classification of diseases, adapted. Eighth revision. Vital and Health Statistics. DHHS Publication No. (PHS) 1693, Washington, DC, 1967, v. 1 tabular list.
8. Smith, K. M., Kerrigan, D. F., and Fritch, H. M.: Traumatic brain-injured patients Connecticut—1982. Connecticut Health Bull 96: 192–198 (1982).
9. National Highway Traffic Safety Administration: Fatal accident reporting system 1980. DOT HS 805 953. Washington, DC, 1981.
10. Rhode Island Department of Health, Division of Medical Care Standards: Institutional short and long range plans of skilled nursing and intermediate care facilities, 1981 summary. Rhode Island Department of Health, Providence, 1983.

Perinatal Needs of Immigrant Hmong Women: Surveys of Women and Health Care Providers

HELEN STEWART FALLER, RN, BSN, MS, EdD

Dr. Faller is an Associate Professor in the School of Nursing, East Carolina University, Greenville, NC 27834. At the time of the survey, she was a member of the faculty at Loretto Heights College in Denver, CO.

Tearsheet requests to Dr. Faller.

Synopsis

The Hill People of Laos in Southeast Asia, who are called the Hmong, are from a primitive culture which has had a written language for only 31 years. By 1980, about 3,000 of them were living in Colorado, one of 9 States to which they had migrated.

In an effort to determine whether or not local health care service was accessible and acceptable to child-bearing families, a pilot survey was conducted in the Denver area. The survey consisted of interviews of the Hmong women themselves and questions of area health care providers.

The interviews proved to be both difficult and illuminating. They were difficult because of the language barrier, which required exclusive use of interpreters, and because of the diffidence of the women themselves, especially in discussing matters of sex and childbearing.

Illumination came from learning Hmong customs and culture and some of the benefits of their version of self-care. It also came from whatever value may lie in applying this knowledge to other immigrant ethnic groups with comparable problems.

Responses to questionnaires from the health care providers disclosed that, from their viewpoint, principal Hmong concerns were family planning and nutrition. They also revealed surprisingly few maternal or child deaths among the Hmong.

There still exists a need for both cross-sectional and longitudinal studies to document the effect of migration on the Hmong.

SINCE 1975, SIGNIFICANT NUMBERS OF HMONG—the Hill People of Laos—have immigrated to nine States in this country: California, Colorado, Illinois, Minnesota, Montana, Oregon, Rhode Island, Washington, and Wisconsin. By 1980, there were 3,000 in Colorado, 2,500 of whom lived in the Denver area, and 500 in Boulder, 50 miles away.

The Hmong are a primitive people, with a written language only since 1954 (*1,2*). Within the language are several dialects. Most of the Hmong speak little or no English, and the conventional wisdom is that they are shy, leery of strangers, and tend to provide answers they feel will please the questioner (*2,3,4*). It is also felt that Hmong women, besides sharing these characteristics, display deference to men and a reluctance to discuss intimate subjects like sex and childbearing in their presence (*3,5*). Of the Hmong with enough English to act as interpreters, the majority are men.

Beyond that, the Hmong are the products of a similarly primitive health care system in which the women often deliver their own children by themselves at home, with minimal support from their husbands and local "healers" (*2,4,6*).

Providing health care, particularly perinatal care, to these refugees is made extraordinarily difficult because of their history and traditions. The result is that the Hmong women may become underserved by that system.

But it is possible that the Hmong and American health care providers can learn from each other. The attempt to learn from the Hmong, difficult and

interesting as it was, seemed to me to be a reasonable undertaking that would have ramifications beyond the immediate.

Data to describe the morbidity and mortality of Hmong mothers are buried within the statistical category "Southeast Asian." Consequently there were no objective data to demonstrate that high levels of morbidity and mortality exist among the new Hmong immigrants, but, if they do, an investigation during the period of resettlement could establish positive long-range health care behavior at the outset. Early investigation could reduce long-range problems and the need for subsequent retrospective study of mortality and morbidity.

A study of behavior during the group's transition also has potential for increasing health care providers' understanding of other mobile immigrant groups who are frequently underserved. Also, new ideas derived from other cultures can increase the health care provider's understanding of self-care practices.

This survey research was designed as a pilot study to address the following questions: Are the perinatal expectations of immigrant Hmong women, as perceived by the women and their health care providers, consistent with the expectations of the health care system in this country? Do the values held by the women, based on their understanding of pregnancy and childbirth, promote compliance with voluntary health care as practiced in this country? Are maternal risk factors and pregnancy outcomes experienced by these women consistent with the risk factors and pregnancy outcomes on which the services were based?

