

PA-ABR-152
15N 87182



**QUALITATIVE RESEARCH FOR THE
SOCIAL MARKETING COMPONENT OF
THE PERINATAL REGIONALIZATION PROJECT
TANJUNGSARI, WEST JAVA**

WORKING PAPER: 19

August, 1993

**QUALITATIVE RESEARCH FOR THE SOCIAL MARKETING COMPONENT
OF THE PERINATAL REGIONALIZATION PROJECT
TANJUNGSARI, WEST JAVA**

Working Paper #19

August, 1993

Field Research: Dr. Nanet Prihatini Ambaretnani, Team Leader
(University of Padjadjaran)

Technical Assistance: Carolyn Hessler-Radelet, MotherCare/The Manoff
Group

Report: Leslie E. Carlin, MotherCare/The Manoff Group

**MotherCare Project
1616 North Fort Myer Drive, 11th Floor
Arlington, Virginia 22209 USA**

**Report Prepared for
The Agency for International Development
Contract #DPE-5966-Z-00-8083-00
Project #936-5966**

This publication was supported by the United States Agency for International Development under contract DPE-5966-Z-00-8083-00.

The contents of this document do not necessarily reflect the views or policies of the U.S. Agency for International Development or of MotherCare.

TABLE OF CONTENTS

GLOSSARY OF INDONESIAN TERMS	i
I. EXECUTIVE SUMMARY	1
II. INTRODUCTION	3
A. Overview of Perinatal Regionalization Project	3
B. Role of Qualitative Research	3
C. Tangjursari, West Java	3
III. QUALITATIVE RESEARCH DESIGN: OBJECTIVES AND METHODS	5
A. Research Objectives	5
B. Methods	5
1. Focus Group Discussions and In-depth Interviews	5
2. Research Plan and Sample Selection	6
3. Analysis	6
IV. RESEARCH RESULTS	7
A. Focus Women, Their Husbands, and Elder Female Influencers	7
1. Experience and Signs of Pregnancy	7
2. Health Problems Associated with Pregnancy	8
3. Antenatal Care	8
4. Giving Birth	10
5. Problems Associated with Giving Birth	11
6. Giving Birth at the Polindes	11
7. Compliance with Referral	15
8. Community Sources of Information Regarding Pregnancy	18
9. Mass Communications Channels	18
10. Kartu Ibu dan Anak (KIA): The Mother-Child Health Card	19
B. TBAs	19
1. Experience and Signs of Pregnancy	20
2. Routine Antenatal Care	20
3. Problems Associated with Giving Birth	20
4. Attitudes Towards the Polindes	20
5. Compliance with Referral	20
C. Midwives	20
1. Routine Antenatal Care	20
2. Complications of Pregnancy	21
3. Birth	21
4. Midwives' Attitudes Toward TBAs	21
5. Attitudes toward the Polindes	22
6. Compliance with Referral	22
7. Mass Communications Channels	22

8.	Kartu Ibu dan Anak (KIA): the Mother-Child Health Card	22
D.	Village Chiefs	23
1.	Available Health Care Choices	23
2.	Appropriate Care During Pregnancy	23
3.	Problems Associated with Pregnancy and Birth	23
4.	Attitudes toward the Polindes	23
5.	Ideas about Village Education	24
V.	CONCLUSIONS AND RECOMMENDATIONS	25
A.	Conclusions	25
B.	Recommendations	26
	REFERENCES	29

Appendices

1. Question guides for focus groups and interviews
2. Members of the field research team
3. Composition of the focus group discussions and in-depth interviews

GLOSSARY OF INDONESIAN TERMS

Health care services and practitioners available to women, both public, government-sponsored (*) and private or traditional (**)

Term or acronym	Explanation
bidan*	midwife with formal training
dukun**	traditional mystical healer
GHS*	Gerakan Hidup Sehat, or "Healthy Life Movement" (a local mobile, monthly health care program)
kader*	a woman, appointed and unpaid, to coordinate the monthly Posyandu and take over other health-related tasks; may be the wife of the village chief or neighborhood leader; kaders vary greatly in their knowledge and commitment to their positions.
KB*	Keluarga Berencana, family planning program
KIA*	Kartu Ibu dan Anak, maternal-child health card
KMS*	Kartu Menuju Sehat, preschool child health card
mantri**	informal paramedical practitioner
paraji**	TBA
PKK*	Pembinaan Kesejahteraan Keluarga = Family Life Education
Polindes*	Pondok Bersalin Desa, village birthing hut available in 10 villages
Posyandu*	Pos Pelayanan Terpadu, "Integrated Service Post," a national monthly mobile well-child program
Puskesmas*	Pusat Kesehatan Masyarakat, Community Health Center
rumah sakit*	hospital

QUALITATIVE RESEARCH FOR THE SOCIAL MARKETING COMPONENT OF THE PERINATAL REGIONALIZATION PROJECT TANJUNGSARI, WEST JAVA

I. EXECUTIVE SUMMARY

This report details the objectives, methods, and major results of the formative research conducted for the social marketing component of the Tanjungsari Perinatal Regionalization Project in West Java, Indonesia. The project's aim is to reduce maternal and perinatal mortality in rural areas. Data consist of the results of 17 focus group discussions and 28 in-depth interviews with pregnant women, recent mothers, husbands, and female influencers of the focus women. Traditional birth attendants (TBAs), midwives, and village chiefs were also interviewed.

A brief summary of relevant results:

- Pregnancy is not generally viewed as a debilitating condition, or one that requires much alteration of one's daily lifestyle. Conditions recognized by respondents to be danger signs during pregnancy include: malposition, bleeding, high blood pressure and anemia. Short stature and swelling of feet or legs in the last trimester are not considered risk conditions.
- Pregnant women generally use both formal and traditional health care systems for antenatal care. Formal health care is provided by trained midwives and doctors at the polindes (village birthing hut), health center and hospital. Most women reported examination by a midwife at least once during their pregnancy. Traditional care is provided by traditional birth attendants (TBAs) or mantris (untrained paramedics) in the village. TBA care is sought by almost all women from the seventh month of pregnancy until forty days postpartum.
- For labor and delivery, women reported a strong preference for home births attended by a TBA and other family members.
- Malposition, heavy bleeding and twin births are viewed as dangerous complications of childbirth. Prolonged labor was not mentioned as a dangerous condition. Labor is normally seen to appear and pass quickly. "One hour" was frequently mentioned as the duration of labor.
- Respondents have somewhat ambivalent views about the Polindes. The Polindes are valued for their regular provision of antenatal care, and for offering emergency access to a midwife or doctor. However, most respondents are uncomfortable with the placement of some of the Polindes in the home of the village chief or in the village office and do not like the fact that the small size of the Polindes prohibits a family from attending the birth. Cost, embarrassment, and inconvenience weigh against using the Polindes for delivery.
- Cost of transportation, poor road conditions and cost of services are obstacles to compliance with referral for both antenatal care and delivery, particularly referrals to the health center or hospital. Most respondents indicated that they would comply with referral only if they are convinced that referral is necessary to preserve the health of the baby or the mother.

- Posters displayed at the health centers and Polindes appear to be the most common way health information is currently conveyed to the focus women. Many women report listening to the radio, which is a potentially effective medium for delivering health information to rural women.

II. INTRODUCTION

A. Overview of Perinatal Regionalization Project

The goal of the Tanjungsari project is to provide services to improve the safety of giving birth and to establish a referral system that directs women to the appropriate level of care.

For over five years, Dr. Anna Alisjahbana, Dr. James Thouw and others at the Research Unit of the Padjajaran University (UNPAD) Medical School have conducted an intervention study in Tanjungsari using a "Risk Approach Strategy" for reducing maternal and perinatal mortality and morbidity. The current project draws its inspiration from this body of work.

B. Role of Qualitative Research

In order to educate the community about the availability and appropriate use of the services offered under the Perinatal Regionalization Project, it was necessary first to explore current local knowledge and practice concerning antenatal health care and childbirth. The qualitative research undertaken had two main goals:

1. To prepare a social marketing campaign for selected components of the Perinatal Regionalization Project;
2. To add to the qualitative information on maternal morbidity and mortality compiled from MotherCare projects.

C. Tanjungsari, West Java

Tanjungsari is a periurban subdistrict in the Sumedang regency of West Java, about 60 kilometers from Bandung, the provincial capital. West Java has population of about 32 million, three million of whom live in Bandung. The maternal mortality ratio for Tanjungsari is 500 deaths per 100,000 live births. Tanjungsari district is largely rural with the exception of the strip along the main road to Bandung. The terrain is highland hillside, and most land is devoted to terraced wet-rice farming. At higher elevations other vegetable crops such as cassava, potatoes, cabbage and carrots are harvested.

While Bahasa Indonesia (Malay-based) is the official national language, in Tanjungsari, as in most of West Java, Sundanese is the language of the villages. Villages in orthodox Muslim areas are referred to as "Pesantren" villages.

III. QUALITATIVE RESEARCH DESIGN: OBJECTIVES AND METHODS

A. Research Objectives

1. Learn what is regarded as "normal" pregnancy and childbirth.
2. Assess local knowledge of obstetrical danger signs and common responses to risk factors in pregnancy and birth.
3. Examine prevailing attitudes toward and utilization of both formal and traditional maternal health services, with particular attention to the newly established birthing huts (Polindes).
4. Identify sources of information about health, including mass media channels and personal networks.

