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# Differentiating the Barriers to Adequate Prenatal Care in Missouri, 1987-88

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**I**NFANT MORTALITY and its leading cause, low birth weight, are serious public health problems in the United States. Research has shown that women who receive adequate prenatal care during their pregnancies have much lower rates of low birth weight infants than do women who receive less than adequate prenatal care (1). In Missouri, inadequate prenatal care has been identified as a significant risk factor for women whose infants die during the neonatal period (2), deaths that are mainly associated with low birth weight.

As with infant mortality and low birth weight, both of which remain much higher among blacks than whites, there are racial disparities in the rates for utilization of prenatal care. The total rate of inadequate prenatal care in Missouri in 1988 was 17.2 percent, but it was 13.7 percent for whites and 33.3 percent for blacks (3).

Because of the association between prenatal care and positive pregnancy outcome, there has been a great deal of interest in identifying barriers to prenatal care. Elimination of these barriers could enable all women to obtain early and continuous prenatal care services.

## Synopsis .....

*Inadequate prenatal care has previously been identified as a significant risk factor for women who have low birth weight infants and infants who die during the neonatal period. Postpartum interviews with 1,484 primarily low-income women were conducted during 1987-88 in three areas of Missouri with the highest rates of inadequate prenatal care. The purpose of the study was to identify barriers to prenatal care and to determine which barriers differentiated between women receiving adequate and those receiving inadequate prenatal care.*

*Women who received inadequate prenatal care were more likely to be black, unmarried, higher parity, and have less education than those who received adequate care. These women were also more likely to be poor, Medicaid-eligible, to have had an unwanted pregnancy, more stress and problems during pregnancy, and less social support. In the multivariate analysis, race and marital status lost their importance. The strongest predictor of inadequate prenatal care was women not knowing that they were pregnant in the first 4 months of pregnancy (adjusted odds ratio 9.28). To improve the rate of adequate prenatal care, society must address the issues of poverty and wantedness of pregnancy.*

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Many of the current research studies and programs regarding barriers have been described in a report by the Institute of Medicine (4). The Missouri study was undertaken to identify both the barriers and inducements to receiving early and continuous prenatal care services.

## Methods

The Missouri case-control study was conducted in two urban areas, Kansas City and St. Louis, and one rural area, southeast Missouri. These communities have been identified as the areas with the highest rates of infant mortality, low birth weight, and inadequate prenatal care in the State. Face-to-face interviews were conducted with postpartum women before their discharge from 11 hospitals where rates of inadequate prenatal care were higher than the State rate. Mothers included in the study had live born infants weighing more than 1,500 grams; those who relinquished their infants were excluded. Mothers whose infants were admitted to an intensive care nursery were evaluated on

Table 1. Percent distributions of adequate and inadequate prenatal care populations and inadequate prenatal care odds ratios by selected characteristics, Missouri 1987–88

Variable	Adequate prenatal care group (N = 720)	Inadequate prenatal care group (N = 764)	Odds ratio (crude)	95 percent confidence interval
Black, non-Hispanic	47.9	56.7	1.44	1.17–1.76
Age under 20 at delivery	27.2	35.0	1.44	1.15–1.79
Unmarried at pregnancy onset	61.9	75.1	1.86	1.49–2.32
Less than high school education	39.2	53.7	1.80	1.46–2.21
Number of previous pregnancies:				
0	36.4	28.4	0.69	0.56–0.86
4 or more	8.5	14.3	1.80	1.29–2.51
Yearly income: <sup>1</sup> less than \$5,000	27.8	38.6	1.78	1.41–2.24
Medicaid participant	40.3	55.4	1.84	1.50–2.26
Food stamp participant	33.1	41.0	1.41	1.14–1.74
WIC participant	74.9	65.6	0.64	0.51–0.80
No previous regular source of health care	50.6	60.2	1.47	1.20–1.81
Worked outside the home during pregnancy	47.2	35.8	0.62	0.51–0.77
Prenatal care not perceived "very necessary"	9.6	27.0	3.49	2.60–4.68
Health problems during pregnancy	39.0	29.0	0.64	0.51–0.79
Total <sup>2</sup>	100.0	100.0	...	...

<sup>1</sup>Adequate care group includes 16.3 percent unknown income. Inadequate care group includes 17.5 percent unknown income.

<sup>2</sup>Includes unknowns.

NOTE: See definition of inadequate prenatal care in Methods section of text.

