MMWR Weekly
April 04, 1997 / 46(13);283-286

4075

Pregnancy-Related Behaviors Among Migrant Farm Workers -- Four States, 1989-1993

The U.S. workforce includes an estimated 3-5 million migrant and seasonal farm workers (1,2); approximately 16% of migrant farm workers are women (R. Mines, U.S. Department of Labor, personal communication, 1997). Early enrollment in prenatal care and proper weight gain during pregnancy can reduce the risk for poor birth outcomes (1-4). To characterize pregnancy-related behaviors and outcomes among migrant farm workers, CDC analyzed data for 1989-1993 on prenatal-care use, weight gain during pregnancy, and birth outcomes among migrant farm workers enrolled in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) in four states participating in CDC's Pregnancy Nutrition Surveillance System (PNSS). This report presents the results of that analysis, which indicate that the goals of the national health objectives for the year 2000 for pregnant migrant women enrolled in WIC have not been met.

The PNSS collects prenatal and postpartum information about women and their infants who are enrolled in publicly funded health, nutrition, and food-assistance programs. For this report, PNSS data from four states were compared for two groups of pregnant women enrolled in WIC programs: women who were classified as migrants (n=4840) and those who were not (n=610,728). A migrant farm worker was defined as a person whose primary employment is in agriculture on a seasonal basis, who has been employed within the previous 24 months, and who establishes, for the purposes of such employment, a temporary abode in the United States (5).

Overall, migrants were more likely than nonmigrants to be of Hispanic origin, younger, and married and were less likely to have attained a high school education (Table_1). By the first trimester of pregnancy, approximately 60% of both groups were enrolled in prenatal care; migrant women were more likely than nonmigrant women to have initiated this care during the third trimester (8% versus 5%, respectively). The proportion of women who gained less than the Institute of Medicine's recommended weight for their body mass index was higher among migrant women (52%) than nonmigrant women (32%) (3). Mean weight gain was lower for migrants (22.9 lbs; 95% confidence interval {CI}=22.6 lbs-23.4 lbs) than for nonmigrants (29.7 lbs; 95% CI=29.7 lbs-29.8 lbs). Among the two groups, prevalences were similar for low birthweight (LBW) (less than 2500 g {less than 5 lbs, 8 oz}) infants, very low birthweight (less than 1500 g {less than 3 lbs, 4 oz}) infants, preterm births (less than 37 weeks' gestation), and small-for-gestational-age infants (6). Mean birthweight for infants born to migrants (3310.7 g; 95% CI=3295.2 g-3326.1 g) was slightly higher than that for those born to nonmigrants (3293.7 g; 95% CI=3292.2 g-3295.1 g).

Reported by: Maternal and Child Health Br, Div of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note

Editorial Note: The findings in this report underscore the need for delivery of timely prenatal care and other health services to migrant farm workers and/or their families. One element of the Migrant and Seasonal Farm Workers Health Objectives for the Year 2000 is that at least 90% of pregnant migrant women be enrolled in prenatal-care services by the first trimester (1). The findings in this report suggest that, to meet this goal among WIC enrollees,

timely enrollment rates would have to increase by 50% over the observed level. In addition, the proportion of women in the study who gained the recommended amount of weight during pregnancy would have to nearly double to meet the year 2000 goal of 85%.

Improvements in pregnancy-related care may reduce the prevalence of LBW (3); among migrant women in this study, the prevalence was higher than the year 2000 goal (6.7% versus 5.0%). In comparison, the Healthy People 2000 review for 1995-96 indicated prevalences in the total U.S. population of first-trimester prenatal care of 80.2%, gaining the recommended weight during pregnancy of 75.0%, and LBW of 7.3% (7).

Although prenatal-care rates and birth outcomes were similar among both groups in this study, migrant women were less likely to have gained the recommended weight during pregnancy. This difference may have resulted from the high prevalence of insufficient weight gain reported among migrants in one of the four states. When data from that state were excluded from the analysis, the rates between the two groups of women were similar.

The findings in this report are subject to at least two limitations. First, the data probably do not represent the total migrant worker population: most of the women for whom data were available worked seasonally in the eastern states, and data were not available for migrant workers in the western states (8). Second, these findings are applicable only to migrant women enrolled in WIC programs because data for migrants not enrolled in WIC programs in these states were not available; birth outcomes are better among WIC participants than among low-income women who do not participate in WIC (9).

The findings in this report suggest that the pregnancy outcomes of migrant farm workers and other low-income women enrolled in WIC programs in the four states were similar. However, none of the states included in this analysis achieved the national health objective for the year 2000 of reducing LBW incidence to 5% (objective 14.5). Additional efforts are needed to meet the year 2000 goals to improve the birth outcomes and pregnancy-related behaviors of low-income women, especially migrant women, because of several barriers, including poor access to services, frequent relocations, occupational exposure to agricultural chemicals, lack of continuity of care, language and cultural barriers, and lack of transportation (2,8,10).

References

1. National Migrant Resource Program, Inc. Migrant and seasonal farm worker health objectives for the year 2000. Austin, Texas: US Department of Health and Human Services, Health Resources and Services Administration, Bureau of Primary Health Care, 1990.

2. National Advisory Council on Migrant Health. Losing ground, the condition of farm workers in America: recommendations of the National Advisory Council on Migrant Health. Bethesda, Maryland: US Department of Health and Human Services, Health Resources and Services Administration, Bureau of Primary Health Care, Migrant Health Branch, 1995.

3. Institute of Medicine. National Academy of Sciences: nutrition during pregnancy. Washington, DC: National Academy Press, 1990.

