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THE MEDICAL SOCIETY AND MATERNAL MORTALITY*

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THE motives which have actuated the presentation, for your thoughtful consideration, of the facts outlined in this essay are inspired by no desire to condone or condemn in this matter either the shortcomings of the medical profession on the one hand or those of the group sometimes called our "innocent victims" on the other. Indeed we are impelled rather by an earnest desire to seek the simple truth, to weigh it without prejudice and to find somewhere in our quest a guiding beacon for our future conduct.

If one were searching merely for a defense of our much-maligned profession in this tragic condition which Paul DeKruif has called "today's saddest medical scandal" he would find it on the lips of the uncounted thousands of women whose hearts are still filled with gratitude for the physicians who led them safely through the perils of motherhood. This, however, is not intended to be an appeal to sentiment or a pleasant excursion into the romance of maternity care. It is our aim, rather, to undertake at the outset an unemotional and dispassionate quest for the truth. Since we seek facts and not fancies our search will be limited to those sources in which the pertinent information, stripped of anathema and alibi, is assembled without fear or favor. The statistics presented in this discussion have been taken, therefore, from reports and studies on Maternal Deaths compiled and published by the Census Bureau and Children's Bureau of the United States Department of Commerce and Labor; from Vital Statistics of Massachusetts published by the Secretary of State; and from "Maternal Mortality" in New York City published by the New York Academy of Medicine Committee on Public Health Relations. These reports were selected because they are impersonal and impartial and the data compiled in all of them are tabulated according to a fairly uniform standard.

Before proceeding with our investigation let us ask ourselves—What is "maternal mortality"? Simply defined it is "death among women from causes directly or indirectly associated

with child-bearing." The Bureau of the Census of the United States Department of Commerce, which is charged with the responsibility of compiling vital statistics, follows the "Manual of the International List of Causes of Death" and classifies maternal deaths as we have defined them under the heading, "Deaths in the Puerperal State." "The word puerperal," says the Manual, "is used in the broadest sense to include all affections dependent upon pregnancy, parturition and also diseases of the breast during lactation. . . . The fact that childbearing occurred within a month of death should always be stated even though it may not have been a cause of death." This is the classification required by the National Census Bureau of all state census bureaus which in turn exact adherence to the rule from similar agencies compiling vital statistics in cities and towns. From the data thus obtained, our Mortality Statistics and Mortality Rates are evolved. Under strict interpretation of the rules applying to the puerperal state all deaths due to any cause whatsoever except violence occurring in pregnancy, labor and the first month of convalescence from childbirth must be classified as maternal deaths. It is highly probable that some deaths are classified erroneously as puerperal. Indeed, in a study of "Maternal Deaths" made in fifteen states by the Children's Bureau of the United States Department of Labor in 1933 (Bureau Publication No. 221), 156 deaths in 7,537 were found to have been inaccurately classified as puerperal deaths. This represents one error in every forty-eight classifications—by no means a negligible number.

When the superexpert statisticians of the Census Bureau in Washington fall into error it is obvious that the way of amateur statisticians, like that of other transgressors, is hard indeed. Another source of discrepancy is to be found in the manner in which mortality rates are expressed. For example, the Committee of the New York Academy of Medicine for the study of Maternal Mortality found that birth and death rates were calculated in New York City per 1,000 live births while for the State they were calculated per 1,000 births live and still.

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The National Census Bureau computes mortality rates per 1,000 and per 10,000 live births, the Massachusetts Division of Vital Statistics per 10,000 live births and per 10,000 confinements, while some municipal and other reports fail to indicate whether the rates are computed on the basis of live births or all births. While it is undoubtedly a fact that figures do not lie, it is no exaggeration to say that their careless use often obscures the truth.

