Assuring all infants a healthy start in life and enhancing the health of their mothers should be a top priority in the 1990s to ensure the future of America's children. However, progress in reducing infant mortality is slowing, maternal mortality among black and non-white mothers is increasing in some areas, and low birth weight may be on the rise. Not enough women receive early prenatal care, which raises great concerns about the health care of America's future generations.

Substance abuse is an increasingly common problem in our urban areas. In Detroit's Hutzel Hospital, which has about 8,000 deliveries per year, 42% of newborns test positive for cocaine. Women who lack health insurance often do not take care of themselves before they become pregnant. Many chronic diseases are undetected before pregnancy, as may often be the case for sexually transmitted diseases. These factors contribute much to the high infant mortality rate.

Threats to Infant Health

The principal threats to infant health are related to low birth weight and birth defects. Both can lead to infant death or lifelong disability. The rate of infant mortality continues to be unacceptable; Michigan ranks in the top ten nationally, the United States ranks 18th among industrialized nations, and in some areas of Detroit, where unemployment is three times the national average, the infant mortality rate is three times the national average.

Lack of health insurance follows unemployment and impedes access to health care. Many workers who formerly depended on industrial jobs find themselves unemployed and without health insurance and health care. Minority groups and adolescents are especially affected by a lack of health care. The infant mortality rate for blacks is two and a half times the national average, and in the last decade, the gap between black and white infant deaths has widened. The disparity in the rates may be attributed to minority women's lack of access to and underutilization of obstetrical care.

The lack of prenatal care is a major factor in poor obstetrical outcome. Unfortunately, the number of infants born to women who receive inadequate prenatal care has increased. In the last decade, 1989 was the sixth consecutive year that this key indicator either has failed to improve or has worsened.

Infant mortality is associated with a number of different factors. Unplanned pregnancy, so common in the adolescent age group, also occurs in the adult group in which an estimated 60% of pregnancies are unplanned. When pregnancies are unplanned, necessary steps toward providing for that pregnancy, such as health insurance, are often neglected, and these women often come late to the health care system as well.

Prenatal Care

Adolescents have special problems. One-third of this group do not receive prenatal care within the first trimester and another one-third actually go through the entire pregnancy with inadequate or no prenatal care. The younger the patient, the less likely she is to get prenatal care, and low birth weight is directly related to the prenatal care these young patients receive. Teenagers have a twofold increase in the number of infants born with low birth weight (1). Minority women, black and Hispanic, are nearly twice more likely to receive inadequate care as white women. Although the younger the patient, the less likely she is to enter a health care system, pregnant women over age 40, particularly the undereducated, are also less likely to get prenatal care. Single women are twice as likely as married women to go through pregnancy without adequate care. A survey by the American College of Obstetricians and Gynecologists (ACOG) (2) indicates that 20% of unmarried women, 16% of women under age 20, 15% of women with less than a high school education, and about 14% of minority women go through pregnancy with inadequate prenatal care.

What is the content of prenatal care which makes it so important? Prenatal care allows the identification of certain infections which could lead either to birth defects or an adverse pregnancy outcome such as preterm delivery. Gonorrhea and chlamydia, which are associated with preterm delivery, are increasingly prevalent in this country, primarily among those who receive in-
adequate prenatal care. Prenatal care also allows the detection of conditions which can have a pronounced effect on the outcome of pregnancy. A prenatal care program will detect hypertension and diabetes which otherwise may remain undetected. Dating the pregnancy is important because of the association of either early or late delivery with increased fetal morbidity and mortality. Surprisingly, many young women do not know the dates of their last menstrual period. Prenatal examinations help to establish the expected date of delivery.

The health care system is inadequate to meet demands of the population. The actual number of obstetrical beds is not sufficient to deliver the number of babies born, and there are not enough clinics available to meet the care demands of the patients. Waiting lists are between six and eight weeks for most obstetrical clinics in the city of Detroit.

Prenatal education is paramount. We can educate the mother so that she will do well not only during her pregnancy but also after the baby is born. Early parenting education reduces emergency room visits and prevents many accidents, fetal suffocations, and even some sudden infant deaths.

