
Reasons for under-reporting of paraquat poisoning in India

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ABSTRACT

Background. Paraquat is an inexpensive herbicide used in agriculture because it is easily available and the cost of labour for manual clearance of weeds is prohibitive. Paraquat is toxic to human beings and is also used for committing suicide. We studied the reasons for under-reporting of paraquat poisoning including those related to the training of doctors.

Methods. In this mixed-methods study, we describe a series of patients with paraquat poisoning. We recorded their demographic data, clinical features, treatment and outcome with an intention to explore the reason for an initial misdiagnosis. We also explored whether deficiencies in curricula contributed to the misdiagnosis.

Results. The patients of paraquat poisoning ($n=28$) were mostly young illiterate men driven by impulsive behaviour rather than chronic depression. Paraquat was consumed by patients from non-agricultural background as well, implying easy access to the poison. Many patients could not name the agent and so initial treatment was directed at organophosphorus poisoning. The diagnostic signs included paraquat tongue, renal failure and jaundice. Most of the casualty medical officers and residents were unfamiliar with the symptoms and signs of paraquat poisoning as was evident by their answers to the questionnaire. Knowledge of medical students about paraquat poisoning was not assessed in the theory examinations and viva.

Conclusion. Factors contributing to the limitation in establishing the diagnosis are illiteracy and ignorance of the patients, lack of specific signs and lack of training of medical officers in treating patients with paraquat poisoning.

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FIG 1. Paraquat tongue presents as an acute painful central ulceration of the dorsum of the tongue on day 2 or 3 of paraquat poisoning