 mos	Any pt. frm 6-7 mos	Any pt. frm 8-9 mos

(i.e., massaging the stomach, wearing of binders, absten-
tion from sexual activity,
no "libog" during pregnancy)

7.4 Gives erroneous advice on the
above items. Specify

7.5 Manner in which discussion on Care of the Body was
conducted:

Evaluation of how the health worker discussed/explained/
care of the body (7.0) to his client.

Check appropriate box that best describe the
transaction:

- 0. No data
- 1. Health worker conducted interview in a way
that elicited equal participation from the
client.
- 2. Health worker had to ask many questions to
obtain necessary information.
- 3. Health worker did not give client
opportunity to initiate discussion.
- 4. Health worker did not need to ask many
questions but client volunteered most of
the information
- 5. No occasion to observe.

8.0 Care of Mind and Emotion:

(i.e., keeping a pleasant disposition, having a positive
attitude toward and talking to the body).

Use check mark [/] if the data given below are discussed
during the process of observation or an asterisk [*] if
recorded previously. Place the marks under the appropriate
column indicating the period when the data were
discussed/obtained.

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P E R I O D

	1st visit 1-5 mos	Any pt. frm 6-7 mos	Any pt. frm 8-9 mos
8.1 Attitudes/emotions/situations to avoid			
8.1.1 Irritability/Anger			
8.1.2 Worry/Anxiety/Fear			
8.1.3 Conflicts			
8.1.4 Tension/Pressure			
8.2 Attitudes/emotional atmosphere to cultivate			
8.2.1 Harmonious relationship			
8.2.2 Positive attitude towards baby			
8.2.3 Relaxed outlook			
8.2.4 Happy disposition			

8.3 Gives erroneous advice: (specify) _____

8.4 Manner in which Care of Mind and Emotion was discussed

Evaluation of how the health worker discussed and explained the care of mind and emotion (8.0) to his client. Check appropriate box that best describe the transaction:

- 0. No data
- 1. Health worker conducted interview in a way that elicited equal participation from the client.
- 2. Health worker had to ask many questions to obtain necessary information.
- 3. Health worker did not give client the opportunity to initiate discussion.
- 4. Health worker did not need to ask many questions but client volunteered most of the information.
- 5. No occasion to observe.

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9.0 Family Planning

- No data
- Discussed
- Not discussed
- Gives erroneous advice. Specify _____

10.0 Discussed other matters not related to pregnancy.
Check the appropriate box.

- No data
- Yes (List specific topics taken-up.)

- No

11.0 Used instructional materials and teaching aids.

- No data
- Yes
- No

12.0 Manner of giving prescription:

- No data
- Written
- Verbal
- Others

13.0 Method of follow-up or monitoring of client's compliance to
the advice/prescription of the health worker

14.0 Manner of setting fees:

- No data
- Fixed rate-inquire from sect./nurse
- Fixed rate-health worker discusses matter with Client (C)
- Sliding scale-inquire from sect./nurse
- Sliding scale-health worker discusses with C.
- Others. Specify _____

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15.0 Manner of collecting fees:

- No data
- Personal (health worker himself)
- Third person
- Others. Specify _____

16.0 Type of payment:

- No data
- Cash. Please specify _____
- Kind. Please specify _____
- Others. Please specify _____

17.0 Overall rating of Completeness of data for the following:

Legend:

	Equip. Weight	% of Completeness	Weighted % of Completeness
1.0 Medical History	20	_____	_____
2.0 Obstetrical History	10	_____	_____
3.0 Current Pregnancy	10	_____	_____
4.0 Physical Examination	10	_____	_____
5.0 Laboratory Examinations	10	_____	_____
6.0 Nutrition	10	_____	_____
7.0 Care of the Body	10	_____	_____
8.0 Care of Mind and Emotion	10	_____	_____
9.0 Family Planning	10	_____	_____
T O T A L :	100	_____	_____

Formula:

$$\text{Percentage (\%) of } = \frac{\text{obtained score}}{\text{total no. of items}} \times 100$$

total no. of items

18.0 Over-all rating of accuracy of advice

	Accurate (w/o error)	Fairly Accurate (with 1 error)	Inaccurate (with 2 or more error)
	2	1	0
1.0 Medical History			
2.0 Obstetrical History			
3.0 Current Pregnancy			
4.0 Physical Examination			
5.0 Laboratory Examinations			
6.0 Nutrition			
7.0 Care of the Body			
8.0 Care of Mind and Emotion			
9.0 Family Planning			

T O T A L

II. PERSONAL SKILLS/QUALITIES

1.0 Flexibility: Please check the column corresponding to the number which best describes your observation of the following qualities/skills of the health worker (refer to the legend).