B. Methods

1. Focus Group Discussions and In-depth Interviews

The primary information comes from a series of 17 focus group discussions and 28 in-depth interviews. This information was collected between October 1991 and June 1992.

Topics addressed included:

- the experience of pregnancy;
- ideal antenatal health care practices;
- knowledge of warning signs of obstetrical complications and responses to them;
- beliefs and practices concerning childbirth including compliance with referral;
- knowledge of and attitudes toward the Polindes, the newly established birthing huts;
- sources of information about health, including personal networks and the mass media;
- awareness of the new maternal-child health card.

Question guidelines for the focus group discussions and in-depth interviews were produced through a collaborative effort involving MotherCare personnel in the U.S., MotherCare consultants in Bandung, and the research team who conducted the focus groups and interviews. The question guides were pretested and altered several times until a consensus was reached regarding appropriateness (see Appendix 1).

The researchers who moderated the focus groups and conducted the in-depth interviews were anthropologists, sociologists and communications specialists from Padjajaran University, also referred to as UNPAD (see Appendix 2). This research team was trained by Giselle Maynard-Tucker during her visit to Indonesia in September/October 1991.

Details of each focus group's composition are found in Appendix 3. In-depth interviews were held with one subject at a time. All focus groups and interviews were conducted in Sundanese. Each respondent received a small amount of cash for his or her participation to reimburse any transportation costs.

2. Research Plan and Sample Selection

The population sample consisted of:

- 1) **focus women** who were pregnant at the time of interview or who had given birth in the last twelve months, and "influencers": **husbands** and **older female relatives** of the focus women (mothers, mothers-in-law, sisters) (focus group discussions and in-depth interviews);
- 2) **traditional birth attendants** (TBAs, or "parajis"), and trained **midwives** ("bidans") (interviews only);
- 3) **village chiefs** from three villages (interviews only).

Group 1 was further divided into "users" and "nonusers" of the newly installed Polindes, into residents of houses with "easy access" or "difficult access" to these huts, and into "older" and "younger" age categories. Appendix 3 provides profiles of each discussion group. In addition, some discussion groups were conducted with inhabitants of Pesantren (orthodox Muslim) villages where a "mantri," an informal paramedical practitioner, often cares for a woman during pregnancy.

3. Analysis

All discussions and interviews were tape-recorded, then transcribed and translated from the original Sundanese into Indonesian and English. The interviewers/moderators transcribed their own sessions in most cases. If this was not possible, someone else from the Research Unit at UNPAD substituted. Transcribers also directly translated their work from Sundanese to Indonesian. Various other individuals translated from Indonesian to English.

The transcripts were read and summarized by topic and by population.

Neither the focus group discussions nor the in-depth interviews were transcribed verbatim. The transcript contents vary widely with the different transcribers/interviewers.

Due to time pressures, there was little opportunity to analyze the results of the focus group discussions before designing and administering the in-depth interviews. Had this been done, the interviews would probably have been more fulfilling compared to the discussion groups.

IV. RESEARCH RESULTS

A. Focus Women, Their Husbands, and Elder Female Influencers

Sixty-two women from the following villages participated: Gunung Manik; Haurgombong; Sukawangi; Sindangsari.

1. Experience and Signs of Pregnancy

Dizziness, indigestion, tiredness, cravings (especially for sour and spicy foods) and nausea are considered as normal for the second until the fourth month of pregnancy. Some women experience loss of appetite. Generally, all of these symptoms disappear by the fifth month, and eating habits return to normal. A few women experience no symptoms at all, and suspect they are pregnant only because menstruation has ceased.

Generally, people believe women should continue to do their normal work in the house and in the fields. Toward the end of pregnancy, they should refrain from heavy lifting, such as carrying water, firewood or grass. If there is no one else available to help, however, women carry on with these tasks. In the last month of pregnancy, women say they should frequently wash their floors, because this will help the fetus assume the correct position for birth.¹

Most women recognize the need for nutritious, vitamin-rich food during pregnancy. They should eat often but only small amounts. Traditional wisdom says that too much food eaten at one time will make the baby too large and cause difficult delivery.

The prevailing pregnancy-related taboos are:

- going outdoors after dark
- sitting in the doorway of a house
- eating from a large dish
- sewing late in pregnancy
- letting hair be loose, rather than tied back
- eating pineapple

The consequence of breaking these taboos is believed to be a complicated delivery, generally because the baby is too large (a result of eating from a large plate) or the birth canal is obstructed (a result of sewing or blocking a doorway). However, several women indicated that these beliefs may not be deeply held, by voicing sentiments exemplified by one pregnant woman's quote:

"My parents say I cannot let my hair be loose; I don't do that anyway because it's too hot. They say I cannot sit in a doorway, which I never do because I would bother those passing through."

Thus, pregnancy is not generally viewed as a debilitating condition, or one that requires much alteration in daily life.

¹ Washing floors is usually done while squatting, the preferred position for delivery.

2. Health Problems Associated with Pregnancy

Problems that women believe **do not** require treatment included:

- dizziness or headache and/or nausea in early pregnancy;
- swelling of legs or feet in the last trimester (a few women specified swollen legs and arms, or swollen body).

Most women say that these disturbances associated with pregnancy do not require any treatment, because they will disappear naturally after the birth. The few who would seek treatment for dizziness would see either the TBA or the midwife; for swollen legs, a midwife or doctor.

Problems that **do** require treatment include:

- malposition (breech or transverse lie)
- bleeding
- high blood pressure
- anemia

For treatment of **malposition**, most women would request help from the TBA, who would use massage to correct the fetal position. A few women would probably go first to the community health center to see the midwife about this problem.

For **bleeding** most women would turn first to the midwife at the community health center or go directly to the hospital in Sumedang, the nearest city.

For **high blood pressure** or **anemia** women would seek treatment from the midwife, because she has medicines while the TBA does not. The midwife can give them an injection for high blood pressure and a pill for anemia. Some women go monthly to the midwife to receive injections for high blood pressure.

Problems mentioned by very few women include fluid discharge, treated by the midwife; fever (no treatment mentioned); and falling.

3. Antenatal Care

Most women use both formal and traditional services during pregnancy.

"A pregnant woman should be examined by the midwife during her pregnancy, especially if she has any difficulty; from the seventh month until forty days postpartum, she is in the care of a TBA."

Two main reasons are given for antenatal examination: one, for the health of the mother and baby, and two, to ensure a smooth and rapid birth. The midwife's role (or in some cases that of the mantri (informal paramedical practitioner) is to check on health. The TBA's skills are geared toward the all important task of facilitating delivery.

Almost all women say they had seen a midwife at least once during pregnancy. Frequency of visits varied.

About half the women make monthly visits to the midwife at the community health center or at the local birthing hut. Many women would see the midwife two or three times while pregnant. A minority receive only one check. (In comparison, one of the midwives who was interviewed believed women should visit a minimum of seven times during a pregnancy. See data from midwives.)

All women see a TBA while pregnant, whether or not they were also receiving care from a midwife or other practitioner. The central role of the TBA is to ensure a safe and smooth birth, which the TBA accomplishes by manipulation of the fetus in the womb and by massaging the mother.

Midwife Care

Many women say that the midwife (Bidan) cares for the physical well-being of the woman: she weighs the woman, takes blood pressure, provides "injections, vitamins and medicines," and gives advice on healthy eating, including injunctions to eat extra amounts of food and to consume plenty of fresh, green vegetables. Most midwives see women at the community health center, but some are posted to the community to rotate among the Polindes. There is also a doctor available at the community health center, but women prefer to see a female midwife rather than a male doctor, which they find embarrassing.

Women seek help from a midwife for antenatal bleeding, fever, headache, or dizziness. The fee for the midwife at the Health Center includes medication, which patients expect to receive at each visit. Midwives generally comply by giving patients vitamins and iron tablets. (One midwife reports giving an appetite stimulant to her patients.)

In addition to seeing patients at the community health center, midwives also attend mobile clinics (GHS and Posyandu; see appendix) that provide primary care services to villages. Having midwives come to the village is a very popular idea, and if a visit is planned and fails to take place, women are disappointed.

"Sometimes the Polindes is a blessing and at other times it cheats us. We are cheated if the midwife doesn't show up at a scheduled examination time, and women have to return home, because we've wasted our time. It's fortunate though when the bidan arrives, because if we had to go all the way to Tanjungari, we'd have to pay for transportation."

TBA Care

Antenatal care provided by the TBA, or "paraji," utilizes massage and palpation. The TBA uses these techniques to adjust fetal position, if necessary, in case of breech or transverse lie. In Java, massage is culturally valued both for its health-giving and sensual properties. Being entitled to massages throughout pregnancy until forty days postpartum is a "perk" of pregnancy. Massage during pregnancy ensures the baby's correct positioning and also promotes an easy delivery. Massage after birth returns the woman's body to its normal state.

"Usually after the paraji comes to examine you, your body feels refreshed and nice."

