Supervised injecting facilities: how much evidence is enough?

Supervised injecting facilities (SIF) have been shown to be highly effective interventions in reducing the harms associated with injecting drug use. To date a total of 28 methodologically rigorous studies have been published in leading peer-reviewed medical journals [1]. This growing body of evidence indicates that SIFs are associated with reductions in needle and syringe sharing, overdoses, public injecting and numbers of publicly discarded syringes [2–6], increased uptake of drug detoxification and addiction treatment programmes [7] and have not led to increases in drug-related crime or rates of relapse among former drug users [8,9].

Despite this evidence, SIFs continue to attract opposition from governments and politicians [10,11], with indications that the evaluation goalposts may be shifting. For example, in Canada, the Minister for Health recently argued that the ultimate determinant of success is whether SIFs contribute to lowering drug use and fighting addiction [11]. Within the context of an increasingly politicised environment surrounding harm reduction initiatives such as needle and syringe programmes and SIFs, politicians often claim that such interventions lack community support. However, evidence suggests that this is not the case.

The Sydney Medically Supervised Injecting Centre (MSIC) was established in 2001 in order to trial potential public health and public amenity benefits associated with supervised injection facilities [6,12]. As part of ongoing evaluation efforts, community support for the Sydney MSIC has been measured and monitored through repeat random telephone surveys of local residents and businesses prior to and following its establishment [13]. A total of 1371 Kings Cross residents have been interviewed in three separate surveys and at each time-point at least three in five (>60%) Kings Cross residents agreed with the establishment of the Sydney MSIC (68% in 2000, 78% in 2002 and 73% in 2005; \( p\)-trend = 0.06). There is also significant support for the MSIC from the local business community. Among the 629 Kings Cross business operators surveyed at the three time-points, there was a statistically significant increasing trend in favour of the establishment of the service (i.e. 58% in 2000, 63% in 2002 and 68% in 2005; \( p\)-trend = 0.03).

A review of drug consumption facilities found that their establishment in local neighbourhoods led to major public debate in most of the 36 European cities where they operate [4]. Results from our evaluation indicate that, in the Australian context, approximately three in five local residents and businesses agreed with the establishment of the Sydney MSIC prior to its opening and that this level of support has been sustained over time. Our results also suggest that local community members are cognisant of both potential public health (perceived reduction in blood-borne viral infections and overdose) and potential public amenity advantages of the Sydney MSIC [13]. In a climate of ongoing political and policy debates surrounding harm reduction strategies, these data contribute to the growing evidence base supporting the benefits of SIFs.

However, while community support may be an important determinant of political will, it is not a measure of efficacy and should not be the litmus test by which SIFs or, indeed, any health intervention, are evaluated. A well-designed and conducted randomised controlled trial (level 1 evidence) remains the best study design for determining a causal relationship between a public health intervention and its putative outcomes. The scientific, practical and ethical issues involved in applying this methodology to evaluating complex public health interventions such as SIFs mean that the...
likelihood of obtaining this level of evidence is negligible. The next best, and ultimately most feasible, study design is a prospective observational study (level 2 evidence), utilised in the evaluation of the Vancouver SIF to provide convincing data on the public health benefits of SIFs. While observational studies exhibit the potential for bias inherent in any non-randomised design, in terms of informing public health decision-making, solid level 2 evidence is clearly superior to unrealistic demands for level 1 evidence.

Within this context, there is a need for realistic expectations of the kind of answers future research can be expected to provide. Even well-funded rigorous observational studies are unlikely to produce evidence that SIFs, or indeed any other single area-focused health intervention, have an impact at a population health level. Nor can they determine the true extent of drug-related harms averted or how much of a change in outcome indicators will be enough. Take public injecting, for example. In the first 5 years of operation, a total of 8912 individual clients accounted for 329 309 injecting episodes at the Sydney MSIC—episodes which would have occurred otherwise in unsupervised and often public settings. Fifty per cent of these clients indicated at registration that they would have injected in public had they not been able to access the Sydney MSIC on this occasion. Assuming a constant rate of one public injection averted for every two supervised injections at the MSIC, we estimate that up to 164 655 episodes of public injecting were potentially averted during this 5-year period. In the absence of reliable data on the rate of overdose in the underlying population of injecting drug users and the proportion of public overdoses that result in fatalities and/or significant morbidity, we cannot estimate the true costs avoided. However, given that public injecting is a significant public amenity issue [5] associated with increased injecting risk behaviour and risk of HIV [14] and HCV transmission [15,16], 32 000 fewer public injections each year is surely a harm worth averting.

While many research questions remain to be answered and the final evaluation report for the Sydney MSIC is not due until mid-2007, enough international evidence now exists to suggest that the main questions, in terms of the impact of SIFs on needle and syringe sharing, overdose, public injecting, uptake of drug treatment and public amenity have been answered unequivocally. In the face of this evidence, politicians and others who continue to oppose SIFs are ducking the issues. The existence of rigorous scientific evidence and high, sustained and unambiguous levels of local community support suggest that lack of political will, rather than lack of evidence or community support, is an important factor that needs to be acknowledged and addressed if SIFs are to move from public health experiments to public health practice.

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