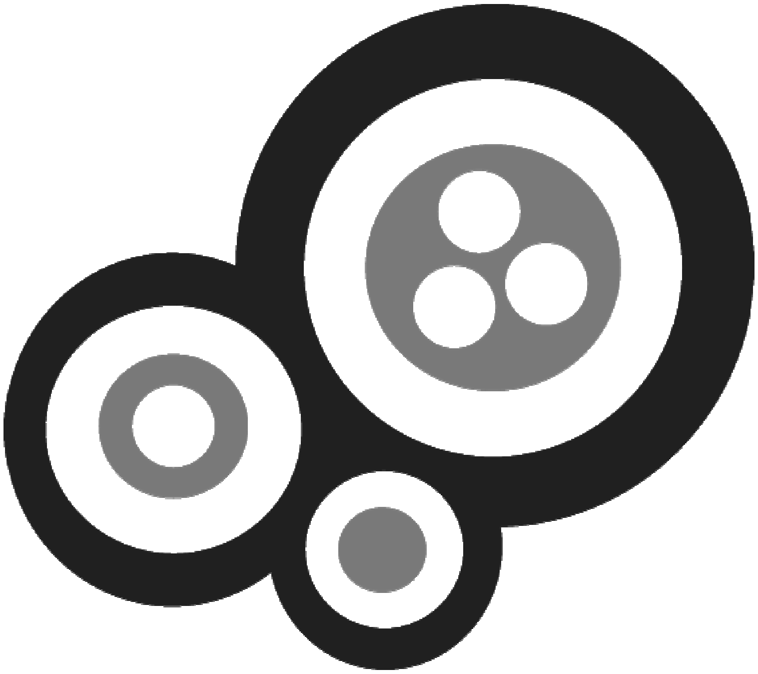

PLENARY 1

DEFINING THE PROBLEM AND NEED

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CHANGING THE PREVENTION PARADIGM: THE ROLE OF PRECONCEPTION HEALTH AND HEALTH CARE IN THE PREVENTION OF BIRTH DEFECTS

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The promotion of Preconception Health and Health Care is based on the premise that further improvements in pregnancy outcomes depends on improving the health of women before pregnancy and on helping couples and women avoid behaviors and exposures known to adversely affect pregnancy outcomes. Today, we have scientific evidence that an array of interventions before pregnancy can improve pregnancy outcomes. Furthermore, the implementation of many of these interventions will result in reducing the incidence of or totally preventing the occurrence of birth defects. A review of the literature in 2004 identified 14 interventions which have scientific evidence indicating that if implemented before pregnancy or early in pregnancy, these interventions would result in improved pregnancy outcomes: Folic acid supplementation, rubella immunization, HIV/AIDS screening and treatment, hepatitis B vaccination, diabetes management, hypothyroidism management, maternal phenylkentonuria management, obesity control, sexually transmitted infection screening and management, alcohol cessation, avoiding teratogenic medications such as anti-epileptic drugs, Accutane, and oral anticoagulants, and smoking cessation.

More recently, the Clinical Workgroup of the Centers for Disease Control and Prevention Select Panel on Preconception Care identified 83 conditions currently recommended to be a part of preconception care. They reviewed over 700 publications to determine the quality of scientific evidence and the strength of recommendation for including these interventions in preconception care services. The criteria used to determine the quality of the evidence and the strength of the recommendation were adapted from those used in the report of the US Preventive Services Task Force Guide of Clinical Preventive Services. In summary, the strength of recommendation was **A** if there is good evidence to support the recommendation that the condition be specifically considered in a preconception care evaluation, **B** for fair evidence to include, **C** for insufficient evidence to include, **D** for fair evidence NOT to include, and **E** for good evidence NOT to include. For 35 of the 83 interventions reviewed, the workgroup determined that there was good evidence (level A) to include the intervention as a component of preconception care. For 25 conditions the level of recommendation was B, and for the remaining 23 conditions, the level of recommendation was C, D, or E.

Today, we know that a woman's health before pregnancy, her behaviors, and her exposure to various environmental factors (including exposures to chemicals at home and at work, alcohol and tobacco use, over the counter and prescription drugs) will affect the outcome of her pregnancy including an increased risk of having a baby with a birth defect. We also know that for many of these factors, we have existing practice guidelines to help us reduce this risk if we act before pregnancy. It is time to move beyond the current paradigm of "anticipation and management" during pregnancy to "health promotion and prevention" in the preconception period and throughout a woman's life.

BIRTH DEFECTS IN THE CENTRAL AND EASTERN EUROPEAN REGION: MORBIDITY, EPIDEMIOLOGY, CURRENT ACTIVITIES

Anna Latos-Bielenska

EUROCAT Working Group

EUROCAT (European Surveillance of Congenital Anomalies, started in 1979) is a European network of population-based registries for the epidemiologic surveillance of congenital anomalies. Currently EUROCAT surveys more than 1.5 million births per year (29% of European birth population). EUROCAT constitute the Central Registry and 43 high quality, multiple source registries in 20 countries, including registries from Poland, Ukraine and Hungary. EUROCAT provides essential epidemiologic information on congenital anomalies in Europe, facilitates the early warning of new teratogenic exposures, evaluates the effectiveness of primary prevention, assesses the impact of developments in prenatal screening, acts as an information and resource center for the population, health professionals and managers regarding clusters or exposures or risk factors of concern, provides a ready collaborative network and infrastructure for research related to the causes and prevention of congenital anomalies and the treatment and care of affected children and acts as a catalyst for the setting up of registries throughout Europe collecting comparable, standardised data.

Registries from Central and Eastern Europe can share their experience in organization and funding of registries, study of the geographical variation in overall rates of congenital abnormalities and the rates of specific abnormalities, primary, secondary and tertiary prevention strategies, as well as planning and evaluation of health services.