TBAs may recommend herbal or other natural treatments such as tea made of turmeric extract, tips of young avocado leaves, boiled young papaya leaves, or egg yolk in a hot liquid, to maintain the health of a pregnant woman and her baby. They also use prayer and other ritual chanting during antenatal massages and during delivery (Maynard-Tucker 1992).

A few respondents mentioned the TBA as curing antenatal or postnatal bleeding by giving patients "sirih," a mixture containing betelnut, which is commonly chewed by women and men as a stimulant.

Mantri and Dukun

Husbands from Sindangsari, the pesantren area, say the "mantri" is an alternative to the midwife in providing care for pregnant women. A mantri is a type of health paraprofessional, whose training is not regulated; thus, the title provides little information about the practitioner. The mantri is more easily accessible in Sindangsari than a midwife. Women often see both a mantri and a TBA.

"Of course! Women's health is checked by the mantri, and once a month they see the TBA to ensure a smooth birth when the time comes."

Only the husbands, not their wives, talk about the mantri as a provider of antenatal care.

One village chief (see below) mentions a "dukun," or traditional mystic healer, as another potential caregiver for women. The dukun's skills are needed when the cause of an illness is related to spirit possession. Some dukuns practice midwifery (Maynard-Tucker 1991, 1992).² TBAs also use prayer and ritual in their practices, so clearly there is some degree of overlap or blending among categories of caregivers and/or their techniques. No one other than the village chief mentions the dukun as a caregiver for pregnant women.

Users and Non-users of the Polindes

"Users" and "non-users" of the Polindes (village birthing huts) are equally likely to use both formal and traditional antenatal care services. Pesantren-area focus women differ from the others only slightly; they list more options for treatment of various problems (herbal remedies, TBAs, midwives, general doctors and specialists), and they tend to have completed more schooling than non-pesantren women. The pesantren men, on the other hand, had somewhat less knowledge about pregnancy than did the non-pesantren husbands.

4. Giving Birth

A woman is about to give birth when she feels "full," or as if she needs to defecate. She will experience a hot feeling around her waist, which develops into pains that come frequently. When there is an "urgent" feeling, the TBA is called by the husband or a neighbor.

At the first signs of labor, the woman herself prepares for the birth. She lays a mat on the floor in the middle of the room, covers it with a sheet of plastic and then places over that a long cloth. She lays out clothes for the baby. Her mother or a female neighbor helps her by soothing her and giving her tea or coffee to keep up her strength. Some women mention feeling very sleepy; if that happens, a woman must keep walking around to overcome the sensation.

² The term "dukun bayi" may also be used to denote a traditional birth attendant, but does not indicate whether the person considers herself primarily a spiritual healer or a traditional birth attendant.

The baby usually comes within one to three hours of the first signs, according to women who refer to a time frame.³ The TBA, if she arrives promptly, receives the newborn, cuts the cord, and bathes the baby. By then the placenta is ready to emerge. After that the TBA massages the mother, and departs. She returns periodically (three to five times) to do more massage, until 40 days postpartum. A few women say they like to drink warm water after giving birth.

The husband's role after delivery includes burying the placenta, which the TBA gives him. Then he goes to the mosque to offer prayers of thanksgiving for a safe birth.

In sum, labor is seen to appear and pass quickly, and does not incapacitate women who manage their own preparations for birth. The TBA and relatives offer ministrations and support to the mother.

5. Problems Associated with Giving Birth

Some women, mainly those who are currently pregnant or husbands whose wives are pregnant, seem hesitant to discuss problems connected with giving birth.⁴

Husbands can only name **malposition** as a complication. Most men cannot think of any inherent difficulties but mention that if a woman had worked too hard, fallen, or eaten the wrong foods, she might have a difficult delivery.

Women and female influencers mention **malposition, heavy bleeding, and twins** as possible complications of birth. Many women say that they themselves have not experienced these problems, nor do they know anyone who has, but they have heard tales. Less frequently women mention **anemia** and **swelling of legs**. One woman refers to "tuukeun," described as a painful sensation of an object moving around inside the abdomen. A few women cannot name any dangerous complications of childbirth.

For bleeding most women would seek help at the health center from a midwife or doctor, but for malposition would depend on the TBA unless she referred them elsewhere. Anemia is treated by an injection given by the midwife, and swelling of the legs is either not treated or self-treated by walking around until ready to deliver.

Thus, malposition, heavy bleeding, and a twin birth are viewed as dangerous complications of delivery; anemia and swelling of the legs are also common but less alarming problems.

6. Giving Birth at the Polindes

Almost all women are aware that they may give birth in a variety of locations, including the Polindes, the midwife's home, the community health center, and the hospital. Most people believe that the safest

³ There may be some bias leading many respondents to emphasize how quickly birth happens. Since many think that the government has intended all women, not just women at risk, to deliver at the birthing huts, one method of resisting that "order" has been to claim that birth occurred so quickly that the woman had no time to get to the Polindes. The interviewers were probably seen as sent by "the government." The purpose of the Polindes is a source of confusion among clients and providers.

⁴ According to the interviewers, this is a form of taboo: discussing or preparing for a negative outcome might invite bad fortune by indicating to God that one did not have enough faith in divine goodness. Therefore, discussion about various problems was difficult to generate and the results somewhat meager.

places to give birth are the hospital or the health center, because trained personnel, medical equipment and medications ensure the well-being of mother and baby.

The local perception of the Polindes⁵ is as a cheaper and closer alternative to the health center or hospital. Nearly everyone complains about the placement of the Polindes within the village office or village leader's home, saying that it is embarrassing to impose on the chief and his wife. Another frequent complaint is the lack of a midwife or doctor posted to the Polindes and available at all times.

Most of the women and their husbands who know of the Polindes refer to the "government order" that all women should give birth there. About half the people did not know the term "Polindes" per se, but know about facilities for giving birth at the "desa" or village office. Some villagers believe that the Polindes is intended only for problematic births.

Users

Users of the Polindes cite safety as the main reason they gave birth there rather than at home, and lower cost plus proximity as reasons for choosing the Polindes over the community health center or the hospital. If needed, a midwife or a doctor can get to a patient at the Polindes, but not to her home. Also, as the Polindes are near roads, transportation to the hospital is more easily arranged in emergencies. Most users had been referred to the Polindes by the TBA for a specific reason, usually malposition.

Some "users" indicate that their use of the Polindes was not their own choice.

"I wanted to be taken care of by a lot of people...the paraji [TBA] took me there without telling me why. Actually, I really wanted to deliver at home."

"The government suggested to me that it's better to give birth at the Polindes."

One woman provides a positive account of giving birth at the Polindes but mentions that she is very friendly with the village chief's wife so it was almost like giving birth with her own relatives around.

"At the Polindes, I was assisted by a doctor. At first I was embarrassed, but because I was in pain I lost that feeling. Mainly I knew I could give birth in safety. Soon after I felt the urge to give birth, I went to the Polindes. This was just after morning prayers [about 5:00 a.m.] and the baby was born at 8:20 a.m."

Non-users

Though non-users of the Polindes also extol the safety of formal medical facilities for childbirth, their clear preference is to give birth at home, the "right" place for such an event, with the woman's chosen

⁵Although Polindes vary in location and structure, in general the Polindes is a three-room structure attached to the compound of the village chief. It has paved floors, a bed, space for equipment and a two-way radio by which emergency care and transportation can be accessed. There is a Polindes for ten villages.

TBA to assist. The benefits of home birth are highly valued and include an environment which feels comfortable and safe, ease of access, and negligible cost.

Many non-users assert that "everyone must give birth at the Polindes now," but explain that they or their wives had not been able to comply with this rule. The most common explanations are:

1) insufficient time after the onset of labor to reach the Polindes.

"I didn't know I was about to deliver, so I was working just as usual. At 5:00 I felt discomfort, and my mother said I was about to give birth. At 6:00 the baby was born."

2) no transportation available and walking made difficult because of darkness or rain.

"I gave birth at home because it was raining hard and I didn't want to go out."

3) convenience of home.

Many of those who respond that it is better or safer to give birth at the Polindes state that they themselves would elect to deliver at home. Reasons include the greater cost, embarrassment, and bother of giving birth elsewhere.

"I want to be healthy but if I can be with the paraji, then sure, just having the paraji is enough. She's nearby, cheap, and it doesn't require a journey. The paraji comes to me."

4) distrust of services.

Negative views of the Polindes held by "non-users" include dislike of its location (in some villages) in the village office or chief's home; the fact that at some Polindes a family cannot be inside with the woman during delivery; its higher cost; and lack of faith in its services for delivery. Distrust of the Polindes is evidenced by stories about deaths there:

"A woman from Babakan died at the Polindes because the placenta did not emerge, and the midwife attending her waited for the doctor rather than take action on her own." (Gunung Manik)

"A pregnant woman went to the Polindes and was told her fetus was already dead; they then refused to help the baby anymore." (Sindangsari, pesantren area)

"A woman went to the Polindes to give birth because the paraji told her the baby was in transverse position, but only the village kader [village woman who coordinates the monthly mobile well-child clinic] was available to assist and the baby was stillborn." (Margajaya)

5) problem births only.