One objective of prenatal care is to identify substances that can cause birth defects. Even if we cannot eliminate the risk factors posed by certain infections, cigarette smoking, and substance abuse, we can anticipate and prepare for the possible outcome.

A major challenge is preventing preterm delivery which accounts for about 10% of all births and 75% of perinatal deaths. Of infants who survive, 50% have neurologic deficits requiring lifelong social and financial commitment. Risk factors for preterm delivery include heavy physical work, long and tiring trips, and cigarette smoking. Women primarily at risk are those of low socioeconomic status, those who reside in the inner cities or distant rural communities, those younger than age 20, and also the older mother who becomes pregnant later in life. A common problem in the postdated pregnancies, perhaps just a phenomenon of aging, is that the fetus will pass meconium which can enter the lungs. When such babies are born they must immediately enter the neonatal intensive care unit (NICU) at a cost of about $15,000 per day (3).

Women who have had no prenatal care sometimes cannot date their pregnancy. In such cases, the baby is sent directly to the NICU after birth. Providing good care and documentation of pregnancy and preventing preterm and postterm delivery sends fewer babies to the NICU and reduces infant mortality as well as our overall health care cost.

Medical Liabilities

The belief that every pregnancy should have a perfect outcome has raised the expectations of the whole population as well as the incomes of many attorneys. As a result, the medical liability costs in the area of obstetrics have increased dramatically. Many states report that as many as 30% of their obstetricians no longer deliver babies, that fewer than 10% of the obstetricians accept high-risk patients, and that health care costs along with the liability costs have skyrocketed. At the University of Michigan, in a recent class of nearly 200 medical students, only five will enter obstetrics. Fear of malpractice liability is the major reason why they do not enter this field of medicine.

About 10% of hospitals in Michigan are closing their obstetrical units because of the liability problem (4). This deplorable situation adds to the difficulty of obtaining prenatal and obstetrical care in the urban area. Of the number of doctors who completed their obstetrics residency when I did, only one still practices in the city of Detroit. The others have either left the state entirely or have moved out of Wayne County because of the threat of medical liability.

Obviously, there are severe financial barriers to obtaining prenatal and obstetrical care in the urban setting. Patients who have Medicaid actually have a little easier access than do those who are without health insurance, but many physicians and clinics will not care for patients with Medicaid because of the low level of reimbursement. Furthermore, the health care system is inadequate to meet the demands of the population. The actual number of obstetrical beds is not sufficient to deliver the number of babies born, and there are not enough clinics available to meet the care demands of the patients (5). Waiting lists are between six and eight weeks for most obstetrical clinics in the city of Detroit. If a woman is already three months along when she first realizes that she is pregnant and then must wait two more months for an initial evaluation, she will be in her fifth or sixth month of pregnancy by the time of her first examination, provided that the clinic will ever accept her.

The coordination of services is often inadequate. Patients receiving public assistance must have a letter from a physician stating the expected delivery date and then must return to the public health worker to validate insurance for subsequent obstetrical appointments. If physicians see patients who are later determined to be ineligible for care, they receive no compensation for the time already invested. These types of problems discourage doctors from becoming involved in the Medicaid system.

Other Problems

There are also cultural and personal barriers to accessing the health care system (6). Some people are afraid of hospitals. One study found that 15% of all women experienced difficulties in simply finding a doctor (5). Such women have no prenatal care. Another 17% experienced difficulty in getting appointments because there just aren't enough doctors. Another 26% were not aware that they were pregnant, which is not particularly unusual among adolescents and older women who believe they are simply skipping periods. Another 12% believed their prenatal care was unimportant.

In 1989 the state of Michigan performed a survey of access to medical care (4). Of the women surveyed, 83% obtained care without difficulty. However, the medically uninsured women
were 3.5 times more likely to have difficulty getting prenatal care. As stated previously, the number of hospital facilities that deliver babies has decreased by 10% since 1986, and one-third of these hospitals closed because of a lack of doctors to deliver babies, a result of the medical malpractice aberration.

