REPORT OF THE COUNCIL ON SCIENCE AND PUBLIC HEALTH

CSAPH Report 3-A-09

Subject: Disparities in Maternal Mortality

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Referred to: Reference Committee E
(Martin G. Guerrero, MD, Chair)

INTRODUCTION

Resolution 511, “Racial and Ethnic Disparities in Maternal Mortality,” introduced by the Minority Affairs Consortium and adopted at the 2008 Annual Meeting, asks that our American Medical Association (AMA) work with other organizations to: (1) seek increased public and private funding to assist in educating health care providers, hospitals, and patient organizations about the increase in maternal mortality in the United States and the importance of preconception care to reduce these risks; (2) work with other interested organizations to seek increased funding to study racial disparities in maternal mortality; and (3) report back on these efforts at the 2009 Annual Meeting (AMA Policy D-420.994, AMA Policy Database).

This report briefly examines the global context and recent trends in maternal mortality in the United States, including racial and ethnic differences, factors influencing maternal mortality rates, and current efforts of key stakeholders to reduce this mortality.

METHODS

Literature searches for articles published from 1995 through February 2008 were conducted in the PubMed database and the Cochrane Database of Systematic Reviews using the search terms “maternal mortality,” “epidemiology,” “health statistics,” and “prevention and control.” Web sites managed by federal agencies, and applicable professional and advocacy organizations were also reviewed for relevant information. Additional articles were identified by reviewing the reference lists of pertinent publications.

EFFORTS TO ELIMINATE HEALTH DISPARITIES

Concern over emerging health disparities in the United States, in general, has triggered research into understanding their background and impact. Less attention has been directed toward exploring solutions to these problems. The first concerted effort to address solutions for health disparities was a Congressional mandate in 1999, which directed the Agency for Healthcare Research and Quality to create two new annual reports: the National Healthcare Disparities Report (NHDR) and the National Healthcare Quality Report (NHQR). As a public report, the NHDR provides a frame of reference to assist patients (and physicians) in pursuing quality care.1

AMA Policy

Elimination of health disparities remains a priority for our AMA. Previous reports issued by this Council, as well as by the Council on Ethical and Judicial Affairs and the Council on Long Range Planning and Development, provide the foundation for key AMA policies on reducing racial and ethnic disparities in health care (Policies H-350.974, “Racial and Ethnic Disparities in Health Care;” E-9.121, “Racial and Ethnic Health Care Disparities;” H-350.972, “Improving the Health of Black and Minority Populations”). Our AMA also recognizes the value of preconception care and supports recommendations developed by the Centers for Disease Control and Prevention (CDC) for improving such care (Policy H-425.976, “Preconception Care”).

To foster an ongoing effort to reduce health disparities, our AMA, the National Medical Association (NMA), and the National Hispanic Medical Association (NHMA) convened the Commission to End Health Care Disparities, now comprising more than 60 organizations. More detailed information on the goals of the Commission can be found at http://www.ama-assn.org/go/commission, and additional information on AMA resources and activities on eliminating health disparities can be found at http://www.ama-assn.org/ama/pub/category/7639.html.

TRENDS IN U.S. MATERNAL MORTALITY

Reducing maternal mortality is a global challenge. According to the 2005 World Health Report, the majority of maternal deaths occur in developing countries and are related, in part, to the overall investment in the health care system. Nevertheless, maternal mortality remains an important issue in the United States as well.

Death caused by pregnancy (maternal mortality) is defined in the International Classification of Diseases, Ninth Revision (ICD-9) as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by pregnancy or its management but not from accidental or incidental causes.” In 1986, a Maternal Mortality Working Group, formed under the auspices of the American College of Obstetricians and Gynecologists (ACOG) and the CDC, developed two additional terms to further advance research and knowledge about pregnancy and mortality, namely:

- **Pregnancy-associated death.** The death of a woman while pregnant or within 1 year of termination of pregnancy, irrespective of cause.
- **Pregnancy-related death.** The death of a woman while pregnant or within 1 year of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by her pregnancy or its management but not from accidental or incidental causes.

These terms broaden the base for analysis of pregnancy-related outcomes, but do not account for the much larger burden (quantitatively) of pregnancy-related complications.

The ICD-9 definition is used by the CDC’s National Center for Health Statistics in its reports on maternal mortality. Maternal mortality in the United States dropped precipitously during the period from 1950 (83.8 deaths/100,000 live births) to 1980 (9.2 deaths/100,000 live births). This rate remained relatively constant over the next 20 years, but began increasing again in 2003 and each successive year, reaching a rate of 15.1 deaths/100,000 live births in 2005. The maternal mortality rate for black women was 36.5 deaths/100,000 live births, approximately 3.3 times the rate for white women.
for white women (11.1 deaths/100,000 live births) in 2005, a disparity that has persisted over the
entire time period.4,7

EFFORTS TO COMBAT MATERNAL MORTALITY

In 1987, the CDC’s Division of Reproductive Health, in collaboration with ACOG’s Maternal
Mortality Study Group and state departments of health, established the Pregnancy Mortality
Surveillance System to evaluate pregnancy-related deaths reported by state health departments,
health care providers, and state-based maternal mortality review committees.4 This comprehensive,
broad-based surveillance was needed to identify the factors occurring before pregnancy through the
postnatal period that affect a woman’s chance of survival and that place minority and older women
at increased risk for pregnancy-related death.

