PREVALENCE OF INJECTING-RELATED BACTERIAL AND FUNGAL INFECTION AMONG PEOPLE WHO INJECT DRUGS: A SYSTEMATIC REVIEW AND META-ANALYSIS

Wheeler A[1], Pradhan A[2], Masters J[1,3], Roth JM[1], Colledge-Frisby S[4,5,6], Degenhardt L[4], Dore GJ[1,7], Matthews GV[1,7], Cunningham EB[1], Peacock A[4], Grebely J[1], Hajarizadeh B[1]*, Martinello M[1,8]* *(*Joint senior author)*

[1] The Kirby Institute, UNSW, Sydney, Australia
[2] Department of Infectious Diseases, Westmead Hospital, Sydney, Australia
[3] Department of Infectious Diseases, Royal Prince Alfred Hospital, Sydney, Australia
[4] National Drug and Alcohol Research Centre, UNSW, Sydney, Australia
[5] National Drug Research Institute, Curtin University, Perth, Australia
[6] Burnet Institute, Melbourne, Australia
[7] Department of Infectious Diseases, St. Vincent's Hospital, Sydney, Australia
[8] Department of Infectious Diseases, Prince of Wales Hospital, Sydney, Australia

Background: There is increasing burden of hospitalisations for injecting-related bacterial and fungal infections, yet there has been no recent synthesis of their epidemiology. To address this gap, we performed a systematic review and meta-analysis evaluating the prevalence of injecting-related infections among people who inject drugs.

Methods: We searched EMBASE, MEDLINE, Web of Science, and PsycINFO without language restrictions for relevant articles published from January 1, 2010, onwards. Eligible studies assessed the prevalence of at least one injecting-related bacterial or fungal infection among people who injected drugs and/or received opioid agonist treatment in the past 12 months. Study populations recruited from inpatient hospital settings were excluded. Random-effects meta-analysis was used to calculate pooled estimates of infection prevalence, according to infection type and prevalence period.

Results: Of 6,244 unique articles identified, 68 were eligible for inclusion. Data were available for 24 countries including 9 low- or middle-income countries. The pooled prevalence of skin and soft tissue infections (including skin abscess and cellulitis) was 23% in the past month (4 studies; 95%CI 11-35%), 30% in the past 3-12 months (19 studies; 95%CI 24-37%), and 52% across the lifetime (5 studies; 95%CI 35-68%). The pooled prevalence of endocarditis was 2% in the past month (3 studies; 95%CI 1-4%), 2% in the past 3-12 months (3 studies; 95%CI 1-2%), and 7% across the lifetime (6 studies; 95%CI 4-11%). The pooled prevalence of sepsis and/or bloodstream infection was 1% in the past month (2 studies; 95%CI 0-2%), 10% in the past 3-12 months (2 studies; 95%CI 8-12%), and 12% across the lifetime (3 studies; 95%CI 3-21%). Prevalence estimates for skin abscess, cellulitis, septic arthritis, and osteomyelitis are included in the Figure.

Conclusions: Injecting-related infections are a common clinical complication of injecting drug use. Targeted interventions to reduce the occurrence of infection and associated disease burden are needed.

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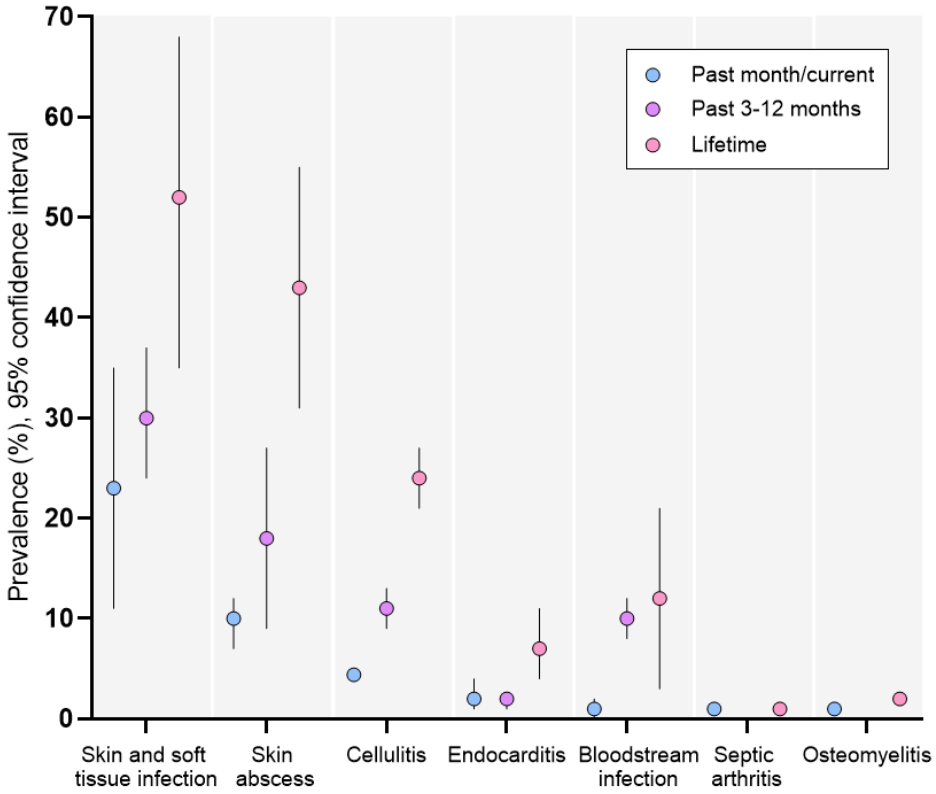

Figure. Pooled estimates of the prevalence of injecting-related infection among people who inject drugs, by infection type and prevalence period.