

Assessment of A Non Structured Distribution of Pesticides Safe Storage Boxes In Sri Lanka

Pieris R (1), Weerasinghe (1), Manuweera G (2), Konradsen F (3), Dawson A (1,4). 1. South Asian Clinical Toxicology Research Collaboration (SACTRC), Faculty of Medicine, University of Peradeniya, Peradeniya, Sri Lanka; 2. Office of the Registrar of Pesticides, Department of Agriculture, No 1056, Gatambe, P.O. Box 49, Peradeniya, Sri Lanka; 3. Department of International Health, Immunology and Microbiology, University of Copenhagen, Øster Farimagsgade 5, Building 16, P.O. Box 2099, 1014 Cph K, 2 3 Denmark; 4. School of Population Health, University of Newcastle, Australia

Objective: The use of locked boxes to store pesticides is widely promoted as a means of reducing poisoning. Usage may be affected by variations in design, method of box distribution. This study examines the efficacy (acceptability and use) of a safe storage program in a rural district of Sri Lanka where 425 safe storage boxes were distributed free of charge to farming households through an existing network of agricultural officers without previous educational promotion. **Methods:** The study used previously validated instruments to define safe storage in addition to qualitatively exploring reasons for appropriate or inappropriate use (1). Trained interviewers used distribution lists where available and interviews to assess utilization. Appropriate use was predefined as storage of all the household's pesticides in a locked box where the key was held by one person. The Safe Storage boxes were constructed from wooden based panels (MDF) with a wire net covered window in a lockable door. A padlock was required to lock the box. The box was designed to hang from a wall with a capacity to store one 4 Lt Pesticide container and several small pesticides containers. **Results:** A total of 374 boxes had been distributed; padlocks were not supplied with the box. It was possible to contact and interview 239 households that had received the box. 81.6% of recipient households expressed satisfaction with the box but only 24.3 % of households that kept their pesticides in the home locked the boxes. 18 households were not satisfied with strength of the box, while one teenage girl had easily damaged a locked box in a suicide attempt. Only 31% households that stored pesticides in the unlocked boxes bought padlocks. **Conclusions:** While community acceptance of boxes is high this does not translate into a pattern of appropriate use that could result in reduced poisoning. Distribution of boxes without community involvement and education was ineffective. The strength of safe storage boxes should be prime concern of such project, locks and keys should included in the package. **References:** 1. Konradsen F, Pieris R, Weerasinghe M, van der Hoek W, Eddleston M, Dawson AH: Community uptake of safe storage boxes to reduce self-poisoning from pesticides in rural Sri Lanka. BMC Public Health 2007, 7:13.