Some respondents are of the opinion that the Polindes is strictly for problem births; since their own births were smooth, there was no reason to use the Polindes. A woman recounts her problem-free birth at home:

"[I gave birth] at home, in order to be calm, and because I wanted to be near my parents. They are already experienced...I was washing clothes and felt a pain at my waist, as though I needed to defecate. My husband said maybe I was ready to give birth, but I told him no, because I didn't know... my parents went to find the paraji, but she was out. Soon after, the baby was born and my grandmother helped me deliver...The paraji still hadn't arrived. A neighbor helped bring out the placenta. The paraji came half an hour later, cut the cord, bathed the baby, and massaged me..."

6) cost of delivery in the Polindes may be too high.

"Costs" include the price of Polindes services and transportation, as well as the "cost" in bother and embarrassment. Any and all of these costs contribute to the widely held perception of the Polindes as "expensive."

Opinions vary about the purely financial costs. Users who live at some distance ("difficult access") to the Polindes think of services there as inexpensive, but transportation cost is onerous. The Polindes is cheap when compared to the cost of the health center, or a midwife seen elsewhere. Compared to the price of a TBA coming to one's own home, the Polindes seems expensive. At some Polindes, the money paid to the village chief for his "hospitality" may add significantly to the cost. Although birth is a relatively rare event in a family, its financial cost is not perceived as though amortized over a woman's reproductive years. The problem is one of cash on hand at that moment. In contrast, TBAs can be paid in-kind, with chickens, rice or other goods. Furthermore, payment to TBAs can usually be deferred for several weeks if necessary.

In general, husbands are more likely to mention financial cost as a drawback to using the Polindes, and women more often mention the "embarrassment" and "bother" aspects.

Overall, the community feels fairly strongly that the appropriate place to give birth is at home, with a TBA and family members in attendance. Cost, embarrassment, and trouble weigh against using the Polindes or any other facility for an away-from-home birth. Those who did deliver infants at the birthing hut seem to have done so largely to appease "the government" (in the person of the village chief) or because they were urged to go there by the TBA when she felt it would be a difficult birth. Thus, the ability of a TBA to recognize danger signs and take appropriate action is a critical factor in making childbirth safer in the villages of Tanjungsari. There is confusion about the purpose of Polindes so the proper role and function should be clarified.

Positive perceptions of the Polindes

- antenatal health care is in the community
- safe birth
- less expensive than health center or hospital
- easier to reach than health center/hospital
- provides emergency access to midwife or doctor
- has lots of medicines
- relatives and neighbors may visit
- comfortable and peaceful

Negative perceptions of the Polindes

General

- embarrassing because at village chief's home
- no doctor or bidan stationed there
- inadequate facilities (no lavatory or kitchen)
- clean water not provided
- expensive compared to home birth

Non-users only (both "easy" and "difficult" access)

- no different from care available at home
- too far away and/or bad road
- noisy because close to main road
- too small for all the relatives to be present
- distrust

7. Compliance with Referral

Most women say that a TBA will refer her patient to the midwife if she becomes aware of a health problem beyond her scope of knowledge. The women say they would comply with such a referral because if a TBA sends her client to the midwife it means that the TBA feels incapable of handling the problem. Several women say they would not need a referral from the TBA, because they themselves would seek help for any given problem from a midwife first. The majority of husbands say they would encourage their wives to follow the instructions of a TBA or midwife.

For antenatal bleeding, headaches, dizziness, fever, high blood pressure, or anemia, most women would accept referral from a TBA to a midwife or go to a midwife first. Most respondents state that swelling of feet, hands or other parts of the body is normal, and they would not accept referral for this, nor for lack of weight gain. No one believes that referral to a midwife because of small stature makes any sense, nor is it regarded as a risk factor, because of its predetermined nature.

"... I don't know about high blood pressure, but if someone is very short it is the hand of god. There are big women who have difficult births and small ones whose deliveries are smooth."

Cost of transportation, poor road conditions and cost of services are obstacles to compliance with referral for both antenatal care and delivery, particularly referrals to the health center or the hospital. The cost of seeing a midwife or doctor can be high, particularly for labor and delivery. (See Table on page 15 for itemization of costs associated with antenatal and labor and delivery services.)

When the cost of transportation is added to the cost of services, the total can be prohibitive for some families. For example, transportation alone can be as high as Rp. 15,000 (see table) per round trip from some villages to the nearest health center. Therefore, many women and their husbands indicate that they will comply with referrals only if they are convinced that referral is necessary to preserve the health of the baby or the mother.

Most women and their husbands indicate that if a medical emergency occurred during a home delivery no expense would be spared to secure expert help from the formal sector. In particular, husbands who express disinclination to having their wives give birth away from home for reasons of inconvenience or cost also express their commitment to obtaining the best care and fastest transportation should any emergency arise, despite the cost.

Almost all women and men indicate greater faith in the opinion of the midwife than in that of the TBA because of the midwife's formal training and education, but they also affirm that the TBA brings the benefit of her vast experience. Only one respondent, a husband, questions the opinion of a midwife. His wife was advised to deliver at the hospital because of high blood pressure, but the husband doubted the necessity of this. He had his wife see a second midwife, who believed that the woman could deliver safely at the Polindes, which she did.

In sum, a woman with serious medical problems (bleeding, high blood pressure, anemia or fever) would probably accept referral to formal medical care but most would not choose to deliver away from home unless the danger was manifest. Swelling of the hands and face is not seen as dangerous and small stature is not perceived of as a risk factor.

Costs for the various antenatal care options, as reported by most respondents.

<u>Care provider/place</u>	<u>Price (rupiah)</u>
Midwife, seen at health center	650
extra cost for medication	0
cost of roundtrip transport	≤ 5000 (high figure, from Sukawangi)
seen at birthing hut	500-1000
seen in private practice	2000-3000
extra cost for medication	500-1500
seen at Healthy Life Movement (GHS)	0
extra cost for medication	500
TBA (does not offer medication)	1000-2000, sliding scale also accepts food as payment
Mantri	Cost of medication only; no figure given (Sindangsari)
Doctor, seen at health center	650
seen at private practice	10,000

*At the time of data collection, the exchange rate was Rp. 2000 = US\$1.00. An average estimate for villagers' income, if they are farmers or day laborers, is Rp. 2000-4000/day.

Costs for giving birth, as reported by most respondents.

<u>Care provider/place</u>	<u>Price (rupiah)</u>
Birthing hut	5000; can go up to 30,000 (depending on any birth complications and who requires payment; sometimes village chief's wife receives 2500)
TBA at patient's home	approx. 5000, and/or food
TBA postpartum visits	1000-2000
Midwife at her own home	50,000-100,000

*At the time of data collection, the exchange rate was Rp. 2000 = US\$1.00. An average estimate for villagers' income, if they are farmers or day laborers, is Rp. 2000-4000/day.

8. Community Sources of Information Regarding Pregnancy

Women say they learn about pregnancy from the TBA, the midwife, friends and older female relatives. Husbands receive their information about pregnancy from informal chats with friends, or from the village office or village chief. Female influencers say they pass on information they received from their own mothers, in particular about taboos. According to the village chiefs, one of the kader's roles is to offer advice about pregnancy. No one else mentions the kader as a source of such advice. Some people, however, report that the kader provides information about the Polindes, urging women to give birth there.

According to over half the women, advice from midwives is the most trusted, owing to the midwives' formal training. Such advice usually concerns healthy eating habits and recommended activities such as to reduce heavy lifting but frequently mop the floor to insure proper fetal position. Midwives may also advise giving birth at the Polindes. The midwife encourages women to eat more than usual, which many find difficult to do.

The rest of the women claim to have greater faith in the TBA and in their own mothers or other elder female relatives, because of their greater experience. A few say they might consult their husbands in case of a health problem, but in general men are not thought to be a source of useful advice related to pregnancy.

In sum, many respondents say they place the most trust in the midwife's opinion, because of her training; others adhere to the advice of elders and TBAs because of their experience.

9. Mass Communications Channels

Radio, Television, Posters, Print, and Presentations

Radio provides news, special programs for villages, agricultural information, and entertainment programs. Some respondents report listening often, some only occasionally. Some do not have a radio in the home. Men are most likely to listen early in the morning or in the late afternoon. Women listen at nonspecific times of day, to many sorts of broadcasts, including music, news, Qur'an readings, and story plays.

Television is viewed frequently by some families, sometimes by most, rarely by a few. Few households possess a television set, so most people who watch do so at a neighbor's home. News shows, story dramas, particularly "dongeng" or traditional legends, wayang puppet plays, popular music presentations, and Qur'an readings are the most frequently viewed programs.

All women report reading **posters concerning health issues** at the community health center, the Polindes, or the kader's home. The women list issues most frequently portrayed as family planning, immunization, and administration of Vitamin A capsules. Some of the husbands mention seeing posters at the village office or the bus depot in Tanjungsari, but generally these concern agriculture rather than health.

Very few men or women read **magazines or newspapers**. Pikiran Rakyat, an Indonesian-language regional daily paper, is read by a few of the husbands.

Live presentations include only "pengajians," readings or lessons from the Qur'an, which are held twice weekly in most villages. Many respondents express enthusiasm for free mobile film presentations though such events are rare.