Table 2. Percent distributions of adequate and inadequate prenatal care populations and inadequate prenatal care odds ratios by wantedness of pregnancy variables, Missouri 1987–88

Variable	Adequate prenatal care group (N = 720)	Inadequate prenatal care group (N = 764)	Odds ratio (crude)	95 percent confidence interval
Unplanned pregnancy	71.9	84.9	2.20	1.70–2.84
Felt happy when learned of pregnancy	54.2	32.1	0.40	0.32–0.49
Didn't want others to know of pregnancy	11.7	23.2	2.28	1.72–3.03
Delayed telling someone else of pregnancy	9.0	21.1	2.69	1.98–3.66
Didn't want to think about being pregnant	17.5	30.2	2.04	1.60–2.61
Didn't know she was pregnant	3.1	19.4	7.62	4.81–12.08
Afraid to tell parents of pregnancy	14.9	22.4	1.65	1.27–2.15
Afraid to tell baby's father of pregnancy	5.4	8.4	1.60	1.06–2.41
Wasn't sure she wanted to be pregnant	32.8	45.3	1.70	1.38–2.10
Embarrassed about being pregnant	5.7	9.3	1.70	1.14–2.53
Considered adoption	3.3	7.3	2.29	1.41–3.74
Considered abortion	11.8	18.5	1.69	1.26–2.26
Total <sup>1</sup>	100.0	100.0	...	...

<sup>1</sup>Includes unknowns.

NOTE: See definition of inadequate prenatal care in Methods section of text.

a case-by-case basis by their nurses to determine whether they should be approached about participating in the study.

The American College of Obstetricians and Gynecologists (ACOG) recommends that pregnant women begin care in the first trimester and obtain at least nine visits. This study used the definition of inadequate prenatal care from the Missouri Center for Health Statistics, which takes gestational age into account. Inadequate prenatal care is defined as both late entry into care (after 4 months of pregnancy) as well as by number of total visits (fewer than 5 visits for pregnancies less than 37 weeks, or fewer than 8 visits for 37 or more weeks pregnancies). Therefore, many of the women meeting the criteria for the adequate care category may not meet the ACOG standard, but nearly all

women meeting the criteria for the inadequate care category should meet the ACOG inadequate care standard.

Interviewers determined whether a woman had adequate or inadequate care based on her prenatal record, or from the information that the patient gave. Gestational age was determined from the patient's chart and verified by calculating the last menstrual period with the date of infant's birth. The questionnaire was 15 pages long and took approximately 30 minutes to complete. It assessed information about the woman's prenatal care, content of care, satisfaction with care, financial information, feelings about the pregnancy, social support, stress factors, and some open-ended questions regarding barriers to prenatal care that she perceived. Most questions required a yes or no answer, but some had scales. For example, a 5-point scale rang-

ing from "happy" to "unhappy" was used to assess how women felt when they found out they were pregnant.

Interviews were conducted with women who received inadequate prenatal care and with an equal number of adequate care mothers. At the two largest public hospitals (one in Kansas City and one in St. Louis), where inadequate prenatal care rates were at 50 percent, all eligible women were interviewed until there were equal numbers of adequate and inadequate cases. Interviews began in June 1987 and were completed in Kansas City in August and in St. Louis in October 1987. Because of the smaller number of births, interviews in southeast Missouri were not completed until June 1988.

In the urban areas, the study was conducted primarily in large, public hospitals that serve primarily low-income and minority women. Therefore, the two groups of women (those who received adequate or inadequate care) were drawn from approximately the same population. In southeast Missouri, where the hospitals serve all women in the area, the two care groups were comparable in their representation of "public" and "private" patients.

For the bivariate analysis, frequencies and crude odds ratios, along with their confidence intervals, were computed. Stepwise logistic regression analysis was used to develop a model for the multivariate analysis (5). Certain variables were combined in the multivariate analysis. Unwanted pregnancy included nine questions relating to wantedness of pregnancy. The pregnancy was considered to be unwanted if the woman felt less than "somewhat happy" when she learned of the pregnancy, did not want to think about being pregnant, was not sure she wanted to be pregnant, or was embarrassed about being pregnant, was afraid to tell her parents or the baby's father of the pregnancy, or if she considered adoption or abortion. Excluded from the list was unplanned pregnancy since unplanned cannot be equated with unwanted. Not knowing of the pregnancy was retained as a separate variable and, in addition to unawareness factors, it may serve as a proxy variable for denial of pregnancy, although irregular menstrual periods and other factors may also contribute to not knowing one was pregnant. Financial barriers to care, including not having enough money to pay for care or put "upfront," and not knowing where to go to obtain low-cost care, were collapsed into one variable. Because lack of prenatal care insurance did not emerge as a risk factor in the bivariate analysis, it was not included in the multivariate analysis.

