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Barriers to Prenatal Care for Montana Women

February 1991

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DEPARTMENT OF
HEALTH AND ENVIRONMENTAL SCIENCES



STAN STEPHENS, GOVERNOR

COGSWELL BUILDING

STATE OF MONTANA

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HELENA, MONTANA 59620

March 7, 1991

MEMORANDUM

TO: Hospital Administrators
Public Health Professionals
Physicians, Certified Nurse Midwives, Direct-Entry
Midwives
Other Interested Parties

FROM: Dennis Iverson, Director *DI*

SUBJECT: Survey on Barriers to Prenatal Care in Montana

The Montana Department of Health and Environmental Sciences is happy to share with you the enclosed report, Barriers to Prenatal Care for Montana Women. In August 1990, the Family/MCH Bureau, in cooperation with the Montana Hospital Association, conducted a survey of women giving birth in Montana. The purpose of the study was to describe the characteristics of maternity patients, to identify barriers to care, and to investigate factors that impact access to care. The report represents pivotal baseline data, never before collected in the state, from which future studies may be compared.

The findings may not surprise many of you, but for the first time your suspicions might be confirmed through a very representative sampling of Montana women. And more importantly, the need for improved maternity services with significant clues on what those services need to look like are given credence through this study.

To summarize some of the key findings:

- * Montana women are more likely to come in late for prenatal care if they are not married, do not have a high school education, are on Medicaid, or living in poverty.
- * There is a strong tendency to access prenatal care late if you are under 19 years old, or an Indian.
- * There is a definite relationship between not feeling well during pregnancy, or being upset or ambivalent about being pregnant, and not coming in for health care during the first six months of pregnancy.

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- * The most common barriers in the health care delivery system were the high cost of prenatal care and the lack of ideal appointment schedules offered by providers. (Difficulty in scheduling meant either having to wait a long time to get in to see the doctor in the first place, or when able to be seen, waiting a long time in the doctor's office.)

Major recommendations of the study include:

- * Efforts need to be exerted in Montana to train, recruit, and retain mid-level practitioners, especially nurse practitioners, both to provide prenatal care and to attend births.
- * Alternative birthing centers need to be piloted by community hospitals which offer more choices to families and can offer less costly delivery services.
- * Home visiting programs need to be increased for the prenatal and postpartum period, especially for first-time mothers and high risk women.

I strongly urge you to read the entire report. There are additional findings and recommendations of value. I hope this report will spur discussion and action to create an environment where all women and children can receive the best health care to which they have a right.

Questions or requests for additional copies of the report may be addressed to DHES, Family/MCH Bureau, Cogswell Building, Helena 59620 (406) 444-4740.

ACKNOWLEDGEMENTS

I would first like to thank the Montana Hospital Association (MHA) and its Data Committee for taking the time to review the first drafts of the prenatal care survey. The MHA was also very helpful in getting the overwhelming support and cooperation of the hospitals that participated in the survey.

Many thanks to the participating hospitals and their maternity service staff who administered the questionnaires to the mothers and made sure the survey forms were returned safely to me. The certified nurse midwives and direct-entry midwives who agreed to participate in this survey deserve special accolades. Their information brought us that much closer to glimpsing the entire picture of all women who give birth in Montana and the kind of prenatal care they obtain.

I also extend a special thank you to Bill McBroom and Fred Reed, University of Montana, Center for Population Research, for their helpful advice about what to do with the data and their constant encouragement to me in this project. And, closer to home, I greatly appreciate the erudite draft revisions I received from my colleague, JoAnn Dotson, R.N., of the Montana Perinatal Program.

The biggest round of applause goes to the 506 mothers who took the time to complete the questionnaire. My highest hope is that your input will help forge the best possible health policy and program development for Montana's pregnant women and newborns.

Prepared by:

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February 1991

BARRIERS TO PRENATAL CARE FOR WOMEN GIVING BIRTH
IN MONTANA

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BARRIERS TO PRENATAL CARE FOR WOMEN GIVING BIRTH
IN MONTANA

-Survey Summary-

I. INTRODUCTION

This study, conducted in August, 1990, provides baseline data about characteristics of women giving birth in Montana and barriers to care that these women experienced. As well as providing comparison data for future studies, this study uncovers more imminent barriers to prenatal care needing to be addressed by health care providers, policy makers, legislators, and local communities in Montana.

For many years in Montana, health care providers and public health professionals have decried the inadequacy of prenatal care, especially for low-income women and the uninsured. Problems are cited such as women living too far from health care facilities, no resources to pay for prenatal care, late initiation of prenatal care by women, or maldistribution of primary care providers. Sometimes psycho-social and motivational factors of women are cited as the problem. These may include a lack of knowledge by women that early prenatal care is important, a discomfort with the health care community, or lack of a support network enabling access to care. In this study, several structural barriers are examined such as distances traveled to care, availability of providers, and cost of prenatal care and delivery. Motivational factors are also examined such as why a woman first went into care, when she began prenatal care, how she perceived her health before and during the pregnancy, and how she felt about becoming pregnant.

Studies have already been done in South Carolina (1987), Oregon (1987), and a multi-state study conducted in Arizona, California, Michigan, New Mexico, New York, South Carolina, Rhode Island, and Texas. The studies were undertaken to look at specific obstacles to prenatal care. The studies looked at both structural barriers to care and also motivational barriers to care experienced by women and their families. A recommendation of the multi-state study was that obstacles to prenatal care are inconsistent between states and that states need to continue to study the health care needs of their own population. This survey responds to that recommendation and provides a snapshot of Montana women giving birth and the circumstances surrounding their prenatal care.

II. SAMPLE CHARACTERISTICS

A. Survey Methodology

A self-administered survey was sent to all hospitals in Montana delivering babies. The survey was administered to as many mothers as possible during August, 1990. Each facility identified a survey coordinator to serve as a contact to the State Department of Health and Environmental Sciences' (DHES) staff person conducting the survey. The hospital decided which staff would help administer the survey to new mothers. In most hospitals it was the nursing staff on the maternity services. In other instances the ward clerk or personnel in medical records coordinated the survey administration.

Mothers filled out the questionnaire before their discharge from the hospital. Hospitals were also asked to provide help to women who required assistance in completing the form. The hospital staff then collected the surveys at the end of August and mailed them back to DHES.

Every hospital in the survey was assigned a number and that identification number was placed on the back of each survey form. The forms themselves were anonymously filled out by mothers.

In addition, the direct-entry midwives (DEM) in the state and certified nurse midwives (CNM) assisting at homebirths were contacted to participate in the needs assessment. ("Direct-entry midwife" is now the term used nationally to refer to a "lay" midwife. It is the term used in proposed licensure legislation in Montana for this group.) The only identifying code placed on these surveys was whether they came from births attended by a DEM or a CNM. The place of residence or office location of the birthing attendants was not obtained. Due to the controversy over non-physician attendants at births in Montana, the DEMs and the CNMs were not asked to give their name and location in hope of gaining better participation. And, indeed, these providers were very cooperative in obtaining as many completed questionnaires as possible from the births they attended. The information gathered on these surveys, however, remains the same as for births occurring in hospitals.

In all, 44 hospitals were invited to participate with only one of those 44 unable to administer the survey according to instructions. Of the remaining 43, six hospitals had no births for August, or had one or two births and were unable to get the mothers surveyed. The final sample (37 hospitals) represented 84% of the possible hospital maternity services in the state. Six direct-entry midwives participated with a return of 22 surveys. Three CNMs attending out-of-hospital births participated in the survey, with 12 surveys returned. Hospital births attended by CNMs totaled 16. The mailing size was 1,021 surveys with 518 surveys returned - of which, 506 were complete enough to be used in the study.

Each mother completed the survey questionnaire. (See Appendix A.) The questionnaire contained questions about age, years of education, race, residence, income, number of people supported by income, from whom and where prenatal care was received, distance traveled to care, month in which pregnancy care was initiated, number of prenatal visits, improvements needed in prenatal care as perceived by respondent, problems experienced in obtaining prenatal care, baby's weight, type of delivery, location of delivery, method of payment for prenatal care and the delivery, and any support/services needed after returning home. There were also four questions addressing the mother's perceptions of her health before and during the pregnancy, how she felt about the care she received, and how she felt about becoming pregnant.

The survey did not ask the number of previous pregnancies nor live births for the mother; so, no comparisons were made based on parity in this study. No questions about the mother's personal lifestyles or health status were asked; e.g., did she smoke cigarettes, use other drugs or alcohol, her food intake, or any existing medical problems. The sample population did not include mothers experiencing a fetal death or a neonatal death prior to filling out the instrument. The surveys were not matched with birth certificates nor were any of the findings weighted to compensate for differences in adequacy of care as has been done in similar studies conducted in other states; e.g. South Carolina (1987).

