

A conversation with the Centre for Pesticide Suicide Prevention, September 20, 2018

Participants

- Professor Michael Eddleston – Director, Centre for Pesticide Suicide Prevention
- Dr. Leah Utyasheva – Policy Director, Centre for Pesticide Suicide Prevention
- James Snowden – Research Consultant, GiveWell

Note: These notes were compiled by GiveWell and give an overview of the major points made by the Centre for Pesticide Suicide Prevention.

Summary

GiveWell spoke with Professor Eddleston and Dr. Utyasheva of the Centre for Pesticide Suicide Prevention (CPSP) for an update on its work. In August of 2017, CPSP received a GiveWell Incubation Grant of \$1,336,409 to start work aimed at reducing deaths from deliberate ingestion of pesticides. Conversation topics included CPSP's progress in India, its progress in Nepal, its other ongoing activities, and a timeline for potentially renewing GiveWell funding.

Progress in India

Waiting to receive ethics approval

CPSP is currently waiting to receive ethics approval from the Indian Council of Medical Research in order to begin data collection in India. The process for receiving approval was complicated by rules established in December of 2017, which require all studies supported by overseas funding to undergo a review by the Indian central government.

The application for ethics approval was submitted by CPSP's partner in South India, Christian Medical College, Vellore (CMC)—which does not have prior experience with the committee created to review foreign research proposals. However, CMC believes that approval will likely be received by September to November of 2018. Based on current information, CPSP estimates the likelihood of receiving ethics approval by the end of 2018 at 50%.

CPSP is six months behind its original expectation of commencing data collection by March of 2018 in India, primarily due to India's new rules regarding foreign research.

Other opportunities to address the question

Stomach contents and blood samples of patients who have overdosed on pesticides are sent to toxicology labs for further analysis. Labs may take months to produce results, which do not affect patient care.

CPSP believes that with government permission it may be able to access the data on pesticide suicides that is stored in toxicology labs. CPSP would work with government officials on an audit, which is not considered research and would therefore not require ethics approval. It has identified multiple opportunities to collect data through a government audit, including:

- **Working with the Food and Agriculture Organization of the United Nations (FAO)** – CPSP is in contact with FAO staff in New Delhi, who are closely connected with government officials, about the possibility of aiding access to and analysis of toxicology labs' data.
- **Working with officials from Maharashtra** – Maharashtra is one of four Indian states where pesticide suicide is a major issue. Dr. Utyasheva has connected with a physician in Maharashtra who may be able to facilitate conversation between CPSP and the state's Chief Minister regarding the possibility of a government audit.

Support of public interest litigation

In 2015, a committee chaired by Dr. Anupam Verma was formed to review 99 potentially hazardous pesticides. In 2016, this committee released a report recommending that 12 pesticides be banned by 2018, six pesticides be eliminated gradually by 2020, and 25 pesticides be reviewed again in 2018. In response to a lack of action following the 2016 report, the Alliance for Sustainable & Holistic Agriculture (ASHA) filed public interest litigation with the nation's Supreme Court, recommending that 66 to 99 pesticides be banned based on evidence from Dr. Anupam Verma's committee. The Supreme Court then authorized a committee chaired by Agriculture Commissioner Dr. S.K. Malhotra to make decisions by June of 2018 regarding the pesticides listed in the 2016 report, focusing particularly on the 18 pesticides recommended for elimination.

Upon the request of Kavitha Kuruganti from ASHA, CPSP submitted an expert statement to Dr. S.K. Malhotra's committee, presenting the case for banning pesticides as a human rights concern and listing data on the dangers of various pesticides in India—including the 18 pesticides recommended for elimination, the other pesticides not recommended for elimination in the 2016 report, and additional pesticides not reviewed by the 2016 report.

Shortly after CPSP submitted its expert statement, Dr. S.K. Malhotra's committee made the decision to adhere to the recommendations of Dr. Anupam Verma's committee, banning 12 pesticides and eliminating six more pesticides by 2020. The bans are being enacted by India's central government, as state-level pesticide registrars are only able to enact pesticide bans for a maximum of 60 days unless specific permission is received from the central government. At least three or four of the pesticides that will be banned are significant problems in India.

CPSP is not certain that its input was a primary cause of the action taken by Dr. S.K. Malhotra's committee, although it believes that its statement may have had some impact.

Politics of enacting pesticide regulation in India

The central Indian government took significantly longer to ban pesticides recommended for elimination than CPSP had expected. CPSP now believes that it is generally unlikely for the central government to make and implement decisions about pesticide regulation swiftly.