Legend:

- 5 Adjustment is very well integrated throughout the whole session.
- 4 Much adjustment was made throughout the session
- 3 Some adjustment was made throughout the whole session.
- 2 Little adjustment was made throughout the whole session.
- 1 No adjustment was made throughout the whole session.

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- | | 5 | 4 | 3 | 2 | 1 |
|---|-----|-----|-----|-----|-----|
| 1.1 Suitability of language used | [] | [] | [] | [] | [] |
| 1.2 Suitability of advice to financial status of client, (i.e., gives free medicine, prescribes cheap but nutritious foods to poor clients) | [] | [] | [] | [] | [] |
| 1.3 Suitability of health care to client's needs:
(Note: to be rated by Amy and Anabelle only; to be cross-checked by Monina) | [] | [] | [] | [] | [] |

0 Clarity in Communicating Ideas (Teaching Skills/Giving Information)

1. Poor
 - uses generalities and abstractions
 - monotone voices; inaudible
 - uses technical terms without explaining
 - does not give explanations for instructions/advice given
 - gives conflicting/confusing information
2. Fair
 - some message can be understood, but generally still unclear
3. Average
 - can be generally understood, but does not explain significance of information
 - does not use examples
 - does not give step-by-step instructions
4. Very Good
 - can be clearly understood
 - explains significance of information
 - uses examples
 - gives clear step-by-step instructions
BUT NOT ALL THE TIME
5. Excellent
 - Use simple words with teaching aids and concrete examples
 - explains meaning with words
 - gives clear procedural explanations
 - ask client if she understand what is being said

• 100

3.0 Empathy

1. Poor - almost all the time shows the following behavior:
 - ignores or shows inappropriate response to thought and feeling message of client
 - follows his own set plan/agenda despite communicated need of client to take up other matters
 - does not look at client during session
2. Fair - shows above mentioned indicators some of the time
3. Average - shows appropriate response to thought message almost all the time, but does not show response to feeling message
4. Above Average - shows appropriate response to thought message almost all the time and appropriate response to feeling messages occasionally
5. Excellent - show appropriate response to thought and feeling message almost all of the time
 - maintains eye contact most of the time
 - shifts focus of prenatal care according to communicated needs of client

4.0 Response of Health Worker to Topics Brought Up by Client Outside of Prenatal Care Concerns

- no occasion to observe
- ignores
- recognizes the message and responds briefly but does not encourage continuation of discussion
- recognizes and responds to the message and gives enough time for discussion
- recognizes and responds to the message and gives enough time for discussion

5.0 Initiative of Health Worker to Take Up Concerns Not Directly Related to Prenatal Concerns

- no occasion to observe
- no initiative whatsoever
- makes implicit invitation to client to ask questions or take up any concern of his or shares own or other peoples' experience which could potentially draw out clients' self disclosure on possible problems/concerns
- specifically and actively probes for possible problems/concerns indirectly related to prenatal care. (e.g. "Isn't it you already have 3 children?" "Don't you find it hard taking care of all of them especially now that you're pregnant again?")

6.0 Psychological Climate:

6.1 Observer's perception of psychological climate as set by the health worker. Please encircle the prevailing atmosphere during the process of observation (refer to the legend).

Legend:

- 0. No data
- 1. Strongly disapproving and obviously disinterested.
- 2. Mentally disapproving or disinterested.
- 3. Passive; gestures absent or neutral, voice sounds mechanical.
- 4. Shows attention and interest.
- 5. Wholly, intensely attentive.

1 2 3 4 5

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III. INTERPERSONAL SKILLS

1.0 Preliminaries

- No data
- No preliminaries (goes straight to business)
- Warmly present (makes the usual routinary introductory statements like: "How are you feeling today?" etc. but does not give much attention to client's responses; goes immediately to business afterwards)

2.0 Sitting arrangement of client and health worker. (Please draw in the space given below the sitting arrangement of client and health worker during the process of observation. Indicate approximate distance in feet/inches.)

