

## COMPARATIVE ANALYSIS OF FOUR SELECTED INTERVENTIONS TO PREVENT ACCESS TO PESTICIDES THROUGH VENDORS FOR SELF-POISONING – A STAKEHOLDER ANALYSIS

Manjula Weerasinghe<sup>1,2</sup>; F Konradsen<sup>2,3</sup>; M Eddleston<sup>2,3,4</sup>; M Pearson<sup>2,4</sup>; D Gunnell<sup>5</sup>;

S Agampodi<sup>1</sup>

<sup>1</sup> Department of Community Medicine, Faculty of Medicine & Allied Sciences, Rajarata University of Sri Lanka, Saliyapura, Anuradhapura, Sri Lanka

<sup>2</sup> South Asian Clinical Toxicology Research Collaboration (SACTRC), Faculty of Medicine, University of Peradeniya, Peradeniya, Sri Lanka

<sup>3</sup> Department of Public Health, Faculty of Sciences, University of Copenhagen, Copenhagen, Denmark

<sup>4</sup> Pharmacology, Toxicology and Therapeutics, University of Edinburgh, Edinburgh, UK

<sup>5</sup> School of Social and Community Medicine, University of Bristol, Bristol, UK

**Objectives:** Around 15-20% of pesticide self-poisonings occur soon after the person has bought pesticide from a shop. This study aimed to obtain feedback from the stakeholders on feasibility of implementing four different interventions to prevent such access to pesticides; identification cards for farmers (IC), waiting times before purchase (WT), prescriptions for pesticides (PP) and gatekeeper trainings for pesticide vendors (GT).

**Methods:** We undertook 4 focus group discussions (FGD) with farmers and pesticide vendors together with a stakeholder analysis after purposively selecting a sample of 12 stakeholders (public health, agriculture, farmers, community, pesticide vendors and pesticide companies). We discussed their support or opposition for each policy option, the barriers and facilitators towards implementation, and preference (by ranking). Data were collected between April to June 2015. Thematic analysis was performed.

**Results:** FGD participants considered GT to be the most feasible intervention. Farmers supported GT because they believed it would not affect their current pesticide purchasing behavior. Vendors also preferred GT; many had already developed practices to identify customers perceived to be at risk of self-harm and were keen for further training. Agricultural representatives believed such training could be incorporated into vendors' annual training curriculum. However, public health practitioners doubted the sustainability of GT. Government health and agriculture agencies preferred ID, but had concerns about identifying eligible farmers and distributing identity cards. Farmers also argued against ID because they wished other family members to buy the pesticides sometimes. Urban vendors argued against ID and PP as their high customer number would make it difficult to validate IDs and prescriptions. Most participants identified ID and PP as difficult in terms of money, energy and resources. Community members (non-farmers) were concerned that ID would make it more difficult to obtain pesticides for their garden cultivation. Prescriptions were difficult due to the perceived lack of people to write them. WT was identified as the least supported intervention by the farmers and vendors. Stakeholders identified farmers and vendors as the major stakeholder groups for any potential intervention at the point of sales whereas the agricultural sector would be the key implementation agency.

**Conclusions:** Stakeholders believed that interventions should be targeted at vendors to improve effectiveness. GT was the intervention preferred by most stakeholder groups. This intervention now needs to be field test to assess the feasibility and sustainability.