A quantitative assessment of mass media channel usage in West Java households comes from a HEALTHCOM study (McDivitt and McDowell 1989). A sample of 1000 mothers divided into urban and rural dwellers was interviewed; relevant results are reproduced below. No single radio station attracted a majority of these listeners; over 50 stations were mentioned during the interviews (although some of these may actually be different programs rather than separate frequencies). The most popular times to listen to the radio were **10:00 a.m. - 12:00 p.m. and 4:00 p.m. - 6:00 p.m.**

<u>Mass media usage by rural West Java mothers</u>		
Own a radio	49.5%	
Listen to radio	75.0%	
Frequency of radio listening		5.7 days/week
Own a television	18.8%	
Watch television	50.4%	
Frequency of tv watching		3.8 days/week
Read a newspaper yesterday	3.0%	
Read a magazine in past 2 weeks	7.7%	
Ever attended mobile film show	31.5%	

Health Information from Mass Media

About half of the men and women recall hearing health information on TV or radio. However, health messages include information on topics such as family planning and immunization and advertisements for commercial headache or flu remedies such as "Bodrex" or "Antalgin."

In conclusion, posters displayed at health centers, health posts, and Polindes are currently the main material and appear to be the most reliable way to convey information to the women through the media at the present time. A well-promoted radio program specifically about women's health issues might well become an effective health education tool. It is questionable if television would be as effective since it is usually viewed at a neighbor's home, and due to the sensitive nature of many of the topics, women's sense of modesty may inhibit them from watching these programs in a social setting.

10. Kartu Ibu dan Anak (KIA): The Mother-Child Health Card

Very few women, and none of the female "influencers," are familiar with this card. One mother knows the KIA for her child. Another says she keeps her own card, but often forgets to bring it with her to examinations. (More than one type of card is in circulation; creating confusion among patients and providers.)

B. TBAs

This section reports on TBAs from three villages who were asked to participate in a focus group discussion. Five women and one man (a dukun, or traditional healer) from Cinaggerang, Margajaya, and Genteng joined the focus group.

1. Experience and Signs of Pregnancy

TBAs confirm a pregnancy in the second or third month by palpation and observation of signs such as swollen breasts and belly, paleness, and by evaluating the woman's reports of stiff muscles and missing her period.

2. Routine Antenatal Care

TBAs see a pregnant woman approximately three times during the pregnancy, for massage, spiritual support and at the last visit (about 8 months), checking fetal position.

3. Problems Associated with Giving Birth

Two of the TBAs say they have delivered cases of malpresentation. The dukun refers women in prolonged labor, which he considers to be more than eight hours. No TBA has experience with a "difficult" delivery.

4. Attitudes Towards the Polindes

The TBAs express approval of the new Polindes, but say patients usually refuse to give birth there because of the expense. Also, women like to give birth on a mat on the floor, not on a raised bed as provided at the Polindes. The TBAs, however, prefer the bed because assisting deliveries on the floor causes back pain.

Though the Polindes are clean and have water, an advantage of delivery in the woman's home is having an experienced female relative to assist.

5. Compliance with Referral

All of the TBAs say they have occasionally referred patients to the health center or hospital, but in general these patients decline due to expense, distance, and fear of being away from family and friends.

C. Midwives

The midwives who were interviewed included three women currently practicing in Tanjungsari and two recent graduates waiting for placement in villages, where they will be responsible for the Polindes.

1. Routine Antenatal Care

Midwives say that patients visit them first in order to confirm a pregnancy. A midwife can determine whether or not a woman is pregnant by palpation at ten weeks post-conception. Subsequently the midwives hope to see the women "seven to twelve times" during the course of pregnancy; monthly until the ninth month, and then weekly. Few women report such a high number of visits.⁶

⁶Pregnant women in one village (Sukawangi) say that some women choose to be examined monthly at the health center, and weekly in the ninth month in accordance with the midwife's recommendation. However, many don't follow this schedule because their husbands and mothers object to it, saying it's better to wait for the midwife to come to the village Polindes. "If she doesn't come one month," they say, "you can just wait until the next time." Mothers and husbands worry about pregnant women traveling in the last month.

Those who do, according to one midwife, are mostly professionals:

"Some pregnant women have a higher-than-usual worry level. They tend to be civil servants, teachers, office workers, or others with more education."

The midwife's services include providing vitamins, immunizations, and advice about self-care during pregnancy. The latter includes healthy eating, regular examination, relaxation, cleaning the nipples, and avoiding heavy work. As mentioned above, one midwife regularly dispenses appetite stimulants along with vitamins and iron pills.

One midwife reports that much of her role is to offer psychological support to her patients.

2. Complications of Pregnancy

Risk factors for a difficult delivery identified by respondents include previous difficult deliveries, more than two miscarriages, narrow pelvis, history of malpresentation, and prolonged labor. Small stature is not considered a risk factor.

The warning signs of complications include anemia, high blood pressure, malposition, bleeding, high fever, swelling and major headaches. Women with such problems are referred to the hospital or the Polindes for delivery.

3. Birth

While attending a woman in labor, the midwife tries to offer psychological support, and prepares her instruments and intravenous equipment. If labor takes more than 24 hours, she will refer the woman to the hospital.

Birth is imminent if a woman cannot hold her breath and the opening is large enough.

After the baby is born, the midwife delivers the placenta; if there has been prolonged labor, this may be difficult. She will bathe the baby, and make sure the mother is resting and eating well.

4. Midwives' Attitudes Toward TBAs

According to the midwives, half to most of their patients visit a midwife while they are pregnant; the rest see a TBA. Those who use a TBA, however, will come to see a midwife should they encounter any health problems.

Midwives say that they regularly include TBAs in their work, usually as assistants. When midwives visit the village, for the Polindes or the GHS (a local, monthly mobile health care program), the TBA gathers the women together and questions them about the length of their pregnancies. One midwife comments that TBAs are useful for bathing newborns and filling in while the midwife is on a break or a holiday. Another felt that the TBA's job is to follow the pregnancy continually, since she lives near the woman, and the midwife's role is to offer a periodic check on the TBA's work.

5. Attitudes toward the Polindes

One midwife comments that there is concern among her colleagues that the Polindes will siphon away patients from the midwives' private practices. Positive comments about the Polindes are given by most of the midwives, including that it "gives women access to a doctor's care if necessary" and "provides antenatal care." There is disagreement among the midwives about whether the all women are expected to deliver at the Polindes, or only those at elevated risk of complications (as mentioned earlier, there is widespread disagreement on this issue.)

One midwife expresses concern about rumors that the villagers expect that a midwife will be continuously available at the Polindes; while in fact, a TBA will be in charge under the guidance of a midwife. (This, too, is unclear even at the planning level.)

One midwife says that when she makes her weekly visit to the Polindes to offer antenatal examinations, there are few patients. When her visit coincides with the monthly GHS, however, many pregnant women come. Antenatal services may need to be better planned and coordinated.

6. Compliance with Referral

Midwives feel that women in general will comply with their advice to give birth at the Polindes, health center, or hospital if her problems, such as those listed in section III. A. 2, persist into the third trimester.

The midwives say that they have no knowledge of whether women comply with a TBA's referral to the health center or hospital, but one of them says she suspects a lack of compliance due to the cost of seeking other, more distant care.

7. Mass Communications Channels

Several midwives mention that they listen to a radio program called "Sturada," which is aired Wednesday evenings and focuses on problems of rural health and medicine.

Midwives also like information pamphlets which have good illustrations without too much text. They are more likely than the other respondents to read a newspaper (Pikiran Rakyat) or a magazine.

8. Kartu Ibu dan Anak (KIA): the Mother-Child Health Card

The majority of midwives know about the KIA. Those who know of it approved of it, but also comment that the large variety of such cards in circulation creates confusion.

In summary, midwives tend to regard TBAs as their helpers or relievers; they have mixed feelings about the Polindes since the Polindes could undermine midwives' incomes from private practice. Midwives do not have much information on whether women comply with referrals from TBAs or from midwives themselves. The midwives stress the need for greater coordination among maternal health services.

D. Village Chiefs

The three village chiefs interviewed were from Cilembu, Gunung Manik, and Margajaya.

1. Available Health Care Choices

The chiefs identify the health care choices available as follows: the monthly Posyandu [national monthly mobile well-child care], the community health center, the hospital at Sumedang, the Polindes (not in Cilembu), the monthly GHS (local, mobile primary care), and "dukuns" or traditional healers. For pregnant women there are also TBAs.

One chief feels that common diseases are amenable to treatment at the health center, while others, like spirit possession, require the services of a dukun. Generally, the chiefs feel formal health services offer tools, medicines, and expertise. Traditional practitioners provide familiar, nearby, and inexpensive treatments, usually in the patient's own home. Often a sick person will use both modern and traditional treatments at the same time.

2. Appropriate Care During Pregnancy

Chiefs feel pregnant women should visit the TBA and later the midwife at the health center, or they might see a midwife in private practice at the midwife's home. Care should include examination, vitamins, injections (immunizations), and pills to correct the blood.

The village chief in Margajaya himself offers guidance to pregnant women during the Friday prayer readings.

3. Problems Associated with Pregnancy and Birth

The most common problem of pregnancy the chiefs mention is anemia. Poor nutrition, overweight, and being too old are also identified.

Bleeding is regarded as particularly dangerous during pregnancy or delivery, and should immediately be treated by a doctor at the hospital.

