

## An epidemiologic study of aluminum phosphide poisoning in patients admitted in a specialized referral poisoning center in northern Iran

Ali Banagozar Mohammadi<sup>1</sup>, Maryam Zaare Nahandi<sup>\*2</sup>

### Abstract

**Background and objectives:** In recent decades, aluminum phosphide pills are used for suicide attempts in Tehran and other parts of the country. Aluminum phosphide is a solid inorganic phosphide that because of the involvement of almost all the body organs right after the use, causes different clinical signs & symptoms. In this study, we review the epidemiological factors of poisoned patients with aluminum phosphide who were admitted in Tehran Baharloo hospital over the two years.

**Material and Methods:** In this retrospective case series study, we survey the poisoned patients with aluminum phosphide who were admitted in Tehran Baharloo hospital. When the data were recorded in a pre-designed data collection forms, the collected data were analyzed using SPSS software.

**Results:** Seventy one cases of poisoned patients with Aluminum phosphide with an average age of  $26.18 \pm 11.29$  years were included in this study. The average number of ingested pills was  $1.27 \pm 0.73$ . Sixty eight (95.8%) patients had a suicidal & deliberate attempt. In this study, the fatality rate of fresh Aluminum phosphide tablets was 51.6%.

**Conclusion:** Based on the fatality rate of aluminum phosphide pills, preventive health care actions and increasing the awareness and training of health & medical management personnel at medical universities seem necessary to reduce the tendency and access to aluminum phosphides.

**Key Words:** Aluminum phosphide, Poisoning, Suicide

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1. Toxicology ward, Sina hospital, Internal medicine department, Faculty of medicine, Tabriz University of medical sciences, Tabriz, Iran

2. Nephrology ward, Imam Reza hospital, Internal medicine department, Faculty of medicine, Tabriz University of medical sciences, Tabriz, Iran (**Email:** [dr\\_mzaare@yahoo.com](mailto:dr_mzaare@yahoo.com))