The political environment surrounding pesticides regulation in India is complex, as large pesticide manufacturers operate in the nation. For example, India was a major producer of the highly hazardous pesticide endosulfan, which the government opposed regulating. The pesticide was ultimately banned through a mandate from the nation's Supreme Court.

Despite complex pesticide governance, CPSP believes that India presents a conducive environment for work on pesticide issues. A significant number of Indian stakeholders in the non-profit sector are advocating for increased pesticide control, and suicide rates in India are decreasing according to national records.

Progress in Nepal

Retrospective data collection

CPSP has collected and catalogued retrospective data from three hospitals in Nepal. Aggregated data from the three hospitals suggests that methyl parathion and phorate are the two pesticides most responsible for death. These pesticides appear to originate from India, as they were banned in Nepal approximately five years ago. Methyl parathion was recently banned in India as well, which may result in a lower number of pesticide suicides in Nepal for the future.

CPSP is cataloguing data from one more hospital and is in the process of collecting data from another hospital.

Timeline and plan

CPSP originally planned to collect data from 10 hospitals in Nepal. It hopes to complete data collection from the 10 hospitals and compile a report from the aggregated data by February of 2019.

CPSP may also collect data from an additional two hospitals, as it received comments from Nepalese stakeholders suggesting that a hospital from each of the nation's 10 provinces should be included in the dataset. It has not yet received approval to collect data from these additional two hospitals.

Improving prospective data collection

In addition to collecting retrospective data, CPSP is discussing methods for improving prospective data collection with hospitals. It plans to collect prospective new pesticide suicides data from all study hospitals in Nepal. In order to understand if its recordkeeping intervention is effective and improve it for the prospective data collection, CPSP plans to revisit the hospitals to look for evidence of improved recordkeeping.

Gathering data from police

CPSP has requested data from the Nepalese police force, which records pesticide-related deaths that occur prior to hospital admission.

Papers on the effects of pesticide regulation in Nepal

CPSP is authoring a paper that compares the enactment of pesticide regulation in Nepal to the past 20 years of pesticide suicides data it is collecting in order to identify any correlations between the two. It is also authoring a paper comparing the prospective pesticide suicides data it plans to collect over the next two years and any new regulations enacted.

Political environment for enacting pesticide regulation

Although the Nepalese Pesticide Registrar is important in determining the viability of pesticide regulation in the country, CPSP believes it is also important to consider public perception and political context. Certain individuals are able to significantly influence public perception and create a political environment more conducive to pesticide regulation.

Increasing awareness of pesticide suicide through newspaper articles

In order to increase public engagement, Dr. Utyasheva and her colleagues are continuing to publish articles in both Nepalese and Indian newspapers, which appear to be highly interested in the subject of pesticide suicide.

Other ongoing activities

Inclusion of pesticide suicide in the Rotterdam Convention

The Rotterdam Convention is an international treaty that maintains a list of hazardous chemicals and promotes cooperation between nations to limit the negative impacts of these substances. CPSP is continuing to explore the possibility of altering the Rotterdam Convention to include pesticide suicide as a legitimate concern.

Small-scale agricultural research in Sri Lanka

The Director General of Agriculture in Sri Lanka may be interested in an RCT on the effects of replacing carbosulfan and profenofos with less hazardous pesticides. CPSP is in the process of identifying low-toxicity pesticides that could perform the same agricultural function as carbosulfan and profenofos.

Timeline for renewal of GiveWell funding

CPSP previously projected that its budget would enable it to work until August 1, 2019. Due to underspending, it now projects that its budget will last until August 1, 2020—although the exact timeline will become clearer over the next 12 months. CPSP's underspending was primarily due to:

- **Overbudgeting**

- **Delay in spending** – CPSP initially projected that it would begin spending significant funding in August of 2017, but this did not occur until November of 2017.

Now that it has spent a significant amount of time working in Nepal and India, CPSP believes it is better calibrated to determine, over the next four to six months, how to most effectively spend its budget to achieve a reduction in pesticide suicides.

By January of 2020, CPSP believes it will have a stronger body of evidence to support an application for a renewal of funding from GiveWell. By March or April of 2020, it would like to know whether GiveWell plans on renewing funding. CPSP is less concerned with when it would actually receive GiveWell funding, as the University of Edinburgh would be able to provide buffer funding until GiveWell funding is received.

All GiveWell conversations are available at <http://www.givewell.org/conversations>