

He Tapu Te Whare Tangata- the sacred house of humankind

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## Background

Globally cervical screening is changing to test HPV virus as the primary test and several countries have switched including Scandinavia and Australia.<sup>(1)</sup> In Aotearoa, the National Cervical Screening Program (NCSP) using the standard speculum examination for cytology, is failing indigenous Māori women, with 33% unscreened compared to 24% of NZ European/other women unscreened.<sup>(2)</sup> Māori women are more than twice as likely to die of cervical cancer - a preventable cancer- than NZE women.<sup>(3,4)</sup> HPV testing is more effective in detecting pre-cancer changes on the cervix and preventing cervical cancer, than conventional cytology.<sup>(5)</sup> Self-collected specimens (self-testing) can be used for HPV testing, providing screening with comparable sensitivity and specificity to clinician-collected specimens.<sup>(6)</sup> This community based RCT offered HPV self-test to under-screened Māori women in partnership with Māori communities and primary care practices. The overall aim was to increase cervical screening coverage and in this presentation we will share the methodology and interim results showing uptake among the intervention group of under-screened Māori women.

## Methods

Inclusion criteria were Māori women aged 25-69 years, who had not had a cervical smear screen in 4 years or more. Six primary care clinics in a rural area of Te Tai Tokerau were randomised to intervention (offer of self-swab) and control (usual offer of cervical smear). Recruitment started on 5<sup>th</sup> March 2018 and ended on 31<sup>st</sup> August 2019. HPV genotyping was carried out using the Abbott Real-time High Risk HPV assay distinguishing HPV-16 and HPV-18 from 'other' high-risk types and from negative samples.

## Interim Results

Of the 500 eligible under-screened Māori women. 263 (52.6%) accepted the swab and 24 (4.8%) chose a cervical smear resulting in 57% of the intervention group having a cervical screen. Only 30 women (6%) declined the swab. Of the total 263 swabs, 233 (88.6%) were taken by the patient, and 30 (11.4%) were taken by the nurse/doctor or other. Of those that had a screen (n =283) 35 had results positive for HPV 16, 18 or 'other' and were referred to colposcopy. Three women required surgical Lletz loop for CIN II/III and there was one micro-invasive cancer requiring a cone biopsy.

## Conclusion

We conclude that self-screening for HPV has the potential to halve the number of under-screened Māori women and is an acceptable and sustainable equity tool. However because of inadequate funding, the NCSP has delayed introduction of HPV testing as a primary test for another 3-4 years. We argue that this is unsafe, inequitable and unacceptable and that self- testing should be incorporated into the new NCSP in Aotearoa as soon as possible to decrease the morbidity and mortality caused by cervical cancer and decrease inequities in health care.

## References

1. Medical Services Advisory Committee. National cervical screening program renewal: executive summary. Canberra: Commonwealth of Australia 2013.

[http://www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/E6A211A6FC29E2CCA257CED007FB678/\\$File/Executive%20Summary%20notated%2013.6.14.pdf](http://www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/E6A211A6FC29E2CCA257CED007FB678/$File/Executive%20Summary%20notated%2013.6.14.pdf)

2. <https://minhealthnz.shinyapps.io/nsu-ncsp-coverage/> [accessed 3rd sept 2019]
3. Robson B PG, Cormack, D. 2010. Unequal Impact II: Māori and Non-Māori Cancer Statistics by Deprivation and Rural–Urban Status, 2002–2006. URL: <https://www.health.govt.nz/publication/unequal-impact-ii-maori-and-non-maori-cancer-statisticsdeprivation-and-rural-urban-status-2002-2006> [accessed 3<sup>rd</sup> Sept 2019].
4. Smith MA, Edwards S, Canfell K. 2017. Impact of the National Cervical Screening Programme in New Zealand by age: analysis of cervical cancer trends 1985–2013 in all women and in Māori women. *Cancer Causes & Control* 28(12): 1393-404.
5. Ronco G, Dillner J, Elfström KM, et al. Efficacy of HPV-based screening for prevention of invasive cervical cancer: follow-up of four European randomised controlled trials. *Lancet* 2014; 383: 524–32 Published Online November 3, 2013 [http://dx.doi.org/10.1016/S0140-6736\(13\)62218-7](http://dx.doi.org/10.1016/S0140-6736(13)62218-7)
6. Polman NJ, Ebisch RMF, Heideman DAM et al. Performance of human papillomavirus testing on self-collected versus clinician-collected samples for the detection of cervical intraepithelial neoplasia of grade 2 or worse: a randomised, paired screen-positive, non-inferiority trial. *Lancet Oncol* 2019; 20: 229–38 Published Online January 15, 2019 [http://dx.doi.org/10.1016/S1470-2045\(18\)30763-0](http://dx.doi.org/10.1016/S1470-2045(18)30763-0)