B. Sample Profile

1. The total sample is 506 mothers giving birth to 509 babies, due to three pairs of twins. The twins were entered as separate records; i.e., the mother's data were entered twice, since the study is interested in information surrounding each live birth. Of the total 506 mothers in the sample, 496 (98%) were Montana residents.

2. Respondents by race:

White = 428 (85%)

Indian = 66 (13%)

Other = 11 (2%)

TOTAL = 505 (100%)

3. Location of births:

*Hospital = 475 (93.3%)
Out-of-Hospital = 34 (6.7%)

(*Refer to Table 1 for the frequency distribution of births by hospital.)

4. Birth Attendants:

Physician = 459 (90%)
CNM = 28 (6%)
DEM = 22 (4%)

5. Out-of-Hospital Births:

DEM = 22 (65%)
CNM = 12 (35%)

6. Certified Nurse Midwife Births:

Hospital Births = 16 (57%)
Out-of-Hospital Births = 12 (43%)

In August, 1990, 961 live births occurred in Montana. The surveys in this sample (506) represent 53% of the live births actually occurring in August, 1990.

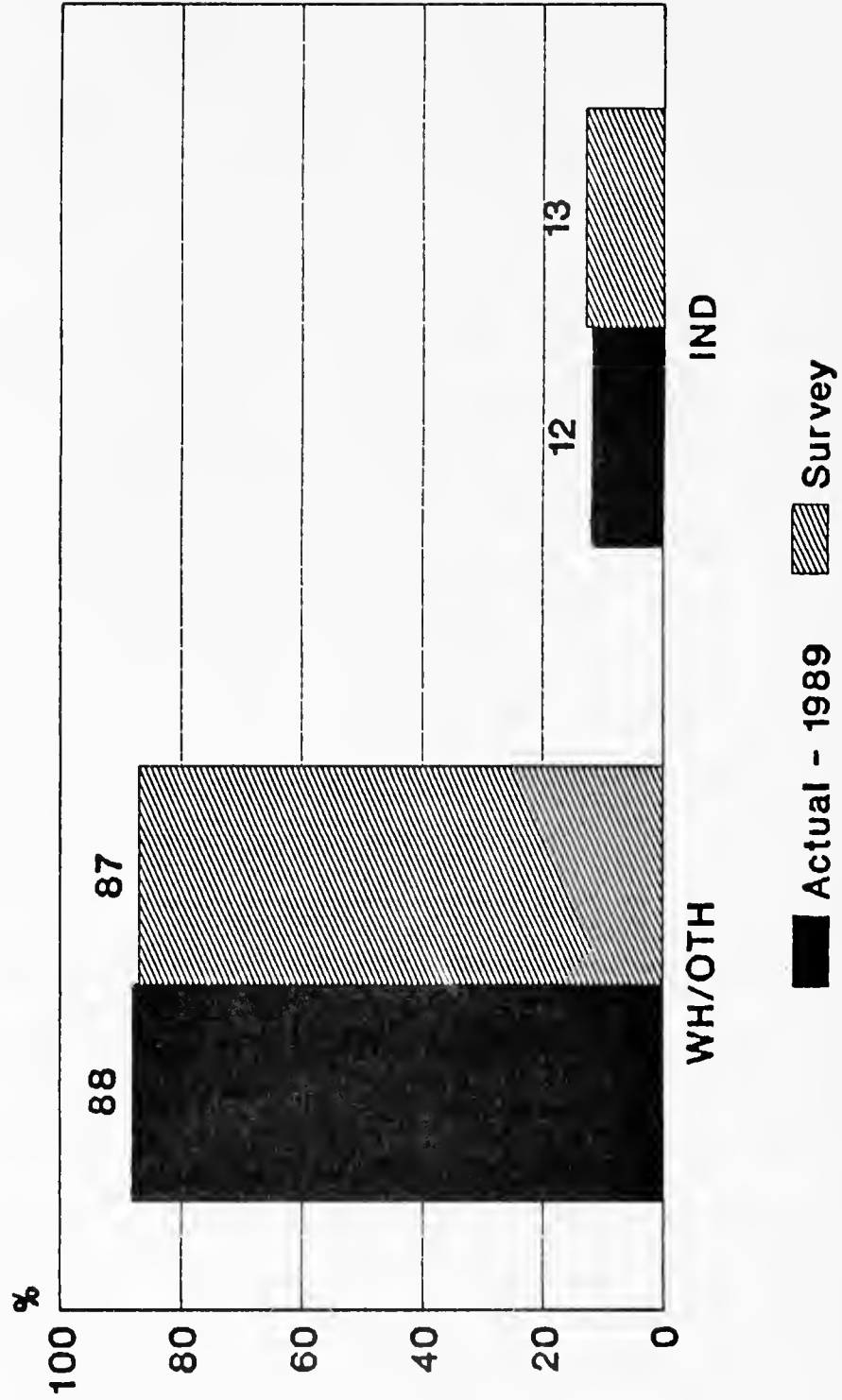
The distribution of the births in the survey was compared with actual 1989 population proportions by race (Figure 1) and also to actual occurrence of births by county and residence (Table 2). The sampling proved to be extremely representative of the breakdown of the Montana population by race. By occurrence and by residence of births, the frequency distribution was also very well matched to actual 1988 birth distributions. The largest populated county was slightly over-represented and the second largest populated county was under-sampled. Out-of-hospital births comprised 6.7% of the total sample. (There was only one Indian mother in the sample who had an out-of-

hospital birth.) The actual percentage in 1988 for out-of-hospital births in Montana was 2.1%. This solid representation of homebirths in the sample should provide useful information about a group with which many providers and consumers in the state are concerned.

FIGURE 1

% MT LIVE BIRTHS - RACE

Actual vs Survey



MT DHES - Fam/MCH

TABLE 1. HOSPITAL BIRTHS
 FREQUENCY DISTRIBUTION BY HOSPITAL: 1990 SURVEY SAMPLE

| <u>NAME (County)</u> | <u>Frequency</u> | <u>Percent</u> |
|--|------------------|----------------|
| Big Horn County Memorial Hospital (Big Horn) | 2 | 0.4 |
| Bozeman Deaconess Hospital (Gallatin) | 32 | 6.7 |
| Broadwater Health Center (Broadwater) | 2 | 0.4 |
| Browning IHS Hospital (Glacier) | 5 | 1.1 |
| Columbus Hospital (Cascade) | 9 | 1.9 |
| Community Memorial Hospital (Richland) | 13 | 2.7 |
| Crow Agency - IHS (Big Horn) | 12 | 2.5 |
| Central Montana Medical Center (Fergus) | 7 | 1.5 |
| Frances Mahon Deaconess Hospital (Valley) | 6 | 1.3 |
| Glacier County Medical Center (Glacier) | 2 | 0.4 |
| Glendive Community Hospital (Dawson) | 4 | 0.8 |
| Holy Rosary Hospital (Custer) | 30 | 6.3 |
| Kalispell Regional Hospital (Flathead) | 24 | 5.1 |
| Liberty County Hospital (Liberty) | 1 | 0.2 |
| Livingston Memorial Hospital (Park) | 7 | 1.5 |
| Marcus Daly Memorial Hospital (Ravalli) | 12 | 2.5 |
| Missoula Community Hospital (Missoula) | 44 | 9.3 |
| Montana Deaconess Medical Center (Cascade) | 15 | 3.2 |
| Northern Montana Hospital (Hill) | 13 | 2.7 |
| North Valley Hospital (Flathead) | 7 | 1.5 |
| Pondera Medical Center (Pondera) | 2 | 0.4 |
| Poplar Community Hospital (Roosevelt) | 8 | 1.7 |
| Powell County Memorial Hospital (Powell) | 1 | 0.2 |
| Rosebud Health Care Center (Rosebud) | 1 | 0.2 |
| Ruby Valley Hospital (Madison) | 2 | 0.4 |
| Sheridan Memorial Hospital (Sheridan) | 2 | 0.4 |
| St. James Community Hospital (Silver Bow) | 11 | 2.3 |
| St. John's Lutheran Hospital (Lincoln) | 19 | 4.0 |
| St. Joseph Hospital (Lake) | 4 | 0.8 |
| St. Luke Community Hospital (Lake) | 7 | 1.5 |
| St. Peter's Community Hospital (Lewis & Clark) | 35 | 7.4 |
| St. Vincent Hospital (Yellowstone) | 110 | 23.2 |
| Stillwater Community Hospital (Stillwater) | 5 | 1.1 |
| Sweet Grass Community Hospital (Sweet Grass) | 2 | 0.4 |
| Teton Medical Center (Teton) | 3 | 0.6 |
| Toole County Hospital (Toole) | 7 | 1.5 |
| Trinity Hospital (Roosevelt) | <u>9</u> | <u>1.9</u> |
| TOTAL | 475 | 100.0 |

