

USING EHEALTH TO ENGAGE AND RETAIN PRIORITY POPULATIONS IN THE HIV TREATMENT AND CARE CASCADE IN THE ASIA-PACIFIC REGION: A SYSTEMATIC REVIEW OF LITERATURE

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Background:

The exponential growth and development of new technologies over the past decade shows that mobile technologies and social media play an increasingly important role in service delivery models to maximise HIV testing and access to treatment and care. This systematic review examines the impact of electronic and mobile technologies in medical care (*eHealth*) in the linkage to and retention of priority populations in the HIV treatment and care cascade, focussing on the Asia-Pacific region.

Methods:

The review was informed by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement from the Cochrane Collaboration guidelines. Both grey and published scientific literature from five different databases were searched for all original articles in English published from 2010 to 2017. The methodological quality of studies included in the review was assessed using the Quality Assessment Tool for Quantitative Studies.

Results:

Of the 224 peer-reviewed articles identified for full text review, 16 studies from seven countries met inclusion criteria. Six cross sectional studies found evidence to support the use of eHealth, via text messages, instant messaging, social media and health promotion websites, to increase rates of HIV testing and re-testing among men who have sex with men (MSM). Evidence regarding the efficacy of eHealth interventions to improve antiretroviral treatment (ART) adherence was mixed, where one randomised controlled trial (RCT) showed significant benefit of weekly phone call reminders on improving ART adherence. Three further RCTs found that biofeedback eHealth interventions that provided estimated ART plasma concentration levels, showed promising results for ART adherence.

Conclusions:

This review found encouraging evidence about how eHealth can be used across the HIV treatment and care cascade in the Asia-Pacific region, including increasing HIV testing and re-testing in priority populations as well as ART adherence.

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