



Correspondence

Opportunistic cervical cancer screening of women visitors at a trade fair in India

Sir,

India is facing an epidemiological transition with non-communicable diseases (NCDs) emerging as the new threat in the country¹. One of the most dangerous aspects of this group of diseases is that these may be symptomless during the course of the disease. People often do not realize that they have the disease until it reaches an advanced stage when the management becomes difficult. This puts a huge load on the already overburdened health system of the country. Some of these NCDs are preventable if appropriate screening and early diagnosis measures are adopted. Cervical cancer is one such disease which is the second most common malignancy among women in India². The International Agency for Research on Cancer (IARC) estimated 123,000 new cases and 67,500 deaths due to cervical cancer in India in the year 2012².

An awareness campaign was organized by National Institute of Cancer Prevention and Research (NICPR), Noida, India, at the India International Trade Fair, Pragati Maidan, New Delhi, India, with the aim of educating the public about risk factors and symptoms of some of the NCDs, using innovative methods to enhance the campaign efficiency from November 14-27, 2014. The study was approved by the institutional ethics committee and the participation was voluntary with informed written consent. A total of seven health camps were set up. Of these, five were devoted to common NCDs and the sixth was exclusively for three most common cancers. The seventh camp was set up for oral health and oral cancer.

A total of 338 women were screened for cervical cancer by Pap smear. The demographic data, presenting complaints and findings on per speculum examination were recorded on a predesigned proforma. The Pap smears were sent on the same day to the NICPR laboratory at Noida for processing and reporting.

Women with positive results were invited to the NICPR for further evaluation by colposcopy at a later date.

The demographic and clinical details are given in the Table. A total of four epithelial cell abnormalities were detected in Pap smear cytology: three pre-neoplastic [one each of atypical squamous cells-undetermined significance (ASC-US), high-grade squamous intraepithelial lesion (HSIL) and atypical glandular cells (AGC)] and one malignant (squamous cell carcinoma) (Figure). The women with epithelial cell abnormalities were followed up. The woman diagnosed with malignancy refused further evaluation/treatment. Despite rigorous counselling and apprising her of the consequences of refusing treatment, she was unwilling to undergo any sort of intervention and so her nearest kin were informed about the situation. The woman diagnosed with ASC-US underwent colposcopy and the finding of leopard skin appearance was suggestive of *Trichomonas vaginalis* infection. She was treated with metronidazole and a repeat Pap smear done after three months was normal. The woman diagnosed with HSIL underwent colposcopy at a private hospital and was reported as normal. She underwent a repeat Pap smear after three months which was within normal limits. The woman with AGC was persistently advised to undergo colposcopy but she did not comply. The rate of Pap positivity during the present screening was found to be 1.2 per cent. The positivity rate using Pap test in previous community-based studies ranged from 2.8 to 8 per cent^{3,4}. The low positivity rate in our study could be attributed to the urban setting of the screening programme, and also the sample size of women covered in the present screening programmes was small making the estimate less precise.

Asymptomatic women are usually not screened for cervical cancer even once in their lifetime in India⁵. The implementation of opportunistic screening programmes becomes very important in such circumstances to

Table. Demographic and clinical profile of women (n=338) attending the camp

Characteristics	n (%)
Age (yr)	
21-30	42 (12.43)
31-40	116 (34.32)
41-50	116 (34.32)
51-60	52 (15.38)
61-65	12 (3.55)
Parity	
Nil	19 (5.6)
1-3	285 (84.4)
>3	34 (10)
Menopausal status	
Premenopausal	237 (70.12)
Menopausal	101 (29.88)
Symptoms*	
Asymptomatic	128 (37.8)
White discharge	168 (49.7)
Pain abdomen	107 (31.6)
Backache	18 (5.32)
Itching of perineal region	14 (4.14)
Menstrual abnormalities	5 (1.48)
Dysuria	2 (0.59)
Something coming out of vagina	2 (0.59)
Stress incontinence	1 (0.29)
Clinical findings	
Normal cervix	260 (76.9)
Cervical erosion	62 (18.3)
Cervicitis	5 (1.48)
Cervical hypertrophy	1 (0.29)
Cervical polyp	1 (0.29)
Suspicious of cancer cervix	1 (0.29)
Healthy vault	8 (2.37)

*The total number of symptoms exceeds the number of women since a few had more than one symptom

reduce the country's burden of cervical cancer⁶. At present, opportunistic screening in India is practiced only at tertiary care centres where Pap smear is offered to women with symptoms related to reproductive tract infections. These programmes could be more effective if conducted at a large scale.

As per the WHO guidelines for Cervical Cancer Prevention 2013⁷, the recommended screening methods are any of the following three tests: human

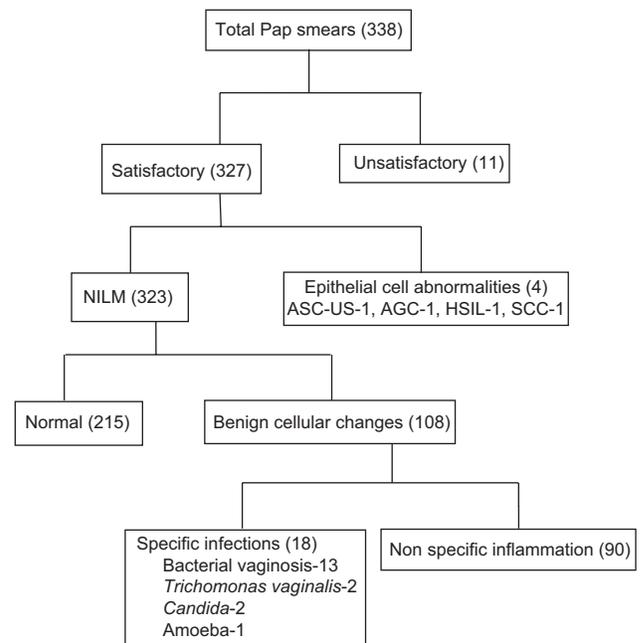


Figure. Flow diagram summarizing the results of Pap smear cytology. NILM, negative for intraepithelial lesion or malignancy; ASC-US, atypical squamous cells-undetermined significance; AGC, atypical glandular cells; HSIL, high-grade squamous intraepithelial lesion; SCC, squamous cell carcinoma.

papillomavirus (cut-off level ≥ 1.0 pg/ml), cytology (cut-off level ASC-US+) and visual inspection with acetic acid (VIA). Though VIA has been used as a primary screening tool in many low-resource settings⁸, it has the limitation of being practicable only in women whose transformation zone is visible (typically in those younger than 50 yr of age) while Pap test has no such limitation, and screening coverage using Pap test can be extended up to 65 yr of age.

Opportunistic screening of women attending health services should be carried out in medical colleges and tertiary care institutions to spread awareness and increase coverage. All women in the target age group who visit a facility for any reason should receive information on cervical screening and should be encouraged to get them screened. The goal of a screening programme should be to reach a larger proportion of women at risk with quality screening strongly linked to treatment as also recommended in the guidelines for screening and early detection of common cancers in India⁹.

In conclusion, mass gatherings provide an opportunity for public education to create awareness about screening for cervical cancer which is an initial step towards reducing its burden in our country.

Conflicts of Interest: None.

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