

**RESEARCH REPORT/NOTES**

**A Comparison of Utilization Pattern,  
the Health Care Process  
and the Effectiveness of Four  
Prenatal Health Services  
in a Provincial Community\***

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Despite modern obstetrics, pregnancy and childbirth remain as a major cause 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 external maternal health care.

The state of maternal health care in the Philippines also needs much attention. One government report in the 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 in 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) as a cause of high mortality rate among Filipino children.

Fortunately, the need for prenatal care in the Philippines has started to draw more attention from both government and private agencies. Organizations like UNICEF, the Department of Health,

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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 paraprofessional 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 focussed on topics as nutrition (Casal, 1959; Pascual, 1969; 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 care centers, the private doctors in private clinics, the midwife working as free agent or based in public health centers, and the *hilots* or the traditional attendants. Studies on child rearing practices in selected Filipino communities suggest that pregnant mothers prefer to go to the doctors and *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 that evaluate the process and effectiveness of health care given by the four types of said prenatal health workers. Three previous studies examined the role of *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 health workers, namely, the public doctor, the private doctor, the midwife, and the *hilots*. More specifically, it tries to:

- 1) determine the pattern of utilization of four types of prenatal health services in a provincial community in the Philippines;
- 2) determine if the women's actual choice of prenatal health worker coincides with their choice of the best type of health worker to go to;

- 3) determine the importance given by pregnant women to the advice of husbands and elderly woman living with them regarding prenatal care;
- 4) 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) describe the events that take place between the health worker and his client during consultation;
- 6) assess the relative effectiveness of prenatal health care given by each of the four types of health workers;
- 7) 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) identify concepts and methods on prenatal care which are native to the culture, and
- 9) 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. The first phase seeks to describe the utilization pattern of four types of prenatal health workers. These four are:

- public doctors: they serve in government health agencies and are paid by the government to give such service.
- private doctors: they charge fees for every consultation
- midwives: birth attendant specialists who have some training in scientific medicine and are licensed by the government to assist women in childbirth.
- hilots: non-formally trained traditional birth attendant who employ massage as a principal method in midwifery practice.

The second up to the fourth objectives mentioned above are also covered in this phase of the study.

The second phase of the study 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.

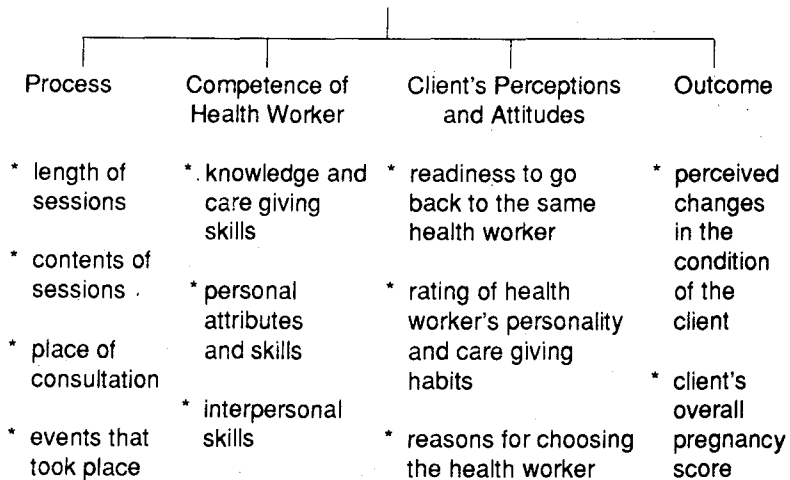
The present study departs from the classical approach to evaluation research which uses outcome data alone to assess the

merit of a particular service or program. This study uses instead what Patton (1980) and Lange (1974) call formative evaluation, which, in this particular study, is focussed on assessing

- (1) the process of health care,
- (2) the professional competence of health workers,
- (3) the client's perceptions and attitudes, and
- (4) the outcome of prenatal care.

The diagram below presents the conceptual framework for Phase II of the study and the specific dimensions which were subsumed by the assessment categories I have just mentioned.