TABLE 2. PERCENTAGE OF MONTANA LIVE BIRTHS BY RESIDENCE
AND BY OCCURRENCE: 1988 Actual - vs - 1990 Survey Sample

| <u>County</u> | <u>By Occurrence</u> | | <u>By Residence</u> | |
|---------------|----------------------|--------------------|---------------------|--------------------|
| | <u>1988</u> | <u>1990 Survey</u> | <u>1988</u> | <u>1990 Survey</u> |
| Yellowstone | 16.3 | 23.0 | 14.0 | 20.0 |
| Cascade | 13.0 | 5.0 | 11.4 | 5.0 |
| Missoula | 12.7 | 9.0 | 9.6 | 7.0 |
| Flathead | 7.5 | 7.0 | 6.7 | 6.0 |
| Lewis & Clark | 6.3 | 7.0 | 5.9 | 6.0 |
| Gallatin | 6.0 | 8.0 | 5.8 | 7.0 |
| Silver Bow | 5.7 | 2.0 | 4.2 | 2.0 |
| Hill | 3.9 | 3.0 | 2.6 | 2.0 |
| Custer | 2.6 | 6.0 | 1.2 | 3.0 |
| Glacier | 2.3 | 1.0 | 2.4 | 1.0 |
| Big Horn | 2.0 | 3.0 | 2.5 | 2.0 |
| Lake | 1.9 | 2.0 | 2.8 | 3.0 |
| Park | 1.6 | 2.0 | 1.5 | 3.0 |
| Lincoln | 1.6 | 4.0 | 2.1 | 4.0 |
| Richland | 1.6 | 3.0 | 1.4 | 2.0 |
| Ravalli | 1.4 | 2.0 | 2.5 | 3.0 |
| Roosevelt | <u>1.3</u> | <u>3.0</u> | <u>2.3</u> | <u>4.0</u> |
| Total | 87.7 | 90.0 | 78.9 | 80.0 |

III. RESULTS

A. General Findings

Table 3 summarizes the main findings of key characteristics of the respondents' background, prenatal visits, and delivery. The table gives figures for the total sample and then compares the sample by race. From this table the most noticeable differences can be seen between races for mean and per capita annual income; years of education; age of the mother; marital status; number of prenatal visits; and the Cesarean section rate (number of C-sections per 100 live births in sample).

Indian mothers reported fewer numbers of prenatal visits, on the average, than the other mothers in the sample. This finding must be looked at with caution as close to 44% of the Indian respondents reported they did not know the exact number of visits they made to a health care provider. This is in contrast to white mothers of whom 23% were unable to indicate the number of visits. The small sample of 11 "others" had three mothers (23%) who did not report the number of visits. The respondents in all racial categories had a higher response rate to the question which asked for the month they initiated prenatal care; so, this was the indicator used to measure adequacy of prenatal care in this study. Although there are differences between whites and Indians for low birthweight (LBW) rates, C-section rates, and the pre-term birth rates, the differences are not statistically

significant. These differences between whites and Indians do indicate a trend in the state population.

In this sample the mean per capita income of \$7,691 is well below the 1988 actual per capita income reported for Montana (\$12,866) by the U.S. Department of Commerce. Individuals may have had difficulty in recalling their 1989 gross income as requested on the questionnaire. Also, the sample was only women, some of whom were single heads of households. Nationally, women in 1988 earned a little less than 70 cents for every dollar men earned. (Montana Department of Labor and Industry) The sample average would be lower given this reality. The survey did obtain a high response level to the income question (71% of the respondents) compared to other state studies. The response rate by Indian mothers to questions about income in the survey was 48%, or 32 out of 66 Indian mothers - less than the Whites (75%) and Others (55%) in the survey.

Women who answered the income question were compared to those women who did not answer the question to determine if there was a difference when prenatal care was initiated. This way it could be safely said that the women who did give income levels were representative of the total sample. There was no difference in timeliness of care between the group who gave income information and those who did not.

Table 4 compares the same characteristics of the sample as in Table 3 looking at the location of the birth: hospital versus out-of-

hospital (OOH). The differences between hospital births and OOH births appear in the older average age of mothers having OOH births; lower incomes of OOH mothers; lower percentage of low birthweight babies born to OOH mothers; and longer distances to travel by OOH mothers to prenatal care. The large difference in round trip mileage traveled may be due in large part to several of the mothers in this group who traveled from out-of-state to deliver their babies in Montana. Their travel mileage was averaged in with the rest of the OOH births and increased this group's average. It may also be due to the fact that the offices of the certified nurse midwives and direct entry midwives were, indeed, farther away from mothers choosing a homebirth. (As stated before, the exact location of the midwife was not given by the respondent nor asked for on the questionnaire.) Differences in the LBW rate and age could be due to a selection bias for mothers choosing homebirths. Only low risk mothers may select homebirth, along with those who had previously given birth at home, thus the older age. Finally, families with lower incomes may well choose a homebirth due to the lower costs of prenatal care and of the delivery compared to a hospital birth.

TABLE 3. COMPARISONS OF SAMPLE BY SELECTED BACKGROUND;
CHARACTERISTICS OF PRENATAL VISITS AND DELIVERY;
ACCORDING TO RACE

| | <u>Total</u> | <u>White</u> | <u>Other</u> | <u>Indian</u> |
|---|--------------|--------------|--------------|---------------|
| <u>I. BACKGROUND</u> | | | | |
| Mean Annual Income | \$21,996 | \$23,356 | \$21,167 | \$9,642 |
| Mean Annual Per Capita Income | \$ 7,691 | \$ 8,102 | \$ 9,028 | \$3,496 |
| Mean Years of Education | 13.1 | 13.3 | 12.1 | 11.4 |
| Mean Age | 27.0 | 27.4 | 27.0 | 24.6 |
| % Married/Cohabiting | 86% | 90% | 82% | 59% |
| <u>II. PRENATAL VISITS</u> | | | | |
| Month Initiated First Prenatal Care Visit (Mean) | 2.7 | 2.7 | 2.8 | 3.2 |
| Mean Number of Prenatal Visits | 11.4 | 11.7 | 13.0 | 9.3 |
| Mean Roundtrip Mileage to Prenatal Care | 36.2 | 37.9 | 44.6 | 22.3 |
| <u>III. DELIVERY</u> | | | | |
| Mean Birthweight (gm) | 3,396 | 3,382 | 3,300 | 3,475 |
| % LBW (\leq 2500 gm) | 6.7 | 7.0 | — | 6.6 |
| % VLBW (\leq 1500 gm) | 0.2 | 0.2 | — | — |
| % C-Section | 21.7 | 21.7 | 27.2 | 19.6 |
| % Full Term | 87.5 | 86.9 | 90.9 | 90.3 |
| % Pre-Term | 11.7 | 12.0 | 9.1 | 9.7 |
| % Late | 0.8 | 1.1 | — | — |

TABLE 4. COMPARISONS OF SAMPLE BY SELECTED BACKGROUND;
CHARACTERISTICS OF PRENATAL VISITS AND DELIVERY;
BY LOCATION OF BIRTH

| | <u>Total</u> | <u>Hospital</u> | <u>Out of Hospital</u> |
|---|--------------|-----------------|----------------------------|
| I. <u>BACKGROUND</u> | | | |
| Mean Annual Income | \$21,996 | \$22,396 | \$15,395 |
| Mean Annual Per Capita Income | \$ 7,691 | \$ 7,993 | \$ 4,498 |
| Mean Years of Education | 13.1 | 13.0 | 13.9 |
| Mean Age | 27.0 | 26.8 | 30.2 |
| % Married/Cohabiting | 86% | 86% | 94% |
| II. <u>PRENATAL VISITS</u> | | | |
| Month Initiated First Prenatal Care Visit (Mean) | 2.7 | 2.8 | 2.6 |
| Mean Number of Prenatal Visits | 11.4 | 11.4 | 12.1 |
| Mean Roundtrip Mileage to Prenatal Care | 36.2 | 34.8 | 82.2 |
| III. <u>DELIVERY</u> | | | |
| Mean Birthweight (gm) | 3,396 | 3,378 | 3,636 |
| % LBW (\leq 2500 gm) | 6.7 | 7.0 | 2.9 |
| % VLBW (\leq 1500 gm) | 0.2 | 0.2 | — |
| % C-Section | 21.7 | 23.0 | *2.9 |
| % Full Term | 87.5 | 86.8 | 97.1 |
| % Pre-Term | 11.7 | 12.3 | 2.9 |
| % Late | 0.8 | 0.9 | — |

*One mother moved to hospital with CNM to deliver breach baby by C-Section.

B. Timeliness of Care When Compared to Key Factors

Adequacy of prenatal care in other studies is often determined using the Kessner Index. The Kessner Index, following World Health Organization guidelines, is a measure of the "adequacy" of prenatal care based on the number of prenatal visits for given lengths of gestation (with relatively few visits being indicative of "inadequate" care). Due to the questionnaire construction which did not ask how many visits occurred in each trimester of pregnancy and also due to the inconsistency of answers to the number of prenatal visits, the only indicator for adequacy of care used was the month care was initiated. Timely care is initiation of prenatal care in the first six months of pregnancy. Late care is any visit initiated in the third trimester.

