ORAL PRESENTATIONS

[ID-O#100] Impact of Reduced Pesticide Imports on Public Health Outcomes in Sri Lanka: A Longitudinal Analysis from 2011 to 2022

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Introduction: In Sri Lanka, agricultural communities have faced considerable public health challenges due to pesticide poisoning, exacerbated by high agricultural dependency and poor handling practices. However, recent years have shown a marked decrease in pesticide imports, correlating with significant reductions in poisoning cases and related fatalities. Data from 2011 to 2022 underscores these trends, emphasizing the impact of reduced pesticide use on improving public health outcomes in the country.

Methodology: Data spanning from 2011 to 2022 was gathered from the Registrar of Pesticides and the Medical Statistics Division of Sri Lanka's Ministry of Health. Additional statistics from 2018 to 2022 were obtained from the National Poisons Information Centre in Sri Lanka.

Discussion and Results: Sri Lanka witnessed significant reductions in pesticide imports from 2011 to 2022. insecticide formulations dropped from 1,712.58 to 687.94 metric tons, herbicides decreased from 5,031.05 to 1,749.19 tons, and fungicides declined from 949.40 to 736.92 tons. Concurrently, data from Sri Lanka's Ministry of Health's Medical Statistics Division indicated a notable decrease in reported pesticide-related toxic effects, falling from 15,710 cases in 2011 to 6,502 cases in 2022. Pesticide-related deaths also decreased significantly from 733 in 2011 to 176 in 2022. Additionally, the National Poisons Information Centre reported a rise in overall poison exposure inquiries from 1,024 in 2018 to 2,190 in 2022, with specific inquiries related to pesticide exposure increasing from 313 to 844 during the same period.

Conclusion: Decreased pesticide imports in Sri Lanka have led to improved public health outcomes by reducing pesticide poisoning incidents. This reflects a decade-long decline in pesticide usage, likely influenced by heightened awareness and better health education. Increased inquiries to poisons information centers underscore these improvements. Future research should focus on evaluating policy interventions aimed at further minimizing pesticide- related health risks.