In anticipation of the complexity of gathering data from non-English-speaking women assisted by a translator, my initial purpose was to determine the feasibility of gathering data of a perceptual nature from the Hmong women. I hoped to use the data to develop a seed group of questions for an interview schedule.

A part of this investigation included Hmong women, health care providers, and social service workers living in the Denver-Boulder area. Data gathered from them in July and August 1981 provided the basis for further investigation in eight other resettlement communities.

A total of 32 Hmong women were interviewed, with the assistance of several interpreters. The interview settings included the English as a Second Language Center, prenatal health clinics, and women's homes.

Most of the interviews were conducted with the assistance of a young Hmong woman employed by a private agency. She was a well-educated woman who had delivered a child since her arrival in the United States. She became a primary source of information about Hmong women as well as a very able research translator. Two additional male translators employed in the study were associated with the language center and one of the prenatal clinics.

Three interview styles were tested in the study. One was with one Hmong woman by herself, another was with a woman and her husband, and the third was with a group of women.

The interview agenda centered on risk factors related to pregnancy and the outcome of Hmong pregnancies in the past. It also included the Hmong understanding of pregnancy, their perception of the needs and expectations of pregnant women, and their attitudes about health care services in this country.

Specific questions were asked, based on my perception of Hmong pregnancy and care and knowledge gained through interaction with the women and the interpreters.

During the interviews, the women smiled, responded to some questions, shrugged their shoulders at others, and avoided answering some altogether. Verbal responses were translated. When husbands were present, the women giggled when asked about having babies and deferred to the husbands. Two women said their husbands had been the first to tell them about childbirth.

Information gathered in the interviews provided insights into the self-care among the women in the hills of Laos. They had lived in small, tightly knit agrarian kinship communities, meeting friends for conversation when they went marketing. The topic of conversation was usually "how the crops were doing."

Women moved into the home of their husband after marriage. Marriages usually occurred within the kinship group. Pregnancy outside of marriage was not acceptable; families were disgraced if an unwed woman became pregnant. A "medicine" could be obtained from "an old woman" (the local healer) to terminate an unwanted pregnancy. The "old woman" was also called if complications arose. She performed dances and provided herbs.

The women shared information about the hot and cold, sweet and sour nature of foods. There were no reported dietary requirements for pregnant women. They could have whatever they wanted; "cravings" were common. The cravings were for sweet and sour foods. Bananas were sweet; a jungle fruit not seen in this country was sour. The husband was

'The interview agenda centered on risk factors related to pregnancy and the outcome of Hmong pregnancies in the past. It also included the Hmong understanding of pregnancy, their perception of the needs and expectations of pregnant women, and their attitudes about health care services in this country.'

expected to go after the appropriate fruit when the craving occurred.

During pregnancy, the women were not to work hard, lift heavy things, or put their hands over their heads. The latter would cause the baby "to break." Following delivery, the mother was to have a reduced workload around the house and 40 days of rest. Babies were breast fed.

Friends and neighbors would bring chickens as the time of delivery drew near. The husband was expected to shorten his day in the fields so he would be available to assist with delivery when the time came.

Soon after delivery, warm chicken soup was served to the new mother, and for the next 40 days she would eat nothing but chicken, rice, and eggs. The husband prepared her meals. No roots were allowed, and any deviation from the diet could lead to a "condition" in old age.

In groups at the antepartal clinic, the women willingly discussed pregnancy, health care, and past childbearing experiences. They denied any problem pregnancies and said that the only newborn deaths they knew about occurred in the refugee camps in Laos and Thailand.

They expressed a desire for health care similar to the American care they had been told about in the relocation centers, and were concerned about their inability to communicate with doctors. They expressed a fear of invasive measures, such as the pelvic examination, and of any incisions. They did not want to be cut, and they did not want their babies cut. Cesarean section, episiotomy, and circumcision were in conflict with their belief that the spirit leaves the body if it is cut.

In solitary interviews, the women were much more serious than in other settings and answered questions willingly. If a husband was present, the wife deferred to him. In either case, answers tended to be a simple "yes" or "no" without any elaboration. It was evident that a fuller, more spontaneous exchange would be necessary if more valid data were to be obtained.

In the small group interviews, the women were excited, openly sharing information about past and present pregnancies. Agriculture was not mentioned. The women responded to direct and open-ended questions. But I was frustrated by having to wait for the translation in both directions and by the realization that only a small portion of the interchanges was being translated. The spontaneity of these group discussions needs to be captured either by multiple interpreters or recording devices.

Using a combination of interview styles, it is possible to develop a valid questionnaire so that ethnic data can be gathered with translator assistance. Specific answers provided objective data, but the group interchange provides an uninhibited sharing of cultural ideas.

