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Study of self-poisoning cases admitted in a single center after the removal of pesticide restriction in Kerala

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Aim and objectives: State government of Kerala in India regionally banned the use and sale of 14 highly hazardous pesticides in 2011 and studies showed significant reduction of suicide after 2011^{1,2}. Kerala high court quashed the government order of the ban in February 2022. We aimed to find out the agents used by hospital admitted patients with self-poisoning after the removal of pesticide ban and to analyze whether the removal of ban has reflected in the agents used for self-poisoning.

Methodology: Data from case records of self-poisoning cases from 2019 January to 2023 August was analyzed. The hospital was functioning as a covid center during the years 2020 and 2021. Chemical name of the agents were recorded whenever possible. In other cases, broad names like organophosphorus compounds (OPC) or pesticides or tablet poisoning were used.

Results:

Year	Total number	Pesticides	Common agent	Other agents	Death
2019	25	12	Chlorpyrifos (3)	Quinalphos, OPC	4
2020	0	0	-	-	-
2021	11	11	Chlorpyrifos (3)	Quinalphos, OPC	3
2022	29	13	OPC (6)	Chlorpyrifos. Quinalphos, Paraquat	5
2023 till August	35	24	OPC (6), Paraquat (6)	Chlorpyrifos. Quinalphos	10



Conclusions: There is increase in number of paraquat poisoning after 2022.

References: 1. Bonvoisin, T., Utyasheva, L., Knipe, D. et al. Suicide by pesticide poisoning in India: a review of pesticide regulations and their impact on suicide trends. BMC Public Health 20, 251 (2020)

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