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The impact of pesticide regulations in Asia on suicide

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Pesticide self-poisoning kills around 150,000 people every year. Prevention will be multi-disciplinary and multi-level, working at patient, community and national levels. Case fatality for pesticide self-poisoning is often high, depending on the pesticide involved, and much higher than intentional poisoning in industrialised regions. Improved medical management will prevent some deaths and is urgently required. Altering how pesticides are used in communities may reduce the risk of self-poisoning, but we have shown that household storage is unlikely to be effective. Finding ways of preventing sales to people who may go on to poison themselves with the pesticide may be effective - studies are ongoing. However, activity at the national level, in particular removing the most toxic pesticides from agricultural use - so that pesticide ingestion becomes much safer - is where the big gains are going to be made. This talk will present evidence from Sri Lanka, South Korea, and Bangladesh that demonstrates that banning highly hazardous pesticides, where pesticide poisoning is a major form of suicide, results in a major reduction in both pesticide specific and overall suicide rates. These interventions have had modest direct costs - in the case of Sri Lanka, just 50 USD per life for the 93,000 lives saved over the last 20 years. Indirect costs will include reduced agricultural yields or increased input costs - however, thus far, no apparent effect of regulations banning highly hazardous pesticides on agriculture has been apparent. A worldwide ban on the use of highly hazardous pesticides is likely to prevent tens of thousands of deaths every year and is urgently required. This approach will be the most effective approach to preventing pesticide suicides.