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Inception of the 'endocarditis team' is associated with improved survival in patients with infective endocarditis who are managed medically: findings from a before-and-after study

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Multidisciplinary infective endocarditis care teams should address substance use disorders and harm reduction services

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Multidisciplinary infective endocarditis care teams should address substance use disorders and harm reduction services

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We read with great interest Kaura and colleagues' evaluation of a multidisciplinary care team for hospital inpatients with infective endocarditis (IE) (1). The study provides further evidence for the effectiveness of a team-based approach to IE care – a model endorsed by both European (2) and American (3) guidelines.

Despite limitations inherent in a before-and-after study design, it is clear that the IE team provides patients rapid access to cardiology, microbiology, and surgical care with coordination between services.

Notably absent from this multidisciplinary approach, however, is care for substance use disorders. We wish to draw readers' attention to the 10% of study participants for whom injection drug use (IDU) was identified as a predisposing factor in their IE. We believe a coordinated IE team offers enormous potential to provide addictions care and harm reduction services for patients with IE who inject drugs.

Compared with people who do not inject drugs, people who inject drugs are far more likely to have recurrences and repeat hospitalizations for IE, and face increased mortality risk after a first episode of IE (4,5). Rates of hospitalization for IDU-associated IE also appear to be increasing (4,6–8).

Evidence-based interventions can be provided in-hospital to reduce both rates of injecting and harms associated with ongoing injection. These interventions include initiating opioid agonist therapies (e.g. methadone or buprenorphine) for opioid use disorders, providing sterile injecting equipment (e.g. needles, syringes, water, cleaning swabs, cookers, and ascorbic acid), and counselling patients on safer injecting practices to reduce risks of infection (9–15).

Hospital admissions for IDU-associated IE represent an opportunity for clinicians to reach patients who are less likely to seek medical attention, and for many patients may provide new motivation to engage in treatment for substance use disorders (16–23). Treatment of acute opioid withdrawal at the time of admission, managing the substance use disorder, and establishing a therapeutic alliance can help to improve adherence to medical management of IE and avoid unplanned discharges against medical advice that often result from active, untreated substance use disorders (10,13,16,18,19,24–31).

Unfortunately, inpatient treatment for IDU-associated IE often focuses on the infection and the medical sequelae without addressing the underlying substance use disorder (9,28,32–35). For example, in a recent study of patients treated for IDU-associated IE at a Boston hospital, only 8% had a plan for opioid agonist therapy at the time of discharge (32).

There are multiple reasons for this implementation gap (28,35). Most physicians do not feel competent in addictions care (36,37). Jurisdictions have different limitations on methadone or buprenorphine prescribing, and institutions may not have clear pathways to identify community-based clinicians to continue prescribing opioid agonist therapy following hospital discharge (38,39). In our institutions (which do not yet have multidisciplinary IE care teams), patients with IE may be admitted or discharged through internal medicine, cardiology, cardiac surgery, or critical care, with ad hoc coordination between those services along with infectious diseases or medical microbiology. Each service may feel that the substance use disorder underlying the IE, and the associated increased risks of recurrence and mortality, are not within their scope of practice and are not the responsibility of their particular discipline (34). Clearly reducing these risks is in the best interests of our patients and our communities – so whose responsibility will it be?

While the European and American endocarditis guidelines do not specify how addiction medicine could fit into multidisciplinary IE care teams, recommendations from the British Heart Valve Society specify that all patients with IE who inject drugs should be offered addictions care (40). National and international IE guidelines should consider injection drug use as an important co-morbidity to address as part of patient-centred IE care.

A coordinated, multidisciplinary care team responsible for all inpatients with IE represents an indispensable opportunity to integrate addiction medicine expertise and offer care for substance use disorders to every patient with IE who injects drugs. An IE team should help facilitate initiation of opioid agonist therapy and promote other harm reduction strategies during hospital admissions in order to reduce the heightened risks of early hospital discharges against medical advice, recurrent infective endocarditis, and mortality. This approach could prolong life and reduce suffering for our patients with IE who inject drugs.

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