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### **Abstract**

# Mobile Technology Use and Acceptability of mHealth for HIV Prevention Among Men Who Have Sex With Men in Malaysia

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## **Abstract**

**Background:** The growth in mobile technology access, utilization, and services holds great promise for facilitating HIV prevention efforts in Malaysia. Despite these promising trends, there is a dearth of evidence on the use of mobile health (mHealth) platforms to address the HIV prevention needs of Malaysian men who have sex with men (MSM).

**Objective:** The goal of this study was to gain insights into (1) the access and utilization of communication technology (eg, landline phone, internet, and cell phone), (2) the acceptability of mHealth-based interventions for HIV prevention services, and (3) preferences regarding the format and frequency of mHealth interventions among Malaysian MSM.

**Methods:** A cross-sectional survey of 376 Malaysian MSM was conducted between July 2018 and March 2020. Participants were recruited using respondent-driven sampling in the Greater Kuala Lumpur region, Malaysia. Participants completed a self-administered assessment of participant demographics, HIV risk-related behaviors, access to and frequency of the use of communication technology, and the acceptability of mHealth for HIV prevention.

**Results:** Almost all participants owned or had access to a smartphone with internet access (97.9%) and accessed the internet daily (99.2%), mainly on a smartphone (88.8%). Using a 5-point scale, participants on average used smartphones primarily for social networking (mean 4.5, SD 0.8), followed by sending or receiving emails (mean 4.0, SD 1.0) and searching for health-related information (mean 3.5, SD 0.9). Further, the results indicated the high acceptance of mHealth for HIV prevention, that is, receiving HIV prevention information (91.8%), receiving reminders to take medications (89.4%), tracking sexual activity (81.4%), tracking drug use (74.7%), and monitoring drug cravings (74.5%), with the most preferred method being the smartphone app for all activities.

**Conclusions:** The findings from this study provide support for developing and deploying mHealth strategies for HIV prevention in MSM by using a smartphone app, which are crucial for a key population with suboptimal engagement in HIV prevention and treatment

Conflicts of Interest: None declared.

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### **KEYWORDS**

HIV; mHealth; men who have sex with men; mobile phone; Malaysia



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