Editorial

The Existing Facts Regarding the Level of Vitamin D in Pregnant Women in Indonesia

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Vitamin D serves not only to control and maintain the regulation of essential minerals like calcium and phosphorous in bones but also plays a crucial role in various functions throughout the human body. It is involved in regulating inflammation, free radicals, the immune system, cell proliferation, differentiation, and the prevention of various diseases such as infections, autoimmune disorders, cancer, and metabolic conditions like diabetes and thyroid issues.

Within the field of obstetrics and gynecology, vitamin D is known to play a significant role in conditions like PCO (polycystic ovary), Endometriosis, Ovarian Cancer, Cervical Cancer, Preterm birth, preeclampsia, Gestational Diabetes Mellitus (GDM), and Intrauterine Growth Restriction (IUGR). In essence, vitamin D is a key player in reproductive health. Unfortunately, existing research shows that both pregnant and non-pregnant women in Indonesia generally have insufficient levels of vitamin D, even though comprehensive studies like riskedas have not been conducted yet.

In pregnant women with early-onset preeclampsia, fetal growth delays, or preterm births (both early and late onset), their vitamin D levels are lower compared to those of normal pregnant women.

The human body can naturally produce vitamin D with the help of sunlight, and Indonesia, being located near the equator, receives abundant sunlight. If low vitamin D levels are detected, the possible reasons could include; Pregnant women having insufficient exposure to sunlight at specific times, inadequate intake of pro-vitamin D nutrients, the presence of genetic variations in enzymes responsible for providing active vitamin D, or Vitamin D requirements surpassing intake and production. Research needs to be conducted on these four conditions. However, given Indonesia's vast geographical area, sampling from various regions is necessary, requiring significant efforts and funding.

The initial step involves collecting and reviewing all existing research on vitamin D during pregnancy in Indonesia. Subsequently, a research framework focusing on vitamin D (and nutrients in general) during pregnancy, including preparations up to BioBank level, should be developed. This research framework can then be proposed to Bapenas (National Development Planning Agency).

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