Enumeration of the opportunities for error would not be complete without mention of that subtle coup de grâce of officialdom known as "The Standard Certificate of Death" without which no one, no matter how defunct, is entirely and legally dead. To the wily and the wary as well as to the innocent and ingenuous this important and well-meaning document often presents terrors and difficulties when they attempt honestly to determine the Disease Causing Death called the "primary cause" and the Contributory Cause or Causes called "secondary." One may cite as evidence that a dilemma may exist, the following causes of death reported to the Health Department of a large southern city: "Nervousness from gunshot wound. Fractured skull; contributory—mule. Frightened to death by deputy sheriff. Rubbed to death by chiropractor." These, no doubt, are legitimate causes of death but unhappily do not conform to the puritanic orthodoxy of the "Manual of Joint Causes" or "The International Classification." When one pictures the quandary of a conscientious physician facing the sad duty of filling out the death certificate of a patient who succumbed during the puerperium to a combination of chronic cardiorenal disease, placenta previa and puerperal sepsis, is it to be wondered that errors creep into our statistics?

The past decade has witnessed a steadily growing lay literature on the subject of maternal mortality. The interest of the public thus aroused serves a useful purpose which should receive the wholehearted approval of our profession if it does no more than stimulate a desire for more and better prenatal care. When, however, such literature contains erroneous statements or actual falsehoods even though well intended, we should not be expected to submit to the libel in inarticulate indignation. The hue and cry on deaths from sepsis, for example, furnish fine fodder for the propagandist. Why not tell the truth about the part self-induced and criminal abortions play in this mortality? In spite of the laissez-faire in speech practiced by "us moderns" the use of the word abortion outside of the hospital staff room or the criminal court is still greeted with an offended raising of the eyebrows. Yet physicians should know and the public should be told that abor-

tions cause about 4,000 deaths annually in the United States.

Next in odium to downright falsehood is the "half-truth." The lie is the weapon of the weak and in this role the moralist may condone it on occasion. But the half-truth is especially deserving of contempt for it masquerades for what it is not. Statements comparing the mortality rate of the United States with that of certain foreign nations, to our eternal shame and humiliation, are "half-truths." To be sure, the same "International List of the Causes of Death" is followed, but our methods of classification are so much more stringent that deaths called "puerperal" or "maternal" in this country would not be generally so classified abroad. Evidence that this difference in method exists was obtained by the Division of Vital Statistics, Bureau of the Census, Washington, when it sent 1,073 identical copies of selected death certificates to twenty-four foreign countries for assignment of the causes of death. Replies were received from sixteen nations. Less than half of the deaths, 431 of the 1,073, were assigned by all replying countries to a "puerperal" classification. Only one country, Denmark, assigned fewer cases than the United States to the nonpuerperal group. Norway and Sweden, cited by propagandists as shining examples of nations blessed with a low maternal mortality rate classified three times as many cases as nonpuerperal as did our Census Bureau. This seems like fairly convincing proof that in our statistics on maternal mortality we are painting ourselves more black than we really are. Moreover, no amount of legerdemain with figures can show the racial and environmental factors that influence the safety of childbearing in any country.

These facts have not been marshaled for the purpose of lulling you into a sense of tolerant complacency toward existing conditions or to hide from your eyes the stain that our maternal death rate has left upon our national honor. It is the design of this review, rather, to place before you, stripped of the somber cloak of statistics and the camouflage of propaganda, the stark figure of tragedy that casts its sinister shadow upon maternity. That we may the better cope with its insidious encroachment into the right of the parturient to live, let us scrutinize calmly and without hysteria the modus operandi of this monster and then coolly and deliberately consider with what weapons we shall attack it.

Not all deaths in childbearing are preventable. The very notion of death from the purely physiological standpoint precludes that assumption and authorities concede that an inescapable minimal death rate must exist. Moreover, there are certain maternal deaths that we call unavoidable because in the light of our present knowl-

edge we have no certain way to prevent them. With these two groups we are not at present concerned. It is with the deaths reducible in number if not wholly preventable that we are deeply concerned. In order that we may the better appreciate the importance of this group let us consider a few statistics expressed in round numbers. Approximately two and one-half million pregnancies occur annually in the United States. According to Taussig* 681,600 of these are terminated by abortions, 60 per cent of which, in his opinion, are induced. In round numbers about 16,000 maternal deaths occur annually of which abortion is responsible for one fourth. This gives a fair general estimate of the situation throughout the country.

