THE FIRST JESSIE M. BIERMAN ANNUAL LECTURE
IN MATERNAL AND CHILD HEALTH

CURRENT PROBLEMS OF MATERNITY CARE

by

ARTHUR J. LESSER, M.D., M.P.H.

Director, Division of Health Services

delivered May 10, 1963

at the

School of Public Health, University of California, Berkeley

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Welfare Administration • Children's Bureau • 1963

The Jessie M. Bierman Lecture Series has been established by friends, former students and colleagues in recognition of the contribution that Professor Bierman has made to the field of public health.

CURRENT PROBLEMS OF MATERNITY CARE*

by ARTHUR J. LESSER, M.D., M.P.H.

Director, Division of Health Services
Children's Bureau
U. S. Department of Health, Education and Welfare
Washington 25, D. C.

We are here this evening to honor Dr. Jessie Bierman for her notable contributions to health services for mothers and children in the United States and in many foreign countries. She is one of those rare persons who successfully combines skills in pediatrics, maternal and child health administration, teaching and research. Some of these qualities have been demonstrated in the Kauai maternity care studies and in the observations of the growth and development of the children born in Kauai. I single this out of her many contributions because of its pertinence to the increasing nationwide interest in the quality of maternity care and its relationship to child health.

In view of the excellent progress that has been made in this country in increasing life expectancy and reducing infant and maternal mortality, why are we becoming so concerned about problems of maternity care? The substantial achievements that have been made have the effect of reducing the value of infant and maternal mortality rates as indices of progress as we come closer to minimal levels. There is, moreover, much more involved in maternity care than the outcome of survival or death, which is all that mortality rates tell us. It is the kind of maternity care that a large segment of our population is receiving that is of increasing concern. Mortality rates still have value, however, in analyzing this problem and in pointing to some of the areas which are experiencing difficulties.

For the United States as a whole, between 1950 and 1960 infant mortality declined by 11%. However, between 1955 and 1960 it decreased only 1.5%. In 1960, 9 of the 10 largest cities had infant mortality rates that exceeded the national rate of 26.0 (The exception was Los Angeles with a rate of 24.5). In 7 of these 10 cities, there were significant increases in infant mortality between 1950 and 1960, ranging from 5.6% to 26.4%. Their non white rates are considerably higher than the white and are close to the non-white rate of 43.2 for the United States. The rate of reduction of infant mortality was much less for the non-white over the decade, being 2.9% as compared with 14.6% for whites. And in non-

*First Annual Lectureship established in honor of Jessie M. Bierman, M.D., School of Public Health, University of California, Berkeley, Calif., May 10, 1963.

metropolitan counties, i.e., those with centers of population smaller than 50,000, the infant mortality rate in 1960 was also higher than the national rate.

These data point to a concentration of problems of maternal and child health in the larger cities and in the rural counties. This has always been true of the rural areas; what is new is the growing seriousness of the situation in the cities.

The period since the end of the war has seen major shifts in population, with large numbers of people moving from rural areas to industrial cities. The huge increase in housing in suburban areas has resulted chiefly from the movement of middle class families from the cities. The resident population now in our cities is made up increasingly of low-income families with larger proportions of non-white than at any previous time.

With the increase in employment and income generally, and with the various attributes of prosperity, there has been a tendency to overlook the fact that we still have many poor people. In the affluent society, we also have what has been called the invisible poor.

The poor, however, are not invisible to welfare and health departments and to the many voluntary agencies which serve them. According to a CIO-AFL study of 1958 incomes, there were more than 41,000,000 people in the United States, or 24% of the population, in families with incomes less than $3,000 a year. By a lower criterion, if poverty is defined as having an income of $2,500 for a family of four, and proportionally higher for larger families, then 19% of the population, or 32,000,000 people, are poor.[1]

In recent years, there has been a growing concentration of these families in the major cities where they constitute a larger proportion of the population than they do nationally. Such changes and what they mean for public health are illustrated in Table I.

