

Opioid Agonist Treatment (OAT) and Prevention of Drug Related Deaths and Overdose Mortality

Global evidence shows that opioid dependent patients have a substantially higher risk of premature mortality than general population – with pooled mortality risk across multiple cohorts of 1.7 per 100 person years approximately 10 times higher than general population. But there is also evidence of substantial heterogeneity with mortality risk varying from 0.8 per 100 person years in Australia to 7.6 per 100 person years in South Asia.

New updated evidence shows that opioid agonist treatment (OAT) – either methadone or buprenorphine more than halves all-cause mortality – with evidence from cohort studies consistent by gender, age, location, HIV, or HCV status.

OAT substantially reduces overdose and suicide and also reduces alcohol-related, cancer, and cardiovascular mortality during OAT. Mortality risk varies in critical periods in first month leaving OAT and for methadone but not buprenorphine in the first month of OAT.

Evidence suggests an extremely strong protective effect of OAT when incarcerated and after release from incarceration. There may be interactions between morbidity, overdose risk and type of OAT and co-prescription of benzodiazepines in opioid dependent patients increases overdose mortality risk. Model projections suggest that scaling up OAT, prolonging duration of OAT in the community and providing OAT in prison, could substantially reduce mortality risk in multiple sites.

In many countries - including the UK – drug related deaths constitute an ongoing public health crisis demonstrated by persistent increase in opioid related deaths in the population.

The key question for policymakers and practitioners is whether there is sufficient coverage and duration of OAT to avert drug related deaths in the population – which we demonstrate with new models based on linked data sets in New South Wales.