### EFFECTIVENESS OF PRENATAL CARE



### METHODOLOGY

To answer Phase I questions, 150 pregnant women from urban and rural communities of Ilocos Norte province were interviewed. A 13-page interview schedule was used to guide the interview sessions.

For Phase II, three consultation sessions of 40 health workers were observed. Of the total 120 sessions that was observed, 40 were sessions with clients on their first visit and at any point within the first and the sixth month of their pregnancy; another 40 were

sessions with clients at any point within the 6th and the 7th month of their pregnancy but not on their first visit; and the last 40 sessions were with clients who were at any point within the 8th to 9th month of their pregnancy and not on their first visit. Researchers, in pairs, observed and noted down topics and events which took place during the consultations using an Observation Record. They also recorded on tapes 15 minutes of the observed sessions. The taped sessions were later analyzed using Flander's Modified Interaction Matrix. The diagram on the next page presents the lay-out of Flander's Interaction matrix which was used in data analysis.

Each of the 40 health workers and the 120 clients were also interviewed separately at the end of the consultation sessions. An interview schedule prepared by the researchers guided the interview sessions.

## **Results**

Interviews with pregnant women in Phase I of the study revealed the following:

- (1) Pregnant women of Ilocos Norte both in the city and in the municipalities, recognize the importance of prenatal care.
- (2) Many of the women (66.40%) go for prenatal care during their first trimester. Some of the women (33.57%) however, find it difficult to observe the frequency prescribed by medical practitioners.
- (3) Clients most often prefer doctors, then midwives, and lastly hilots. The public doctors draw more clients than private doctors. Clients choose doctors mainly for their professional competence, midwives because of their professional competence and also because 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. (See Table 1).

## FLANDER'S MODIFIED INTERACTION MATRIX

**TRANSACTION**                      **TIME BLOCKS (15 seconds/block)**

	1	2	3	4	5	6	.....	58	59	60
<b>HEALTH WORKER</b>										
asks questions										
initiated										
responded										
gives information										
initiated										
responded										
expresses feelings										
initiated										
responded										
examines										
initiated										
responded										
giving prescription										
<b>CLIENT</b>										
asks questions										
initiated										
responded										
gives information										
initiated										
responded										
expresses feelings										
initiated										
responded										
non-verbal										
<b>SILENCE</b>										
<b>CONFUSION</b>										

This practice of going to more than one type of health worker for the entire duration of pregnancy is common among women in their first and middle pregnancies but not so among women who have had more than 2 pregnancies. (See same Table)

- (6) 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. Hilots are regarded as reliable in postnatal care.
- (7) As the clients see it, the private doctor is the best health worker, followed by the midwife, then by the public doctor and finally by the hilot. (See Table 2).
- (8) Not all women consult the health worker they consider the best.
- (9) Pregnant women decide who to go to for prenatal care either on their own or in consultation with their husbands. It was very rare for women to say that their decision was influenced by the husband alone or by the elderly woman in the family alone.

Table 1. Frequency and Percentages of Use of Prenatal Workers As Reported by Respondents

Type of Health Worker	Frequency	Percentage
public doctor	36	24.0
private doctor	26	17.3
nurse	1	0.7
midwife	32	21.3
hilot	12	8.0
more than one HW	42	28.0
public doctor/midwife	(25)	(59.52)
midwife/hilot	(15)	(35.71)
public doctor/hilot	(02)	(04.76)

Table 2. Perceived Best Health Worker

Type of Health Worker	Freq.	%
doctors	(107)	(72.29)
public doctors	23	15.54
private doctors	29	19.59
doctors in general	55	37.16
midwife	29	19.46
hilot	12	8.10

There is, however, greater participation of husbands in the decision-making process among couples in the middle and upper classes.