To insure greater accuracy in the conclusions to be reached from a study of maternal mortality statistics, the United States Children's Bureau in 1927 and 1928 made a detailed study of the maternal deaths occurring in fifteen states selected as representing a fair cross section of our general population. Review of statistics was supplemented by personal interviews with the physicians or midwives who attended the fatal cases. A brief summary of the findings is illuminating: A total of 1,176,603 live births were recorded in these states during the years of the study. There were 7,537 maternal deaths, 156 of which were from nonpuerperal causes. The death rate was 64 per 10,000 live births in the states studied as against 67 per 10,000 for the entire birth registration area of the United States. One third of all the deaths occurred before the seventh month of pregnancy and one fourth, 1,825, followed abortion—three fourths of the aborted dying of blood poisoning. As 1,549 or 40 per cent of all the deaths were due to sepsis or blood poisoning it is obvious that abortions contributed heavily to the general maternal death rate. Of the cases dying of sepsis later in pregnancy 65 per cent were spontaneously delivered. Next to infection the heaviest toll was taken by albuminuria and convulsions which accounted for 26 per cent of the deaths, while accidents of pregnancy and labor caused 10 per cent. Some operative procedure preceded death in 50 per cent of the cases but physicians cannot be held entirely blameworthy in all the cases for the poor results obtained, since in 43 per cent of the operative cases the physician had not seen the patient before the emergency requiring the operation had occurred. On the other hand the fact that cesarean section was performed on one fourth of all the patients who died following operations for delivery, may indicate lack of skill, judgment or experience on the part of the attendant and to the responsibility in this which may be placed on the physician should be added the unwise choice of anesthetics which is cited in the report as a contributory

*Taussig, F. J.: *Abortion, Spontaneous and Induced: Medical and Social Aspects*. St. Louis: C. V. Mosby Company, 1936.

factor in some of the deaths. While nationally collected statistics on the role of the relief of pain in labor in the causation of maternal deaths are not available, the report of Montgomery in a recent number of the *Journal of the American Medical Association** tends to support an opinion privately voiced by many that amnesia and analgesia have merely added new horrors to the practice of obstetrics.

The role which the lack of adequate prenatal care played in this mortality is as tragic as it is striking. In but 1 per cent of the cases where prenatal care was sought did it reach a desirable standard. Here, obviously, the blame and the shame are on the medical profession. On the other hand, of the 5,636 women who might have been expected to have had decent prenatal care more than half (54 per cent) had no prenatal examination by a physician. "For the most part," says the report, "physicians had no opportunity to give prenatal care to these women because they were not consulted." It is particularly interesting to note that for one in every eight of the 7,380 cases making up this tragic series no physician was ever in attendance. In round numbers 5,000 women reached the last 3 months of pregnancy, of whom 3,000 were delivered at home and 2,000 in hospitals. Of those hospitalized more than half were admitted as emergencies and only 900 had planned to have hospital care.

Enough of the horrible details. Let us try now to place, if we can, some measure of the responsibility and to seek a remedy. The burden of responsibility for a death in childbearing rests essentially upon three agencies, the patient, the physician and the public. Primarily it is the duty of the pregnant woman to assure herself and her unborn child of every available protection against disaster. The safeguards needed, unhappily, are not always available to her but too often, alas! ignorance prevents her from seeking them or from recognizing them when they are before her. But when she is sufficiently educated and the opportunity for proper care is available and she rejects it through complacency or bad advice and even attempts by her own hand or another's the destruction of the life within her, then the problem becomes more social and moral than medical.

That deaths following abortion play an important role in the causation of maternal deaths was shown by the investigations of the New York Committee. It found that approximately 1 in every 5 maternal deaths in New York City in the years 1930, 1931 and 1932 followed abortion, while the therapeutic abortion, an allegedly benevolent procedure, accounted for 1 in every 7 deaths from this cause.

