

survey (2015–16) of all psychiatric emergencies seen in our department.

This retrospective study included patients who presented to the emergency department between January and December 2015 at the All India Institute of Medical Sciences, New Delhi for whom a psychiatric consultation/call was sought. Of a total of 720 patients, 9.6% ( $n=69$ ) presented with deliberate self-harm (suicidal or para-suicidal) attempts. Of these patients who attempted self-harm, a majority 38 (55%) had presented with ingestion of toilet cleaners, with 28 (40%) reporting intake of the 'branded'/other toilet cleaners (many of which may contain diluted hydrochloric acid or the alkaline bleach) and the remaining 10 (15%) reported ingestion of corrosive 'acid' over the course of one year.

The mean (SD) age of these patients was 25.3 (7.4) years and 48 (70%) were women. The attempts were limited to self-reported ingestion of minimal/few sips, mostly as an unplanned or impulsive attempt. A small number of these patients was previously diagnosed with a major psychiatric disorder (recurrent major depression, acute psychosis), while the majority did not have a prior psychiatric diagnosis. Many patients initially reported it to be an accidental ingestion. It is well-known that suicide is usually under-reported and an attempt is often made to disguise it as an accident due to various social and legal consequences associated with documented attempt at self-harm. During the course of psychiatric assessment of these patients, we found that almost all the incidents were preceded by conflicts such as an argument with family members or failure in an examination or a failed relationship, etc.

We wish to emphasize that although acid ingestion is a common mode of deliberate self-harm, its public health role is usually missed in the context. In several research reports and the National Crime Record Bureau data, the role of poisoning, including pesticide ingestion, as a mode of suicide has been documented, with public health measures initiated to limit the availability of such substances.<sup>4,5</sup> However, there is not much documentation or emphasis on acid ingestion as a mode of self-harm. The Supreme Court directives have a bearing for self-harm attempts using corrosive acidic cleaners. There is a need for effective control at the source of sale of acid, though enforcement is a practical challenge.

Public should be made aware and consumers should be sensitized about safe-keeping of the corrosive acid at home. Educational institutions, research laboratories, hospitals, government/public sector departments are now required to keep and store acid/corrosive and maintain a register of usage of acid. There is little awareness about the potentially harmful consequences of using acid-based cleaners and guidelines for proper storage and safe-keeping need to be disseminated widely.<sup>1,6</sup>

The easy, unrestricted availability at home coupled with low awareness and safe-keeping have a potential of *serious* short- and long-term medical consequences upon ingestion of 'concentrated, corrosive acid'. On ingestion, the inhaled acidic fumes can severely damage lungs, kidneys and the intestines. The damage caused by an acid is dependent on the concentration and quantity of acidic solution used. Cost-effective and safer cleaning options, or necessary modifications in the form of dilution, etc. may help to minimize self-harm.

## REFERENCES

- 1 Sharma DC. India promises to curb acid attacks. *Lancet* 2013;**382**:1013.
- 2 309 acid attack cases in 2014, 300% rise in 3 years. *The Indian Express* 10 Apr 2015. Available at [www.indianexpress.com/india-india-others](http://www.indianexpress.com/india-india-others) (accessed on 22 May 2016).
- 3 Supreme Court of India. Laxmi vs. Union of India [(2014) 4 SCC 427], The Supreme Court of India Criminal Original Jurisdiction Writ Petition (CRL.) No. 129 of 2006. Supreme Court Order dated 18 July 2013. Available at [www.health.mp.gov.in/ha/acid%20regulation-supreme%20court-13.pdf](http://www.health.mp.gov.in/ha/acid%20regulation-supreme%20court-13.pdf) (accessed on 21 May 2016).
- 4 Radhakrishnan R, Andrade C. Suicide: An Indian perspective. *Indian J Psychiatr* 2012;**54**:304.

---

### Self-harm attempts with corrosive 'acid' among patients referred to psychiatric emergency services: Observations and implications

The use of corrosive acids to carry out 'acid attacks' is a topic of current debate.<sup>1</sup> Anecdotal reports from different parts of India suggest an alarming rise in such cases.<sup>2</sup> To curb such incidents, the Indian Penal Code has been amended with insertion of sections 326A and 326B to deal with acid violence. As per the directives of the Supreme Court in 2013, a person selling acid must maintain a complete record of the people to whom it is sold as well as the quantity sold. Further, they can sell the acid only to a customer who shows a valid identity proof and gives the reason for buying acid, failing which a fine of ₹50 000 may be imposed.<sup>1,3</sup> However, in spite of regulations, concentrated hydrochloric acid and sulphuric acid are easily available in stores across India. A litre of over 95% concentrated acid can be obtained for as little as ₹25 (almost one-third a US dollar) in most places, making it a cheaper, preferred option to clean and unblock toilets and drains vis-a-vis other kinds of cleaners.

A related issue that is often overlooked and needs to be highlighted is the use of this corrosive acid as a mode of attempting self-harm/suicide among patients presenting to psychiatric services. In view of its potential for self-harm attempts, we compiled the findings pertaining to use of 'acid' as a mode of self-harm in a one-year retrospective

- 5 National Crime Records Bureau. *Accidental deaths and suicides in India 2014*. New Delhi:Ministry of Home Affairs, Government of India; 2015.
- 6 Rasouli HR, Motamedi MH. Raising awareness against acid attacks. *Lancet* 2015;**385**:772–3.

Raman Deep Pattanayak  
Saurabh Kumar  
S.K. Khandelwal  
*sudhir\_aiims@yahoo.co.uk*  
Department of Psychiatry  
All India Institute of Medical Sciences  
New Delhi