In collaboration with the CDC, ACOG also developed national toolkits and provided starter grants
to state ACOG sections for the purpose of establishing Maternal and Infant Mortality Review
Committees to assist in investigating maternal and infant deaths. In the state of Michigan, for
example, the Michigan Maternal Mortality Study determined that suicide in pregnant women
occurs at least twice as often as in women of similar age who are not pregnant.5

A strategic issue paper from the CDC in collaboration with ACOG, the U.S Department of Health
and Human Services, the American College of Nurse-Midwives, and others also is available to
inform approaches to reducing maternal mortality.9

FACTORS INFLUENCING MATERNAL MORTALITY

The relevant issues and factors contributing to maternal mortality are complex, ranging from
inadequate access to prenatal care to complications occurring during and/or after delivery. Some
causes of maternal mortality are preventable, while others are largely unpreventable. For example,
most deaths caused by hemorrhage or that are related to complications of chronic disease are
believed to be preventable, whereas deaths due to amniotic fluid embolus, microangiopathic
hemolytic syndrome, and cerebrovascular accident are largely unpreventable.10 The number of
Cesarean section deliveries has increased over the past two decades. Although complications can
occur with any surgical procedure, whether this trend has contributed to the recent increase in
maternal mortality is not established.10 Other recognized causes of maternal mortality include
hypertension (pre-eclampsia), placenta previa with hemorrhage, and cardiomyopathy.

Despite these recognized causes, inadequate access to care is the primary factor in maternal
mortality. Increasing a pregnant woman’s access to prenatal care will significantly improve the
chances of reducing maternal mortality. Pregnancy-related maternal mortality is 3 to 4 times
higher among women who receive no prenatal care compared with those receiving such care.

ADDRESSING HEALTH CARE DISPARITIES IN MATERNAL MORTALITY: THE AMA
ROLE

Inadequate access to prenatal care is a social determinant of maternal and fetal health. In the
United States, social determinants of health status are influenced by a patient’s race and ethnicity;
mortality rates for almost all disease categories are higher in minorities.11 These factors reflect
systemic problems related to disparities in health care delivery and the need for systemic/national
interventions. If interventions are done in a culturally competent manner, health outcomes can
improve for minority populations and could also affect specific issues, such as maternal mortality.12
To develop interventions that reduce mortality and eliminate health disparities, perspectives from
individual providers, hospitals, hospital systems, state and local government agencies, and
academic medical centers, as well as patients, must be considered.

There are numerous national efforts on the part of organizations to eliminate disparities in various
aspects of health care treatment and outcomes. One such effort is being led by the Commission to
End Health Care Disparities. The Commission was founded in 2004 as a collaborative effort of our
AMA, the NMA, and the NHMA in response to the Healthy People 2010 goals and to the Institute
of Medicine report, “Unequal Treatment: Confronting Racial and Ethnic Disparities in Health
Care.” Currently, the Secretariat of the Commission, comprising the AMA, NMA, and NHMA,
collaborates with the more than 60 member organizations on work to eliminate disparities in health
care through educating providers, policy/advocacy efforts, the provision of workforce development
tools, and building awareness about disparities in this country. These member organizations
represent a diverse group of health care stakeholders, including several medical specialty societies,
other medical/nursing organizations, and pharmaceutical and health insurance companies. ACOG
is a member of the Commission.

The Council believes that the issue of maternal mortality is best explored on a systemic level
through the work of the Commission to End Health Care Disparities. The Commission provides a
national platform to identify and implement necessary policy change and advocacy that may help
advance solutions to eliminate disparities and therefore positively impact the challenge of maternal
mortality in minority populations.

SUMMARY/CONCLUSION

Maternal mortality remains one of the priority areas of the World Health Organization. Given the
scope of the challenge in the United States, this issue should be addressed by a systemic approach
to eliminating health care disparities. Impact in this broader arena will directly affect the issue of
disparities in maternal mortality. The Commission to End Health Care Disparities is a national
organization working to develop solutions to eliminate health care disparities and is best positioned
to advocate for policies and activities designed to reduce maternal mortality in the United States.

RECOMMENDATIONS

The Council on Science and Public Health recommends that the following be adopted, and the
remainder of this report be filed:

1. That our American Medical Association ask the Commission to End Health Care Disparities to
evaluate the issue of health disparities in maternal mortality and offer recommendations to
address existing disparities in the rates of maternal mortality in the United States. (Directive to
Take Action)

2. That our AMA rescind D-420.994 (Directive to Take Action)

Fiscal Note: Less than $500.
REFERENCES