The relationship between selected background characteristics of the mother and the initial timing of prenatal care is shown in Table 5. Women in this sample who are not married, who had not graduated from high school, who use Medicaid to pay for prenatal care, and whose annual per capita income is less than \$6,000 are more likely to come in for late prenatal care. Women who were most likely to receive timely prenatal care in the sample were those with an annual per capita income greater than \$6,000, who had private insurance, who were married, followed by those who are high school graduates. Surprisingly, those women with no insurance in the survey were also a group more likely to have timely prenatal care. (The "no insurance" group was

comprised of those women who reported paying for care with personal savings, loans, bartering for services, or who were unable to pay at all.)

In a study conducted among low-income women in New York City looking at barriers to prenatal care, women who had no insurance were significantly more likely than Medicaid recipients to receive late care or no care. The researchers used the same parameters for timely and late care as this study. Those with private insurance were no more likely than those with Medicaid to initiate care in the first or second trimester (Kalmuss & Fennelly, 1990). This survey produced different findings than the inner-city study between the Medicaid population and the uninsured. These differences in findings underscore the need to look separately at very rural and urban settings when examining the utilization of health care and its provision to the consumer.

Although not statistically significant, a trend can also be seen between the age of the mother and when she comes in for prenatal care; the younger she is, the later she comes in. Other patterns occur when looking at the race of the mother and whether she is on food stamps/AFDC. If she is an Indian mother, she is more likely to initiate prenatal care later than non-Indians. If the woman received public assistance, she tended to initiate prenatal care later than mothers not receiving food stamps/AFDC.

One of the structural barriers that this study wanted to look at was

distance needed to travel to prenatal care and its relationship to timeliness of care and birth outcomes. There was no difference in groups who traveled round trip 0-5 miles, 6-25 miles, or greater than 25 miles for prenatal care and when they initiated care. These particular mileage groupings were used because approximately a third of the sample fit into each of the intervals. There may be significant regional differences. This summary does not compare the findings regionally.

Several attitudinal factors were investigated as shown in Table 6. Those women who perceived their health to be fair or poor before or during the pregnancy were more likely to have late prenatal care. Those women feeling good during their pregnancy and feeling happy about being pregnant were most likely to come in for timely prenatal care.

There also seems to be a relationship, although not statistically significant, between the Cesarean section rate (number of Cesarean births per 100 live births) and the method of payment for the delivery (see Table 7). A woman in this survey is more likely to deliver by Cesarean section if her delivery is paid by military and private insurance, followed by Medicaid, then Indian Health Service provisions. Other than women giving birth at home, women with no insurance had the lowest C-section rate in the sample.

TABLE 5. Number and Percentage Distribution,
By Selected Background Characteristics,
According to Timing of Prenatal Care

| <u>CHARACTERISTICS</u> | <u>N</u> | <u>TIMELY CARE</u> | <u>LATE CARE</u> |
|----------------------------------|----------|--------------------|------------------|
| <u>Age</u> | | | |
| ≤ 19 | 37 | 91.9 | 9.1 |
| 20-24 | 127 | 95.2 | 4.8 |
| ≥ 25 | 304 | 96.7 | 3.3 |
| <u>*Marital Status</u> | | | |
| Not Married | 68 | 88.2 | 11.8 |
| Married/Cohabiting | 419 | 97.4 | 2.6 |
| <u>Race</u> | | | |
| White | 413 | 96.9 | 3.1 |
| Indian | 58 | 91.4 | 8.6 |
| Other | 11 | 100.0 | — |
| <u>**High School Graduate</u> | | | |
| No | 70 | 88.6 | 11.4 |
| Yes | 411 | 97.6 | 2.4 |
| <u>**Health Insurance</u> | | | |
| None | 81 | 97.6 | 2.4 |
| Medicaid | 109 | 87.2 | 12.8 |
| IHS | 32 | 93.8 | 6.2 |
| Private | 241 | 99.6 | 0.4 |
| <u>Receive AFDC/Food Stamps</u> | | | |
| No | 162 | 93.2 | 6.8 |
| Yes | 102 | 89.2 | 10.8 |
| <u>*Annual Per Capita Income</u> | | | |
| ≤ \$6,000 | 180 | 93.8 | 6.2 |
| > \$6,000 | 170 | 100.0 | — |

Timely Care = Initiated prenatal care during 1st and 2nd trimester.

Late Care = Initiated prenatal care during 3rd trimester (month 7, 8 or 9)

* Yates corrected χ^2 is significant at $p < .01$.

** Yates corrected χ^2 is significant at $p < .001$.

TABLE 6. Number and Percentage Distribution,
By Self-Perceptions about Health and the Pregnancy,
According to Timing of Prenatal Care

| <u>CHARACTERISTICS</u> | <u>N</u> | <u>TIMELY CARE</u> | <u>LATE CARE</u> |
|-------------------------------|----------|--------------------|------------------|
| <u>Self-Perception</u> | | | |
| *Health Before Pregnancy | | | |
| Good | 433 | 96.8 | 3.2 |
| Fair/Poor | 53 | 90.6 | 9.4 |
| **Health During Pregnancy | | | |
| Good | 412 | 97.4 | 2.6 |
| Fair/Poor | 74 | 89.1 | 10.9 |
| Health Care Received | | | |
| Excellent/Good | 475 | 96.2 | 3.8 |
| Fair/Poor | 9 | 88.9 | 11.1 |
| Feelings About Being Pregnant | | | |
| Happy | 288 | 97.3 | 2.7 |
| Mixed/Upset | 196 | 94.3 | 5.7 |

Timely Care = Initiated prenatal care during 1st and 2nd trimester

Late Care = Initiated prenatal care during 3rd trimester (month 7, 8 or 9)

- * Fisher exact 2-tailed p-value significant at .05.
** Fisher exact 2-tailed p-value significant at .01.

TABLE 7. CESAREAN SECTION PERCENTAGE BY METHOD OF PAYMENT

| <u>PAYMENT METHOD</u> | <u>N</u> | <u>C-SECTION %</u> |
|-----------------------|----------|--------------------|
| Military Insurance | 12 | 41.7 |
| Private Insurance | 257 | 23.7 |
| Medicaid | 125 | 22.4 |
| IHS | 32 | 15.6 |
| No Insurance | 73 | 12.3 |

C. Remaining Frequency Data

A summary of the frequency of responses to the survey questions follows. Only three respondents indicated not getting any kind of pregnancy check-ups.

1. **SELF-PERCEPTIONS OF HEALTH STATUS AND PREGNANCY:** (Percentage of responses to each possible choice.)

a. How would you rate your health before this pregnancy?

| | | |
|------|-------|-----------|
| Poor | 0.2% | |
| Fair | 11.3% | |
| Good | 88.5% | (N = 506) |

b. How would you rate your health during this pregnancy?

| | | |
|------|-------|-----------|
| Poor | 1.4% | |
| Fair | 14.4% | |
| Good | 84.2% | (N = 506) |

c. What did you think about the health care you received during this pregnancy?

| | | |
|-----------|-------|-----------|
| Excellent | 70.4% | |
| Good | 27.2% | |
| Fair | 2.0% | |
| Poor | 0.4% | (N = 503) |

d. How did you feel when you found out you were pregnant?

| | | |
|----------------|-------|-----------|
| Mixed feelings | 36.1% | |
| Upset | 4.2% | |
| Happy | 59.7% | (N = 504) |

Over 40% of the mothers indicated that they were upset or had mixed feelings about being pregnant. When this question was examined for any differences between races, the findings were:

| | <u>WH/OTH (N = 435)</u> | <u>INDIAN (N = 65)</u> |
|----------------|-------------------------|------------------------|
| Mixed feelings | 34.0% | 50.8% |
| Upset | 3.7% | 6.2% |
| Happy | 62.3% | 43.1% |

An analysis between groups was done using a single table Chi square analysis. The difference between Indians and Whites/Others is significant at $p \leq .05$.

When looking at this variable and the timeliness of prenatal care, however, there was no significant difference between groups who were happy and who had mixed/upset feelings, either in the total sample or by race of mother.

2. **WHERE WOMEN WENT FOR PRENATAL CARE:** (Respondents could indicate more than one location.)

| (N = 507) | <u>Percent</u> | <u>(N)</u> |
|----------------------|----------------|------------|
| Doctor's Office | 76.3 | (385) |
| Hospital Clinic | 13.4 | (68) |
| IHS/Tribal Health | 8.9 | (45) |
| Direct Entry Midwife | 5.1 | (26) |
| Local Health Dept. | 3.4 | (17) |
| Cert. Nurse Midwife | 2.0 | (10) |
| Other | 1.4 | (7) |

3. **WHO WOMEN SAW FOR PRENATAL CARE:** (Respondents once again could indicate more than one provider.)

| (N = 502) | <u>Percent</u> | <u>(N)</u> |
|------------------------|----------------|------------|
| Pvt Family Physician | 56.2 | (282) |
| Pvt OB/GYN | 27.1 | (136) |
| Nurse Practitioner/CNM | 9.4 | (47) |
| IHS Physician | 8.8 | (44) |
| Direct Entry Midwife | 4.0 | (20) |
| Other | 2.2 | (11) |

A majority of women (70.9%) reported seeing the same person each time they came in for prenatal care.

