IASP Special Interest Group (SIG) on the Prevention of Intentional Pesticide Poisoning

Bibliography: Study Design - Qualitative

64 patients admitted to Kandy General Hospital, Sri Lanka, following 'self-poisoning' were interviewed. The sample resembled those from Western countries in that a major cause was inter-personal disputes, but differed from the West in that the disputes were mainly between patient and kin. Other differences were that social isolation was not a cause, agricultural pesticides were the commonest poisons used, relatively few patients were referred for psychiatric advice, and recidivism was very infrequent. An attempt is made to explain the differences on a socio-cultural basis.


**BACKGROUND:** Policy analysis is often retrospective and not well suited to helping policy makers decide what to do; in contrast prospective policy analysis seeks to assist in formulating responses to challenging public policy questions. Suicide in Sri Lanka is a major public health problem, with ingestion of pesticides being the primary method. Previous policy interventions have been associated with reduced mortality through restricting access to the most toxic pesticides. Additional means of reducing access are still needed. **METHODS:** The prospective policy analysis comprised two stages. The first used a consensus activity within a well defined policy community to generate and frame policy options. The second broadened the analysis to include other stakeholders. We report the consensus activity with seven actors from agriculture, health, and academia. Policy options were identified through two rounds of discussion along with ratings by each participant on their degree of support for each option. Data were analysed quantitatively and discussions analysed with Nvivo 8 to code prominent and recurrent themes. **RESULTS:** The main finding was the strong support and consensus for two proposals: further regulation of pesticides and the novel idea of repackaging pesticides into non-lethal doses. Participants identified several factors that were supportive of future policy change including a strong legislative framework, good links between agriculture, health and academia, and a collaborative relationship with industry. Identified barriers and potential threats to policy change included political interference, difficulties of intersectoral collaboration, acceptability of options to the community, difficulty of implementation in rural communities and the challenge of reducing mortality. **CONCLUSIONS:** The development and consideration of policy options within this epistemic community reflected an appreciation and understanding of many of the factors that can facilitate or thwart policy change. The understanding of context, evidence and ideas, implementation and impact influenced how the participants considered and rated the options. Use of epistemic community actors identified the level of support for each option, helped elaborate the particularities of context, as well as the power and influence of ideas. Further examination of the potential barriers and opportunities for these options will determine if broader consensus, involving a wider range of stakeholders, can be achieved and policy change promoted.

**BACKGROUND:** Suicide in Sri Lanka is a major public health problem and in 1995 the country had one of the highest rates of suicide worldwide. Since then reductions in overall suicide rates have been largely attributed to efforts to regulate a range of pesticides. The evolution, context, events and implementation of the key policy decisions around regulation are examined.

**METHODS:** This study was undertaken as part of a broader analysis of policy in two parts–an explanatory case study and stakeholder analysis. This article describes the explanatory case study that included an historical narrative and in-depth interviews.

**RESULTS:** A timeline and chronology of policy actions and influence were derived from interview and document data. Fourteen key informants were interviewed and four distinct policy phases were identified. The early stages of pesticide regulation were dominated by political and economic considerations and strongly influenced by external factors. The second phase was marked by a period of local institution building, the engagement of local stakeholders, and expanded links between health and agriculture. During the third phase the problem of self-poisoning dominated the policy agenda and closer links between stakeholders, evidence and policymaking developed. The fourth and most recent phase was characterized by strong local capacity for policymaking, informed by evidence, developed in collaboration with a powerful network of stakeholders, including international researchers.

**CONCLUSIONS:** The policy response to extremely high rates of suicide from intentional poisoning with pesticides shows a unique and successful example of policymaking to prevent suicide. It also highlights policy action taking place 'under the radar', thus avoiding policy inertia often associated with reforms in lower and middle income countries.


Background: Suicidal behaviour, primarily through self-poisoning, is a major public health problem among youth in Sri Lanka. Methods: This article describes a qualitative study of student perspectives on suicidal behaviour and its prevention. Focus groups were held with students 17-20 years of age. A discussion of the perceived causes of suicidal behaviour provided the context for discussing prevention efforts. Conclusion: Participants identified pathways to suicidal behaviour and emphasized experiential aspects and the variability of fatal intent. Suggestions for prevention tended to emphasize the strengthening of community-oriented actions in order to better realize lethal means restrictions.


Self-harm using poison is a serious public health problem across Asia. As part of a broader effort to tackle this problem, medical research involving randomised clinical trials are used to identify effective antidotes among patients who have ingested poison. On the basis of ethnographic material
collected in rural hospitals in Sri Lanka between 2008 and 2009, this article describes the conduct of trials in this unusual and difficult context. It outlines three subject positions crucial to understanding the complexity of such trials. At one level, self-poisoning admissions might be thought of as objects, that is, stigmatised by actions that have placed them at the very limits of physical and social life. They have seriously harmed themselves in an act that often leads to death, marking the act as a suicide. Yet, this is the point when they are recruited into trials and become objects of research and experimentation. Participation in experimental research accords them particular rights mandated in international ethical guidelines for human subject research. Here the inexorable logic of trials and morality of care meet in circumstances of dire emergency. BioSocieties (2013) 8, 41-57. doi:10.1057 biosoc.2012.34; published online 7 January 2013


BACKGROUND: Self-poisoning with pesticides is the cause of an estimated 300,000 deaths annually in rural Asia. The great majority of these deaths are from impulsive acts of self-harm using pesticides that are readily available in the home. The secure storage of pesticides under lock has been emphasized as a possible answer to the problem. This aspect, however, has been poorly researched. In this paper, we report on the design and use, in rural Sri Lanka, of a variety of different lockable storage devices. METHODS: Following a baseline survey of pesticide storage practices, randomly selected households received a pesticide safe storage device. The study was conducted in two phases. In the first phase a total of 200 households in two villages were provided with in-house safe storage devices and two follow-up surveys were conducted seven and 24 months after distribution. The results of the seven month post-distribution survey have already been published. In the second phase, a further 168 households were selected in two additional villages and given a choice between an in-house and an in-field storage device and a follow-up survey conducted seven months after distribution. Both follow-up surveys aimed to assess the use of the device, obtain detailed user feedback on the different storage designs, and to identify problems faced with safeguarding the key. Twelve focus group discussions were held with representatives of households that received a storage device to derive from the community qualitative feedback on the design requirements for such devices. RESULTS: One hundred and sixty one of the 200 households selected during the first phase were using pesticides at the time of the follow-up survey, 24 months after distribution. Of these 161 households 89 (55%) had the pesticides stored and locked in the provided device. Among the 168 households that were given a choice between an in-house and an in-field storage device 156 used pesticides at the time of survey and of these 103 (66%) selected in-field storage devices and 34% chose in-house storage devices. Of the 156 households, 106 (68%) stored all pesticides in a locked storage device at the time of the follow-up survey seven months after distribution. The majority of households that received an in-field storage device chose to install the device within their compound rather than in the field as they were concerned about the possibility of theft. The preferred
design of the storage device was influenced by a number of occupational factors such as land size, crop patterns, types and the quantity of pesticides used. The presence of termites, perceived safety, material used to manufacture the device and ease of location influenced their choice. The study revealed that it was difficult to keep the key to the device hidden from children; and that the person in charge of the key would have easy access to the stored poison. CONCLUSION: This study confirms the high acceptance of lockable storage devices by the community although the use of the device reduced over time. A large proportion of pesticides stored within the compound after the introduction of the device may have implications for accessibility to pesticides in the domestic environment. The ability of other household members, including children, to easily find the key is also worrying.