What of the physician and our death rate? The medical profession, while it deplores, does

*J. A. M. A. 108:1679 (May 14) 1937.

not deny its share in the culpability. There are incompetent physicians as there are incompetent operators of motor vehicles and both take their toll of lives year after year. Often enough the physician is morally if not physically negligent in his care of the parturient patient. Too often he is ignorant of his duties and responsibilities because of lack of knowledge, training and experience. Generally he is conscientious but often handicapped by ineptitude or incompetency. That deadly aphorism, "Childbearing is a perfectly natural process," has filled many a physician with dangerous, unjustified self-assurance. The oft-exploded myths about birth among the ancients and the savages are accorded greater credence than the solemn experiences of thousands of honest physicians who have striven to learn by their own mistakes and those of their forebears. To blame all physicians for the sins of a few is as unjust as to blame the medical profession for the deaths of women who come to it for succor when beyond hope of saving due to their own ignorance, neglect or failure to cooperate or from the crime-stained hands of the abortionists.

The public, too, shares with patient and physician this heavy responsibility in its failure to demand and obtain better facilities for the protection of motherhood, higher standards of qualifications for those who are to be entrusted with its care and a broader scope in the program in health education, to the end that the gross ignorance still so prevalent may be mitigated at least, since it cannot be entirely eradicated. The care of the childbearing woman is a medical problem in all its aspects and when the public delegates any part of that care by authority or by acquiescence to lay or quasi-medical hands without adequate medical supervision it invites the public disaster of a high maternal mortality. Greater cooperation and broader mutual understanding of the common problems of the medical profession and those charged with the expenditure of public funds for medical purposes will go far in providing better physical facilities for maternity care. The modern trend in hospital construction toward greater architectural grandeur and fewer hospital beds is to be deplored.

Although lack of maternity care is not always due to inaccessibility of a physician it has been found more frequently where physicians are not readily available. Even Massachusetts is not exempt from this problem. Ultimately something will be done about it and the Medical Society may well initiate the first steps. Whether we approve of it or not the day is not far distant when subsidization of physicians, especially in small communities, will be no longer a fear but a fact.

Meanwhile what is the medical profession in general and what is the Medical Society in par-

ticular doing to improve the unwholesome condition that now pertains in this matter of maternity care? A glance at the record shows that the profession through its various organizations is demanding—first, better obstetric teaching in the medical schools; secondly, more practical training in maternity care for the hospital intern; and, thirdly, standardization of qualifications for specialists in obstetrics to the end that the unfit and the specialist by proclamation, generally his own, be eliminated from the field. In addition to these activities instruction in obstetrics has been provided by the Massachusetts Medical Society through the medium of the post-graduate courses offered to its members during the past 3 years and now conducted for all registered physicians in co-operation with the Massachusetts Department of Public Health under the National Security Act. The Section of Obstetrics and Gynecology still moving under the impetus given to it in 1928 by the present distinguished President of this Society has maintained a continuous program of education in maternity care by means of symposiums before district societies, a column in the *New England Journal of Medicine*, and by studies of maternal deaths in the State from toxemia of pregnancy and puerperal sepsis. Throughout the United States similar activities are being conducted by regional and national societies of obstetricians and gynecologists with the particular aim in view of improving the education and training for maternity practice. In our own New England Obstetrical and Gynecological Society the trained specialist has joined hands with the general practitioner for the better understanding and the happier solution of our common problems.

In spite of what has been done and what is now being attempted, our maternal death rate is far too high. There has been little improvement observable since 1900. Meanwhile what has become of the doctor's horse and buggy and the dim light that burned the night long in his office window to guide the breathless messenger to his door? It is incredible that this span of years that has given us the marvel of the airplane, the wonder of the cinema and the miracle of the human voice encircling the globe can still complacently witness the death of one woman in every one hundred and fifty-five who bears a child, three fourths of whom die of preventable causes.

