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**Seventeen Year Mortality in a Cohort of Patients Attending
Opioid Agonist Treatment in Ireland.**

**Commentary on ‘Methadone-maintained patients in primary
care have higher rates of chronic disease’**

(O'Toole et al EJGP 2014;20: 275-80)

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Commentary

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Running title: Agonist Mortality in General Practice

**Seventeen Year Mortality in a Cohort of Patients Attending Opioid Agonist Treatment in
Ireland**

**Commentary on ‘Methadone-maintained patients in primary care have higher rates of
chronic disease’ (O’Toole et al EJGP 2014;20: 275-80)**

The paper by O’Toole et al (2014) provides a real-world example of the high morbidity among people attending primary care for opioid agonist treatment (OAT). We wish to highlight the accompanying high mortality rate in this population.

OAT has substantially changed the course of the drug use epidemic. Although noted to reduce morbidity and mortality of patients attending specialised treatment clinics (1-4), limited longitudinal information is available on cohorts of such patients.

To explore the mortality rates, we conducted a prospective observational study, through the Registrar of Births, Deaths and Marriages in Ireland and the Central Methadone Treatment List, that followed up a cohort of patients (N=98) recruited for a methadone treatment study in 1996. All patients were attending specialist services for OAT and were randomly selected from those who met clinical criteria for transfer to general practice for continuing care. Research Ethics Committee of the Irish College of General Practitioners approved the study.

At baseline, the cohort was predominantly male (77%), with a mean age of 33 years (SD 5.7) and a median school-leaving age of 15 years (range 6-21). The average age of first heroin use was 17 (SD 3.2) years, with a mean age of first injection of 19 (SD 4.0).

Fifty (51%) participants had been in drug treatment on four or more occasions. The cohort had a mean of 5.1 treatments, including detoxification programmes, abstinence-oriented

programmes, narcotics anonymous and previously attempted, unsuccessful methadone maintenance programmes. The average time spent in their current methadone programme was 3.3 years (SD 1.5), mean dose 60.8 mgs (SD 20.2).

At follow up in 2013, 27 (27.6%) of the 98 participants had died in Ireland and had relevant entries in the Register of Deaths, 19 (19.4%) were currently in OAT and the status of the remaining 52 (53%) was “alive” (i.e., no entry in the Irish death register), as per the Irish death registry. The 52 “alive” patients had left the Central Treatment List (CTL) register but no further CTL information was available on their current status. The death certificates recorded multiple causes for most patients who had died; only six had a single cause. Drug toxicity and/or overdose were the most commonly listed causes of death (see Figure).

<Insert Figure here>

Our results are biased by the small sample size, non-probabilistic sampling framework, study location and data source and the possibility that some patients may have died outside Ireland. We did not retrieve and compare information on the cohort from other sources, such as GP records. Our inability to establish the interval data for the retention in treatment is a significant study limitation, but the overall retention of 19 out of the surviving 71 patients is comparable to previous research.

Our longitudinal follow-up study documents a minimum mortality rate of 27% in a cohort of relatively young adults followed from 1996 to 2013, demonstrating the much higher mortality rates observed among drug users. As OAT programmes develop, our findings point to an urgent need to improve the structure of addiction treatment in order to engage more users, reduce the mortality of drug users and improve their quality of life.

Abbreviations

OAT – Opioid Agonist Treatment

ICGP - Irish College of General Practitioners

CTL – Central Treatment List

GP – General Practice

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Contributors

JK and GB designed the study and oversaw data collection. AK conducted the research as part of her thesis for a degree in Biomedical, Health and Life Sciences. WC, JK and GB supervised AK's thesis fieldwork, contributed to the funding and ethics applications in 2012. FO contributed to the study design and the initiation of the original cohort. All authors reviewed and approved the final version.

Conflict of Interest

No conflict declared

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