ECONOMIC EVALUATION OF SYRINGE VENDING MACHINES IN TBILISI, GEORGIA

Walker JG[1], Kirtadze I[2, 3], Tabatadze M[2], Vickerman P[1], Otiashvili D[2, 3]

[1] Population Health Sciences, University of Bristol, Bristol, UK [2] Alternative Georgia, Tbilisi, Georgia, [3] Ilia State University, Tbilisi, Georgia

Background:
Georgia has one of the highest prevalences of injecting drug use in the world, an estimated 2.2% of 18-64 year old people inject drugs. Syringe vending machines (SVM) can improve access to sterile injecting equipment, but they have not been widely implemented or evaluated.

Methods:
From July 2019-December 2020, 10 SVM were installed at five harm reduction sites in Tbilisi, Georgia and outcomes evaluated as part of an implementation trial. The SVM were stocked with a variety of package types, including for opioid users, stimulant users, overdose prevention, male and female condoms, and pregnancy tests. We gathered financial data from the project to estimate fixed (staff time, start up costs, equipment, running costs, and consumables) and variable (harm reduction kits) costs. We calculated the full economic cost of the SVM intervention, cost per user, and cost per kit distributed, compared to no implementation of SVM, in 2020 Euro values.

Results:
Over the study period, 1,132 users were issued with access cards, and 29,238 kits distributed through the SVM, at a total cost of €204,358. The largest cost component was taff costs, at 51%, with consumable costs 28%, equipment 10%, and start up, recurrent costs, and overheads 5% or less each. Opioid and stimulant kits were the most accessed, at 35% and 32% of total. The cost per user was €66 per year, and the cost per transaction was €7, of which approximately €5 was fixed costs and €2 consumables. If the monthly number of transactions increased from the average of 1,622 per month to the highest monthly usage (4,714), the fixed costs per transaction would decrease to less than €1.

Conclusion:
These costing results will be important for decision makers considering the relative cost of harm reduction interventions as national programs take on costs previously funded by Global Fund.

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