Contrary to published reports, I did not find Hmong women to be shy, unresponsive, or inhibited in the presence of men. In fact, one male interpreter said *he* was uncomfortable during some of the discussions. I tried to phrase many of my questions to strip them of any sexual connotation.

I found it difficult to maintain eye contact with the women during the translator-assisted interviews because of having to maintain it with the interpreter. When I failed to keep eye contact with the women, their attention tended to wander.

Another difficulty in working with translators was that many questions were subject to translator interpretation. It is necessary, I would say, to develop a technique of restatement that makes the translator an extension of the interviewer rather than a joint interviewer. There were times when the young woman translator evoked interesting answers which were not responsive to the questions I posed, indicating that she was asking her own questions, in effect.

As an example, the women unanimously denied any belief in demons. I later discovered that this denial probably reflected the bias of the interpreter rather than the women's actual response. The necessity of a translator actually then creates a barrier between the interviewer and the subject or subjects interviewed.

In addition to the interviews with the Hmong women, local health care providers and social workers were questioned about local problems with Hmong perinatal care.

A telephone network of 51 health care contacts was developed from a seed group of 6 Public Health

Service refugee project coordinators representing the States with the largest Hmong populations.

A summary of the problems, solutions, and research data obtained from these six was used to develop a questionnaire to provide feedback and to identify further the major problems care providers encountered, the attitudes of the Hmong, and current research and mortality-morbidity statistics.

Of the questionnaires sent to 51 providers, 28 (55 percent) were returned. There were responses from 9 States. Numbers of Hmong women to whom these responses related are not available because reporting on this point was inconsistent.

A review of the responses clearly defines two areas of concern: family planning and nutrition. Nearly half the respondents identified parity and pregnancy interval to be a problem with the Hmong, and one-third reported inconsistent use of contraception. This could be attributed to Hmong concern for privacy, fear of examination, a perceived lack of need for medical care and, probably, the language barrier as much as anything.

One-third of the respondents listed maternal nutrition as a problem, and one-half said it was infant nutrition. Some said there was a Hmong reluctance to breast feed and a lack of knowledge on how to prepare and store formula.

The responses listed no maternal deaths, toxemia, or diabetes; no newborn birth trauma or spontaneous abortions; only two newborn deaths and two birth defects. The universe of births was not available.

Problems cited among the Hmong closely resembled those of other low-income and immigrant groups. Transportation and communications solutions are stop-gap and short-term. When relocation funding ends, most of the same problems would resurface.

Much of the research did not lend itself to empirical answers. But perhaps some of the speculation and implications to be made in pointing the way to the need for further study are equally as important.

As an example, although expectations of the Hmong and the health care providers were not always consistent, it is interesting to note that there was no incidence of maternal hypertension, toxemia or diabetes. This could be either a tribute to the general health of the Hmong or the fact that they were being given adequate health care in this country, despite the difficulties. If it is the former, perhaps closer scrutiny of Hmong self-care is indicated.

'Soon after delivery, warm chicken soup was served to the new mother, and for the next 40 days she would eat nothing but chicken, rice, and eggs. The husband prepared her meals. No roots were allowed, and any deviation from the diet could lead to a "condition" in old age.'

There is still a need for cross-sectional studies of the transition period and for longitudinal studies to document the effect of lifestyle changes in terms of self-care and environment, as well as the effects of marriage outside the original kinship group. The kinship group itself and the local "healers" likewise deserve study.

Studies of this immigrant group hold potential for greater understanding not only of the Hmong but of other non-English-speaking immigrants who may come in the future. Early investigation of group health care behavior during resettlement may reduce the rate of movement to the ranks of the underserved.

References

1. Special report: Physical and emotional health care needs of Indo-Chinese refugees, compiled by Court Robinson. Indo-China Refugee Action Center, Suite 104, 1424 16th Street, NW, Washington, DC 20036, March 20, 1981.
2. Koumarn, Y. S., and Barney, G. L.: Glimpses of Hmong history and culture. General Information Series No. 16, Indo-Chinese Refugee Education Guides. Centers for Applied Linguistics, Arlington, VA, 1978.
3. Gordon, V., Matousek, I. M., and Lang, T. A.: Southeast Asian refugees' life in America. Am J Nurs, 80: 2031–2036, (1980).
4. An outline of health care for Vietnamese refugees: cultural myths and realities. West Side Health Service, Denver, CO, May 1979.
5. Silverman, M. L.: United States health care in cross-cultural perspectives: the Vietnamese in Denver. Abstract of thesis, University of Denver, 1977.
6. Hollingsworth, A. O., Brown, L., Brooten, D. A.: The refugee and childbearing: what to expect. R.N. 43:45–48 (1980).