

Scientific Liaison Coalition Webinar

Occupational Exposures and Pregnancy: A Balancing Act

Tuesday, February 11, 2020

11:00 AM—12:00 Noon Eastern U.S.

Speaker: Richard K. Miller, PhD

Moderator: Linda G. Roberts, PhD, DABT

[Registration Link](#)

Abstract

Women in the workplace are confronted by so many issues from this current topic to the use of opioids, vaping, smoking and therapeutic medications when preparing to conceive; however, it is well known that 50% of pregnancies are unplanned. Thus, these women and their health care providers are confronted with how the workplace exposures will impact their pregnancy and baby. Yet many working women accept and do not question their working conditions and exposures until they are pregnant. The objective of this presentation is to sensitize all working women and their health care providers to have discussions of their workplace conditions at their regular health visits, to encourage health care providers and their company counterparts to explore the workplace conditions for every woman in her reproductive years especially to prevent harmful exposures during pregnancy.

Such a recommendation does not exclude the male; however, the concentration for the moment is on the woman in the workplace. We will explore the history of women in the workplace, regulations, assessing exposure risk, working with the patient, primary health care provider and her employer. Lessons learned will arise from case studies presented not only for workplace exposures but also non-work exposures that can require in depth counseling, action and making difficult choices for the pregnant mother and her family. It is hoped that the participant in this discussion will leave feeling their questions have been answered, their toolbox has many more options and their confidence is enhanced to intervene when necessary to remove the woman from the workplace.

Speaker Biography



Richard K. Miller, PhD, is Professor of Obstetrics/Gynecology, of Pathology and of Environmental Medicine at the University of Rochester, School of Medicine and Dentistry in Rochester, New York. He is Co-Director of the New York State Center of Excellence in Children's Environmental Health. Since 1987, he has been the Director of the MotherToBaby UR Medicine, which is a Teratogen Information Service providing counseling to pregnant and lactating women as well as their health care providers concerning occupational, environmental and therapeutic exposures. Professor Miller received his undergraduate and graduate training at Dartmouth College and Dartmouth Medical School in Pharmacology and Toxicology with

William O. Berndt, PhD, Gilbert Mudge, MD and Virgil Ferm, MD, PhD. He then pursued a fellowship in Developmental Biology and Teratology at Jefferson Medical with Robert L. Brent, MD, PhD and Thomas R. Koszalka, PhD from 1972-1974. Since 1974, he had been on the faculty at the University of Rochester. He has chaired or been a member of committees for many national and international scientific organizations including the National Children's Study,

NIH-Environmental Influences on Children's Health Outcome Study, the US National Toxicology Program, National Academy of Medicine as well as Founding Secretary of the International Federation of Placental Associations and Organizer of the Rochester Trophoblast Conferences from 1980-2000. He also has been a Fulbright Distinguished Professor in the former Yugoslavia and an NIH Fogarty Senior International Fellow at the Universite de Paris. Rich is also a Past President of the Teratology Society, now the Society for Birth Defects Research and Prevention. He has been recognized with the Outstanding Faculty of the Year at the University of Rochester. He has had the privilege of training more than 50 Doctoral Students and Fellows. Recently, he was recognized by the Teratology Society as the Agnish Fellow for Outstanding Contributions in Teratology Education. Also, he was recognized by the International Federation of Placenta Associations with its highest honor, the Senior Placentology Award for Outstanding Research. He also received Bock Prize in Developmental Biology and Child Health from De Nemours Foundation. He is currently a member of the Scientific Boards and dysmorphologist for the US National Ribavirin Pregnancy Registry, the Belimumab Pregnancy Registry and the MoTHER Pregnancy Registry. He has authored more than 200 publications as well as edited 12 books in the field of reproductive and developmental biology and toxicology focusing on issues of placental function and birth defects. The most recent volume is *Drugs During Pregnancy and Lactation – Treatment Options and Risk Assessment* in its 3rd edition. Professor Miller has been recognized for his contributions in the field of Toxicology by election as a Fellow of the Academy of Toxicological Sciences. Also, he has been funded by NIH for more than 40 years; his current research involves 1. the reproductive toxicity of heavy metals and nanoparticles, 2. the vertical transmission of the viruses, CMV, Coxsackie, ECHO11, Zika, HIV-1 and the role of anti-HIV therapy, and 3. the role of vitamins in normal and abnormal development, especially vitamins A, B12, C and E. He has been the lead investigator for a fifteen-institution study of placental genetic, epigenetic and environmental investigations as part of the NIH-National Children's Study and currently is co-principal investigator with Professors Thomas O'Connor and Elizabeth Barrett on a 500 patient study on maternal stress as part of the NIH ECHO Study and a companion NIH study with Dr David Rich on air pollution effects on pregnancy in Beijing, China.