Text messaging to encourage uptake of HIV testing amongst African communities: Findings from a theory-based feasibility study

C Evans¹, K Turner¹, H Blake¹, A Juma², S Suggs³ and A Occa³

¹University of Nottingham, Nottingham, UK; ²African Institute for Social Development, Nottingham, UK; ³University of Lugano, Lugano, Switzerland

Background: There is a public health need to tackle high levels of undiagnosed (or late diagnosed) HIV amongst the UK’s African communities. This research aimed to assess the feasibility and acceptability of using a text messaging intervention to encourage uptake of HIV testing amongst this population in a UK city.

Methods: Participatory research adopting a mixed-methods design. Four distinct stages included: [1] Formative Research: Six focus group discussions (FGDs) were conducted with diverse sections of the African community to assess perceptions about HIV and to inform message development (n=48). The Health Belief Model (HBM) was used as an organising framework for data analysis and interpretation.

[2] Message Development: SMS messages were developed based on HBM constructs, existing HIV campaigns and FGD findings, and tailored according to language, gender and religion. 12 HIV-related and 12 generic health-related text messages were developed and piloted using elicitation interview processes.

[3] Intervention and outcomes: 172 participants were recruited. They received 2 messages per week for 12 weeks. Data was collected in pre and post questionnaire surveys assessing uptake of HIV testing, HIV-related attitudes and knowledge and perceived general health.

[4] Evaluation: Acceptability and meaningfulness of the intervention were explored via semi-structured telephone interviews (n=21). Data were analysed using thematic content analysis.

Results: Follow up data was collected for 76 of the participants (44%). Of these, 8 (10.5%) reported having had an HIV test during/after the intervention. Risk perception remained low at pre and post-test. Non-significant improvements were observed in HIV-related knowledge (testing procedures and treatment availability) and attitudes towards HIV. Qualitative evaluation (n=21) showed that messages were perceived to be highly acceptable, useful and appropriately targeted. The majority of those interviewed had shared the messages with others and reported intentions to test in future.

Conclusions: SMS text messaging is an acceptable and feasible method of promoting HIV testing in African communities, with widespread appeal. Rate of testing uptake is comparable to other community-based strategies in this population. More research is needed to fully understand outcomes and impact on testing uptake, and methods of improving response to follow-up.