Patient Preference in Cervical Cancer Screening

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Background

CERVICAL CANCER

- Cervical cancer is one of the most common cancers among women globally, resulting in an estimated 341,831 deaths in 2020 [1-4]
- Primarily caused by high-risk human papillomavirus (HPV), most cervical cancer is preventable with proper screening and early intervention [5,6]

SCREENING OPTIONS

- Though effective screening and preventive measures exist, they often fail to account for personal, social, cultural, or economic barriers
- Alternative collection methods have been proposed to overcome these barriers and increase participation in cervical cancer screenings [3,4,6-8]

Objective

- To examine women's preference for self-sampling vs clinician-performed cervical screenings with the aim of increasing participation in cervical cancer screening

Methods

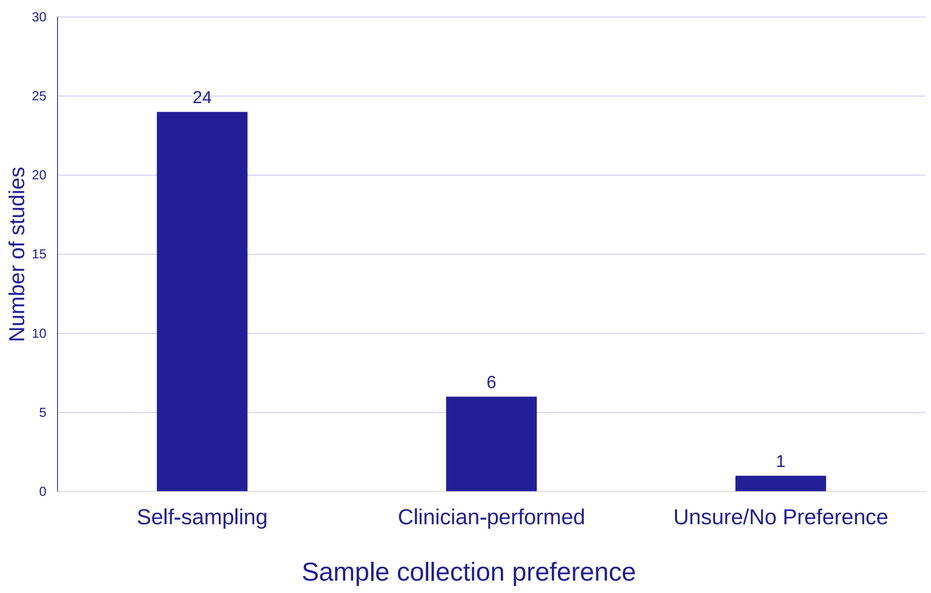
- A focused review of PubMed was conducted to identify patient-preference data reported in cervical cancer screening initiatives
- Publications reporting on community health strategies, test accuracy, economic evaluations, co-infected populations, self-collection intentions, linkage to care, and pharmacologic therapies were excluded
- Results were limited to English-language publications from 2012 to 2022
- Descriptive analyses and qualitative meta-synthesis of patient preference for self-sampling vs clinician-performed screenings were conducted

Results

PATIENT-REPORTED PREFERENCES

- A total of 31 publications that reported on patient preference for self-sampling vs. clinician-performed cervical screening were identified
- The per protocol (PP) population across all studies ranged from 60 to 10,166 participants with the mean age ranging from 24 to 69 years
- Overall, 24 studies reported self-sampling as the most preferred collection method compared to six studies reporting patients' preference for clinician-performed screenings (**Figure 1**)

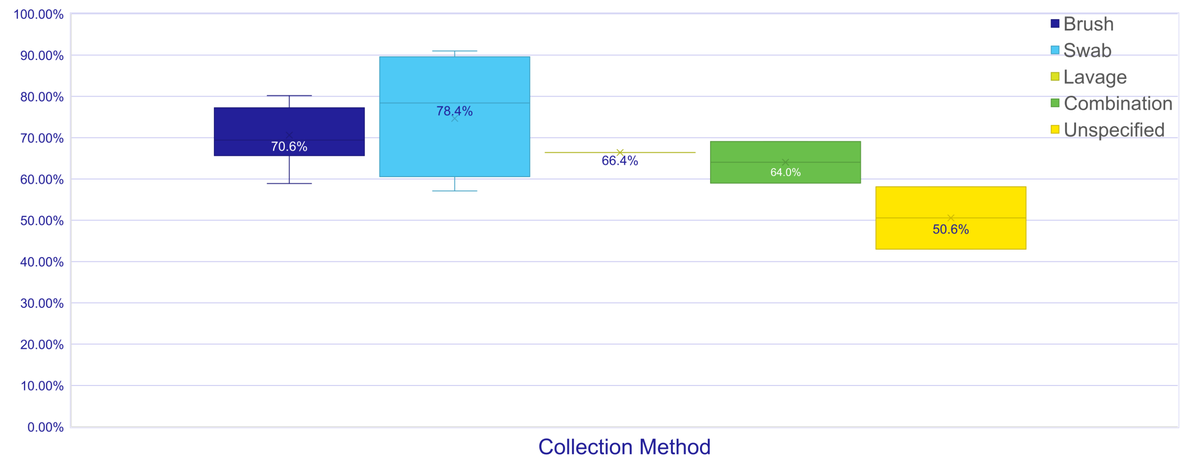
Figure 1. Patient preferences for collection of samples used in cervical cancer screening



Results, continued

- Self-sampling methods evaluated included cervicovaginal brush (N=10), swab (N=13), lavage (N=1), or a combination of these methods (N=4); three studies did not specify the method of collection
- The proportion of participants indicating a preference for self-sampling methods ranged from 43.02% to >90% (**Figure 2**)