TABLE I

Indices of Population Changes in Baltimore[2]

Public assistance clients	+ 39
Population total	— 1.1
Live births	+ 8.8
White	— 15
Non-white	+ 56
Out-of-wedlock births	+ 41
Well-baby clinics: Infants registered	+ 59
Prenatal clinics: Women registered	+133
Infant mortality rate	+ 19

Other cities are having similar experiences.

During the past decade, the number of people residing in the District of Columbia has remained virtually the same, but the proportion of low-income families in the city has increased. From data on birth certificates, it has been reported that only 40% of the births to women residents in the District of Columbia are attended by physicians as private patients. Among non-white maternity patients, who now account for over two-thirds of the births in Washington, less than 25% were private patients.[3]

In New York City, only 60% of the women, who are residents of the city, giving birth are private patients. Thirty per cent of all infants in New York City receive their health supervision at the health department's well-baby clinics; in one district, it is over 80%.[4]

In Dallas, a recent study revealed that 64% of maternity patients are private patients and 36% make partial or no payment, i.e., are service patients.[5]

About one-third of Chicago's babies in 1961 were born in the low-income census tracts of the city.[6]

In seeking medical care, these low-income families are straining the resources of the communities in which they live. For the most part, they receive outpatient and hospital care in the tax-supported hospitals as the voluntary hospitals increasingly require payment by or in behalf of each patient admitted. The result has been a great overcrowding of many of the tax-supported hospitals, which together with understaffing is leading to conditions which are incompatible with a decent quality of care.

To accommodate such large numbers of maternity patients, they may be discharged from the hospital 24-72 hours after delivery. The crowding in Chicago has reached such proportions that last year the Cook County Hospital delivered almost 20,000 patients and the hospital is reported to be about to lose its accreditation. Such patients in appreciable numbers find it difficult to gain admission to other hospitals in the County, except at Michael Reese. The Cook County Hospital is required by law to accept all eligible patients. A study of the Cook County Welfare Department, done by Greenleigh Associates of New York, revealed that the Michael Reese Hospital periodically closes clinic intake because of the excessive caseload. The Cook County Hospital cannot do this and consequently patients may have to wait all day to be seen and sometimes have to return the next day. In Chicago, the number of health department well-baby clinics has decreased from 98 in 1945 to 49 in 1960. A 26% decrease also took place in well-baby clinics sponsored by the Infant Welfare Society.[7]

Similarly, the great crowding of hospital clinics in New York City recently led the health department into a new role in the provision of

medical care. On November 15, 1962,[8] Mayor Wagner announced the opening of a pediatric treatment clinic at the Bedford Stuyvesant Health Center in Brooklyn, "in order to relieve long lines of mothers waiting with their children" for care at the overcrowded hospitals in the area. The clinic is open daily from 8 a.m. to 8 p.m. for children with acute illnesses and injuries, including fractures. By March, 1963, the clinic had provided care for 7,500 children.

Recently, Dr. John D. Thompson, Professor and Chairman, Department of Obstetrics and Gynecology at Emory University School of Medicine, made this comment about the situation:

> "The failure of large charity hospitals to maintain programs of excellent maternity care is often due to circumstances beyond their control, such as the lack of funds to pay for a non-professional and professional staff sufficient in number and competence, the lack of funds for adequate facilities, and the overwhelming task of providing for the medical needs of an enormous number of indigent patients.
>
> "On the Obstetrical Services of these large charity hospitals, the massiveness of the prenatal clinics is unbelieveable. It is simply not possible to give adequate prenatal care under these circumstances of too many patients; too few doctors, nurses, social workers, etc.; and inadequate facilities. Each patient is seen for only a very few minutes by a doctor. The doctor does not get to know the patient and the patient does not get to know the doctor. Many important aspects of pre-natal care have to be omitted. In a recent study in our hospital, it was found that 23% of all patients delivered came to the hospital first when they were in labor, having had no prenatal care. Only 11% of all delivered patients came for prenatal care in the first trimester of their pregnancy. This is in marked contrast to the experience in private practice. 90-95% of the patients delivered by private obstetricians had had prenatal care beginning in the first trimester. I point to our hospital only as an example of a situation I know to exist in almost all of the large charity hospitals in this country."[9]

Contrast this with the following statement from a symposium on "Medicine and Society" in the March, 1963, issue of *The Annals* of the American Academy of Political and Social Science.