4. **WHY DID YOU GO TO THIS CLINIC/DOCTOR:** (Most frequently cited reasons with percentage of respondents who answered the question.)

Total Sample (N = 477)

- a. I had been there before (31.2%)
- b. I heard good things about the care given there (27.5%)
- c. Friend/family member had been there (9.4%)
- d. It's close to my home (4.4%)
- e. Another doctor/clinic sent me there (4.2%)

Out-of-Hospital Births (N = 33)

- a. I heard good things about the care given there (30.3%)
- b. This [setting] offered me more choices for labor/delivery (21.2%)
- c. I had been there before (12.1%)

5. **WHAT WAS THE PRIMARY REASON YOU FIRST DECIDED TO GO IN FOR A PREGNANCY CHECK-UP:** (N = 501)

- a. To find out if I was pregnant (35.9%)
- b. To get medical care (25.1%)
- c. I knew I needed to go at this time (21.8%)

There was no difference between racial groups in answering this question.

6. **DID YOU START PREGNANCY CHECK-UPS AND THEN STOP:**

Only 13 women (about 2.6% of the total sample) indicated that they had started pregnancy check-ups and then stopped. Four women cited difficulty getting an appointment at a time they could come in; three women relocated to another city; two reported that they just never felt like going in; one woman said there was no one to take care of the other children; one did not want to see a male health provider; and one respondent for reasons of personal safety could not stay in one location long enough to obtain care.

A brief profile of the 13 women shows that seven of the women are Indian (with six on a reservation); five of the women were not high school graduates and those five were Indian; the average annual reported income (\$12,996) and average annual per capita income (\$3,810) were less than the total sample; the mean month that prenatal care was initiated was 3.8 with an average of 6.4 prenatal visits reported; there was one low birthweight baby; ten of the 13 women (77%) reporting feeling upset or having mixed feelings about being pregnant. None of the babies or mothers had to stay in the hospital longer than usual.

7. WHAT DO YOU THINK COULD BE DONE TO IMPROVE PREGNANCY CHECK-UPS:
(Seventy percent of the women in the sample answered this question.)

| | <u>TOTAL (N = 356)</u> | <u>% RESPONDING</u> |
|----|---|---------------------|
| a. | Make pregnancy care cost less | 48.6 |
| b. | Better scheduling of appointments; less waiting time | 22.5 |
| c. | See the same doctor/nurse each visit | 9.3 |
| d. | Make child care available at clinic/doctor's office | 7.0 |
| | <u>INDIANS (N = 44)</u> | <u>% RESPONDING</u> |
| a. | Better scheduling of appointments; less waiting time | 38.6 |
| b. | Make pregnancy care cost less | 29.5 |
| c. | See the same doctor/nurse each visit | 18.2 |
| d. | Help with transportation to clinic/doctor | 9.1 |

WHITE/OTHER (N = 305)

| | | |
|----|---|------|
| a. | Make pregnancy care cost less | 51.8 |
| b. | Better scheduling of appointments; less waiting time | 20.0 |
| c. | See the same doctor/nurse each visit | 7.5 |
| d. | Make child care available at clinic/doctor's | 7.2 |

In order to see if there was a relationship between when a woman goes in for care and her perceptions about health care delivery, the groups that reported wanting pregnancy care to cost less and better scheduling of appointments were compared to the respondents who indicated no improvements were needed. There was no difference in the average month they reported initiating prenatal care. All began, on the average, about 2.7 months into the pregnancy.

8. **WHAT WERE THE MAIN PROBLEMS GETTING PREGNANCY CHECK-UPS:**

Nearly two-thirds of the respondents (65%) did not indicate any problems getting care. Of the remainder, the leading problems were -

| <u>TOTAL SAMPLE (N = 176)</u> | <u>% RESPONDING</u> | |
|-------------------------------|--|------|
| a. | When I got an appointment, I had to wait too long at clinic/doctor's office. | 23.9 |
| b. | I did not have health insurance. | 19.3 |
| c. | I did not have enough money to pay for care. | 18.8 |
| d. | Transportation | 14.8 |

INDIANS (N = 31)

| | | |
|----|--|------|
| a. | Transportation | 29.0 |
| b. | When I got an appointment, I had to wait too long at the clinic/doctor's office. | 22.6 |
| c. | I didn't have enough money to pay for care. | 16.1 |
| d. | I didn't want my family to know. | 9.7 |

WHITE/OTHER (N = 141)

%RESPONDING

| | | |
|----|--|------|
| a. | When I got an appointment, I had to wait too long at the clinic/doctor's office. | 24.1 |
| b. | I did not have health insurance. | 24.1 |
| c. | I did not have enough money to pay for care. | 19.1 |
| d. | Transportation | 12.1 |
| e. | It was difficult to get an appointment; had to wait too long to be seen. | 5.7 |

A slightly larger proportion of Indian mothers (47%) reported problems getting pregnancy check-ups than White/Other mothers (40%). Also transportation to care poses more of a problem for Indian mothers than White/Other mothers. Again the groups that reported the two most frequently cited problems were compared to the group that cited no problems for the month they first initiated prenatal care. Both groups reported initiating prenatal care between the 2nd and 3rd month of pregnancy; there was no difference.

9. **THE DELIVERY:**

a. Cesarean Sections

The C-section rate for the survey sample was 21.7%. The rates by race of mother and by location of birth are shown in Tables 3 and 4. Indian mothers had fewer C-sections than their white/other counterparts. In 1989, the C-section rate for live births occurring in Montana was 20.1%; for Whites/Others - 20.3%; and for Indians - 20.7%. The sample is very close to 1989 rates.

b. Complications

Over ninety percent (92.2%) of the women sampled reported that they would be going home without any complications either for themselves or the baby. Two mothers needed to stay longer - one for a high fever and the other had her "tubes tied". Thirty-six babies stayed in the hospital longer than an uncomplicated birth required. Six of these 36 were three pairs of white twins who were premature. Five Indian babies comprised the group staying in the hospital longer (or 7% of the total Indian sample) with the remaining 31 babies representing 6% of the White/Other portion of the survey sample.

Of those respondents giving the reason for their baby staying in the hospital longer, the major reasons for continued hospitalization are as follows, with the number of babies in each category:

Prematurity (13)
Respiratory Distress Problems (5)
Jaundice (4)
Miscellaneous (8)

10. METHOD OF PAYMENT FOR PRENATAL CARE AND FOR THE DELIVERY:

Respondents were asked to indicate their main source of payment for prenatal care and for the delivery. Only one response could

be given, even though the family may have used several avenues for payment. Table 8 shows the proportions of the sample using the various categories of payment. The survey sample is comparable, once again, to the actual state percentages for Medicaid-covered prenatal care and deliveries and the most current state estimates for individuals with no insurance.

TABLE 8. PERCENTAGE DISTRIBUTION OF SAMPLE BY METHOD OF PAYMENT FOR PRENATAL CARE AND DELIVERY BY RACE

| | <u>Total</u> | <u>Wh/Oth</u> | <u>Indian</u> |
|-------------------------|--------------|---------------|---------------|
| A. <u>PRENATAL CARE</u> | (N=494) | (N=435) | (N=59) |
| Private Insurance | 49.8 | 55.2 | 10.2 |
| Medicaid | 24.1 | 22.8 | 33.9 |
| IHS | 6.1 | | 50.8 |
| Military | 2.4 | 2.5 | 1.7 |
| No Insurance | 17.6 | 19.5 | 3.4 |
| B. <u>DELIVERY</u> | (N=499) | (N=437) | (N=62) |
| Private Insurance | 51.5 | 57.4 | 9.7 |
| Medicaid | 24.1 | 22.9 | 40.3 |
| IHS | 5.6 | 0.2 | 43.5 |
| Military | 2.4 | 2.5 | 1.6 |
| No Insurance | 15.4 | 17.0 | 4.9 |

11. BREASTFEEDING:

Women in the survey were asked if they planned on breastfeeding their babies; and if they were, were they encouraged to do so.