What are we as one of the oldest organized medical groups in America going to do about it? The problem looms large on the horizon of our medical future. Unless we attempt an early solution, government bureaucracy or paternalism will take the matter out of our hands. What form the remedy will assume is beyond our present clairvoyance. Certain recommenda-

tions appear advisable in the light of experience in the past and hope for the future. First in importance is the education of the public in the need for and the benefit derived from proper maternity care; secondly, the creation of a Maternal Welfare Commission to be composed of representatives of the State Department of Public Health, the Board of Registration in Medicine, the Massachusetts Medical Society and charitable organizations concerned with public welfare, a commission armed with broad supervising authority under the police powers of

the Commonwealth especially for the investigation of deaths in the puerperal state; thirdly, the establishment within the Medical Society of an obstetrical consultation service to be available for needy cases that, for good and sufficient reasons, cannot be referred to clinics; and finally, a courageous and determined effort in our own midst to raise the standards of professional conscience as well as those of professional care to the end that the mothers entrusted to our hands, though they "walk through the valley of the shadow of death", will fear no evil.

GEORGE W. GAY LECTURE ON MEDICAL ETHICS*

BY LAWRENCE K. LUNT, M.D.†

THIS lectureship was founded by Dr. George W. Gay, a graduate of this School in the class of 1868 and a public-spirited and revered physician of Boston who died in 1931, at the age of 89. Owing to an appendix abscess and subsequent operations, he was forced to give up his active surgical practice at the age of 53. But he loved his profession and with undiminished vigor of spirit he continued to serve it in legislative matters having to do with public health, in the State Society, and in educating the public along the lines of preventive medicine. He was probably aware of the fact that few medical students have reason to acquaint themselves with the ethical aspects of their profession, and become internes and even practicing physicians without having heard much beyond a few casual references to this side of professional life. He therefore arranged for lectures to be given at Harvard and at Tufts on medical ethics.

Ethics is the consideration and study of right action toward the production of the highest good, and in its practical aspects comes down to what is right, what is good in the relation of one human being to another. The basic principles of ethics apply to all the many varieties of human relations, but each field will have certain distinctive factors peculiar to itself which demand special attention and definition. This is especially true in the relation between the person in trouble and the one to whom he turns for help; and still more intensively so where that trouble is illness. Therefore, it is a natural development that men whose energies are devoted to the problem of illness should consider and formulate principles seeking the highest good in this particular field.

If there were not a considerable number of

men seeking to take advantage of their fellows at every turn, such principles would not be necessary. But there always have been and always will be predatory individuals seeking their own nefarious ends at the expense of others. The person whose body or mind is disabled is at a disadvantage and often an easy prey for those who are waiting their chance, and for this reason requires special protection. Therefore, professional men whose genuine desire it is to relieve suffering seek to prevent such abuse and to set down suggestions to that end. Furthermore, as they are human beings working together in the same difficult field, they have relations among themselves of such a nature as to require examination and clear understanding. And, finally, being members of society, there are matters relating to the body politic which demand definition. So evolves medical ethics with its three aspects: the relation of doctor to patient, the relation between doctors themselves and the relation among doctors and the public at large.

Instruction in this subject has been a matter of concern to the teachers and practitioners of the "Healing Art" since the days of Hippocrates, some four hundred years before Christ, and, no doubt, even before that. The medical students of ancient times were novitiates in the temples of Aesculapius and were bound by oaths, and it is said that "when it became necessary to admit outsiders into the hereditary schools of Greek medicine, Hippocrates administered an oath in order to secure candidates of a suitable character." Should you desire information concerning the oath, you could not do better than to read W. H. S. Jones's "The Doctor's Oath," a most interesting study of the various sources and forms of the Hippocratic oath. It has survived to our day, and several variants, obviously based on the same original form, have also come down to us. When the Christian Era dawned, a somewhat modified version was evolved, "the

*Delivered before the medical students of Harvard University, February 9, 1937, under the endowment of Dr. George Washington Gay.

†For record and address of author see "This Week's Issue," page 994.