> "In clinical medicine, great and growing emphasis has been put on the importance of 'treating the patient as a person.' A large literature has been produced in the last 30 years on the obligation of the physician to understand the social and psychological background of the patient. The whole field of medical social work represents this humanism in patient care. Medical schools have introduced the

concept of comprehensive medicine, which means simply taking account of the patient's total life situation."

The author goes on to point out that this ideal has certainly not been achieved everywhere in American medicine.

We can agree with this statement as an expression of a concept. To what extent it has been realized, even among private patients, is difficult to say. It is, certainly, not representative of what has been taking place in tax-supported hospitals and public clinics.

It is interesting to me, and perhaps characteristic of the way we do things in the United States, that a proposal for legislation to do something about this problem has been developed, not in direct response to the problems of maternity care, but in relation to the current interest in mental retardation.

The Report of the President's Panel on Mental Retardation,[18] in considering the possibilities of preventing mental retardation, states that "the prevalence of mental retardation is significantly higher in those population groups where maternal care is frequently inadequate" and then calls for the launching of a nationwide program. There follows a discussion of the increased disability in infants that is associated with prematurity. Reference is made to the need for focussing attention upon women with complications of pregnancy, and stress is placed on the necessity of providing good comprehensive maternity care especially for this group. The President's Panel was much concerned by reports of the increase in the number of patients in low-income families who arrive at the hospital in labor having had no or very little prenatal care.

The Expert Committee on Maternal and Child Health of the World Health Organization has emphasized that the association between low birth weight and poor environment is firmly established. The unfavorable conditions usually do not occur singly, but rather the "poorly nourished woman is often the one who gets or seeks little care during her pregnancy, lives in poor circumstances, is badly housed, ignores signs of impending obstetrical difficulties, has had many previous and closely spaced pregnancies, has many family problems, knows little of simple sanitation and hygiene, and is in general ignorant and poorly motivated to care for herself."[10]

This is illustrated by the situations prevalent in several of our cities.

In Philadelphia,[11] in 1961, in a district where only 1% of the maternity patients had had poor or no prenatal care, the prematurity rate was 7.9%. In another district where 36% of the women had had poor or no prenatal care, the prematurity rate was 15.7%. There are about 10,000 women a year who give birth with no or poor prenatal care in this city.

A study done in New York City, in 1957, found that among 70,952 women with adequate prenatal care, the prematurity rate was 7.8%. Among 8,683 women with no prenatal care, the prematurity rate was 20.3%.[12]

In Chicago in 1961, the prematurity rate in the highest income census tracts was 7.5%; in the lowest, it was 14%.[6] Comparable figures in New York are 6.2% and 16.5%.[13]

Because prematurity, as defined by birth weight, occurs more frequently among non-white groups, the possibility of a relationship of this increased frequency to genetic or racial factors is sometimes expressed. Studies of rate of prematurity among Negro private patients do not bear this out. The study of Negro patients in a prepaid group practice medical care plan in New York (Health Insurance Plan) shows that 8.8% had premature infants.[14] While higher than the white rate of 5.5%, it is close to the national average and far below the rates quoted here of women giving birth in unfavorable circumstances.

There are then these associations between income, prenatal care and prematurity, with particularly small prematures under 1,500 grams frequently having brain damage and mental retardation.