## Results

After matching the questionnaires with birth certificates (98.8 percent match rate), there was a total of

1,484 women, 764 (51.5 percent) of whom had inadequate prenatal care. Table 1 illustrates the adequate and inadequate prenatal care populations (percentages) and inadequate prenatal care odds ratios by selected characteristics. The inadequate prenatal care group had a higher percentage of black, teenage, unmarried, less educated, high parity, and low income (less than \$5,000 per year) women than did the adequate care group. Women in the inadequate care group were more likely to believe that prenatal care was not "very necessary" (27.0 percent) than those women in the adequate care group (9.6 percent).

On one hand, the inadequate care group had more Medicaid participants (55.4 percent) and food stamp participants (41.0 percent) than the adequate care group (Medicaid, 40.3 percent; food stamps, 33.1 percent). On the other hand, the adequate care group had a higher rate of participation in WIC, the Supplemental Food Program for Women, Infants and Children, (74.9 percent) than the inadequate care group (65.6 percent). The inadequate care group had higher rates of women with no previous source of health care (60.2 percent) than the adequate care group (50.6 percent) but had lower rates of women who worked outside the home (35.8 percent) than the adequate care group (47.2 percent). These criteria can be considered both direct and proxy variables for poverty, which emerged as a major factor in differentiating between the two groups.

Wantedness of pregnancy has been described by others (4, 6) as a factor that differentiated between adequate and inadequate prenatal care. This variable was examined in this study by a series of questions illustrated in table 2. When questioned as to how they felt when they found out they were pregnant, more than half (54.2 percent) of those with adequate care said that they were happy, while only 32.1 percent of those who received inadequate care said they were happy. The other categories (those who felt somewhat happy through unhappy) were higher in the inadequate care group than the adequate care group. The inadequate care group had much higher rates of women who did not want to be pregnant, did not want others to know of the pregnancy, or considered adoption or abortion than the adequate care group. Women with unplanned pregnancies were more than twice as likely to have had inadequate care, and women who did not know they were pregnant were 7.6 times as likely to have had inadequate prenatal care.

Table 3 illustrates other problems commonly thought to affect prenatal care. The inadequate group reported more problems with transportation, child care problems, and financial problems affecting their ability to pay for care or find prenatal care providers than the adequate care group. They also reported longer waiting periods to get an appointment and longer waits to see

Table 3. Percent distribution of adequate and inadequate prenatal care populations and inadequate prenatal care odd ratios for selected problems, Missouri 1987–88

Variable	Adequate prenatal care group (N = 720)	Inadequate prenatal care group (N = 764)	Odds ratio (crude)	95 percent confidence interval
Transportation problems	19.7	31.8	1.90	1.50–2.41
Child care problems	5.0	10.2	2.16	1.44–3.25
Too many other problems to go for care	7.8	18.7	2.73	1.97–3.79
Just didn't feel like going sometimes	17.5	22.0	1.33	1.03–1.72
Afraid of medical procedures, physicians	3.2	5.8	1.85	1.12–3.10
Couldn't get an appointment sooner	2.8	6.4	2.40	1.41–4.08
Over 1 hour wait to see physician	25.1	30.6	1.32	1.04–1.66
Couldn't see what I gained from care	1.0	3.4	3.59	1.55–8.32
Financial problems regarding care:				
Didn't have enough money for care	43.9	50.6	1.31	1.07–1.61
No insurance until later in pregnancy	11.5	15.7	1.43	1.06–1.93
Didn't know where to go for low-cost care	8.1	14.9	2.00	1.43–2.80
Couldn't find physician who accepted Medicaid	0.4	2.4	5.77	1.69–19.66
Turned away because couldn't make payment up front	1.2	4.8	4.02	1.93–8.39
They hassled me about money	0.8	2.4	2.87	1.13–7.28
Stressful events during pregnancy:				
Money problems (general)	44.9	50.8	1.27	1.03–1.56
Victim of crime	0.6	2.2	4.07	1.36–12.16
Unable to get needed services	2.6	6.4	2.53	1.48–4.34
Marriage	7.4	4.8	0.64	0.42–0.99
Experienced "a lot" of stress during pregnancy	29.0	38.6	1.54	1.24–1.91
Help, support from baby's father:				
Excellent, good	70.6	58.6	0.59	0.48–0.74
Fair, poor, no support	29.4	41.5	...	...
Help, support from others:				
Excellent, good	84.4	75.2	0.56	0.44–0.73
Fair, poor, no support	15.5	24.8	...	...
Total <sup>1</sup>	100.0	100.0	...	...