4. Attitudes toward the Polindes

Cilembu is the location of a community health center, and so has no Polindes. The chief there believes women should continue to give birth in their own homes unless there is a problem. At Gunung Manik the village chief sees the Polindes as a positive alternative to the community health center. This village chief also comments on the embarrassment which a woman might suffer were she to be examined by the male doctor at the community health center in Tanjungsari.

The village chief at Margajaya says that it is better for women to choose where to give birth themselves, rather than being forced by him. He suggests that high-risk women or those who have a limited income and want to ensure a safe delivery give birth at the Polindes. He proudly notes that 37 healthy births have already occurred at the local Polindes. According to this man, as well as the chief at Gunung Manik, women from outside their villages would be welcome to use the Polindes, though this issue has not yet come up.

5. Ideas about Village Education

Suggestions from the village chiefs include using the village Qur'an readings as a time to dispense information on pregnancy and birth. Another wonders about the possibility of using women from the local state-sponsored social welfare program or university students as educators.

The village chiefs are proud of the formal health services offered in their village, and are aware of the need for medical care for pregnant women. They also affirm the value of traditional practitioners' services as well.

V. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

While maternal and neonatal mortality ratios are high in Indonesia compared to many other countries, at the village level maternal deaths are relatively rare. Villagers' choices regarding antenatal care and delivery involve weighing issues of preference, risk, and cost, both financial and personal. When it comes to childbirth, the clear preference is to deliver at home, with a TBA to assist. This is the traditional way, and also coincides with a local, Muslim belief that planning for a negative outcome, e.g., by arranging to give birth at a medical facility, may invite one. Bad roads and expensive transportation also figure into the equation determining where childbirth will occur, and to a lesser extent what kind and frequency of antenatal care is obtained.

Awareness of formal health care resources is high. Women know their options (midwife at a community health center, midwife in private practice or as part of a monthly program such as GHS, etc.). Most women use both formal (midwife) and informal (TBA) care during the antenatal period, and a TBA for birthing.

Most of the women could identify risk factors for and warning signs of obstetrical complications. Swelling of hands or face and small stature were not identified as representing potential problems, but malposition, bleeding, high blood pressure, anemia, high fever, and prolonged labor are all mentioned frequently as reasons to seek treatment from a TBA, midwife, or doctor.

Women and men express ambivalence toward the Polindes. The Polindes are valued for the regular provision of antenatal care, and for offering access to a midwife or doctor in case of an emergency during delivery. Most respondents are uncomfortable with the location of the Polindes within the village "office." Some respondents report a positive experience giving birth at the Polindes, while others express distrust based on stories.

Nonetheless, a recurring theme remains a strong preference for giving birth at home, attended by a TBA. All pregnant women visit a TBA, particularly in the latter stages of pregnancy, and usually request their presence for the birth. While many TBAs have received training from health center doctors, these women are usually elderly and illiterate. The training is soon forgotten (Maynard-Tucker 1992). Therefore, their training should be reinforced regularly.

The government currently provides at least three different health programs that bring midwives to the village on a regular basis in Tanjungsari: the Polindes, GHS, and Posyandu. Some midwives have reported that many patients will come to one or two of these programs and not the other(s). The Polindes is not well-coordinated with existing services.

The price of hospitalization and the poor quality of roads remain major obstacles to hospital delivery. Unless an emergency is manifest, or the woman's risk well-understood, many families feel that money is better spent on other necessities, and that the effort of getting to a medical facility is wasted and possibly harmful to women about to give birth.

B. Recommendations

The aims of the Perinatal Regionalization Project are multiple and ambitious. In order to best serve the project, social marketing should be directed toward changing behavior that is amenable to change and which promises the greatest opportunity to reduced maternal and perinatal mortality. Koblinsky and Kwast have suggested promoting the following key behaviors and knowledge:

1. Use antenatal care.
2. See a midwife during the final month of pregnancy to select an appropriate delivery site.
3. Comply with referral made by attendant (midwife or TBA).
4. Increase awareness of the most frequent danger signs:
 - previous caesarian section
 - bleeding any time during pregnancy
 - swollen face and hands
 - fetal malposition
 - prolonged labor (\geq 12 hours).

The foregoing analysis of the focus group discussions and in-depth interviews in Tanjungsari lead to the following recommendations for action in pursuit of the project's goals.

1. Emphasize use of the Polindes facilities as a place for women to receive antenatal care from visiting midwives.
2. Promote Polindes as an alternative, safe delivery site but contingent that Polindes are re-structured and staffed to better meet the needs of villagers (see below).
3. Provide continuous or frequent training for all TBAs concerning danger signs and their management (Maynard-Tucker 1992).
4. Educate women about danger signs during pregnancy and their management in order to encourage compliance with referral to a health facility for giving birth.
5. Streamline government health services and integrate Polindes services to provide more regular care and reduce confusion.
6. Waive or at least reduce the cost of hospitalization for women referred for high risk of birth complications.
7. Improve local roads and transportation options.

If promoting birth at the Polindes continues to be a central component of the Perinatal Regionalization Project, some alterations are suggested:

1. Move the Polindes out of the chief's compound and provide it with a freestanding structure.

2. Ensure that a doctor or midwife can be brought quickly to any Polindes if needed, or a patient to the health center, by running regular drills of these procedures. This will also serve to educate the villagers about this benefit of the Polindes.
3. Decide whether or not the Polindes is meant for all or only higher risk births, and dispense that information to TBAs and villagers.
4. Provide mats for those women who prefer delivering on the floor to delivering on a bed. Allow family members to be present.

REFERENCES

Kwast, B. and M. Koblinsky. Indonesia Trip Report #6. MotherCare, Washington, D.C. 1992.

Maynard-Tucker, Gisele. "Indonesia: the role of traditional midwives during complications of pregnancy." Paper presented at the American Anthropological Association meetings, December 6, 1992.

Maynard-Tucker, Gisele. Research plan and research instruments for the regionalization of perinatal care, a pilot study in Tanjungsari, Indonesia. Trip Report for the Manoff Group. MotherCare, Washington, D.C., 1991.

McDivitt, J.A. and J. McDowell. Understanding mothers' knowledge and behavior related to the treatment of diarrhea in young children in West Java, Indonesia: recommendations for health communication. Working Paper No. 121, Center for International, Health, and Development Communication (HEALTHCOM), Annenberg School for Communication, University of Pennsylvania. July 1989.

APPENDIX 1: Question Guidelines for Focus Groups and In-Depth Interviews

Question guidelines for focus group discussions

I. Experience with pregnancy

1. What is it like when a woman is pregnant? Explain from how a woman first knows she is pregnant, and then through the end of her pregnancy.
2. What kind of examinations does a pregnant woman receive?
3. What kinds of disturbances does a woman experience in during pregnancy?
4. Where or from whom do pregnant women receive trusted advice?
5. Tell about the kind of food or eating habits a pregnant woman should have.
6. What is daily life like for a pregnant woman? How does it differ from when she is not pregnant? Does she need to limit her workload?

II. Antenatal care

7. Why does a pregnant woman need to be examined?
8. By whom is a pregnant woman usually examined?
9. How much does such an examination cost?

III. Understanding danger signs and attitudes toward referral

10. What kinds of problems might a pregnant woman encounter?
11. Have you ever heard of women in this kampung who have experienced bleeding, swelling, major headaches, anemia or malposition while pregnant?
12. What is done in response to these problems?
13. What are the signs that a fetus is malpositioned?

IV. Reasons for choice of delivery site

14. Where is the best place to give birth? Why? Who decides where a woman is to give birth?
15. Who assists a woman who is giving birth?
16. Who makes the preparations for delivery? What preparations are necessary?
17. Who calls for the TBA?

18. How much does the TBA get paid for her assistance at delivery?

V. Perception of the Polindes

19. Do you all know about the Polindes? From whom do you know about it?

20. Have you already visited the Polindes? What does it contain? What is it for?

21. What are the benefits of the Polindes?

22. What are some disadvantages of the Polindes?

VI. Channels of communication

23. Do you have a television or a radio in your household?

24. What programs do you like best on t.v. or radio?

25. How much time each day do you listen to t.v. or radio?

26. Do you like reading newspapers or magazines?

27. Here in this village are there ever live cultural performances, such as wayang? Qur'an readings? What days?

28. If you visit the health center, Polindes, or Posyandu do you ever see posters on the wall about immunization, pregnancy, etc.? Do you find these posters helpful?

29. Information from which of the channels discussed earlier is most trusted by you?

In Depth Interview for Currently Pregnant Women

Date:

Day:

Time:

Name of interviewer:

I. Introductory information

1. Respondent's name
2. Village
3. RW
4. RT
5. Kampung
6. Age of respondent
7. Education
8. Job/spouse's job
9. Marital status
10. List of household members
11. How many children do you have?
12. How many times have you given birth?