It is, therefore, of great concern that such large numbers of women are receiving little or no prenatal care and the proportion seems to be increasing. From various parts of the country we learn that in Atlanta, 23% of women delivered at the Grady Hospital had had no prenatal care;[9] in Dallas, approximately one-third of low-income patients receive no prenatal care;[5] at the Los Angeles County Hospital in 1958, it was 20%;[15] at the D. C. General Hospital in Washington, it is 45%;[3] and in the Bedford Stuyvesant section of Brooklyn, New York, it is 41%[13] with no or little prenatal care.

What are the reasons for this?

One of the best studies of failure to receive prenatal care was done in California by Howard Monahan and Esther Spencer.[16] Another excellent study was done in 1962 by Dr. Frank McPhail as part of the Dallas County Youth Study.[5] These reports cite the following factors which are deterrents to good care:

a. *Transportation*

With a trend toward centralizing care for these patients in fewer facilities, transportation difficulties and expense (which is considerable especially if accompanied by children) are deterrents.

b. *Too Restrictive Eligibility*

Eligibility requirements vary; many patients are ineligible under too restrictive financial requirements and yet cannot afford to pay

the rate many hospitals charge for ward patients. Difficulty is compounded when patients are required to pay the flat sum, e.g., $140 upon registration for prenatal care. In the California study, a large proportion of these patients received no prenatal care but were admitted to a hospital in labor as an emergency. This occurs elsewhere as well. Unrealistic financial or residence requirements are a major deterrent to prenatal care. In the California study, 42% of agencies used the same budgetary standards as in the ADC program.

c. *Finding Somebody to Stay with the Other Children*

d. *Working Mothers*

Many pregnant women work and the loss of time involved in getting prenatal care which costs money and the fear of losing a job are significant factors. Night clinics have been suggested.

e. *Age of Patient*

In some States, maternity patients under the age of 21 are minors and parental consent is needed for medical procedures unless the patient has a marriage certificate. Many unmarried girls do not receive prenatal care because of this.

f. *Donation of Blood*

Some hospitals require that clinic patients have one or two pints of blood deposited in the blood bank upon admission to the clinic. Inability to meet this requirement delays or leads to the omission of prenatal care.

g. *Dissatisfaction with the Clinic*

Patients spend hours waiting to be seen in the clinic. Impersonal attitudes on the part of the staff, abrupt and hurried treatment, and the general climate of many overcrowded public clinics depreciates the value of the services provided.

h. *Seeking Care Too Late*

Some clinics won't admit a patient who applies in the third trimester.

i. *Cultural Differences*

Other deterrents are rather vaguely defined but include lack of understanding of the importance of prevention, poor motivation, fear of authority, fear of doctors, preoccupation with living from day to day and related factors.

Much of the difficulty in providing adequate care is due to the fact that there are not enough physicians, nurses, social workers, and others

available to provide the necessary services. Time is working against us in this respect. The rapid growth of the population has not been accompanied by a proportionate increase in physicians. The actual number of general practitioners, who do most of the obstetrics, was smaller in 1962 than 1949. This period has seen a rapid increase in obstetricians who now number about 15,000.[17] However, the lack of increase in the rate at which physicians are graduated, the decreasing interest in general practice, and the expected increase in the number of births, resulting in an estimated total of 5,000,000 newborn in 1970, mean that other than traditional methods of providing medical care must be sought if the situation is not to deteriorate further.

The problems of maternity care led the President's Panel on Mental Retardation to make them the focus of one of its major recommendations. The Panel urged that a new program be established with Federal funds authorized on a project basis to assist State and local health departments in meeting the costs of administering programs of comprehensive maternity and infant care for women who have problems associated with pregnancy which increase the hazards of childbearing for themselves and for their infants and who are unlikely to receive the care they need because of low income or for other reasons. These programs would make it possible to:

1. increase the number of prenatal and postnatal clinics,
2. bring the prenatal and postpartum clinics close to the population served,
3. establish special clinics for some patients with complications of pregnancy (where more time by obstetricians, nurses, social workers, nutritionists and others can be provided),
4. pay for hospital care not only for the delivery but also during the prenatal period as needed,
5. relieve overcrowding in tax-supported hospitals by paying for care in voluntary hospitals,
6. pay for hospital care of premature infants and other infants needing special attention,
7. provide consultation services.

