

INTRODUCTION

In Singapore, Cervical cancer screening programme has been introduced since 2004. However, the uptake remains low at 45- 48%, which is below the WHO target of 70%. Barriers reported by women include embarrassment, anxiety, and fear of pain during clinician sampling screening. HPV self- sampling screening test provides a private, less invasive alternative, and may help improve cervical cancer screening uptake, particularly among the under- screen women

OBJECTIVE

This study aims to find out the acceptability and experience of HPV self- sampling compared with nurse-sampling among women attending the polyclinics in Singapore.

METHODOLOGY

A randomized control trial was conducted at National Healthcare Group Polyclinics. Women in the usual care arm were offered routine nurse- sampling test, while those in the intervention were offered nurse or self- sampling test. Surveys were administered to self-sampling (n=104) and nurse-sampling (n=218) participants. Willingness to re-screen, preferred future screening modality (self or nurse-sampling), and subjective experiences across five domains: discomfort, anxiety, embarrassment, unpleasantness, trust in results were assessed. Responses were compared using logistic regression adjusted for baseline characteristics.

RESULTS

312 screened participants (96.3%) completed the questionnaire. Self- samplers were significantly younger (mean age 51.3 vs. 53.7 years, $p=0.046$) and more likely to have secondary or higher education (89.4% vs. 79.8%, $p=0.032$). Self-sampling was associated with lower odds of discomfort (OR 0.03, 95% CI 0.00–0.23), anxiety (OR 0.25, 95% CI 0.12–0.52), embarrassment (OR 0.31, 95% CI 0.15–0.65), and unpleasantness (OR 0.13, 95% CI 0.03–0.57). Trust in results (OR 1.75, 95% CI 0.54–5.73) and willingness to re-screen (OR 1.20, 95% CI 0.41–3.53) were not significantly different. Preferences aligned with the method experienced: 77.8% of self-samplers preferred self-sampling (OR 380.94, 95% CI 79.35–1828.72), while 84.1% of nurse-samplers preferred nurse-sampling (OR 0.01, 95% CI 0.01–0.03).

CONCLUSIONS

Our study found that self-sampling was associated with fewer negative experiences. However, the strong preference for nurse-sampling among nurse-samplers underscores the need to offer both options to accommodate individual preferences and support a person-centred screening approach.

Strength

The sample was representative of Singapore's population, with ethnicity distribution matching local demographics across Chinese, Malay, and Indian groups. This enhances the generalisability of our findings to the local context

Limitation

More detailed measures of the participants' experience and satisfaction would have provided deeper insights into acceptability factors.

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Table 1: Characteristics of Nurse VS Self- Sampling participants

	Nurse- Sampling n=218	Self- Sampling n=104	p-value
Age, years (Mean ± SD)	53.7 ± 10.2	51.3 ± 10.4	0.046
Ethnicity:			0.418
Indians and others	34 (15.6%)	17 (16.3%)	
Malays	70 (32.1%)	26(25.0%)	
Chinese	114 (52.3%)	61(58.7%)	
Highest educational level:			0.032
Up to Primary school	44 (20.2%)	11(10.6%)	
Secondary & above	174 (79.8%)	93 (89.4%)	
No. of pregnancy (Mean ± SD)	30 ± 1.3	2.7 ± 1.1	0.201
Previous screening:			0.802
Regular	60 (27.5%)	26 (25.0%)	
Non- regular screening	74 (34.0%)	39 (37.5%)	
No previous screening	84 (38.5%)	39 (37.5%)	
Body Mass Index, kg/m2	32.5 ± 30.7	30.3 ± 27.4	0.351

