A Proof of Concept for a Street-Based Mobile Monkeypox Vaccination Clinic

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Introduction:
Monkeypox is a new public health outbreak that particularly threatens the homeless population. Street Medicine Phoenix (SMP), a student-led interprofessional volunteer organization that provides medical care and other essential services to Phoenix’s homeless population, identified two cases of monkeypox during an outreach event. Accordingly, SMP has partnered with the Maricopa County Public Health Department to set up mobile monkeypox vaccination clinics on the streets outside of Phoenix Arizona’s largest homeless shelter.

Methods:
In the summer of 2022, SMP deployed the UACOPH mobile health unit to administer the JYNNEOS poxvirus vaccine to people experiencing homelessness on the same city block where the original Monkeypox cases had been discovered. Our approach considered all individuals on the block to be “close contacts” due to the proximity of their encampments to the infected patients. After filling out the appropriate paperwork, patients were taken into the mobile health unit and vaccinated. They were then monitored for adverse reactions.

In August 2022, SMP discovered 2 cases of monkeypox during an outreach event. Accordingly, SMP has utilized the UA Mobile Unit to deliver 50 poxvirus vaccines to homeless individuals directly in their encampments.

Results:
The overall intent of SMP’s outreach efforts was to increase access to the monkeypox vaccine for those individuals experiencing homelessness who desired vaccination and high-risk individuals (e.g., men who have sex with men), although the homeless population as a whole is considered high-risk due to their congested living environment. Fifty individuals experiencing homelessness received the monkeypox vaccination through SMP’s outreach efforts. All patients spoke English; however, resources were available to facilitate vaccination of Spanish-speaking individuals. The vaccines were well tolerated and no adverse reactions occurred.

Discussion:
The Standard Regimen of the JYNNEOS vaccine in a 0.5ml subcutaneous injection; however, SMP utilized the intradermal route which only requires 0.1 ml of vaccine. Therefore, this route allowed SMP to administer 5x the normal amount of vaccine while generating a similar level of immunogenicity. Besides providing monkeypox vaccinations, SMP was limited in its ability to diagnose and treat monkeypox. SMP did not have access to diagnostic tests for monkeypox and was unable to provide treatment other than over-the-counter medications (e.g., ibuprofen, acetaminophen, and Voltaren gel) for symptom relief.

Conclusion:
SMP’s street-based mobile vaccination efforts highlight the impact of field and outreach work by academic institutions for vulnerable populations who may not otherwise have access to care. Due to the containment of the monkeypox pandemic, monkeypox vaccination efforts have decreased; however, the vaccine is still available upon request for all individuals experiencing homelessness.