Using health and demographic surveillance systems for teratovigilance in Africa

Increased funding in the past decade has improved healthcare coverage of the population and access to vaccines and drugs across sub-Saharan Africa. However, there is still a need to collect valid and sufficient baseline data on the safety of drugs and vaccines used during pregnancy, and for innovative approaches to pharmacovigilance in pregnancy to inform policymakers and to improve treatment guidelines.

Interest in establishing sustainable pharmacovigilance systems in Africa is gaining momentum thanks to pharmacovigilance systems in Africa informing policymakers and to improve treatment guidelines. Teratovigilance in Africa is one such strategy that is likely to affect compliance and risk factors of suspected adverse events among pregnant women, identify and evaluate adverse effects that are likely to affect compliance and treatment outcomes, and, finally, demonstrate the feasibility of using the HDSS as a sustainable platform to assess the use and safety of medications to facilitate decision-making in Africa.

More recently, INDEPTH introduced CHESS, a new generation of population surveillance operations that integrates across population and health facility data systems and links demographic, epidemiological, mortality, morbidity, clinical, laboratory, household, environmental, health systems, and other contextual data, with a unique electronic individual identification system throughout. CHESS will make pharmacovigilance more effective.

With over 2 million people under longitudinal evaluation in African countries, this population could generate a sufficient sample size of pregnant women for pharmacoepidemiological studies through all trimesters. Data collection staff are well trained in collecting data from sensitive vital events (eg, death, abortion, and medication, drug or vaccine adverse events). With CHESS, a form of enhanced HDSS, we could identify the main classes of medications used by pregnant women, prospectively determine the incidence and risk factors of suspected adverse events among pregnant women, identify and evaluate adverse effects that are likely to affect compliance and treatment outcomes, and, finally, demonstrate the feasibility of using the HDSS as a sustainable platform to assess the use and safety of medications to facilitate decision-making in Africa.

We declare no competing interests.

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