

## COMMENTARY

# Exploring the potential of dapivirine vaginal ring for HIV prevention in Namibia: A call to action

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## ABSTRACT

The recent recommendation by the World Health Organization for the use of the dapivirine vaginal ring as a promising safe, efficacious and alternate choice for HIV prevention among women at significant risk of infection presents a welcome development for countries hard hit by HIV especially those in Sub-Saharan Africa. In Namibia, there is paucity of evidence on whether this novel HIV prevention strategy would be acceptable among those women at elevated risk of acquiring the virus. This paper provides a discourse on the opportunities and potential challenges in introducing the dapivirine vaginal ring on a large scale in the country.

## INTRODUCTION

In January 2021, the World Health Organization (WHO) recommended the use of a female-initiated option, the dapivirine vaginal ring as an additional method to prevent transmission of HIV among women who are at substantial risk of getting of getting HIV such as female sex workers<sup>1</sup>. The introduction of the ring serves as an additional

choice as part of combination prevention interventions. Worldwide, in 2020, there were 37.7 million people living with HIV with women and girls constituting more than half of this population (53%) . The situation is even more dire in sub-Saharan Africa where women and girls accounted for 63% of all new HIV infections in the year 2020 according to UNAIDS<sup>2</sup>. Namibia has a generalized HIV epidemic. Although 8.2% of the general population was reported to be living with HIV, women aged 15 to 49 years are disproportionately affected with HIV prevalence in this group being estimated at 14.7%<sup>2</sup>. Furthermore, it must be appreciated that there are groups of women that are at substantial risk for HIV infection, and these include commercial sex workers, injecting drug users, and other disadvantaged and vulnerable women.

Novel HIV prevention methods such as the Dapivirine ring which offers discreet and long-acting alternative to daily oral pre-exposure prophylaxis (PrEP), provide an opportunity to address existing gender imbalances and social norms impeding uptake of PrEP. A number of studies have demonstrated the effectiveness and acceptance of the dapivirine ring in a number of

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countries<sup>3-6</sup>. Additionally, the vaginal ring has been reported to avoid structural and interpersonal barriers to access when compared to using oral PrEP. Other studies have also shown that using the dapivirine ring is both safe and cost-effective<sup>7-10</sup>. Despite these promising results, there still remains a wide gap in literature on the acceptance of the dapivirine ring in Namibia and whether its introduction on a wider scale will achieve the desired results. Exploring the potential of dapivirine vaginal ring for HIV prevention in Namibia is that essential so that there is proper guidance to both policy and practice.

### POTENTIAL CHALLENGES IN ROLLING OUT THE RING

Several challenges to adopting and scaling up the use of the dapivirine ring in Namibia exist. First, there is a general lack of information regarding the use and effectiveness of the ring in the general population. To the author's knowledge, there has been no study to explore women's perceptions of the vaginal ring in the local context. Such information is however vital to gauge public perceptions and to inform public health policy. Secondly, some of the groups mostly likely to benefit from the dapivirine ring face the greatest amount of stigma in our society<sup>11</sup>. Third, given the recent withdrawal of the dapivirine ring from US Food & Drug Administration (FDA) consideration has been regarded by some to negatively affect the prospects of funding of the device in other world regions where most governments and agencies may not be sufficiently able to scale up the intervention without support.

### OPPORTUNITIES

Despite the challenges that exist towards the adoption of the dapivirine ring in Namibia, several opportunities exist which may be exploited and these include integrating the ring into already existing reproductive health care services. Another way will be to create and promote support groups for women who may be substantial risk of acquiring

HIV in the Namibian context, to include the use of the ring in already established HIV policies and strategic plans, garner buy-in from governmental agencies and other key HIV stakeholders and to engage the academia in leading research.

### CONCLUSION

Dapivirine vaginal ring PrEP appears to show great potential as a prevention method but there is need for the different HIV stakeholders in Namibia to come up with strategies which would ensure that adequate resources are put in place and that there is prioritization of high risk groups such as female sex workers in the prevention of HIV in the country.

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