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International Call to Action to Prevent Common Killer of Pregnant Women Worldwide

Government Officials, Ministers of Health, Health Providers, International Nongovernmental Organizations Are Urged to Prioritize Magnesium Sulfate as a Life-Saving Treatment for Eclampsia in the Developing World

Giving birth should be a time for celebration, but for more than half a million women each year—or one woman every minute—pregnancy and childbirth end in death and mourning. Ninety-nine percent of these deaths occur in the developing world, and tragically, most of these deaths are preventable.

One of the most common, yet treatable, causes of maternal death worldwide is pre-eclampsia—the rapid elevation of blood pressure during pregnancy—which, if untreated, can lead to seizures (eclampsia), kidney and liver damage, and ultimately, death. Approximately 63,000 pregnant women die every year because of eclampsia and severe pre-eclampsia, which are also associated with a higher risk of newborn death.

Based on the latest scientific evidence, the World Health Organization (WHO) has recommended magnesium sulfate as the most effective, safe, and low-cost medication to treat eclampsia and pre-eclampsia. While magnesium sulfate has been the standard treatment in the developed world for the past 20 years, less-effective and riskier medications (such as diazepam and phenytoin) are still widely used for these conditions in most developing countries. This is yet another example of the enormous disparity in the quality of maternal health care between industrialized and poor nations.

Earlier this year, in response to this issue, EngenderHealth, an international reproductive health organization, and the University of Oxford brought together leading scientists, advocates, researchers, and representatives of the WHO, UNICEF, United Nations agencies, and national ministries of health from around the world to identify country-specific barriers to the availability and use of the drug, as well as factors that facilitate its utilization in settings where magnesium sulfate is not the treatment of choice within public health systems.

This historic gathering of global public health experts identified the following as the primary barriers to the use of magnesium sulfate:

- **Lack of National Priority and Guidelines**. In countries like Nigeria, Uganda, and Pakistan, guidelines mandating magnesium sulfate use do not exist, and only about half of the world's countries include magnesium sulfate on their national list of "essential drugs."
- **Lack of Education and Training.** Many clinicians remain unfamiliar with the safety and effectiveness of magnesium sulfate and continue to rely on other, less-effective and riskier drugs.

- **Supply Shortage.** Relative to other health conditions, pre-eclampsia and eclampsia affect a small population. In addition, magnesium sulfate is relatively inexpensive. In combination, these factors leave little or no incentive for pharmaceutical companies to make magnesium sulfate more widely available.

Based on these conclusions, EngenderHealth and the University of Oxford have developed a "Call to Action" that calls on policy makers and ministers of health to make pre-eclampsia and eclampsia a higher priority and to set national guidelines for treatment and care based on WHO guidelines. It also urges decision makers and international and national health organizations and agencies to help make magnesium sulfate more available and affordable, in part by empowering local clinicians with education and training.

REDUCING ECLAMPSIA-RELATED DEATHS—A CALL TO ACTION

Magnesium sulfate is the only drug for which there is extensive and compelling evidence of efficacy, safety, and cost-effectiveness for treatment of women with eclampsia and severe pre-eclampsia (the condition that usually precedes it).

Every year, approximately 63,000 pregnant women across the world die because of eclampsia and severe pre-eclampsia, which are also associated with numerous neonatal deaths. Nevertheless, magnesium sulfate is still not available in many health facilities, in the settings where most of these deaths occur. Additionally, even where the drug is available, there are multiple barriers (e.g., resistance to use, lack of institutional protocols, and lack of experience with the drug and/or awareness of its effectiveness and safety) to ensuring its appropriate use.

An urgent step in reducing the unacceptable burden of eclampsia and severe pre-eclampsia is to ensure the widespread availability and appropriate utilization of affordable, ready-to-use "eclampsia treatment packs" for the administration of magnesium sulfate. These should be available in all settings providing care to women with these life-threatening conditions.

All health professionals (including family and emergency room physicians, anesthetists, nurses, midwives, medical officers, and pharmacists) need to be appropriately trained in the care of women with eclampsia and severe pre-eclampsia, including in the use of magnesium sulfate.

Governments, donors, and all organizations concerned about women's health are urged to take all necessary measures to ensure that efforts for the prevention and treatment of eclampsia and severe pre-eclampsia are commensurate with their health care burden. These conditions not only kill mothers and infants, but also have a long-term effect on the health and well-being of those who survive.

We strongly believe that scaling up the use of magnesium sulfate for treatment of severe pre-eclampsia and eclampsia will significantly advance the safe motherhood agenda and contribute to reaching the Millennium Development Goals by 2015.

We therefore call for adding magnesium sulfate to essential drug lists, ensuring registration, universal availability, and appropriate use in all countries.

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