The findings indicate that in the Indian population over half planned not to breastfeed with about 3/4 of the White/Other group choosing to breastfeed. If women did choose breastfeeding, most indicated they were encouraged in this choice.

a. Plan to breastfeed

| | <u>WH/OTH (438)</u> | <u>INDIAN (61)</u> | <u>TOTAL (499)</u> |
|-----|---------------------|--------------------|--------------------|
| Yes | 76.5 | 42.6 | 72.3 |
| No | 23.5 | 57.4 | 27.7 |

b. Were encouraged to breastfeed

| | <u>WH/OTH (320)</u> | <u>INDIAN (33)</u> | <u>TOTAL (357)</u> |
|-----|---------------------|--------------------|--------------------|
| Yes | 93.4 | 97.0 | 93.8 |
| No | 6.6 | 3.0 | 6.2 |

12. INCOME:

a. Was major income earner employed during pregnancy -

| | <u>WH/OTH (434)</u> | <u>INDIAN (64)</u> | <u>TOTAL (501)</u> |
|-----|---------------------|--------------------|--------------------|
| Yes | 89% | 39% | 84% |
| No | 11% | 61% | 16% |

b. Was the mother (survey respondent) the major income earner in the family -

| | <u>WH/OTH (426)</u> | <u>INDIAN (65)</u> | <u>TOTAL (501)</u> |
|-----|---------------------|--------------------|--------------------|
| Yes | 20% | 39% | 22% |
| No | 80% | 61% | 78% |

13. INCOME AND POVERTY LEVELS: Seventy-one percent (359 responses) of the total sample gave their estimated gross income for 1989. The average income for the sample plus the mean income by race is given in Table 3. The average number of people supported in the sample by the range of incomes was 3.3 persons. Estimated annual incomes ranged from a low of \$220 to a high of \$130,000.

Using 1989 Federal Poverty Guidelines, 25% of the 359 responses were at the 100% poverty level; 36% were at 133% of poverty; and 50% were at 185% of poverty.

14. MOTHER'S IDENTIFIED NEEDS AFTER LEAVING THE HOSPITAL: (Top three needs.)

Total Sample:

- a. Money to pay the bills
- b. Help to take care of new baby and family
- c. Time to do fun things for me

White/Other:

- a. Money to pay the bills
- b. Help to take care of new baby and family
- c. Time to do fun things for me

Indians:

- a. Money to pay the bills
- b. Getting into school/job training/find a job
- c. Clothing

All women indicated a wish for more money to pay their bills; but, Indian mothers cited more basic survival needs and skills than the other mothers. Indians included jobs, training, education and clothing for their families. White/Other mothers, after more money to pay the bills and help at home to take care of the new baby, ascended the hierarchy of needs to wanting more time to do fun things.

IV. DISCUSSION AND RECOMMENDATIONS

This study uncovered that social, economic, educational, and ethnic factors do create differences in accessing prenatal care for Montana women. One of the most significant relationships apparent in the findings was that a woman who was not a high school graduate was more likely to come in for late prenatal care. It is not apparent if the woman's pregnancy prevented her from receiving a high school diploma or if dropping out of school provided the conditions conducive to becoming a mother. Nationally, in the

field of teen pregnancy prevention, finishing high school provides greater life options and a brighter economic outlook for young women. In Montana it is also clear that young women who are competent in the "three Rs" are less likely to become pregnant; and, if they do become pregnant, they will be more likely to come in for timely prenatal care.

Montana needs to continue efforts to prevent women from dropping out of school, especially young Indian women. And if a high school student does become pregnant, more programs need to be developed within school districts to provide the support for these women to continue their schooling. Several "young mothers" programs are already in operation in Montana school districts which can serve as prototypes.

The other important finding was that women on Medicaid are more likely to come in for late prenatal care. As of August, 1990, Montana's Medicaid program had not implemented the presumptive eligibility waiver for pregnant women. Women still needed to apply for Medicaid and be deemed eligible. The time it takes to submit a Medicaid application and become eligible may have delayed entry into care. Also, the survey did not specifically ask women if they were denied care from a physician because they were on Medicaid. There have been reports from public health personnel that in some communities providers are not taking new Medicaid patients, or will not see Medicaid patients at all. One woman in the survey, residing in northwest Montana, reported that she felt quite fortunate to have received care, even though she was on Medicaid. She stated the need to have more doctors in all specialties accept Medicaid patients. She knew of women who had to go

to an emergency room for care because "no one accepts new Medicaid patients." A systematic determination about reported denial of care by health care providers and why it is happening must be made in the state.

In addition to Medicaid introducing the presumptive eligibility waiver, the State Medicaid Program will be proposing increases in the reimbursement for pregnancy care to physicians and nurse practitioners. Perhaps a future survey will show an improvement in the Medicaid population due to these changes in the Medicaid program.

Women who are not married or not cohabiting with a significant other are more likely to come in for late prenatal care. A family or social support system is important when trying to access health care. Low per capita income for women was also a strong indicator for late access to prenatal care. In summary, female single heads of households and women in poverty do not easily access the health care delivery system.

Efforts need to be made by the public health sector to increase prenatal and post-natal outreach programs to high risk women who are:

- Not high school graduates
- Not married or living with a significant other
- Low-income
- On Medicaid

Special focus should also be placed on providing affordable, early, and

continuous prenatal care to pregnant teens and Indians.

The National Commission to Prevent Infant Mortality strongly urges states to support home visiting programs. Home visiting programs have proved to be effective, cost-saving, community-oriented, and workable in rural settings in protecting the health of high-risk pregnant women and children. Home visiting programs provide both the health services and social support needed to promote optimal perinatal outcomes. In this research, across all racial and income categories, one of the priority needs cited after leaving the hospital was help to take care of the new baby and the family. In Montana, the Governor's appointed MIAMI (Montana's Initiative for the Abatement of Mortality in Infants) Advisory Council recommended in an executive summary (December 1990) that Montana "facilitate home visits for all high risk and/or first time mothers."

Indian mothers in the survey also present special risks. Indian mothers were, on the average, younger, poorer, less educated and had less than favorable feelings about being pregnant in the first place. They also represented most of the women in the study who started and stopped prenatal care. More of the Indian women than the white mothers in the study reported not choosing to breastfeed their new infant. Montana's Indian population has a higher post-neonatal (first month to one year old) mortality rate than whites and others in the state. Although this study cannot draw definite conclusions about this period in the infant's life, these predisposing conditions in Indian mothers may have a bearing on the poor showing in the postneonatal period. Future research in the postneonatal mortality rates

necessitates the examination of possible relationships between psychosocial factors in Indian families and infant mortality, and not just the characteristics of health care received. The link between increased economic self-sufficiency and improved health outcomes for Indian families cannot be ignored either.

From these findings it is apparent that the state public health programs need to increase efforts to coordinate efforts with the Indian Health Service, tribal health programs and urban Indian centers. In particular, the WIC (Women, Infants, and Child Food Supplemental) Program needs to fortify its efforts to teach Indian mothers about the importance and benefits of breastfeeding. The State Family Planning Program and the Montana Perinatal Program need to implement an ongoing mechanism where program planning and development occur with the Indian Health Service and other Indian groups.

Additional scrutiny of the relationship between method of payment for delivery and the Cesarean section rate in this study needs to occur. There was an obvious trend of increased C-sections for insured women. This pattern in the sample should be compared to other national studies being conducted around the occurrence of C-sections and the payment source for the woman. The high correlation between having a C-section and being insured is probably not isolated to just Montana's obstetrical practices and health financing structure.

From the response of the mothers in the study to needed improvements, it

is also apparent that who provides care and how prenatal care is delivered in Montana requires change. Making prenatal care cost less was the first improvement desired followed by better scheduling of appointments/less waiting time. All these problems could be resolved by training and using more nurse practitioners in Montana to provide primary care to pregnant women. Montana's physician shortage is continually discussed; yet other primary care providers can provide prenatal care more cheaply and as effectively as physicians. The gaping hole in training, recruitment, and retention of nurse practitioners in Montana also demands the attention of private and public health policy-makers and legislators. Recently, the White House Task Force on Infant Mortality (included in an, as yet unpublished report) presented to President Bush's Domestic Policy Council a recommendation to ease curbs on certified nurse-midwives and obstetric nurse practitioners. The MIAMI Advisory Council also recommended in its executive summary (December 1990) that Montana needed to "facilitate the role of mid-level health care providers in Montana."

Why Montana women perceived their health as not good before and during their pregnancy deserves further investigation. This needs assessment did not gather data on mothers' behavioral risk factors. Other studies have shown that mothers who adopt high risk lifestyles (smoke cigarettes, use alcohol or other drugs) are more likely to come in for late, or no, prenatal care. This study did show a very strong relationship between not feeling good and coming in for late care. Further study is required to fully examine the extenuating circumstances surrounding Indian mothers' feelings about becoming pregnant and if there is any relationship to what happens to their

children in the first year of life or how they accessed prenatal care.

The present study showed good birth outcomes immediately after birth for those mothers choosing an out-of-hospital birth. These mothers were very enthusiastic and supportive of homebirths and of using midwives, whether "lay" or "nurse". Some typical comments from these mothers:

"I chose midwifery over a hospital clinic because of the common sense methods used. They really listen to what each person wants - only after they have been educated about all the methods. A hospital clinic usually educated about their method only. Midwifery is a personal, beautiful, experience, and I recommend it to everyone."