4. Public Health Service. Healthy people 2000: national health promotion and disease prevention objectives -- full report, with commentary. Washington, DC: US Department of Health and Human Services, Public Health Service, 1990; DHHS publication no. (PHS)91-50212.

5. US Department of Agriculture. Special Supplemental Food Program for Women, Infants, and Children (WIC): consolidation of WIC regulations. Federal Register 1990;246:4.

6. Yip R, McLaren N. Optimal birthweight distribution at specific gestational age of the United States infants: the CDC intrauterine growth standard. Atlanta, Georgia: US Department of Health and Human Services,

Public Health Service, CDC, 1992.

7. Public Health Service. Healthy people 2000 review, 1995-96. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, CDC, 1996.

8. Trotter RT. Orientation to multicultural health care in migrant health programs. Austin, Texas: National Migrant Resource Programs, Inc., 1988.

9. Abrams B. Preventing low birthweight: does WIC work? A review of evaluations of the Special Supplemental Food Program for Women, Infants, and Children. Ann N Y Acad Sci 1993;678:307-16.

10. Watkins E, Larson K, Harlan C, Young S. A model program for providing health services for migrant farmworker mothers and children. Public Health Rep 1990;105:567-75.

Table_1

Note: To print large tables and graphs users may have to change their printer settings to landscape and use a small font size.

Selected characteristics of migrant and nonmigrant pregnant women -- four states, Pregnancy Nutrition Surveillance System, 1989-1993

	Migrant (n=4840)			Nonmigrant (n=610,728)		
Characteristic	No. *	(%)	(95% CI +)	No.	(%)	(95% CI)
Age group (yrs) &						
15-19	1253	(26.1)	(23.6%-28.5%)	142,067	(23.5)	(23.3%-23.7%)
20-24	1758	(36.6)	(33.9%-39.3%)	207,861	(34.3)	(34.1%-34.5%)
25-29	1039	(21.7)	(19.7%-24.3%)	144,048	(23.8)	(23.6%-24.0%)
30-34	503	(10.5)	(8.7%-12.1%)	78,106	(12.9)	(12.7%-13.1%)
35-39	209	(4.4)	(3.2%- 5.5%)	28,476	(4.7)	(4.5%- 4.8%)
40-49	38	(0.8)	(0.3%- 0.8%)	5,090	(0.8)	(0.8%- 0.8%)
Marital Status &						
Married	2132	(52.5)	(49.5%-55.5%)	193,269	(43.0)	(42.7%-43.3%)
Not married	1932	(47.5)	(44.5%-50.5%)	255,980	(57.0)	(56.6%-57.2%)
Education (yrs) &						
>=12	1341	(33.5)	(30.6%-36.4%)	269,627	(60.1)	(59.8%-60.4%)
<12	2666	(66.5)	(63.7%-69.4%)	179,276	(39.9)	(39.6%-40.2%)
Race/Ethnicity &						
Hispanic	2827	(58.4)	(54.8%-61.9%)	122,231	(20.0)	(19.5%-30.4%)
White, non-Hispanic	1389	(28.7)	(26.2%-31.2%)	280,227	(45.9)	(45.6%-46.1%)
Black, non-Hispanic	535	(11.1)	(9.3%-12.8%)	189,387	(31.0)	(30.8%-31.2%)
Other	89	(1.8)	(1.1%- 2.6%)	18,883	(3.1)	(3.0%- 3.2%)
Recommended weight gain during pregnancy & @						
Less than recommended	1835	(52.0)	(48.7%-55.2%)	115,363	(31.6)	(31.1%-31.9%)
Amount recommended	843	(23.9)	(21.1%-26.7%)	117,771	(32.3)	(32.0%-32.6%)
Greater than recommended	851	(24.1)	(21.3%-26.9%)	131,683	(36.1)	(35.8%-36.4%)
Prenatal-care initiation & (mos)						
1-3	2533	(61.8)	(58.8%-64.7%)	331,436	(64.4)	(64.1%-64.7%)
4-6	1206	(29.4)	(26.7%-32.1%)	150,240	(29.2)	(28.9%-29.4%)
7-9	344	(8.2)	(6.6%- 9.8%)	27,885	(5.4)	(5.3%- 5.5%)
No care	14	(0.3)	(<0.1%- 0.7%)	5,387	(1.1)	(1.0%- 1.2%)
Birth outcomes						
Low birthweight & (<2500 g{<5 lbs, 8 oz})	322	(6.7)	(5.3%- 8.1%)	45,193	(7.4)	(7.3%- 7.5%)
Very low birthweight (<1500 g{<3 lbs, 4 oz})	35	(0.7)	(0.3%- 1.2%)	5,961	(1.0)	(0.9%- 1.0%)
Preterm births (<37 wks)	481	(9.9)	(8.9%-11.5%)	60,149	(9.9)	(9.7%-10.0%)
Small for gestational age **	234	(6.5)	(4.9%- 8.1%)	29,495	(6.1)	(5.9%- 6.2%)

* Because of missing data, numbers may not equal sample size.
† Confidence interval.
& Differences are statistically different at p<0.05.
@ Based on the Institute of Medicine, National Academy of Science Report on Nutrition During Pregnancy.
** Creation of this variable involved multiple variables, and missing volumes on these variables resulted in a smaller overall sample size (n=3852 for migrants, and n=483,598 for nonmigrants) for analysis.

Return to top.

Print Help

***MMWR* Home | *MMWR* Search | Help | Contact Us**

CDC Home | Search | Health Topics A-Z

This page last reviewed 5/2/01

Centers for Disease Control and Prevention
Morbidity and Mortality Weekly Report