

OPTIMISING HARM REDUCTION EFFECTIVENESS THROUGH LOW DEAD SPACE SYRINGE AND NEEDLE DISTRIBUTION: LESSONS FROM A MIXED-METHODS PILOT IN OYO STATE, NIGERIA

Authors

Isumafe B¹, Okonkwo O¹, Dunkley Y², Folorunsho J¹, Nwankwo N¹, Lawani C¹, Hatzold K³, Salihi A¹

¹Society for Family Health, ²LSHTM, ³Population Services International

Background

Low Dead Space Syringes and Needles (LDSS/N) reduce residual blood volume and transmission risk of blood-borne infections, including Hepatitis C Virus (HCV), among People Who Inject Drugs (PWID). However, evidence on real-world acceptability and operational feasibility in low and middle-income settings such as Nigeria remains limited. This study reports findings from Phase two of the Hepatitis-C Combination Prevention in PWID Project (HEPC3P), designed to generate behavioural and operational evidence to inform scale-up of LDSS/N distribution in Oyo State, Nigeria.

Description of intervention

A six-week Community-led pilot distributed LDSS/N alongside regular High Dead Space Syringes and Needles (HDSS/N) through peer community facilitators under routine harm reduction conditions. 30 PWID (15 males, 15 females) accessed multiple syringe and needle options. Weekly monitoring tracked uptake, substitution and stock-outs. Gender-segregated focus group discussions explored usability, product preference, stigma and feasibility. Explanatory sequential mixed methods analysis integrated quantitative and qualitative findings.

Effectiveness

LDSS/N uptake was consistently higher than HDSS/N throughout the pilot, with HDSS/N uptake ceasing by week three. Participants consistently preferred LDSS/N, citing reduced pain, smoother injection, less bleeding, minimal scarring and lower drug wastage. 2mL syringe paired with a 16mm 25G needle emerged as the most preferred combination across genders, while some female participants preferred shorter 13mm 30G needles for injecting into shallower veins, relating to gendered differences in drug-choice and enhanced privacy desire for women in caregiving roles. Some men preferred 5mL syringes to enable drug-mixing, relating to poly-drug use. Across genders, product colour strongly influenced acceptability, with blue syringes preferred for their discreet appearance, reduced risk of stigma and police harassment, and connotation with Chelsea football club.

Conclusion and next steps

PWID in Oyo State adopted LDSS/N when products reflected user preferences and realities with differentiated product choices with gendered differences in injecting use and product choice.

Disclosure of Interest Statement

Investigators received funding from Unitaaid through PATH and Population Services International.