<sup>1</sup>Includes unknowns.

NOTE: See definition of inadequate prenatal care in Methods section of text.

the physician. Women from the inadequate care group were almost three times as likely (18.7 percent) to report having too many other problems to go for care than those in the adequate group (7.8 percent). A sizable number of women from both the adequate care group (17.5 percent) and the inadequate care group (22.0 percent) reported that they just did not feel like going sometimes.

Of stressful life events surveyed, only three emerged individually as differentiating between women who got adequate and inadequate prenatal care. The inadequate prenatal care group reported more general money problems, being the victim of a crime, and inability to get needed social services than the adequate care group. In addition, the adequate care group had more women who got married during the pregnancy than the inadequate care group. The inadequate care group reported that they experienced "a lot" of stress during pregnancy more often (38.6 percent) than the adequate care group (29.0 percent). Table 3 also reveals the mediating influence of social support on prenatal care utilization, as women in the adequate care group had higher rates of social support than those in the inadequate care group. Information on the variables in tables 1–3 shows substantial differences between the adequate and inadequate prenatal care groups.

Among the factors that were examined but which were not strongly related to the adequacy of care were satisfaction with care, length of wait to get an appointment, stressful life events pertaining to living conditions, problems with partner or family, problems with a job, and death or illness of family members or close friends. Prenatal care during the previous pregnancy did not demonstrate an association with adequacy of care for this pregnancy. Neither did concern about the baby's health, about the woman's health, nor about factors such as school enrollment or problems with the Medicaid application process.

A total of 15 variables, plus five interaction terms, were included in the multivariate analysis. Table 4 illustrates the inadequate prenatal care odds ratios for those variables that substantially differentiated between the two groups after controlling for all other variables in the model. Women who said they did not know they were pregnant initially were nine times as likely to have had inadequate prenatal care. Women who were Medicaid-eligible were 1.93 times more likely to have had inadequate rather than adequate care; those who had had three or more previous pregnancies were 1.70 times more likely; those who had not finished high school were 1.49 times more likely. Women who said they had too many other problems to go for care were

twice as likely to have had inadequate prenatal care. Transportation problems, financial problems regarding care, and unwanted pregnancy were also predictors of inadequate prenatal care. Women who were on Medicaid and were unable to find a physician, who were the victims of a crime, or who could not get an appointment sooner were more likely to have had inadequate prenatal care, although the number of women receiving inadequate prenatal care in these categories was small (range 17–49). Race and marital status were not predictors of inadequate prenatal care in the multivariate analysis.

### Comment

Unlike follow-back surveys, which have been used to study barriers to prenatal care, data for this study were collected in face-to-face interviews with women in the immediate postpartum period. There were several advantages to this methodology. We had targeted a specific population of women who were at risk of receiving inadequate prenatal care and interviewed women in hospitals with the highest rates of inadequate prenatal care. Virtually none refused to be interviewed. The exclusion of interviews with most mothers of babies born weighing less than 1,500 grams, in intensive care, or who relinquished the infants may have introduced a bias in the findings. However, these situations represented less than 2 percent of the sample, and it is unlikely that they had a large effect. In studies where mailed questionnaires are used, there is concern that those people who may be at highest risk for inadequate prenatal care may not return the questionnaire. Literacy, which may be a problem in low socioeconomic groups, was not a factor, and because interviewers administered the questionnaire, there was opportunity for clarification of questions. Training of interviewers decreased bias, and because all women were interviewed in the immediate postpartum period, recall bias was the same for all participants.