II. Main questions

1. What kind of care do you need to have while you are pregnant? Have you yourself been receiving that kind of care? IF NO, why not?
2. What problems can arise during pregnancy that are dangerous for a woman or her baby?
3. How do you know about these problems? [probe for information sources: paraji, bidan, mother, relatives, puskesmas, posters, etc.]
4. While you are pregnant, from whom do you receive care? [Ask about each one]
 - a) paraji (where? probe for care at POLINDES)
 - b) bidan (where? probe for care at POLINDES, puskesmas, posyandu)
 - c) doctor (where? puskesmas, hospital, practice)
 - d) nurse (where...?)
 - e) mantri (where?)
 - f) other (specify)

[for each time the answer is "yes," ask: What does he/she do during your visit? How often do you go to him/her?]

5. Have you experienced any problems in your pregnancy? In past pregnancies? Name the problems. Were they treated? Where and how, and by whom?
6. Have you ever miscarried? IF YES, how many times?
Have you ever had a stillbirth? IF YES, how many times?
7. What problems would make you want to seek care?

IF NOT mentioned in Question No. 5, probe specifically for:

- a) bleeding
- b) headaches
- c) dizziness
- d) swollen hands, feet, face
- e) fever more than 2 days
- f) not gaining weight
- g)
- h)

Where would you go to get treatment for each problem?

8. If a paraji suggested that you visit a bidan or a doctor, would you go? Why or why not? [Probe for problems of cost, distance, difficult access, fear, embarrassment] Would you go to the bidan or doctor if the paraji told you to go because of:
 - a) bleeding
 - b) headaches
 - c) dizziness
 - d) swollen hands, feet, face
 - e) fever more than 2 days
 - f) not gaining weight
9. Where do you plan to give birth?
10. What special preparations will be made so you can give birth there? Describe the place/room where you will deliver.
11. Who will help you to give birth? What will this person do to help you during labor? During delivery? After giving birth?
12. Sometimes a woman knows that she may have problems giving birth, problems which might be dangerous for her or her baby. Do you know what those problems might be? Give some examples. [PROBE for malposition, high blood pressure, small maternal size]
13. What would you do if you knew you might have one of these problems giving birth? Would you go to the puskesmas or hospital? Why or why not?
14. Do you know what the POLINDES is? IF YES: What is it for? Do you use it? Why or why not? IF NO: [explain to the respondent what the POLINDES is, then ask] Would you use the POLINDES for giving birth? Why or why not? For care while you are pregnant? Why or why not?
15. Who gives you advice about health care during pregnancy? About where to give birth? [Probe for family members, friends, mass media]
16. Do you get information about health from television or radio? IF YES: ask for an example of health information from television; from radio.
17. Do you ever see posters with information about health? IF YES, where? What do the posters tell you?
18. a) How often do you watch television? What program? What is your favorite film? Where do you watch television?

b) How often do you listen to the radio? What program? Where do you usually listen to the radio?

c) Where do you usually see posters?

d) What do you like to read (probe for newspapers, magazines; which ones?)

19. [Show the respondent a Kartu Ibu dan Anak (KIA)] Have you seen one of these before? Do you have one? IF YES: may I see it? Do you find it helpful? Why or why not?

12/5/92

Social Marketing Project

In Depth Interview for women who gave birth < 12 months ago

Date:

Day:

Time:

Name of interviewer:

I. Introductory information

1. Respondent's name
 2. Village
 3. RW
 4. RT
 5. Kampung
 6. Age of respondent
 7. Education
 8. Job/spouse's job
 9. Marital status
 10. List of household members
 11. How many children do you have?
- For women, ask:
12. How many times have you given birth?

II. Main questions

1. What kind of care do you need to have while you are pregnant? Did you yourself receive that kind of care when you were pregnant? IF NO, why not?
2. What problems can arise during pregnancy that are dangerous for a woman or her baby?
3. How do you know about these problems? [probe for information sources: paraji, bidan, mother, relatives, puskesmas, posters, etc.]
4. While you were pregnant, from whom did you receive care? [Ask about each one]
 - a) paraji (where? probe for care at POLINDES)
 - b) bidan (where? probe for care at POLINDES, puskesmas, posyandu)
 - c) doctor (where? puskesmas, hospital, practice)
 - d) nurse (where...?)
 - e) mantri (where?)
 - f) other (specify)

[for each time the answer is "yes," ask: What did he/she do during your visit? How often did you go to him/her?]

5. Did you experience any problems in your last pregnancy? In other pregnancies? Name the problems. Were they treated? Where and how, and by whom?
6. Have you ever miscarried? IF YES, how many times?

Have you ever had a stillbirth? IF YES, how many times?

7. What problems during pregnancy would make you want to seek care?
IF NOT mentioned in Question No. 5, probe specifically for:
- a) bleeding
 - b) headaches
 - c) dizziness
 - d) swollen hands, feet, face
 - e) fever more than 2 days
 - f) not gaining weight

Where would you go to get treatment for each problem?

8. Did a paraji ever suggest that you visit a bidan or a doctor? Did you go? Why or why not? [Probe for problems of cost, distance, difficult access, fear, embarrassment] Would you have gone to the bidan or doctor if the paraji told you to go because of:
- a) bleeding
 - b) headaches
 - c) dizziness
 - d) swollen hands, feet, face
 - e) fever more than 2 days
 - f) not gaining weight
9. Where did you give birth?
10. What special preparations did you make for giving birth there? Describe the place/room where you delivered.
11. Who helped you to give birth? What did this person do to help you during labor? During delivery? After giving birth?
12. Sometimes a woman knows that she may have problems giving birth, problems which might be dangerous for her or her baby. Do you know what those problems might be? Give some examples. [PROBE for malposition, high blood pressure, small maternal size]
13. What would you have done if you knew you might have one of these problems giving birth? Would you go to the puskesmas or hospital? Why or why not?
14. Do you know what the POLINDES is? IF YES: What is it for? Do you use it? Why or why not? IF NO: [explain to the respondent what the POLINDES is, then ask] Did you use the POLINDES for giving birth? Why or why not? For care when you were pregnant? Why or why not?
15. Who gave you advice about health care during pregnancy? About where to give birth? [Probe for family members, friends, mass media]
16. Do you get information about health from television or radio? IF YES: ask for an example of health information from television; from radio.
17. Do you ever see posters with information about health? IF YES, where? What do the posters tell you?

18. a) How often do you watch television? What program? What is your favorite film? Where do you watch television?
- b) How often do you listen to the radio? What program? Where do you usually listen to the radio?
- c) Where do you usually see posters?
- d) What do you like to read (probe for newspapers, magazines; which ones?)
19. [Show the respondent a Kartu Ibu dan Anak (KIA)]; Have you seen one of these before? Do you have one? IF YES: may I see it? Do you find it helpful? Why or why not?

In Depth Interview for husbands and other influencers

Date:

Day:

Time:

Name of interviewer:

I. Introductory information

1. Respondent's name
 - 1.a. Name of focus woman (woman in household who is or was pregnant)
2. Village
3. RW
4. RT
5. Kampung
6. Age of respondent
7. Education
8. Job/spouse's job
9. Marital status

II. Main questions

1. What kind of care do pregnant women need to have? Has [focus woman] been receiving that kind of care? IF NO, why not?
2. What problems can arise during pregnancy that are dangerous for a woman or her baby?
3. How do you know about these problems? [probe for information sources: paraji, bidan, mother, relatives, puskesmas, posters, etc.]
4. While [focus woman] is pregnant, from whom should she receive care, in your opinion? [Ask about each one]
 - a) paraji (where? probe for care at POLINDES)
 - b) bidan (where? probe for care at POLINDES, puskesmas, posyandu)
 - c) doctor (where? puskesmas, hospital, practice)
 - d) nurse (where...?)
 - e) mantri (where?)
 - f) other (specify)

[for each time the answer is "yes," ask: What does he/she do for pregnant women? How often should a pregnant woman visit him/her?]

5. Do you know of any problems that [focus woman] experienced during her pregnancy? Name the problems. How and where did/do you think they should be treated, and by whom?
6. What causes miscarriages, in your opinion? Stillbirths?
7. For what problems should a pregnant woman seek care?
IF NOT mentioned in Question No. 5, probe specifically for:
 - a) bleeding

- b) headaches
- c) dizziness
- d) swollen hands, feet, face
- e) fever more than 2 days
- f) not gaining weight

Where should she go to get treatment for each problem?

8. If a paraji suggested that [focus woman] visit a bidan or a doctor, should she go? Why or why not? [Probe for problems of cost, distance, difficult access, fear, embarrassment] Should she go to the bidan or doctor if the paraji told her to go because of:
 - a) bleeding
 - b) headaches
 - c) dizziness
 - d) swollen hands, feet, face
 - e) fever more than 2 days
 - f) not gaining weight
9. Where should pregnant women give birth?
10. What special preparations need to be made there to be ready for giving birth? Describe the place/room that is ready for a woman to give birth.
11. Who should help a woman to give birth? What does this person do to help a woman during labor? During delivery? After giving birth?
12. Sometimes a woman knows that she may have problems giving birth, problems which might be dangerous for her or her baby. Do you know what those problems might be? Give some examples. [PROBE for malposition, high blood pressure, small maternal size]
13. What would you suggest if you knew [focus woman] might have one of these problems giving birth? Should she go to the puskesmas or hospital? Why or why not?
14. Do you know what the POLINDES is? IF YES: What is it for? Does/did [focus woman] use it? Why or why not? IF NO: [explain to the respondent what the POLINDES is, then ask] Should women use the POLINDES for giving birth? Why or why not? For care while they are pregnant? Why or why not?
15. Do/did you give any advice to [focus woman] about health care during pregnancy? What suggestions did you make to her? Did you discuss with her about where to give birth? What suggestions did/will you make?
16. Do you get information about health from television or radio? IF YES: ask for an example of health information from television; from radio.
17. Do you ever see posters with information about health? IF YES, where? What do the posters tell you?
18.
 - a) How often do you watch television? What program? What is your favorite film? Where do you watch television?
 - b) How often do you listen to the radio? What program? Where do you usually listen to the radio?

c) Where do you usually see posters?

d) What do you like to read (probe for newspapers, magazines; which ones?)

