Commentary: Agent Orange and birth defects in Vietnam

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The subject of Ngo et al.’s review¹ has been in the news since the 1960s: has exposure to Agent Orange sprayed in Vietnam between 1962 and 1971, or its dioxin contaminant 2,3,7,8-tetrachlorodibenzo-p-dioxin (or TCDD), resulted in an increased incidence of congenital malformations in Vietnam? Since 1983 there have been a number of Vietnamese conference presentations, which support the belief that Agent Orange exposure is linked to birth defects in Vietnam.¹³ However committee Reports of the US Institute of Medicine of the National Academy of Sciences, published as biennial reviews since

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consumption of residual dioxin in their diet. There is no doubt that during and after the war, many Vietnamese absorbed this very toxic material. It is our belief from toxicological research and epidemiological studies from many countries that this dioxin probably resulted in significant health effects in Vietnam. However we are not convinced that Vietnamese investigations linking congenital malformations to dioxin are, as yet, more than suggestive. We know of no non-Vietnamese studies linking herbicide or dioxin exposure to congenital malformations other than spina bifida and anencephaly. Earlier Vietnamese studies or case reports suggested a link to liver cancer and to hydatidiform mole and chorionic carcinoma, but these did not hold up after more rigorous subsequent research by Vietnamese and Western scientists.19,20 This article and its novel approach confirm the need for continued rigorously controlled research to definitively answer the question posed at the opening of this commentary. To date the answer is, at best, scientifically equivocal and, at worst, without valid positive scientific evidence.

References


