

≈ ORAL PRESENTATIONS ≈

OP 028

**Health Resources and Pesticide Bans: Effect on Suicide Mortality
in Sri Lanka****Dawson AH**, Jayamanne SJ, Gawarammana I, Manuweera G, Buckley NA.**Abstract**

Background: Deaths from deliberate pesticide poisoning is a major contributor to suicide deaths in the developing world. In 2008 the high toxicity of dimethoate, fenthion and paraquat was acknowledged by regulatory authorities in Sri Lanka leading to their removal from the market place over 3 years. This study examines the effects of these bans on ingestion behaviour, deaths and utilisation.

Methods: Data was extracted from 3 sources for the years 2006-2013; a prospective cohort of 44,000 patients presenting with self-poisoning to study hospitals, Ministry of Health admission statistics for the entire country coded for poisoning, deaths from poisoning recorded by police for the entire country.

Results: During the observation period the overall mortality in the cohort dropped from 5.4 to 1.8% (Relative risk (RR) 0.32, 95% CI: 0.26- 0.40). This was virtually all due to a reduction in pesticide mortality. Comparable relative risk reductions were seen in the national hospital data (RR 0.33, 95% CI: 0.31-0.37) and police data (RR 0.53, 95% CI: 0.50-0.56). Police data did not show a significant increase in other suicide methods. Hospital presentation data showed an earlier decline in presentations from the banned pesticides than might be predicted from the timing of restrictions, suggesting farmers were switching early. Within the cohort it was apparent that there was an improvement in care over the study period and this was responsible for about 50% of the fall in case-fatality.

Conclusion: Pesticide bans were associated with a large reduction in both deaths from pesticides and overall suicides.