The Panel also recommended that the Children's Bureau support some comprehensive demonstration programs, including the provision of long-range child health supervision, especially among families which lack motivation, are apathetic and uncooperative. The inclusion of maternal and child care centers as a prominent part of city planning, in which the professional staff would divide their time between the centers and hospitals

was proposed. This recommendation also has a relationship to the problem of children who become retarded by living in an environment in which there is little stimulation and communication. The present and expected future shortage of physicians led the Panel to recommend that the Children's Bureau expend its interest in studies to determine what aspects of medical care can be provided by personnel who are not physicians. While the subject was not developed in the report, the Panel was much interested in the contributions of nurse-midwifery to maternity care.

These and other recommendations related to the work of the Children's Bureau have been incorporated in House of Representatives Bill No. 3386, one of the Administration's bills introduced in the Congress to follow up the Report of the Panel. This bill provides for a step by step increase in the authorization for the maternal and child health and crippled children's programs to $50 million each by 1970, an authorization for the maternity care program, additional authority for research related to maternal and child health and crippled children's services, and an authorization for one-time, planning grants in the field of mental retardation.

The maternity care provisions constitute a different approach to grants-in-aid that will be interesting to study. The funds would be granted to the State health department, or with its agreement, directly to a local health department. These are not demonstration projects. They are support grants for medical care programs meeting up to 75% of the costs of the projects. The use of project grants rather than formula apportionments means that funds are to be granted, upon request, to specific areas where most needed. Both rural areas and cities are included. This proposal will extend part of the provisions of Title V to the cities and will provide us all with the opportunity of gaining a better understanding of Federal-State-Local government relationships in public health and medical care.

REFERENCES

[1]Harrington, M., "The Other America." The MacMillan Company, 1963.

[2]Tayback, M. and Wallace, H., "Urban Economics and Public Health." *Public Health Reports,* Public Health Service, U. S. Department of Health, Education, and Welfare, Oct. 1962.

[3]Oppenheimer, E. "Population Changes and Perinatal Mortality." *A.J.P.H.,* Feb. 1961.

[4]Piore, N. "The Scope of Tax Expenditures for Urban Medical Care." *Baltimore Health News,* June-July 1962.

[5]McPhail, F. "Review and Evaluation of Maternity Services." Dallas County (Texas) Youth Study, 1962.

[6]Report from Board of Health, City of Chicago, 1961.

[7]"Medical Responsibilities for the Displaced Child." Ross Laboratories, Columbus, Ohio, 1963.

[8]New York Times, Oct. 31, 1962.

[9]Thompson, J. D. "Improving Maternity Care." Unpublished.

[10]WHO Technical Report Series, No. 217, "Public Health Aspects of Low Birth Weight," 1961.

[11]Annual Statistical Report, 1961. Philadelphia Department of Public Health.

[12]Dunham's Premature Infants, William A. Silverman, M.D., Paul B. Hoeber, Inc., 1961.

[13]Bureau of Records and Statistics, Department of Health, New York City, 1961.

[14]Shapiro, S. et al, "Further Observations on Prematurity and Perinatal Mortality in a General Population and in the Population of a Prepaid Group Practice Medical Care Plan." *A.J.P.H.*, Sept. 1960.

[15]California's Health, State Department of Public Health, July 1, 1960.

[16]Monahan, H. and Spencer, E., "Deterrents to Prenatal Care." *Children*, Children's Bureau, U. S. Department of Health, Education, and Welfare, May-June, 1962.

[17]Health Manpower Source Book, Section 14. Public Health Service, U. S. Department of Health, Education, and Welfare, 1962.

[18]Report to the President, A Proposed Program for National Action to Combat Mental Retardation. The President's Panel on Mental Retardation, October, 1962.