

Climate Crisis and Health Statement

In recognition of the need for a world federation to address the threat of toxic environmental chemicals to human reproductive and developmental health on the global stage, the International Federation of Gynecology and Obstetrics (FIGO) adopted its opinion, ***Reproductive Health Impacts of Exposure to Toxic Environmental Chemicals***.

When this opinion on environmental exposures was released at the FIGO World Congress of 2015, FIGO established a global Working Group on the topic of Reproductive and Developmental Environmental Health (RDEH). This working group set a global agenda on the impact of toxic exposures impacting women's health. In 2018 the working group was recognised for the impact it has had and was designated a formal FIGO Committee.

Climate Crisis and Women's Health

Emergent evidence from a broad coalition of international researchers and the medical community has demonstrated that the current climate crisis presents an imminent health risk to pregnant women, the developing fetus, and reproductive health. (The Lancet Countdown, ACOG Position Statement, AAP Policy Statement on Climate Change). Global warming, the gradual heating of Earth's surface, oceans and atmosphere, is caused by human activity, primarily the burning of fossil fuels that release carbon dioxide (CO₂), methane and other greenhouse gases into the atmosphere.

The term "climate change" is a better reflection of conditions, because these atmospheric changes are accompanied by storms, even paradoxical snowstorms, temperature increases, melting ice, changes in sea levels, disruption of weather and worsening air quality. Air quality, exposure to heat, and even population displacement discussions are an integral consideration in the climate crisis. Any discussion of the current climate crisis will need to address these variables and their impact on health.

The following statement regarding Climate Change reflects a review of the literature and the Precautionary Principle. This principle implies that there is a social responsibility to protect the public from exposure to harm when scientific investigation has found a plausible risk. These protections can be relaxed if further scientific findings emerge that provide sound evidence that no harm will result. In some legal systems, such as the law in the European Union, the application of the precautionary principle has been made a statutory requirement in some areas of law.

Background

Adverse obstetric outcomes impacted by extreme weather (primarily heat and natural disasters) and air pollutants (principally fine particulate matter (PM_{2.5}) and ozone) include preterm birth, low birth weight, and stillbirth. Adverse neonatal outcomes affected by these exposures include neurodevelopmental delay, autism spectrum disorder, and cardiac defects (FIGO Opinion Paper, Project TENDR, Zhang 2019, Vrijheid 2011). The adverse health effects are not limited to obstetric and pediatric outcomes. Recent data point to a series of health complications that span the entire life course, including respiratory and cardiovascular disease, fertility complications, and impacts on mental health (Sorensen 2018).

However, the risks to pregnant women and the developing fetus pose perhaps the greatest risk to global population health due to long term impacts on current and future generations.

Air pollution and the risk to reproductive health and human development

Multiple national and international review articles have demonstrated a link between prenatal exposure to air pollutants PM2.5 and ozone and the adverse obstetric outcomes preterm birth (DeFranco 2016, Ha 2014, Li 2017, Lamichhane 2015) and low birth weight (Ha 2014, Li 2017, Lamichhane 2015). These include a systematic review with meta-analysis: level 1 evidence, according to the US Agency for Healthcare Research and Quality (Li 2017). A 2016 meta-analysis found that over 3% of preterm birth in the United States could be attributed to PM2.5 (Trasande 2016) and a 2017 meta-analysis found that globally PM2.5-associated preterm birth was as high as 18% with the highest risk in South Asia, East Asia, North Africa/Middle East and West sub-Saharan Africa (Malley 2017).

Research has also demonstrated a proximity effect for prenatal pollutant exposures and low birth weight, a 2017 study found that among 1.1 million live births the risk of low birth weight was higher within 3 km of a fracking site compared to the background risk, and increased by 25% within 1 km of a site (Currie 2017).

Heat and the risk to reproductive health and human development

In addition to the numerous sequelae of extreme weather and natural disasters on maternal and child health (AAP Technical Report) – including food insecurity, water contamination, increased risk of vector-borne illness, mental trauma due to displacement and violence against women (Camey et al 2020) – specific obstetric risks linked to heat include preterm birth and low birthweight. Five international review articles have found heat to be associated with preterm birth (Kuehn 2017, Zhang 2017, Poursafa 2015, Carolan-Olah 2013, Rylander 2013) which corroborate the same findings from multiple national studies (Basu 2017, Ha 2017).

Additionally, four of these international review articles found heat to be associated with low birth weight (Kuehn 2017, Zhang 2017, Poursafa 2015, Rylander 2013) which are consistent with national studies (Ha 2017, Sun 2019).

The necessity of policy interventions

In protecting pregnant women and the developing fetus from the health hazards associated with air pollution and heat, any individual efforts – while commendable – must be acknowledged for their limitations and ultimately deemed insufficient. Pregnant women already face a litany of personal restrictions from dietary limitations, travel precautions, and personal care product choices. They cannot control the outdoor air quality they encounter or the ambient local temperature.

Conclusion

Global health should be our guiding light. We recommend that the Climate Crisis be recognised for the global emergency it is, and health care providers lead in education, advocacy and research in responding to changing health consequences and the global awareness that is needed.

FIGO will incorporate Climate Change into its Education, Advocacy and Research Programs within the Committee on Reproductive and Developmental Environmental Health so that global leaders from our 132 National Member Societies have the ability to effect change in their countries.

About FIGO

FIGO is a professional organisation that brings together obstetrical and gynecological associations from all over the world.

FIGO's vision is that women of the world achieve the highest possible standards of physical, mental, reproductive and sexual health and wellbeing throughout their lives. We lead on global programme activities, with a particular focus on sub-Saharan Africa and South East Asia.

FIGO advocates on a global stage, especially in relation to the Sustainable Development Goals (SDGs) pertaining to reproductive, maternal, newborn, child and adolescent health and non-communicable diseases (SDG3). We also work to raise the status of women and enable their active participation to achieve their reproductive and sexual rights, including addressing FGM and gender based violence (SDG5).

We also provide education and training for our Member Societies and build capacities of those from low-resource countries through strengthening leadership, good practice and promotion of policy dialogues.

FIGO is in official relations with the World Health Organization (WHO) and a consultative status with the United Nations (UN).