

Methadone treatment- case control study of risks and causes of death amongst patients in treatment

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Introduction

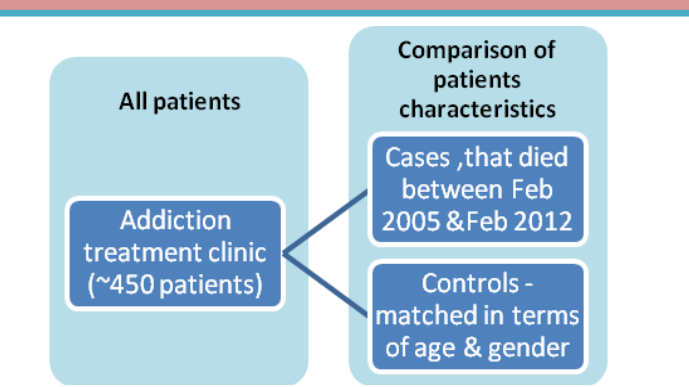
International studies indicate that MMT reduces mortality in opioid dependent patients, but mortality remains elevated compared to the general population (Tobutt 1996). The risk of death (overdose) amongst injecting drug users (IDU) was reported to be increased particularly after release from prison (Farrell 2008), & period of detoxification (Davoli 2007). Other previously reported risk factors included infection with blood born viruses & other medical problems. 63% of IDU in Dublin were reported to have died within 25 years follow-up (O'Kelly 2011).

Aims and hypothesis

This study aimed to review risk factors impacting upon mortality among patients on methadone maintenance treatment (MMT). We hypothesised that co-existing abuse of cocaine and lower methadone dose would be associated with mortality.

Method

The study was conducted at **an addiction treatment** clinic with about 450 patients on MMT. We identified all deaths occurring between February 2005 and February 2012. We utilised a **case-control design matching** each death with another attendee in terms of age, gender and in treatment at the same time. Information about patients characteristics and causes of death were obtained from Electronic Patient System at National Drug Treatment Centre & National Drug Related Death Index at Health Research Board.

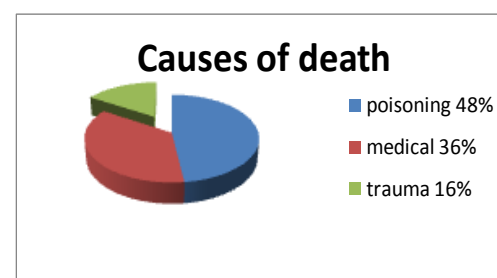


Conclusions

Methadone dose was not associated with increased mortality. This may reflect the fact that patients were generally treated with quite high dose methadone at this clinic. While many studies have highlighted an increased risk of fatal accidental overdose following release from prison, our findings indicate that a history of imprisonment is itself a marker for increased risk of death while on MMT. Treatment non-attendance was associated with increased mortality, and services should seek to proactively follow-up on patients who drop out of treatment.

Results

There were 80 deaths with median age 35 years and the causes of death were categorised as poisoning, medical and trauma. Their median methadone dose was 70mg (IQR 55-90) was not significantly different from the control group, (Median 80mg, IQR60-90, $p=0.6$). There was no significant difference between the fatalities and the controls in terms of recent misuse of cocaine. Patients who died were more likely to have a history of imprisonment, HIV infection and other non-HIV related medical problems. They were also more likely to have missed attendance at the clinic for at least one week.



Significant between groups differences ($p<0.001$)

