



High self-reporting of HIV self-test results through an interactive voice response telephone line in inner city Johannesburg

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Background

Self-Testing for HIV (HIVST) is recommended as an additional approach to HTS by the WHO. It aims to provide infrequent and under-tested populations with the option to screen themselves for HIV in private. Many countries have adopted policies that now include HIVST, however, operationally, scale-up has been slow due to certain barriers that still exist. One of the biggest challenges that faces large-scale HIVST implementation is the lack of information around test usage and further to that, the test result and whether seropositive individuals have been linked into care. The aim of this study was to determine if a mobile health communication platform and SMS reminders using behavioural nudge principles can be used by self-testers to report their results and in the case of sero-positives, if they have linked into care.

Method

The study was designed as a multi-site implementation science project in the inner city of Johannesburg, South Africa, targeting but not confined to men of all ages, and young people aged 18 – 25. Between October 2018 and February 2019, distribution of HIVST kits were completed as per the National HIVST (HIVSS in SA) Guidelines with the addition of an informed consent process. Participants were provided with information to contact a hotline or access a website link to report their HIVST result. Participants were randomised into two arms receiving differing SMS reminders on day 3 and day 5 to self-report their result. By the 7th day after distribution, if the participant had not initiated contact with the system, an interactive voice response system called the participant to go through a short survey which included test result. Data were downloaded from the Viamo Mobile system to Stata 15 where they were reshaped and analysed.

Results

In total 10,698 participants registered a phone number with the system and received a HIVST kit. Of those, 9,504 (89%) were unique phone numbers. There were slightly more male (n=5,056, 53%) than females. In total, 927 (9.8% of total) participants called into the study to report results within seven days of receiving a test kit, of which 612 (66% of

Results Continued

inbound callers) self-reported HIV status linked to care. 8,577 (90%) of participants received a phone call seven days after enrolment by the same recorded phone survey as accessed by those calling into the system. In total, 2,467 (26%) participants answered any survey question, and 78% of those (1,933, 20.3% of total) were willing to self-report their HIV status. Men were slightly more likely than women to have made an inbound call (10.2% vs 9.1%, p=0.06) but significantly less likely to have reported a test result (19% vs. 22%, p=0.01). Self-reporting a test result was independently predicted by being younger and female. 313 reported a positive test, indicating a HIV prevalence of 16.2%, 204 (65%) reported that they had either linked to care or intended to link to care, 116 male and 88 female.



Conclusion

Self-reporting of HIVST results via an IVRS system is a potential option for implementation programmes. It offers the individual confidentiality whilst reporting, and also allows implementers to design evaluation frameworks for their programmes to make more informed decisions on HIVST roll-out. Other self-report tools used in HIVST programmes in Johannesburg typically have self-report rates of between 5 and 15%.

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