19. [Show the respondent a Kartu Ibu dan Anak (KIA)] Have you seen one of these before? IF YES: What is it for? Do you think it is useful for [focus woman]? Why or why not? Do you know whether she has one?

In Depth Interview for Bidan Desa

Date:

Day:

Time:

Name of interviewer:

I. Introductory information

1. Name

2. Age

3. Origin

4. Training history

a. Where did respondent train to be a bidan? Name of school:

b. When was the training? 19__ __ - 19__ __

5. Employment history:

Where has respondent worked in the past, and what dates?

6. Marital status

If married, any children?

II. Main questions

Bidan's services

1. How do women know they are pregnant?

2. Pregnancy visits

a. When during their pregnancy do women usually come to see you for the first time?

b. How many times does a woman come to see you during her pregnancy?

c. What do you do for a pregnant woman who comes to see you? [PROBE for each procedure used (e.g. questions, weighing, feeling the woman's belly, or other methods)]

3. What kind of care do women need to have while they are pregnant?

4. How many women in this area receive the kind of care that they should have? [PROBE for "all" "many" "half" "few" etc.] IF "FEW" or "NONE", ask, Why not?

5. Why do some pregnant women choose to see a bidan instead of a paraji? How do a bidan's services differ from a paraji's?

6. Do you ever involve a paraji in your work?

IF YES: Is the paraji helpful to you? Why or why not?

IF NO: How would you feel about working with a paraji? Why?

Pregnancy

7. What problems can arise during pregnancy that are dangerous for a woman or her baby?
8. How does a pregnant woman's weight or size affect the baby? How do her weight or size affect her giving birth?
9. For what conditions would you refer a pregnant woman to someplace other than her home for giving birth? Where else would you suggest a pregnant woman give birth?
10. Is a pregnant woman likely to agree with your advice and do what you suggest? Why or why not?
11. What are some signs that indicate giving birth will be easy or difficult? [PROBE for bleeding, prolonged labor, fever, seizures, presentation or position of baby]
12. What special preparations do you make before a pregnant woman gives birth? Describe the ideal place/room for a delivery.
13. How do you know a woman is ready to give birth? What are the warning signs?
14. What will you do to help the woman while she is in labor? During the birth? After the baby has come out?
15. What, in your opinion, is the POLINDES for? What services does it offer? Is it a good idea? Why or why not? What would you do to improve the POLINDES?
16. Do you get information about health from television or radio? IF YES: ask for an example of health information from television; from radio.
17. Where do you usually see posters with information about health? What do the posters tell you?
18. How often do you watch television? What program? What is your favorite film? Where do you watch television?
19. How often do you listen to the radio? What program? Where do you usually listen to the radio?
20. What do you like to read (probe for newspapers, magazines; which ones?)
21. [Show the respondent a Kartu Ibu dan Anak (KIA)] Have you seen one of these before? IF YES: Do you find it helpful? Why or why not?

In Depth Interview for Village Chiefs

Date:

Day:

Time:

Name of interviewer:

I. Introductory information

1. Respondent's name
2. Village
3. How many years as kepala desa? _____
4. Age of respondent
5. Education
6. Job/spouse's job
7. Marital status
8. Number of children

II. Main questions

1. What kind of health care is available in your village? If someone were ill, what choices do they have for treatment?
2. In your opinion, where is the best place to get treatment if you are ill?
3. What kind of health care is available in your village for women while they are pregnant? [PROBE for each one]
 - a) paraji (where? probe for care at POLINDES)
 - b) bidan (where? probe for care at POLINDES, puskesmas, posyandu)
 - c) doctor (where? puskesmas, hospital, practice)
 - d) nurse (where...?)
 - e) mantri (where?)
 - f) other (specify)
4. What kind of care should pregnant women receive? In your opinion, do most women in this village receive that kind of care? Why or why not?
5. What kinds of problems can arise while a woman is pregnant? Do you know of women in your village who have had one or more of these problems?
6. What problems during pregnancy are very dangerous for a woman or her baby? What can be done to prevent them? To treat them?
7. Have women here died of problems during pregnancy or giving birth? [Ask for details]

8. If a paraji suggests that a pregnant woman visit a bidan or a doctor, should she go? Why or why not? [Probe for problems of cost, distance, difficult access, fear, embarrassment] Should she go to the bidan or doctor if the paraji told her to go because of:
 - a) bleeding
 - b) headaches
 - c) dizziness
 - d) swollen hands, feet, face
 - e) fever more than 2 days
 - f) not gaining weight
9. Where should pregnant women give birth? Who should be there to help with giving birth?
10. What would you suggest if you knew a woman in your village might have some problem giving birth? Should she go to the puskesmas or hospital? Why or why not?
11. What do you know about the POLINDES? What is it for? Do women in your village use it? Why or why not? What kind of care is given at the POLINDES?
12. Would a woman from a different village be allowed to use the POLINDES here in this village? Why or why not?
13. Who gives advice to women while they are pregnant? Who makes the decisions about health care during pregnancy and giving birth? Who chooses where the woman will give birth?
14. Do you get information about health from television or radio? IF YES: ask for an example of health information from television; from radio.
15. Do you ever see posters with information about health? IF YES, where? What do the posters tell you?
16.
 - a) How often do you watch television? What program? What is your favorite film? Where do you watch television?
 - b) How often do you listen to the radio? What program? Where do you usually listen to the radio?
 - c) Where do you usually see posters?
 - d) What do you like to read (probe for newspapers, magazines; which ones?)
17. Other than television, radio and posters, what other ways are there to communicate health information to people in this village?
18. [Show the respondent a Kartu Ibu dan Anak (KIA)] Have you seen one of these before? IF YES: What is it for? Do you think it is useful? Why or why not? Do you know anyone who uses one?
19. Why, in your opinion, do some people choose the "formal" health services (like Puskesmas, Polindes, Posyandu) and others prefer traditional services (like paraji or mantri)? What does the community like about the formal health services? What do they like about the traditional services?

APPENDIX 2

Field Research Team, UNPAD:

Dr. Nanet Prihatini Ambaretnani
Dr. Susanne Dida
Dr. Adi Purwanto
Dr. Isbanun Prabantinah
Dr. Yudi Nugraha
Dr. Saifullah Zakaria
Dr. Deddy Adisudharma
Dr. Desi

APPENDIX 3

A. Focus Group Discussions

Legend:

User/non-user = focus woman has delivered at Polindes

Currently pregnant = not designated as user or non-user

Easy access/difficult access = relative access to Polindes

Age = younger or older groupings of focus women

Pesantren = resident of orthodox muslim areas of district

These categories, when applied to the husbands or elder females (influencers), refer to the focus women to whom they are married or related.

I. Focus Women

No.

1. 7 participants; polindes users; easy access; age < 26 yrs
Village: Gunung Manik/Haurgombong
2. 9 participants; Polindes users; easy access; age > 25 yrs
Village: Gunung Manik
3. 5 participants; Polindes users; difficult access; age < 26 yrs
Village: Gunung Manik
4. 5 participants; non-users; easy access; < 26 yrs
Village: Gunung Manik
5. 8 participants; non-users; easy access; age > 25 yrs
Village: Gunung Manik
6. 4 participants; non-users; difficult access; age > 25 yrs
Village: Sukawangi
7. 7 participants; currently pregnant; easy access; age < 26 yrs
Village: Sukawangi
8. 5 participants; currently pregnant; easy access; age > 25 yrs
Village: Gunung Manik
9. 4 participants; medical service users; age > 25 yrs; pesantren
Village: Sindangsari
10. 8 participants; non-users; age > 25 yrs; pesantren
Village: Sindangsari

II. Influencers

A. Elder women

No.

2. 3 participants; Polindes users; difficult access; age > 25 yrs
Village: Gunung Manik
4. 7 participants; non-users; difficult access; age > 25 yrs
Village: Gunung Manik
6. 5 participants; currently pregnant; easy access; age > 25 yrs
Village: Gunung Manik

B. Husbands

No.

1. 7 participants; Polindes users; easy access; age > 25 yrs
Village: Gunung Manik
3. 4 participants; non-users; easy access; age > 25 yrs
Village: Gunung Manik
5. 4 participants; currently pregnant; easy access; age < 26 yrs
Village: Citali
8. 5 participants; non-users; age > 25 yrs; pesantren

B. In-depth Interviews (N=28)

Focus women: 14

Currently pregnant: 7
Birth \leq 12 months: 7

Influencers 6

Elder women: 1
husbands: 5

Village chiefs 3

Midwives 5