Although there were some important advantages, there were also several limitations of the study. It had been hoped that interviewers would be able to compare the mothers' reported use of prenatal care services with the medical records. In most of the large, public, urban hospitals this was not possible because the prenatal care charts were not attached to the hospital charts, particularly if the women had attended nonhospital clinics. In southeast Missouri, where prenatal care charts were attached to the hospital chart, it was possible to document prenatal visits up to the time when the prenatal records were sent to the hospitals. Unfortunately, this forwarding of records was sometimes done 1 to 2 months prior to delivery, and attempts to contact the physician's office to update the prenatal records were

Table 4. Inadequate prenatal care odds ratios after controlling for other variables,<sup>1</sup> Missouri 1987–88

Variable	Number of women with inadequate care	Adjusted odds ratio	95 percent confidence interval
Didn't know she was pregnant.....	148	9.28	8.73–9.83
Couldn't find a physician who took Medicaid.....	28	4.46	3.36–5.56
Victim of crime.....	17	3.82	2.26–4.98
Couldn't see what gained from care.....	26	2.93	2.03–3.83
Couldn't get an appointment sooner.....	49	2.51	1.93–3.09
Too many other problems to go for care.....	161	2.01	1.66–2.36
Medicaid participant.....	423	1.93	1.59–2.27
Unable to get needed services.....	49	1.70	1.10–2.30
Three or more previous pregnancies.....	199	1.70	1.42–1.98
No money to pay for care or put "up front".....	417	1.51	1.27–1.75
Less than high school education.....	410	1.49	1.26–1.72
Transportation problems.....	243	1.43	1.16–1.70
Unwanted pregnancy.....	563	1.39	1.11–1.67
Total.....	764	...	...

<sup>1</sup>Race and marital status did not strongly differentiate the two care groups. Interaction terms included were marital status by race, marital status by Medicaid status, race by Medicaid status, marital status by how felt when learned of pregnancy, and not knowing of pregnancy by not wanting others to know of the pregnancy. Other interaction terms were tested but did not strongly contribute to the model.

NOTE: See definition of inadequate prenatal care in Methods section of text.

not always made. In the two largest urban hospitals where rates of inadequate prenatal care were 50 percent, the interviewer consulted with all eligible postpartum patients, usually without knowing if they had received adequate or inadequate prenatal care. However, in cases where charts were available for review before the interview, the interviewers knew which women received adequate prenatal care, which may have influenced the tenor of the interviews.

Because the number of prenatal care visits and the point of entry into prenatal care were obtained mostly from the women being interviewed, there is some concern about possible misclassification of inadequate prenatal care. There was a 23 percent disagreement in categorizing adequacy of care between the survey and the birth certificate data. When only those that agreed were used, the odds ratios were generally larger than those shown in tables 1–4. Therefore, the possible misclassification of adequacy of prenatal care may have obscured differences between the two groups. In tables 1–4, only survey data were used to define adequacy of prenatal care.

**Medicaid.** At the time most of the study was conducted, Medicaid-eligibility was at 37 percent of the

Federal poverty line. During the last 6 months of data collection in southeast Missouri, Medicaid-eligibility was increased in Missouri to include women who were below 100 percent of the Federal poverty line. Of the 157 women who were interviewed after Medicaid expansion occurred, 35 (22.3 percent) were on Medicaid before their pregnancy, 71 (45.3 percent) enrolled during their pregnancy, and 51 (32.5 percent) did not participate in Medicaid. It is not known how many of the 71 women who enrolled during their pregnancy would have been eligible for Medicaid before it was expanded.

Medicaid-eligibility emerged in both the bivariate and multivariate analyses as a risk factor that differentiated between adequate and inadequate care groups. It has been suggested that the time-consuming Medicaid enrollment may contribute to late entry into prenatal care, and that few studies that analyzed use of prenatal care by insurance coverage controlled for the changing eligibility status of women over the course of a pregnancy (4). Problems with the Medicaid process did not demonstrate an association with the adequacy of prenatal care in this study. Our data reveal that even those women who said that they were Medicaid-eligible before the index pregnancy were more likely to have received inadequate prenatal care (odds ratio: 1.82, 95 percent confidence interval, 1.44–2.31). This finding is consistent with the findings from other statewide prenatal care surveys (4), suggesting that one of the main barriers to adequate prenatal care may be poverty. Medicaid-eligibility by itself will not guarantee adequate prenatal care, and efforts to expand Medicaid-eligibility must address other issues related to poverty, such as education, health care values, social services, housing, crime, transportation, and the myriad of other problems that contribute to the stresses faced by poor women in our society.

In this study, Medicaid-eligible women received inadequate prenatal care for two reasons—because of late entry into care and less than the index number of visits. Late entry into care suggests the need for presumptive eligibility, while inadequate number of visits suggest problems associated with other factors. Presumptive eligibility did not become effective in Missouri until August 1990. Other researchers (4, 7) discuss the importance of comprehensive, well-coordinated services—including social and emotional support, information, advice and caring—for populations at greatest risk of inadequate prenatal care. The additional support and educational services offered by WIC may have fostered higher rates of adequate prenatal care.