"I had my baby at home this time. The first one was born in the hospital. It was so much better at home because I chose where I was and what I could do. It was a normal, healthy delivery. I think that C-sections, malpractice suits and labor and delivery problems could be significantly reduced if midwives could deliver babies in hospitals with MD support. This would also save time for the doctors."

"I was on Medicaid and could have had my baby free in the hospital, but after a lot of research, I decided to have my baby at home with a lay midwife and barter for her service fee. I'm glad I did. I had a safe and beautiful experience in my home! My way!"

" I chose midwifery care because I'd had a very traumatic experience with my first birth in a conventional hospital/MD setting. I was very pleased with the quality of care, the long, informative appointments and the personal loving attention my whole family received all during pregnancy and birth under midwifery care. It was a beautiful experience."

"I am most happy that I went to a certified nurse midwife. After visiting a hospital facility for birth, I don't know how I could ever have had my child in such a sterile, impersonal, regulated, and very uncomfortable environment."

In summary, mothers preferred midwifery support and a homebirth due to more personal time between the midwife and the mother; more family involvement; less cost than hospitals; and, reportedly, a more caring attitude by the health care provider.

Stronger advocates for the training and recruitment of certified nurse midwives need to be heard in Montana. At the same time, passage of legislation for licensure and regulation of direct-entry midwives that meets the needs of the lay midwives and the consumers needs to move forward. As in Oregon, it would also be ideal to have criteria established among the various health care providers and law makers on when a homebirth is safe and when a hospital delivery is more appropriate. An additional, unexpected finding around homebirths was that the general public is confused about the difference between a certified nurse midwife and a direct-entry midwife. Both these midwifery groups need to make concerted efforts to educate the consumer about who they are and what they can and cannot do, especially certified nurse midwives.

By and large, mothers who gave birth in hospitals had no complaints. Negative comments from this group usually consisted of complaints about the high cost of prenatal care and of the delivery and not about the care received in the hospital setting. In fact, several mothers commented on the generosity of the hospital toward them even though they had no insurance or Medicaid coverage. Some of these mothers' comments are as follows:

"My doctor is and was wonderful throughout my pregnancy, labor and delivery and after. The hospital staff did an excellent job with each of the individual jobs. They were all very pleasant and they all have lots of smiles and kindness. My hospital stay was very comforting and restful."

"I was thrilled, and so was my husband, that I was able to have a successful vaginal birth after a Cesarean. I was very fortunate to have a wonderful, supportive doctor and nursing staff during labor and delivery. Also, Lamaze classes helped make it a better experience for

my husband and [me]."

"Without having childbirth classes, I feel the OB staff did an excellent job and were very knowledgeable and helped my delivery go much easier."

"I liked the fact that my doctor gave me a choice about having an ultrasound done. Especially since we don't have insurance."

A recommendation for hospitals with maternity services, however, would be to examine those attributes of homebirths that could be transferred to the hospital setting. Ideally, a Montana community hospital should pilot a free-standing maternity center which would offer the non-institutional ambience of a home and the medical back-up of a hospital. A birthing center would offer the family a wider range of choices for who could attend the birth and would cost less.

The survey summary does not give regional comparisons of the various factors addressed. This needs to happen. One of the important variables, distance traveled to prenatal care, did not turn out as a significant factor in the total sample. This may not be the case when looking at the data just from southeast Montana or the northeast corner of the state. There may be issues specific to a region which surface when aggregating the data in that manner that were not apparent when examining statewide data as was done in this report.

This initial study demonstrates that women in Montana do face difficulties accessing prenatal care. Montana does not face the severity nor possess the magnitude of inadequate prenatal care that occurs in other more populated states. We do share a need with the rest of the country to revamp

the service delivery system of prenatal care and to find a more equitable and universal method of financing prenatal care and deliveries. The issues of lack of education; motherhood at an early age; poverty; minority membership; and lack of familial, social, and economic support systems loom as grave concerns for Montana women. This survey lays a sound foundation for the future monitoring of these conditions.

V. REFERENCES

1. Kalmuss, D. and Fennelly, K. "Barriers to Prenatal Care Among Low-Income Women in New York City." Family Planning Perspectives, October 1990, Vol. 22, No. 5, pp. 215-218, 231.
2. Mayer, J.P., Johnson, C.D., Condon, J.W. and Berquist, C.L. Multi-State Prenatal Needs Determination Project - Final Report. Lansing, Michigan: University Associates, September 1987.
3. National Commission to Prevent Infant Mortality. Home Visiting: Opening Doors for America's Pregnant Women and Children. Washington, D.C.: July 1989.
4. Oregon Department of Human Services. Maternity Services Needs Assessment, 1986. Portland, OR: Health Division, Office of Health Services, Maternal and Child Health Program, February 1987.
5. South Carolina Department of Health and Environmental Control. Prenatal Care in South Carolina. Columbia, SC: Low Birthweight Prevention Program, Division of Maternal Health, September 1987.

**PRENATAL CARE SURVEY OF NEW MOTHERS
DISCHARGED FROM A MONTANA MATERNITY SERVICE**

To improve health care to mothers and babies, the Montana Department of Health and Environmental Sciences would like information on the health care that pregnant women receive. We would like to ask you some questions about the health care that you got before the birth of your baby. **Do not put your name on this form. Your answers will be kept secret.** Most of the questions are about your opinions, so there are no "right" or "wrong" answers. We want to know how you really feel about the care that you got. Your answers will help us plan for better services for mothers and babies in Montana. Thanks for your help.

- Q-1** HOW WOULD YOU RATE, IN GENERAL, YOUR HEALTH BEFORE THIS PREGNANCY? *(Circle only one.)*
1. Poor
 2. Fair
 3. Good
- Q-2** GENERALLY, HOW WOULD YOU RATE YOUR HEALTH DURING THIS PREGNANCY? *(Circle only one.)*
1. Poor
 2. Fair
 3. Good
- Q-3** WHAT DID YOU THINK ABOUT THE HEALTH CARE YOU RECEIVED DURING THIS PREGNANCY? *(Circle only one.)*
1. Excellent
 2. Good
 3. Fair
 4. Poor
- Q-4** HOW DID YOU FEEL WHEN YOU FOUND OUT YOU WERE PREGNANT? *(Circle only one.)*
1. Mixed feelings about being pregnant
 2. Upset
 3. Happy
- Q-5** WHERE DID YOU GO FOR PREGNANCY CHECK-UPS DURING THIS PREGNANCY? *(Check all the places you went to.)*
1. Doctor's office
 2. Local health department
 3. Indian Health/Tribal Health Clinic or Hospital
 4. Hospital clinic
 5. Emergency room
 6. Other *(Where?)* _____
 7. I didn't get pregnancy check-ups. *(Skip to question 20.)*
- Q-6** HOW MANY MILES DID YOU HAVE TO TRAVEL *(round trip)* ON EACH VISIT FOR PREGNANCY CHECK-UPS DURING THIS PREGNANCY? _____ miles *(round trip)*
- Q-7** WHO DID YOU SEE FOR PREGNANCY CHECK-UPS DURING THIS PREGNANCY? *(Check all that you used.)*
1. Private family physician
 2. Private OB/GYN physician
 3. IHS Physician
 4. Family nurse practitioner; nurse-midwife
 5. Lay Midwife
 6. Other: _____

Q-8 DID YOU SEE THE SAME PERSON EACH TIME YOU WENT IN FOR CHECK-UPS?

- 1. Yes
- 2. No

Q-9 WHY DID YOU GO TO THIS DOCTOR OR CLINIC? (Check all that apply to you.)

- 1. I had been there before.
- 2. A friend or family member had been there.
- 3. A friend or family member told me to go there.
- 4. It's close to my home.
- 5. My family said I needed to get good health care while I was pregnant.
- 6. Another doctor/clinic sent me there.
- 7. This doctor/clinic offered me more choices for labor and delivery.
- 8. Cost of care was cheaper.
- 9. This doctor/clinic encouraged my family/partner to participate in my pregnancy.
- 10. I heard good things about the care given there.
- 11. I didn't know of another place to go.
- 12. The local WIC Clinic sent/referred me.
- 13. Newspaper ad.
- 14. Radio ad.
- 15. TV ad.
- 16. Listed in phone book.
- 17. I don't know.
- 18. Other reasons: (PLEASE WRITE THEM DOWN.) _____

Q-10 GO BACK TO QUESTION 9 AND CIRCLE THE MAIN REASON WHY YOU CHOSE THIS DOCTOR OR CLINIC. (CIRCLE ONLY ONE.)

Q-11 HOW MANY MONTHS PREGNANT WERE YOU WHEN YOU BEGAN GOING FOR PREGNANCY CHECK-UPS?

- 1. Months
- 2. Don't know

Q-12 WHAT WAS THE PRIMARY REASON YOU DECIDED TO GO AT THAT PARTICULAR TIME? (Check only one.)

