

Overall survival among patients receiving methadone maintenance therapy for opioid dependence. A mortality analysis from a hospital-based cohort study with a 14-year follow-up

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ABSTRACT

Introduction: Opioid use disorder is associated with greater mortality, but methadone maintenance therapy (MMT) has been shown to confer survival advantages. However, the causes of mortality have not been thoroughly studied. **Methods:** A retrospective longitudinal cohort study was conducted among MMT programme patients between January 2008 and December 2017 at Hospital Seri Manjung, Perak. All MMT patients were included, while those with less than 6 months of therapy were excluded. The data were abstracted from a hospital-based registry. The duration from MMT enrollment until December 2022 was analysed as a survival function. The mortality status was obtained from national death records, and multivariate Cox proportional hazard regression was used to adjust the death hazard risk (AHR) among the variables. **Results:** 282 patients were included in the analysis. By the end of 2022, 72 patients had died, and 210 were alive, providing an overall 5-year survival rate of 74.5%. Patients aged 41–50 and 51–70 years old had AHR 3.05 times ($p=0.008$) and AHR 3.65 times ($p=.005$) higher than patients aged 18–30 years old, while defaulted patients had AHR 15 times ($p=0.008$) than those on active treatment. Among the 72 events observed, Human immunodeficiency virus, Tuberculosis, and Hepatitis (HTH) contributed to 22.2% of the deaths. The HTH-related Infection had AHR 2.69 times ($p=0.023$) higher than the non-HTH-related Infection. **Conclusion:** Increasing age and HTH-related infections were associated with a higher hazard risk, indicating the importance of addressing these co-occurring health conditions in individuals undergoing MMT.