



### Economic burden of acute poisoning - An exploratory study

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**Objectives:** Acute poisoning is a major cause of morbidity and mortality in South Asia. The economic burden of treating the patient and caring for the dead is an un-addressed issue. In this study we examine the economic morbidity of self-harm.

**Methods:** Prospective 3 year study conducted in UT of Chandigarh and adjoining district towns of Mohali (Punjab) & Panchkula (Haryana). Direct, indirect and productivity cost of acute poisoning were estimated. Analyses were performed using IBM Statistics package (SPSS 18).

**Results:** Of 1799 acute poisoning cases eligible for evaluation, only 1126 (1042 alive and 84 dead) were traceable. Of these, 862 were from Chandigarh, 185 from Mohali and 79 from Panchkula. The most affected age groups were 19 to 26 years (36.2%) and 26 to 40 years (31.6%). Most cases were from urban areas (68.8%) and victims were more often students (28%) or house wives (20.4%), particularly those from a nuclear family (77.8%). The majority were suicidal poisonings (57.4%) followed by accidental poisoning (40.3%) and homicidal poisoning (2.0%). The majority of victims were exposed to the poison at their home (82.3%) of which anticholinesterase compounds (41.6%) were the most common agent, followed by prescription drugs (29.1%). Of the survivors, the total direct cost on medicines was 5,189,792.00 Rs (average cost 4,722.29 Rs per victim) and the average travel expenditure of the victims and/or their relatives during their treatment was around 749.23 Rs per family. In terms of mortality, the financial burden suffered by 84 families due to death at early age/unexpected time (including lost income), was approximately 342,793,580.84 Rs and the family spent approximately 4,018,441.56 Rs on the cremation or ceremony. The total mortality cost in each geographical area was 220,368,749.04 Rs in Chandigarh (54 cases), 106,103,471.76 Rs in Mohali (26 cases) and 16,321,360.04 Rs in Panchkula (4 cases). The total cost for 1126 cases of acute poisoning for these three regions is 352,789,708.68 Rs.

**Conclusion:** The total cost of acute poisoning over 3 years in UT of Chandigarh and adjoining district towns of Mohali (Punjab) & Panchkula (Haryana) is 352,789,708.68 Rs.