

A Strategy That Could Bring Down the High Mortality Rate That is Seen With Acute Poisoning in Sri Lanka

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Objective: The case fatality for self-poisoning in the developing world is commonly 10–20%, but for particular pesticides it may be as high as 50–70%. This contrasts with the less than 0.3% case fatality ratio normally found for self-poisoning from all causes in developed countries. This study was conducted to look in to the different hospital setups in Sri Lanka in the management of poison patients and to find out the ways to bring down the mortality rates. **Method:** A large prospective cohort study of acute self poisoned patients was carried out in Teaching Hospital Karapitiya (THK) in the year 2006 and in three hospitals in the North Central and North Western provinces of Sri Lanka since 2002 and at Teaching Hospital Peradeniya (THP). The poison ingested was provisionally identified from the patient's or relatives' histories, bottles brought in to hospital or doctor's comments in transfer letters and/or from clinical toxidrome. A plasma sample was taken from patients who consented. Retrospective analysis showed that the poison was correctly identified in more than 80% of cases (All analyses were done in Munich, Germany). Patients were assessed on admission for Organophosphate Poisoning (OP) features and management was carried out by hospital doctors independently from study doctors. Ward observations were performed five times per day to assess the patients' condition by study doctors. Data were analyzed from November 2006 to December 2007. Results: Poison patients admitted to THK had distributed among 10 medical wards, 140 nursing staff and 80 doctors. In THP has a separate ward with 13 nursing staff and 8 doctors which is solely for poisoned patients, both male and female poisoned patients admitted to the same ward. There are 4 medical wards 50 nursing staff and 8 doctors in THA. The break down of the total number of 4157 poisoning patients admitted during November 2006 to December 2007 are as follows: THK (1290), THP (624) and THA (2243). Rates of "on admission symptomatic patients" to THK 35.1%, THP 62.3% and THA 25.5%. Overall mortality rates among on admission symptomatic poisoned patients in THK 17.4%, THP 12.6% and THA 14.5%. Rate of Symptomatic OP patients admitted to THK, THP and THA were 52.9%, 70.6% and 33.5% respectively. Mortality rates among symptomatic OP patients admitted to THK, THP and THA were 30%, 16% and 25% respectively. **Conclusion:** THP is different from other two teaching hospitals because of the separate ward it has to manage poison patients. The staff working in that ward acquired a very good knowledge and experience regarding poisoning in comparison to other medical ward personnel. A dedicated poison unit as at THP may have some impact of to lower mortality rate. This study shows a strategy that might bring down the high mortality rate due to acute poisoning that is seen in Sri Lanka.