

TREND OF ACUTE METHADONE INTOXICATION IN A REFERRAL POISON CENTER, AN EPIDEMIOLOGICAL SURVEY

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Objectives: Due to increase in number of methadone maintenance clinics during the past decade, acute methadone overdose is a common poisoning in our society. The aim of the current study is to evaluate epidemiological trend and characteristics of methadone overdose.

Methods: Demographic data of all hospitalised methadone overdosed patients were gathered through chart review of hospital records.

Results: During a decade (2000-2010), a total number of 1426 cases of methadone toxicity were admitted in Loghman-Hakim Hospital (Tehran-Iran). During these years, trend of methadone intoxication increased from 5 cases in 2000 to 557 cases in 2010 revealing more than one hundred times increase in a decade (Figure 1). Of whom 1041 cases (73%) were male and the rest were female. The mean age of men was 31.6 ± 16 years with minimum of 1 year and maximum of 87 years. In women mean age was 25 ± 17 years, minimum of 1 year and maximum 81 years. Among 1059 cases with identified methadone form; 537 (50.7%) had ingested syrup, 518 (48.9%) consumed tablet and 4 (0.3%) used both syrup and tablet. Mortality rate in syrup and in the tablet users were 1.5% and 1.7% respectively (p value=0.753). The mean ingested dose in syrup and tablet groups were 153 ± 339 mg and 87.9 ± 27 mg respectively. The data showed that the patients who used tablet form of the drug had less mean ingested dose than syrup users (87.9 mg vs 153.9 mg, p value=0.005). Not surprisingly, there was a significant correlation between level of consciousness and mortality (p value=0.001). We also were able to follow time elapsed ingestion to admission in 928 patients. The mean time was 7.93 hours. Among live cases, this time was 7.9 ± 8.1 hours and in expired patients were 10.55 ± 6.3 hours (p value=0.788). In 950 cases, the cause of intoxication was identified. Among them 273 (28%) patients who had consumed methadone to prevent opioid withdrawal, 9 (3.3%) cases expired. From 178 (18%) patients who had abused methadone, 4 (2.2%) died. Of 254 (26%) cases of suicidal attempt, 2 (0.8%) expired and finally among 245 (25%) patients with accidental poisoning, the mortality rate was 0.4% (one case). So we concluded that the group whose consumption was due to preventing withdrawal syndrome, had maximum mortality rate (p value=0.041).

Conclusions: It is clear that methadone intoxication is increasing in our community and may affect whole family of dependent patients.

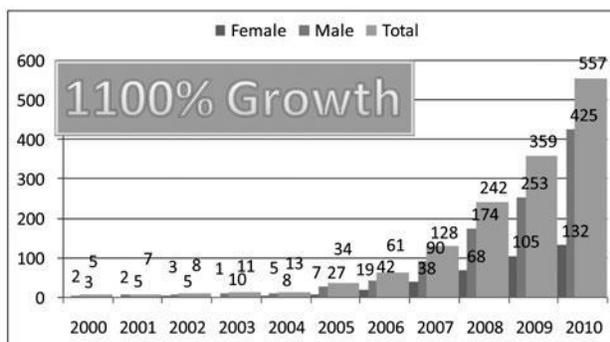


Figure 1. Growth of acute methadone poisoning in recent years at Loghman-Hakim Hospital.