Figure 1: Screening experiences of Nurse VS Self- Sampling

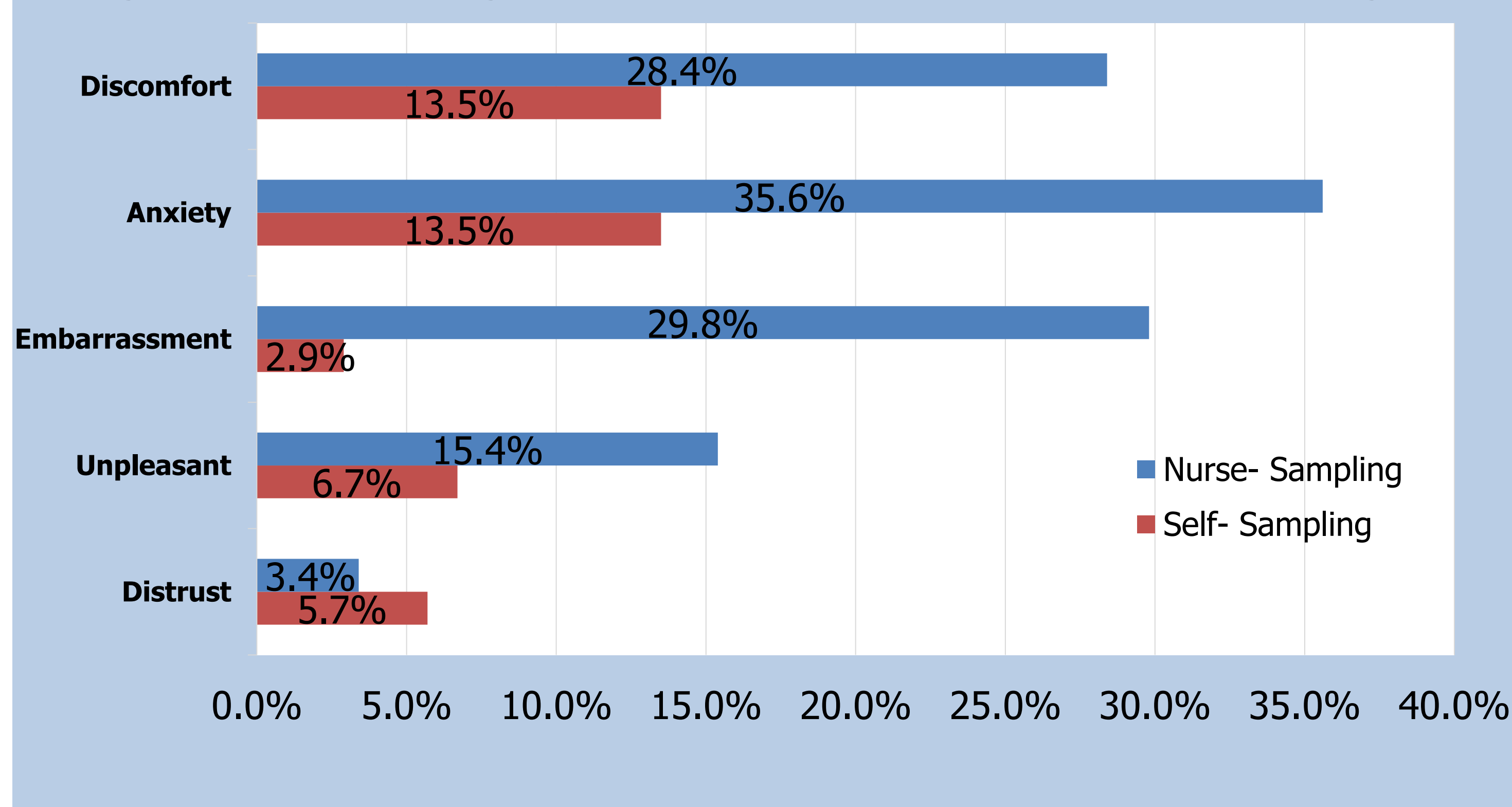


Figure 2: Preferred method

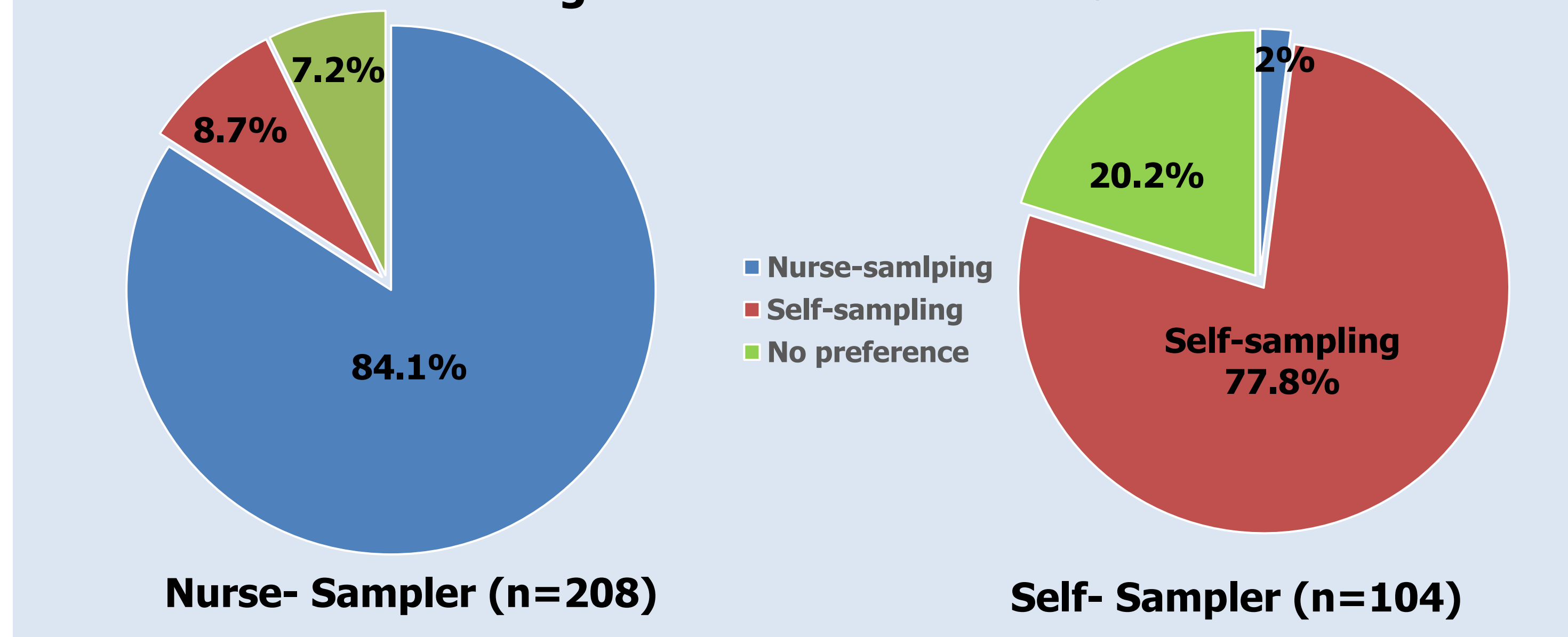


Table 2: Comparison of Screening Experiences and Preferences Between Self-Sampling and Nurse-Sampling Participants, With Adjusted Odds Ratios

Experiences & Preferences	Adjusted OR (95% CI)	p-value
Discomfort	0.03 (0.00-0.23)	<0.001
Anxiety	0.25 (0.12-0.52)	<0.001
Embarrassment	0.31 (0.15-0.65)	0.002
Unpleasant	0.13 (0.03-0.57)	0.007
Distrust	1.75 (0.54-5.73)	0.351
Repeat screening in 5 years	1.20 (0.41-3.53)	0.744
Preference for nurse-sampling	0.01 (0.01-0.03)	<0.001
Preference for self-sampling	380.94 (79.35-1828.72)	<0.001