**Wantedness of pregnancy.** The answers to the questions about wantedness of pregnancy must be distinguished from the mother's feelings about the

wantedness of her newborn baby. The answer to a direct question about an unwanted pregnancy is described as being subject to variation depending on the circumstances under which the question is asked (8). The women were never asked if their pregnancies were wanted or not. Instead, they were asked how they felt when they first found out that they were pregnant. They were asked, also, to respond to a variety of statements regarding how they initially felt about the pregnancy. Even though the mothers had resolved their initial feelings about their pregnancies and were generally happy with their babies, they were extremely forthright and open about their feelings when they first discovered that they were pregnant. There may have been some recall bias, however, regarding the answers to these questions.

In this survey, a huge proportion (78.6 percent) of all pregnancies were unplanned. The study population consisted of predominantly low socioeconomic status women with low educational attainment. These women, who often perceive that they have little control over their lives or options for their future, may not utilize family planning services effectively because they view pregnancy as an inevitable event. Unplanned pregnancies must be addressed within the context of women living in poverty and the options available to them.

According to the findings, whether or not a woman intends to get pregnant and how she feels about the pregnancy appear to be central elements in the obtaining of prenatal care. Unplanned and unwanted pregnancies are clearly a barrier to obtaining early and adequate prenatal care. Because of the association between inadequate prenatal care and low birth weight, unwanted pregnancy can be considered as a precursor of infant mortality. Programs designed to lower the rates of low birth weight and infant mortality should not ignore the preconceptional period. Comprehensive preconceptional health education, including family planning, should be provided to help women avoid unintended pregnancies and understand the importance of prenatal care when they do become pregnant. Coordination among sectors of the health care system, especially family planning and prenatal care services, is essential. Information about the pregnancy testing and prenatal care services should be widely available in the community, and these two services should be strongly linked.

In summary, the barriers to prenatal care that we identified were not surprising and corroborate findings of similar studies from other States (4). We should do what we can to make pregnancy a wanted, rather than an inevitable, event. Even family planning services may not be utilized effectively if women do not perceive that they have control over their lives and options for their future. Health education campaigns can educate women about the signs and symptoms of early pregnancy, as

well as about the importance of prenatal care. While transportation and child care problems can be addressed by clinics within the existing system, issues pertaining to poverty must be addressed by society as a whole to improve the rate of adequate prenatal care utilization.

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## Trends in Rates of Live Births and Abortions Following State Restrictions on Public Funding of Abortion

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## Synopsis .....

*Abortion rates rose following the expanded legalization of abortion by the Supreme Court decision in Roe v. Wade. As a result, the impact of the restriction on Federal funding of abortions under the Hyde Amendment in 1977 was not clear. However, abortion rates*

*had plateaued by 1985, when State funding of Medicaid abortions was restricted in Colorado, North Carolina, and Pennsylvania. Analysis of statewide data from the three States indicated that following restrictions on State funding of abortions, the proportion of reported pregnancies resulting in births, rather than in abortions, increased in all three States.*

*In 1985, the first year of State restrictions on the use of public funds for abortion, Colorado, North Carolina, and Pennsylvania recorded 1.9 to 2.4 percent increases in the proportion of reported pregnancies resulting in live births, after years of declining rates. With adjustments for underreporting of abortion, there was an overall 1.2 percent rise in the proportion of pregnancies resulting in live births in those States. Nationally the proportion rose only 0.4 percent. By 1987, the three States had experienced increases above 1984 levels of 1.6 to 5.9 percent in the proportion of reported pregnancies resulting in live births.*

*The experiences of the three States can be used in projecting an expected increase in the proportions of reported pregnancies resulting in live births, rather than in abortions, for similar States. A projection for California, for example, showed that an increase could be expected in the first year of restrictions on the use of public funds for abortion of at least 4,000 births, which could be expected largely to affect women of low income.*

**T**HE U.S. SUPREME COURT RULING in the case of *Webster v. Reproductive Health Services* in 1989 opened the door to new State restrictions on abortions performed in public facilities or with public funds. Although increased restrictions are likely in many

States, the probable impact of such legislation on both abortions and births, with its implications for women of low income, is not well understood.

Examining the effects of that part of the original Hyde Amendment to the annual appropriations bill that