There are other reasons why women do not receive prenatal care. Public transportation is not always comfortable or convenient. Too long of a wait at the doctor's office is often a complaint of working women. Child care is a need for many women, and others may not be able to leave work for medical appointments. Some people complain of having to see different doctors.

The ACOG surveyed complaints of physicians who actually did participate in Medicaid (2). Low reimbursement was a major factor in discouraging care of Medicaid patients. Slow payment, the eventual denial of eligibility, and the concern that they would be sued for malpractice were almost equally important. For a physician, a single lawsuit can terminate his practice and destroy his entire livelihood. These very real concerns of the physician have had their effect upon the health care community. Specialists and family practitioners no longer practice obstetrics, and medical students no longer elect obstetrical training. Yet we have increasing demand for services. The system is already stressed to the point that it's inadequate to meet its needs.

These problems seriously impact the care of pregnant adolescents. In an effort to meet their needs, Henry Ford Hospital established a study program in the early 1980s which involves a doctor/nurse team and utilizes social workers to address the problems of pregnancy in adolescence. Most of the patients in this study were 16 years old or younger when they delivered. Of the 20,000 deliveries annually in Detroit, 23% are to teenagers (7). In the area surrounding Henry Ford Hospital, 35% of the deliveries are to unmarried teenagers. Detroit is not unlike other urban areas throughout our country. We're now delivering the babies of those babies born to teenage mothers in the 1970s. We didn’t address the problems adequately then, and now we’re trying to catch up. What will happen in the year 2000 if we fail to solve the growing problem of teenage pregnancy?

About 150 babies are born annually to mothers under the age of 15. This is the group that we especially target in our program—the very young adolescent patient.

A pregnant teenager has a tremendous effect upon the family, whether it’s black or white or suburban or urban. The teenagers may get kicked out of the house; they may be denied help from health insurance; the parents as well as the involved teenagers experience a denial process; the father may leave home, blaming the mother; the mother may leave home, blaming the father. The pregnant teenager also has a number of unique problems. First, she’s at greater risk for pregnancy-induced hypertension and has up to three times the risk for toxemia. Toxemia leads to preterm deliveries, sometimes infant death, and occasionally maternal death. Second, 75% of pregnant teenagers are anemic because of poor diet. As adolescents, they have an increased iron demand and often enter the pregnancy already deficient in some nutrients. Preterm labor carries a two to three times greater risk of a baby born of low birth weight with increased infant mortality and neurologic deficits.

Some of these teenagers may appear proud and happy to be pregnant, but most are very sad and often shy about revealing their pregnancies. They usually blame themselves and hide their pregnancy as long as is possible, especially when they can wear big, bulky sweaters. Not surprisingly, some teenagers do not come to us until they are actually in labor. Most are somewhat afraid, 25% are severely depressed, and some are suicidal. Rich or poor, black or white, they all go through similar emotions.

Among new patients, most of them age 15 years and younger, up to 60% have one or more sexually transmitted diseases that are asymptomatic. These include chlamydia, gonorrhea, trichomonas, and condyloma. One 13-year-old patient had carcinoma in situ of the cervix associated with the condyloma virus. The reported cases of gonorrhea infections (about 35,000 annually in Michigan) are more common than mumps, measles, and rubella combined. In fact, the only infection more common than gonorrhea is the flu.

Over the last ten years, our teenage pregnancy clinic has provided services to over 1,000 adolescents ranging in age from 10 to 17 years. With this group, the incidence of low birth weight babies is about 8%, nearly normal. The hypertension rate is about 8%, also nearly normal. We have one of the lowest cesarean section rates for any group in the hospital, and the neonatal mortality rate is about 6 per 1,000 (the “expected” rate was 40 per 1,000).

Prenatal care is important. For every dollar we spend on prenatal care, at least $4 and as much as $12 can be saved on the cost of neonatal care. We have to help America’s children get off to a healthy start, a healthy walk into life.

References