

Abstract:

In communities that offer a needle exchange program, does intravenous drug use increase?

Lauren Knazze, MD

PGY 3 Resident, Northwestern McGaw Family Medicine at Humboldt Park

Background: Intravenous drug use (IVDU) is associated with increased risk of HIV, Hepatitis C, and other blood-borne viruses, mostly because of the propensity of sharing needles between participants. A needle exchange program is a harm reduction intervention designed to decrease the risk of contracting HIV, Hepatitis C., etc. by allowing participants to receive clean, sterile needles in exchange for used ones. However, there is concern that needle exchange programs increase the amount of IVDU in the area and that they increase the time needed for participants to achieve cessation of IVDU. The purpose of this review was to identify the research on the effects of needle exchange programs on IVDU.

Methods: A literature review was conducted to identify studies on needle exchange programs and their effects on IVDU. Inclusion criteria were 1) observational studies 2) published between 2000 and 2018, 3) primary outcomes included injection cessation and/or injection frequency.

Results: Many studies were identified mentioning effects of IVDU, but only two listed rates of IVDU as primary outcomes. One study shows that 33% of patients using intravenous drugs (IVDs) reported substantially fewer injections at follow-up encounters compared to initial enrollment at NEP. Those injecting every day were significantly more likely to reduce injection frequency (ARR= 3.44, 95% CL 1.46–8.09) (SOR B: cohort study). Another study comparing needle exchange program expansion to IVDU patterns of the surrounding community showed that the proportion reporting injecting cessation increased from 2.4% (95% CI: 0.0–7.0%) in 1996 to 47.9% (95% CI: 46.8–48.9%, $P < 0.001$) in 2010 (SOR: B, cohort study).

Conclusions: Communities with needle exchange programs (NEP) do not have increased intravenous drug use (IVDU). In fact, they may help decrease injection frequency and decrease the time to cessation. Many needle exchange programs including the ones in the studies above have additional services, such as addiction counseling, medication-assisted therapy, and other resources to aid patients with addictions. It is possible that those extra resources beyond just needle exchange contributed to the decreased rates of injection frequency and increases drug cessation. Because of these positive changes, more money and resources should be dedicated to needle exchange programs.