

CONCEPT POLICY BRIEF I

Research findings from a mobile health trial in the Comprehensive Cervical Cancer Prevention in Tanzania (CONCPET) project

Key findings

This policy brief summarises the key findings from the Ph.D. thesis “Connected2Care - One-way text message Interventions and cervical cancer screening in Tanzania”

The Ph.D. thesis consisted of three different studies, which jointly provide a multidisciplinary evaluation of text message interventions and cervical cancer screening attendance in an African context.

The systematic review and meta-analysis found that one-way text messages (i.e. text messages which the receiver cannot respond to) generally improved attendance to health care appointments in Africa (OR: 2.03; 95% CI: 1.40-2.95; 12 trials), but was most effective on childhood immunisation appointment attendance.

In contrast, a randomised trial among HPV-positive women in Tanzania showed that one-way text messages did not improve attendance follow-up screening appointments at clinic level (RR: 1.02; 95% CI: 0.79-1.33). However, more women (23%) attended the follow-up appointments at clinic level if they received phone call reminders from nurses, and even more women (30%) attended when they had the option of doing the follow-up appointment as a HPV self-sample from home.

A qualitative study among HPV-positive women in Tanzania showed that most women attended their first screening appointment due to gynecological issues, which they needed help for, or because they

Papers in thesis

Systematic review and meta-analysis

Linde DS, Korsholm M, Katanga J, et al. One-way SMS and healthcare outcomes in Africa: Systematic review of randomised trials with meta-analysis. *PLoS One* 2019; 4(6):e0217485.

Randomised controlled trial

Linde DS, Andersen MS, Mwaiselage JD, et al. Text messages to increase attendance to follow-up cervical cancer screening appointments among HPV-positive Tanzanian women (Connected2Care): study protocol for a randomised controlled trial. *BMC Trials* 2017;18(1):555.

Linde DS, Andersen MS, Mwaiselage J, et al. Effectiveness of One-Way Text Messaging on Attendance to Follow-Up Cervical Cancer Screening Among Human Papillomavirus-Positive Tanzanian Women (Connected2Care): Parallel-Group Randomized Controlled Trial *J Med Internet Res* 2020;22(4):e15863

Qualitative study

Linde DS, Rasch V, Mwaiselage JD, et al. Competing needs: a qualitative study of cervical cancer screening attendance among HPV-positive women in Tanzania. *BMJ open* 2019;9(2):e024011.

1

TEXT MESSAGES

Generally improved attendance to healthcare appointments in Africa but not follow-up screening appointments in Tanzania.

2

PHONE CALLS AND HPV SELF-SAMPLES

Improved screening attendance to follow-up screening appointments.

3

SCREENING BENEFITS

Included prevention of disease and treatment of gynecologic symptoms.

4

SCREENING BARRIERS

Included fear of disease, gynecologic examination, waiting time, transport costs. Follow-up screenings are not first priority when a woman does not feel sick.

wanted to prevent cervical cancer. Follow-up screenings tended to be postponed as it only entailed the benefit of prevention and therefore more emergent needs were present. Screening barriers included fear of cancer, fear of the examination, transportation costs, and waiting time at the clinic.

"When women find themselves sick, they will come back for check-up. I'm just feeling good, I will go next week. You see, we Tanzanians, when were are healthy we won't come back."

Recommendations

On a public health and clinical level, HPV-testing will solve the issue of using a primary screening method with poor sensitivity, like VIA. Yet it is important to ensure proper follow-up of women who test HPV-positive. If Tanzania is to switch from VIA to HPV-testing successfully, there is a



need to address this issue. One option to be investigated further, could be to restructure the screening service by conducting HPV-testing as a self-sample on outreach level, and only invite HPV-positive women to come for a gynaecologic examination at clinic level. This approach would limit the waiting time at the clinic and transportation time as well as minimise the number of gynaecologic examinations conducted. If women do not attend the follow-up examination, we recommend calling them over texting them.

CONCEPT partners

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