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**MATERNAL MORTALITY IN DEVELOPING COUNTRIES****Murat Yayla**, *Dicle University Medical School, Diyarbakir, Turkey*

Of all health statistics mentioned by World Health Organization (WHO), maternal mortality is the unique one showing the largest discrepancy between developed and developing countries. Approximately 90% of maternal deaths (more than 0.5 million) occur in developing countries each year.

During the last century, almost all countries have accepted antenatal care principles. However, insufficiency of the resources and lack of women's compliance were the main handicaps in developing countries compelling these countries to apply various standard programs. Unfortunately, these programs are not effective enough in preventing and treating maternal mortality. Both fixing the number (quantity) of antenatal visits and static approach affect the "quality" of antenatal care.

Bleeding, chronic anemia, hypertensive disorders, obstructed labor and infections are the main affecting factors in maternal mortality. The majority of these factors are preventable. It is important to suspect any of these factors and to perform prompt interventions during antenatal care, and immediately after delivery. The way reaching this solution is to realize evidence-based approach. Nowadays, WHO is developing an intervention package, called the "Integrated Management of Pregnancy and Childbirth" (IMPAC), to summarize all evidence-based activities with the aim of reducing maternal and perinatal mortality and morbidity.

Antenatal care is a concept extending from pre pregnancy to postpartum, leading to effective emergency care for unpredictable and predictable complications during pregnancy and childbirth. Worldwide policies are not always available for each country, coercing national policies. There is still need to prospective randomized trials to clarify this concept and relevant policies.

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**NEW PLACENTAL VASOACTIVE FACTORS AND GESTATIONAL DISEASES****Cosmi E.V.**, *Institute of Gynecology, Perinatology and Child Health, University of Rome "La Sapienza", Italy*

Recently, among the several hormones and peptides produced by the placental tissues, the role of newly discovered vasoactive factors has been investigated for their involvement in the pathophysiology of gestational diseases. Most of them, besides the effects on vascular system are also implicated in the regulation of other functions such as cellular growth and differentiation, inflammation, smooth muscle cells activity. In this light, we have investigated the potential role of endothelin-1 (ET-1), nitric oxide (NO), and adrenomedullin (AM) in some gestational diseases. ET-1, NO and AM were measured by means of a specific RIA in maternal and fetal plasma and in amniotic fluid and, using an immunohistochemical method, in placental tissues in pregnancy complicated by preeclampsia, IUGR and gestational diabetes. We found that all these vasoactive factors are produced by the placental tissues in large amount and are secreted in the fetal compartment where they participate in the regulation of feto-placental circulation. In pregnancy complicated by preeclampsia, IUGR and gestational diabetes, conditions associated with impairment of utero-placental and fetal hemodynamics, ET-1, NO and AM secretion is significantly affected. In particular, NO and AM increase significantly in the fetal plasma in response to fetal hypoxia and correlate with the redistribution of fetal cardiac output in response to reduced utero-placental perfusion.