- 1. To find out if I was pregnant
 - 2. I felt sick
 - 3. To get medical care
 - 4. Family/friends said I should go
 - 5. I knew I needed to go at this time.
 - 6. I didn't know I was pregnant until the last part of the pregnancy.
 - 7. It cost too much to go earlier.
 - 8. I didn't get my Medicaid card until then.
 - 9. I didn't have any way to get there earlier.
 - 10. I didn't think it was important to go earlier.
 - 11. Other: _____
-

Q-13 HOW MANY PREGNANCY CHECK-UPS DID YOU HAVE DURING THIS PREGNANCY?

- 1. Number
- 2. Don't know

Q-14 DID YOU START HAVING PREGNANCY CHECK-UPS AND THEN STOP GOING?

- 1. Yes
- 2. No (*Skip to Question 17*)

Q-15 WHY DID YOU STOP YOUR CHECK-UPS?

- 1. Couldn't get appointment; had to wait too long in office.
 - 2. I did not like the way the doctor/staff treated me.
 - 3. The doctor/clinic wanted me to come in for check-ups too many times.
 - 4. I already knew what they were telling me to do.
 - 5. I couldn't see the same person for my checkups.
 - 6. Costs too much.
 - 7. I stopped being eligible for Medicaid.
 - 8. I didn't have a way to get there.
 - 9. I didn't have anyone to look after my children when I went.
 - 10. I was embarrassed to see a male health care provider.
 - 11. Other reasons: _____
-

Q-16 GO BACK TO QUESTION 15 AND CIRCLE THE ONE MAIN REASON.

Q-17 WHAT DO YOU THINK COULD BE DONE TO IMPROVE PREGNANCY CHECK-UPS? (*Check all that you think are important.*)

- 1. More courteous service.
 - 2. Better scheduling of appointments; less waiting time.
 - 3. See only female health care providers.
 - 4. Make child care available at the clinic/doctor's office.
 - 5. Help with transportation to the clinic/doctor.
 - 6. Extra or different clinic/office hours.
 - 7. Make pregnancy care cost less.
 - 8. See the same doctor/nurse each visit.
 - 9. Have nurses do most of the checkups.
 - 10. Other changes: _____
-

Q-18 GO BACK TO QUESTION 17 AND CIRCLE THE ONE MOST IMPORTANT IMPROVEMENT NEEDED.

Q-19 WHAT WAS THE MAIN SOURCE OF PAYMENT FOR PREGNANCY CHECK-UPS YOU RECEIVED DURING THIS PREGNANCY? (*Check only one.*)

- 1. Health Insurance
- 2. Medicaid
- 3. Military insurance
- 4. Personal income or savings
- 5. Health Maintenance Organization
- 6. Indian Health Service or Tribal Health Services
- 7. Free or low-cost public health or community health clinic
- 8. Loan
- 9. Unable to pay
- 10. Other: _____

- Q-20** WOMEN SOMETIMES HAVE PROBLEMS GETTING CHECK-UPS WHILE PREGNANT. WERE ANY OF THESE A PROBLEM FOR YOU? *(Please check all that apply to you.)*
- 1. I did not have enough money to pay for care.
 - 2. I did not have any health insurance.
 - 3. I didn't have a Medicaid card.
 - 4. Transportation to the doctor/clinic was a problem.
 - 5. People in the clinic/doctor's office were not nice to me.
 - 6. I couldn't get time off of work.
 - 7. I didn't know where to go for a pregnancy test or check-up.
 - 8. The doctor/clinic was not taking new patients.
 - 9. Doctor/clinic did not take Medicaid patients.
 - 10. I didn't have anyone to take care of my children.
 - 11. I didn't want my family to know I was pregnant.
 - 12. I was embarrassed to see a male health care provider.
 - 13. I was going to have an abortion, but I changed my mind.
 - 14. It was difficult to get an appointment; had to wait too long to be seen.
 - 15. I did not like the care given at the clinic/doctor's office.
 - 16. When I got an appointment, I had to wait too long at the clinic/doctor's office.
- Q-21** GO BACK TO QUESTION 20 AND CIRCLE THE ONE MAIN PROBLEM.
- Q-22** WHO WILL PAY FOR THIS BABY'S DELIVERY? *(Check the one main source of payment.)*
- 1. Health Insurance
 - 2. Medicaid
 - 3. Military insurance
 - 4. Personal income or savings
 - 5. Health Maintenance Organization
 - 6. Indian Health Service or Tribal Health Services
 - 7. Free or low-cost public health or community health clinic
 - 8. Loan
 - 9. Unable to pay
 - 10. Other: _____
- Q-23** HOW MUCH DID YOUR BABY WEIGH AT BIRTH? _____ pounds _____ ounces
- Q-24** DO YOU THINK YOUR DOCTOR THOUGHT YOUR BABY WAS _____ FULL-TERM OR _____ PRE-TERM?
(Check only one.)
- Q-25** HOW WAS YOUR BABY DELIVERED? *(Check one.)*
- Vaginal Birth Cesarean Section
- Q-26** WILL YOU AND YOUR BABY GO HOME AT THE SAME TIME?
- 1. Yes *(Skip to Question 29.)*
 - 2. No
- Q-27** WHO WILL GO HOME FIRST?
- 1. Baby
 - 2. I will
- Q-28** WHY DID YOU OR YOUR BABY HAVE TO STAY LONGER? _____
-
- Q-29** ARE YOU GOING TO BREASTFEED YOUR NEW BABY?
- 1. Yes
 - 2. No *(Skip to Question 31.)*

- Q-30 DID YOU RECEIVE ENCOURAGEMENT/SUPPORT IN YOUR DECISION TO BREASTFEED?
 1. Yes
 2. No
- Q-31 WHICH ONE OF THE FOLLOWING BEST DESCRIBES YOUR RACE?
 1. White
 2. American Indian (*Tribal Membership*) _____
 3. Other _____
- Q-32 IF AMERICAN INDIAN, DO YOU LIVE ON OR OFF A RESERVATION?
 1. On
 2. Off
- Q-33 PLEASE GIVE YOUR PLACE OF RESIDENCE FOR EACH OF THE FOLLOWING:
 State _____
 County _____
 City/Town _____ Zip Code _____
- Q-34 YOUR BIRTH DATE: _____/_____/_____
- Q-35 HOW MANY YEARS OF SCHOOL HAVE YOU COMPLETED?
 _____ Years of education (For example; completion of the eighth grade equals 8, high school or GED equals 12, or two years of college equals 14.)
- Q-36 WHAT IS YOUR MARITAL STATUS **RIGHT NOW**?
 1. Never Married
 2. Married
 3. Widow
 4. Divorced
 5. Separated
 6. Living with a significant person and not married
- Q-37 DURING YOUR PREGNANCY, WAS THE MAJOR INCOME EARNER IN YOUR HOUSEHOLD EMPLOYED?
 1. Yes
 2. No
- Q-38 WERE YOU THE MAJOR INCOME EARNER?
 1. Yes
 2. No
- Q-39 WHAT WAS YOUR ESTIMATED HOUSEHOLD INCOME FOR 1989 BEFORE DEDUCTIONS? \$ _____
- Q-40 HOW MANY PEOPLE IN YOUR FAMILY ARE SUPPORTED BY THIS INCOME? _____
- Q-41 HAVE YOU RECEIVED SERVICES FROM THESE PROGRAMS DURING THIS PREGNANCY? (*Check all that apply to you.*)
 1. Social Security
 2. Disability
 3. WIC
 4. Medicaid
 5. Food Stamps
 6. Unemployment Compensation
 7. AFDC
 8. Other: _____

Q-42 AFTER YOU LEAVE THE HOSPITAL WITH YOUR BABY, WHAT KIND OF HELP DO YOU THINK YOU WILL NEED THE MOST? *(Check all that apply.)*

- 1. Money to pay the bills
- 2. Food
- 3. Child care for my other kids
- 4. Transportation
- 5. Help to take care of new baby and my family
- 6. Legal services
- 7. Child support money
- 8. Time to do some fun things for me
- 9. Better place to live
- 10. Clothing
- 11. Protection from violence at home
- 12. Information about health services for me
- 13. Family planning services
- 14. Getting into school/job training program; find a job
- 15. Family/Maternity Leave
- 16. More information on baby care & feeding
- 17. Help with drug or alcohol problems

PLEASE GO TO THE ABOVE LIST AND CHOOSE THE THREE MOST IMPORTANT NEEDS. *(Put the number of the item in the space provided.)* IF A NEED OF YOURS IS NOT MENTIONED, FEEL FREE TO WRITE IT IN.

- 1. _____
- 2. _____
- 3. _____
- 4. Other:

IS THERE ANYTHING ELSE THAT YOU WOULD LIKE TO ADD ABOUT YOUR PREGNANCY? IF SO, PLEASE USE THIS SPACE TO ADD THESE COMMENTS.

Thank you again for participating in this survey. The information you provided will assist the Montana Department of Health and Environmental Sciences in improving health care services for mothers and their families.

