

# A COMPARISON OF TWO TEXT MESSAGE-BASED INTERVENTION STUDIES FOR HEALTH PROMOTION IN CAPE TOWN, SOUTH AFRICA: THE LESSONS LEARNT

Yan Kwan **Lau**<sup>1</sup>, Kirsty **Brittain**<sup>1</sup>, Damian **Hacking**<sup>1</sup>, Avital **Cassidy**<sup>1</sup>, Hanne Jensen **Haricharan**<sup>1</sup>,  
Marion **Heap**<sup>1</sup>

<sup>1</sup>Health and Human Rights Programme, School of Public Health and Family Medicine, University of Cape Town, Anzio Road, Observatory 7925, South Africa

Journal MTM 2:4S:16, 2013

DOI: 10.7309/jmtm.2.4S.13

www.journalmtm.com

## ABSTRACT

According to the World Bank, there are 128 mobile subscriptions per 100 people in South Africa as of 2011. Cellphones are therefore viewed as having considerable potential for health promotion. However, evaluations of interventions and evidence of effectiveness are still limited in developing countries. Two separate trilingual (isiXhosa, Afrikaans and English) short-message-service (SMS) interventions that took place from 2012 to 2013 in Cape Town are evaluated.

The SMS campaigns aimed to increase health knowledge by disseminating health information via SMS. Specifically, each study involved sending SMSes to participants to provide them with information regarding how to control hypertension and how to be healthy during pregnancy, respectively. The hypertension campaign was conducted with hypertensive patients at a Community Health Centre, while the antenatal campaign was with pregnant women attending a Midwife Obstetric Unit. Facility staff guided the preparation and checked the health promotion content of both campaigns.

There were 223 and 206 participants at baseline in the hypertension and antenatal campaigns respectively. Both studies used mixed research methods of a randomised control trial followed by a focus group. Participants were randomised either to be sent SMSes (experiment group) or not (control group). Intervention in the hypertension campaign involved sending 5 SMSes per week for 16 weeks. The pattern of dissemination was different in the antenatal campaign: SMSes were staggered according to the week of pregnancy at the time of recruitment into the study. The total number of SMSes sent to all those in the experiment group was 101.

34.53% and 46.60% of the participants were lost to follow-up (LTFU) in the hypertension and antenatal campaign respectively. There was no differential LTFU in either study. At the end of the antenatal campaign, there were no significant differences in the level of knowledge (assessed by nine questions) between the experiment and the control group (all  $p > 0.05$ ). Similar results emerged in the hypertension campaign. Despite no significant improvements in knowledge, both campaigns' participants (experiment group) reported high levels of behavioural change. Participants in both focus groups remarked that the SMSes acted as reminders or "light bulbs".

SMSes appear to be more effective at improving motivation than increasing knowledge, although objective measures to verify behavioural change could not be obtained in either campaign. Further research is needed to investigate how health knowledge can be improved via mHealth interventions, particularly in populations of low socioeconomic status where high rates of LTFU are a reality.