

The pattern of initial treatments for poisoned patients in primary care hospital level in rural Sri Lankan districts: Are the standard protocols useful?

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Introduction: Within rural areas of developing countries the self-poisoning mortality reaches 20%, higher than the 0.5 % seen in industrialized countries(1). In Sri Lanka the majority of poisoned patients present to the rural primary care hospitals where they receive the initial treatment. The delivery of care depends upon resources such as antidotes and equipment as well as the knowledge to deliver care. We conducted this study to assess the initial clinical assessment and treatment protocols compared to views about appropriate treatments and national guidelines.

Method: This retrospective survey was conducted in 37 peripheral hospitals with inpatient treatment facilities in North Central Province, Sri Lanka. Patient records were traced to collect details about the poison type, initial clinical assessments and treatment decisions. A structured questionnaire using four case scenarios was used to interview doctors about the treatments for common poison types. Doctors were asked to consider the available antidotes and equipments in their hospital while answering the questionnaire. Treatment details from patient records were compared with the results from interviews to determine the agreement and also compared to national protocols.

Results: There were 1021 admissions to 37 hospitals during the six month study period. In the patient record pulse rate, blood pressure and level of consciousness (55%, 65% and 83% respectively) were recorded most frequently this contrasted with the doctors' interview results where pulse rate (79%) and blood pressure (80%) were identified as important parameters. In patients with organophosphate poisoning there was relatively little attention paid to important parameters such as respiratory rate and lung signs both in patient records (9% and 10% respectively) or during interviews (11% and 18% respectively). At interviews the frequency of recommending gastric lavage (83%), activated charcoal (38%), Fullers earth (34.5%), and pralidoxime (30.4%) for appropriate cases was higher than actual practice: gastric lavage (67.5%), activated charcoal (5.5%), Fullers earth (3.7%) and pralidoxime (7.5%).

Conclusion: There is a significant mismatch between what doctors think are appropriate treatments and the actual practice according to patient records. Even when antidotes were available they were poorly utilised in particular hospitals when judged by the indications in Sri Lankan standard treatment protocols. Revising of the implementation current guidelines together with the mechanism to feedback is necessary. **Reference:** (1). Eddleston M, Karalliedde L, Buckley N et al. Pesticide poisoning in the developing world - a minimum pesticides list. *Lancet* 2002; 360(9340): 1163-7.