## EPIDEMIOLOGICAL PROFILE OF PESTICIDE POISONING (2007–2024) IN PREGNANT WOMEN FROM BRAZIL

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INTRODUCTION: Brazil is one of the world's largest consumers of pesticides, and exposure to these substances can cause both acute and chronic effects on human health. In this context, the country records thousands of pesticide poisoning cases annually, resulting from occupational, domestic, environmental exposure, and the consumption of contaminated food. The bioaccumulation of these toxicants in breast milk and their transfer to the fetus during pregnancy may lead to hormonal, genetic, and teratogenic alterations in future generations. OBJECTIVE: To identify the epidemiological profile of reported cases of unintentional pesticide poisoning in pregnant women from Brazil. MATERIALS AND METHODS: An ecological study was carried out in March 2025 based on data from the Notifiable Diseases Information System (SINAN). Cases of exogenous pesticide poisoning - agricultural, domestic, and public health pesticides - were analyzed by the five Brazil regions, according to the year of notification (2007 to 2024), age group, outcome final case, and type of exposure (occupational, habitual use, accidental, environmental, administration error, and ingestion of contaminated food). Descriptive statistics (n, %) were applied for data analysis. RESULTS AND CONCLUSION: A total of 283 cases were reported from 2007 to 2024, mostly in the second trimester of pregnancy and in 2019. The southern region registered the highest number of cases (37.1%), which is also one of Brazil's main agricultural zones. The most affected age group was 20 to 39 years (67.7%), corresponding to the reproductive age range. Nearly half of the pregnant women (46.6%) experienced occupational pesticide exposure. This finding supports studies indicating that agricultural work often continues until delivery, despite known risks. Regarding the circumstances of poisoning, approximately 55.8% were accidental. As for case outcomes, 89.8% recovered without seguelae. However, studies suggest that chronic and late-onset effects may mask this classification. Although research is scarce, evidence shows that maternal exposure to pesticides may impact pregnancy outcomes, leading to miscarriage, prematurity, and congenital malformations. Therefore, enhanced preventive and surveillance measures during pregnancy are needed.

Keywords: Poisoning; Agrochemicals; Reproductive Health.