- No data
- Health Worker turns back to client every now and then
- Facing each other with table in between them
- Facing each other without anything in between
- Seated beside the health worker

3.0 Observer's perception of health worker's manner of conducting physical examination.

- No data
- Coldly perfunctorily (only gives instructions on what to do; shows irritability, rudeness, lack of respect/concern)
- Perfunctorily/routinary (goes straight to business but shows respect)
- Warmly personal (explain procedure and rationale or care, motivates client by giving emotional reassurance)

4.0 Language/Dialect Spoken. What dialect/language was used during the observation session:

- No data
- Ilocano
- English
- Tagalog
- Others, please specify: _____

5.0 Evaluation of Health Worker's Listening Skills

- 0. No data
- 1. Does not listen (totally pre-occupied with something else while the client is talking)
- 2. Listens sometimes (most of the time busy doing something while interacting with the patient)
- 3. Listens most of the time (attention to the client is sometimes distracted)
- 4. Listens all the time (maintains eye contact for the most part of the session)

6.0 Flander's Modified Skill (Check if present during the process of observation).

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	
	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-
	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	sec																																					
6.1 Health Worker Initiates																																						
† by asking questions																																						
† by giving info/ideas																																						
† by expressing feelings																																						
† by examining client																																						
6.2 Health workers responds to ideas/info/feelings																																						
† by asking questions/ follow up questions for clarifications.																																						
† by giving ideas/info/ advise																																						
† by giving prescription																																						
† by expressing feelings																																						
† by non-verbal signals																																						
- facial expression																																						
- touch/body movement																																						
- silence																																						
† by examining client																																						
6.3 Client initiates																																						
† by asking questions																																						
† by giving ideas/info/ update																																						
† by expressing feelings																																						
6.4 Client responds																																						
† by asking questions																																						

Flander's Modified Skill (Check if present during the process of observation).

	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37		
	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	1-	
	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
	sec																																						
* by answering/giving information	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
* by non-verbal signals	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
- facial expressions	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
- body movements	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
- silence	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
* by expressing feelings	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
6.5 Confusion	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
6.6 Silence (how long)	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

APPENDIX -III-

A: ORGANIZATIONAL STRUCTURE OF HEALTH UNITS AND MANPOWER

RESOURCES ILOCOS NORTE

Population: 374, 315
1989

District 1* Office Based at Ilocos Norte Provin- cial Hospital				District 2 Office Based at Bangui Hospital				District 3* Office Based at Dingras Hospital				District 4 Office Based at Batac Hospital				District 5 Office Based at Marcos Hospital			
Pop.: 143, 726								Pop.: 48, 134											
Municip.	Pop'n	Midwife	Trained Hilot	Municip.	Pop'n	Midwife	Hilot	Municip.	Pop'n	Midwife	Hilot	Municip.	Pop'n	Midwife	Hilot				
Sarrat	21,610	6	24	Dingras	30, 941	6	47												
Bacarra	27,400	6	23	Solsona	17, 193	5	not reflected												
Pasquim	20,931	4	19																
Piddig	17,372	5	18																
San Nicolas	27,447	6	21																
Vintar	28,461	7	25																
Carasi	505	1	3																
Barangay Health Stations - 26				Barangay Health Station - Existing				Puericulture Center -but was not				reflected							
Puericulture Center - 5																			
Laoag City Health Office *																			
Population as of 1989: 81,289																			
Rural Health Units - 2																			
Barangay Health Stations - 17																			
Puericulture Center - 2																			
public doctors - 23																			
midwives - 43																			
trained hilots - 41																			
untrained hilots - 3																			

Those with asterisk are the areas under study.

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Appendix -III-

B. Provincial Birth Statistics in Laoag and Sarrat

Birth Statistics by Place of Birth from the Provincial Annual Statistics on Birth

Area/Place	Total No. of Births	Place of Birth			
		Home Number	%	Hospital Number	%
Laoag	5,009	4,611	92.05	398	7.95
Sarrat	1,156	1,137	98.36	19	1.38

Provincial Annual Statistics on Total Births by Attendance from Health Information System Office in Laoag City

Year	New Cases	High Risk	Old Cases	Total Mean	# of Visits
1984	6420	147	9530	16097	2.11
1985	6703	525	14428	21656	2.92
1986	7528	154	10074	17756	2.34
1987	7256	163	10482	17901	2.43
1988	7988	100	9506	17594	2.15

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