Oral Abstracts

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PREVENTING PESTICIDE SUICIDES BY RESTRICTING ACCESS FROM SHOPS - EXPLORATORY AND PILOT STUDIES

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Objectives: We aimed to identify a public health intervention that has the potential to be effective in reducing access to pesticide from shops for self-poisoning. An effective intervention could contribute to saving thousands of lives every year across rural Asia.

Methods: We used the three steps 'systems thinking' approach to identify the most appropriate intervention; (1) A case control study - fifty self-poisoning patients who had bought pesticides from shops (cases) were compared with 200 unmatched legitimate customers (controls) to identify risk factors associated with purchasing pesticide from shops for self-poisoning. (2) A stakeholder analysis - ten focus group discussions were held with key stakeholders to identify the most promising intervention for field test. (3) A feasibility study –the selected intervention was field tested in 14 pesticide shops to assess the feasibility and acceptability.

Results: The case control study identified two key risk factors that might be recognizable by a pesticide vendor - that of being intoxicated (OR 33.7, 95% CI 2.2 to 508.0) and being a non-farmer (OR 10.5, 95% CI 2.1 to 53.3). Avoiding selling pesticides to alcohol intoxicated men and non-farmers would prevent 72% of cases where pesticides were brought from shops for the act. We analyzed our findings in the context of a literature review and identified four potential interventions (farmer Identity cards, prescription for pesticides, increased waiting times before purchased and vendor training) that might reduce access to pesticides from shops for self-poisoning. Vendor training was the most strongly supported intervention, being ranked first by the stakeholders. Facilitators strongly favored vendor gatekeeper training since farmers did not think it would affect their current practice, vendors were already doing it (while appreciating the opportunity for formal training), and the Department of Agriculture believed such a program could be incorporated into ongoing work. Vendors were trained to observe customer behaviors, to check for intoxication, and to ask questions that farmers would know. Vendors reported that over the three months they were aware from community feedback that they had prevented at least seven suicide attempts. However, on four occasions they had been unable to recognize the real intention of the customers who had then drunk pesticide.

Conclusion: Our study suggests that training for all pesticide vendors in a region has the potential to prevent a substantial proportion of people who buy pesticides for self-poisoning. Further assessment of the effectiveness and sustainability of this initiative is needed.