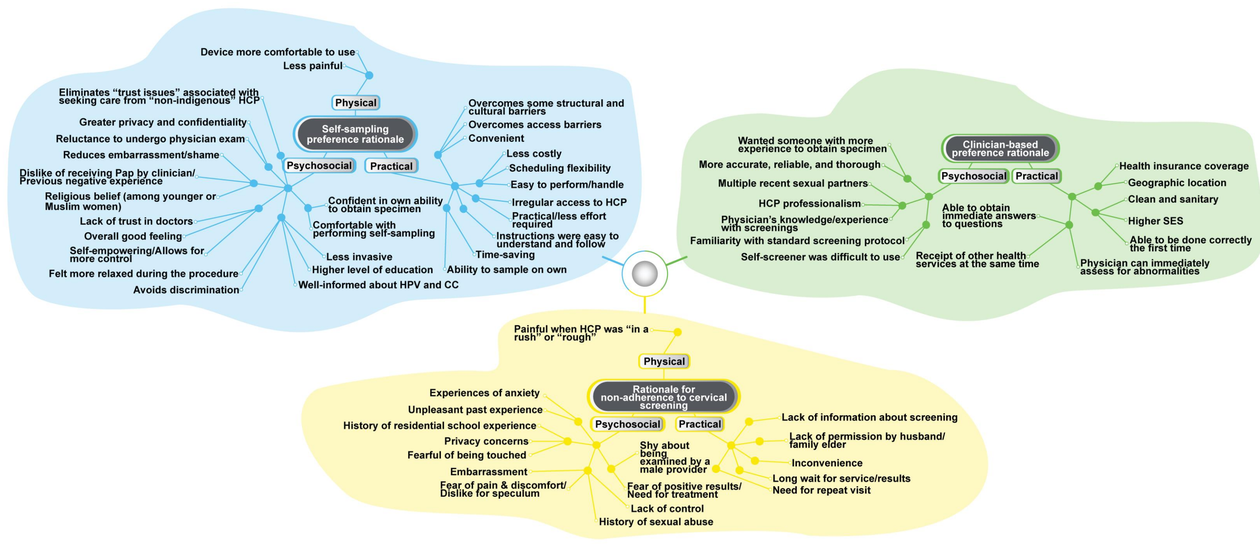
Figure 2. Patient's preference for selected self-sampling method



REPORTED RATIONALE BEHIND PREFERENCES

- Participants expressed a preference for self-sampling due to ease of use, comfort, convenience, painlessness, and decreased feelings of embarrassment and fear (**Figure 3**)
- A preference for clinician-performed sampling typically stemmed from greater confidence in clinician samples due to perceptions of increased accuracy of clinician-based screenings or a lack of confidence in the patient's own ability to accurately perform self-sampling

Figure 3. Reported preference rationale



Limitations

- Study heterogeneity (eg, clinical, methodological, geographic & population variations) may limit the generalizability of study findings and conclusions
- Most studies provided compensation for study participation which may have influenced participant preference for self-sampling vs conventional screening
- The mode of questionnaire administration (eg, home-based vs HCP-led; pen and paper vs face-to-face interview) may have introduced response bias that could potentially impact study outcomes
- Different approaches were used in each study to determine the analysis population which may result in an overestimation of preference. Results should therefore be interpreted with caution

Conclusions

- A better understanding of barriers to screening and preference drivers is needed to maximize screening rates and potentially improve long-term outcomes, especially in under-screened populations
- Integration of HPV self-collection into routine clinical practice may serve as a viable option to expand cervical cancer prevention strategies as a large proportion of participants in this study preferred self-collection to clinician sampling

References

1. Globocan. Estimated number of deaths in 2020, cervix uteri, all ages. International Agency for Research on Cancer; 2022.
2. Lefeuvre C, De Pauw H, Le Duc Banaszuk A-S, Pivert A, Ducancelle A, Rexand-Galais F, et al. Study Protocol: Randomised Controlled Trial Assessing the Efficacy of Strategies Involving Self-Sampling in Cervical Cancer Screening. Int J Public Health. 2022;67.
3. Sechi I, Cocuzza, C.E.,, Martinelli M, Muresu N, Castriciano S, Sotgiu G, Piana A. Comparison of Different Self-Sampling Devices for Molecular Detection of Human Papillomavirus (HPV) and Other Sexually Transmitted Infections (STIs): A Pilot Study. Healthcare. 2022;10.
4. Nishimura H, Yeh PT, Oguntade H, Kennedy CE, Narasimhan M. HPV self-sampling for cervical cancer screening: a systematic review of values and preferences. BMJ Global Health. 2021;6:e003743.
5. World Health Organization (WHO). Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva: License: CC BY-NC-SA 3.0 IGO; 2020.
6. Gupta S, Palmer C, Bik EM, Cardenas JP, Nuñez H, Kraal L, et al. Self-Sampling for Human Papillomavirus Testing: increased Cervical Cancer Screening Participation and incorporation in international Screening Programs. Front Public Health. 2018;6:77.
7. Coorevits L, Traen A, Binge L, Van Dorpe J, Praet M, Boelens J, et al. Are vaginal swabs comparable to cervical smears for human papillomavirus DNA testing? J Gynecol Oncol. 2018;29(1):e8.
8. Pierz AJ, Ajeh R, Fuhngwa N, Nasah J, Dzudie A, Nkeng R, et al. Acceptability of Self-Sampling for Cervical Cancer Screening Among Women Living With HIV and HIV-Negative Women in Limbé, Cameroon. Front Reprod Health. 2021;2.

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Abbreviations:

CC, cervical cancer; HCP, healthcare provider; HPV, human papillomavirus; PP, per protocol; SES, socioeconomic status

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