Microbicide uptake likely to be higher among women not using condoms: results from a discrete choice experiment in Johannesburg, South Africa

F. Terris-Prestholt¹, L. Kumaranayake¹, C. MacPhail², H. Rees², C. Watts¹, HIVTools Research Group

¹London School of Hygiene and Tropical Medicine, Public Health and Policy, London, United Kingdom, ²Reproductive Health and HIV Research Unit, Johannesburg, South Africa

Background: Concerns about women who are successfully using condom switching to microbicides have been at the forefront of the debate on microbicide introduction. This study analyses the impact of different potential microbicide HIV-efficacies on the probability of women switching from what they did last time they had sex. Two groups were examined: women who had used a condom in their last sex-act (CondUse) and those who had not (CondNoUse).

Methods: A discrete choice experiment was conducted among 1017 women in three Johannesburg townships. Women were presented with choices between different barrier products (microbicides, female condom and ‘what I did last time’ (either: CondUse or CondNoUse)) with different HIV-efficacies (35% - 95%), pregnancy efficacies (0%-95%) and prices (Rand (R) 0-20). The multinomial logit model was applied to estimate preferences for products and attributes and women's choice probabilities are calculated.

Results: HIV-efficacy was the most important product attribute in determining choice, followed by pregnancy prevention. Among CondNoUse women the probability of choosing a 55% effective microbicide with no pregnancy efficacy sold at R10 over a R10 female condom was 9%. At 95% HIV-efficacy, the probability becomes 41%; adding 95% effectiveness against pregnancy the choice becomes 56%. When approaching the effectiveness and price of condoms, the probability of choosing a microbicide was 80%. Reducing price led to a great increase in predicted uptake among CondNoUse. CondUse women had lower relative preferences for microbicides over the female condom, with the highest probability of switching at 64%.

Conclusions: The efficacy of products was critical in women’s choices, with a low uptake of microbicides with poor effectiveness, especially among women successfully using condoms. Price will affect uptake and could be used to stimulate use among women unable to use condoms and discourage use among women who can use condoms. However, further research on how to target CondNoUse women is needed.

Presenting author email: fern.terris-prestholt@lshtm.ac.uk