Going to Phase II results, interviews with health workers and their clients and actual observations of consultation sessions led to the following major 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 complication, knowledge acquisition and skills training.
- (2) In evaluating the professional competence of prenatal health care given by the health workers in general, it was found out that:
  - (a) They were not thorough in obstetrical history;
  - (b) They give least attention to care of client's body, mind and emotion;
  - (c) They are average in their ability to teach;
  - (d) They rarely give erroneous advice, and if they occur they usually are about nutrition;
  - (e) They were judged by the observers to be flexible in use of language and in manner of giving advice, average in empathy, fair in treatment of their clients and have little concern about their clients' personal lives;
  - (f) They talk almost twice as much as clients, rarely express feelings and encourage clients to take the initiative in conversation and also to express their feelings.



- (3) Assessment of health workers' and clients' perceptions and attitudes regarding prenatal care led to the following generalizations:
- (a) Clients do not expect much from their health workers with regard the content and the manner of their prenatal and delivery service;
  - (b) The clients' picture of an effective health worker is primarily a person with good character or personality;
  - (c) The health workers' picture of an effective health worker is one who is a good person and is also competent;
  - (d) Many clients fail to come for regular check-up and to observe dietary regulations; and health workers need to understand the clients' reasons for such failures to comply with instructions;
  - (e) Clients go to their first prenatal consultation to confirm normalcy or of pregnancy. They are not adequately aware of their need for prenatal care regardless of the normality or abnormality of their pregnancy;
- (4) There are indigenous concepts related to pregnancy and health care which medical practitioners need to understand and appreciate for their own professional improvement.
- (5) The process and effectiveness of the prenatal care of the four types of health workers are significantly different and to a certain extent consistent with the clients' perceptions of their specializations and effectiveness. (See Table 3).
- (a) The private doctors, relative to other health workers, are effective in their prenatal care as evidenced by the length of their consultation sessions, by the thoroughness of their medical history interviews, by their physical and laboratory examinations, and their positive regard for their clients;
  - (b) Midwives are superior to private doctors in prenatal care for, aside from their skills and positive attributes also manifested by private doctors, they were also thorough in giving advice on nutrition, are warm and personal rather than perfunctory, they visit clients at home and give them counsel even on matters outside prenatal care;

- (c) Hilots, unlike the midwives do not score high on professional competence, but are very thorough and adept in personal aspects of health care. They are the only health workers who give adequate time to care of clients' mind and emotion and encourages consumption of nutritious foods instead of taking pills;
  - (d) Public doctors, though almost as thorough as the private doctors in conducting examinations and medical interviews are mechanical, cold and routinary in their health care and barely give attention to the personal and interpersonal aspects of health care.
- (6) In general, the findings that were presented lead us to the conclusion that prenatal health delivery service by the four types of health workers of Ilocos Norte needs to be improved if it is to give adequate care to pregnant women.

Table 3. Description of Process of Health Care of Four Types of Health Worker

HW	Consultation Time	Medical History	Physical /Lab Exam	Mind /Emotion	Nutrition	Fees	Rapport	Notion-Prenatal Care	Consultation Style
P R I V A T E	relatively enough	exhaustive	thorough regular internal exam	minimal attention given	gives vitamin pills/ prescription	highest but flexible	perfunctory	care of both mother and baby	with usual preliminaries; laboratory and int. and phy. exams set follow-up sessions
P U B L I C	not enough	most thorough	most thorough	no attention given	gives vitamin pills/ prescription	free/donation	routinary, mechanical, cold	care of both mother & baby	no preliminaries; physical and internal exams; free medicine if available

Table 3 continued

HW	Consultation Time	Medical History	Physical /Lab Exam	Mind/ Emotion	Nutrition	Fees	Rapport	Notion-Prenatal Care	Consultation Style
M I D W J F E	relatively enough	thorough	thorough	minimal attention given	gives most thorough teaching	free/donation	warm	care of both mother & baby	personal; gives advice, counsel and teaching visits clients at home
H I L O T	shortest	least thorough	least thorough	most thorough	encourages intake of nutritious food	flexible fees	warm	care of baby	personal; gives message, visits clients at home