

# Self-sampling in biomolecular tests beyond the prevention of cervical cancer

*Autocoleta em testes biomoleculares além da prevenção do câncer do colo do útero*

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An article entitled: “HPV-DNA test access based on self-collection of vaginal samples from women living with HIV/AIDS: pilot implementation in Brazil”<sup>(1)</sup> was recently published in the Brazilian Journal of Sexually Transmitted Diseases (BJSTD). The authors describe the acceptability and applicability of self-collection of vaginal samples for human papillomavirus (HPV) DNA testing among women carrying the human immunodeficiency virus (HIV) in Brazil. The study demonstrated more than 90% acceptability; most participants preferred self-collection over collection by healthcare professionals. Such data are essential since this is a population that requires easily accessible screening for differentiated cervical cancer as immunosuppression is associated with a higher risk of persistent HPV infection and cervical cancer development<sup>(2)</sup>.

Searching MEDLINE, it was possible to find the likely first publication focused on self-collection for HPV research in 1993<sup>(3)</sup>. In this manuscript, the author pointed out that the greatest advantage is its acceptability by the population, as it exceeds the limits imposed by problems such as modesty and accessibility to a screening program.

Since then, many studies have been conducted on immunocompetent and immunosuppressed women demonstrating the benefits of better coverage and reaching populations not covered with the traditional screening form<sup>(4)</sup>. However, this accuracy depends on the method used<sup>(5)</sup>. Therefore, it is essential to recognize the importance of the technology applied through self-collection.

This self-collection strategy, which is now widely used for HPV, was suggested about 17 years ago to study the vaginal microbiota<sup>(6)</sup>. In this article, the authors demonstrated the same concern for better acceptability while ensuring accuracy of morphological examinations for pathogen identification (**Figure 1**) — noting that this study concerns microorganisms present in the vagina. Given new technologies based on nucleic acid amplification techniques (NAAT) on multiplex platforms that have emerged in recent years and new algorithms proposed, this strategy can be used today to make things easier for the patient without compromising the reliability of exams<sup>(7)</sup>.

Self-collection indeed allows us to overcome barriers imposed by logistical and cultural difficulties by special populations that are currently abandoned when it comes to preventing cervical cancer. We believe that the possibility of new and more comprehensive studies can evaluate self-collection as a tool to help with cancer screening and diagnosing genital infections.

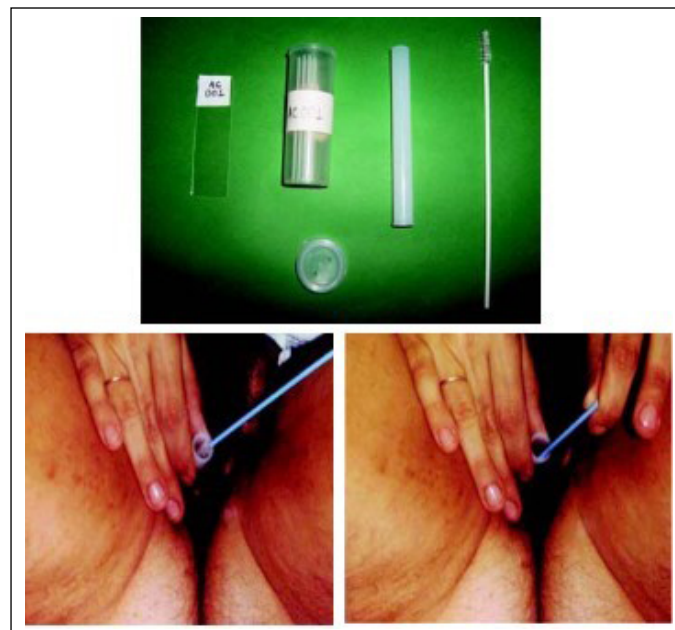


Figure 1. Tools used in the method suggested for the self-collection of samples for microbiological and vaginitis diagnoses<sup>(6)</sup>.

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## Conflicts of interest

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## Participation of each author

JEJ: Conceptualization, Writing – original draft, Writing – review & editing. WNCA: Writing – review & editing. RQV: Conceptualization, Writing – review & editing.

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