

## **ABSTRACT**

### **Introduction**

Cervical cancer is one of the most common diseases; between 16 and 29% of cervical cancer cases worldwide are found in India. Cervical cancer can be found early with the help of cancer screening programs and awareness of the symptoms. Early detection efforts have been shown to reduce annual incidence and prevalence by 50–70% in a number of affluent nations. Because of their inadequate screening programs in public healthcare systems, developing countries experience the highest prevalence of HPV-related cervical cancer. In addition to other screening techniques like visual inspection and colposcopy testing; cervical cytology screening has been shown to be effective in reducing the prevalence of the disorder.

### **Objective**

To investigate the sociodemographic factors that affect cervical cancer. To choose the most effective approach, the viability of several screening procedures has been assessed. The AgNOR count has also been examined in attempt to discriminate between cases of high-risk and low-risk dysplasia in addition to ki-67/p53.

### **Materials and methods**

To examine the symptoms and combination of different molecular markers, we have screened 498 women for cervical cancer at the G. G. G. Hospital in Jamnagar and G.T Sheath Rajkot. The patients' medical and personal histories had been gathered by us. The study's cervical smears were from the gynecology department. The cervical smears were obtained in pairs, one for the PAP test and the other for the specialist AgNOR staining. The smear sample was used to run PCR on the ki-67/p53 and HPV genes. We performed the PAP test as part of our standard cytopathology procedure. Patients range in age from 18 to 86, with the majority being between the ages of 26 and 45.

### **Result and discussion**

0.6% of the patients we found had cervical cancer. More than 90% of patients

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belong to the Hindu group, and 49.4% of them were married before becoming 18 years old. Only 1.1% of patients underwent both a full-term caesarean section and a full-term vaginal delivery, while 93% of deliveries took place in hospitals. White discharge was the symptom that patients complained about the most, in 65.6% of cases. The majority of the women in our study were housewives who relied on their husbands for financial support. Pap smear and AgNOR staining were used to check for cervical lesions in 498 subjects. We discovered types 16 and

18 of HPV after 4 cases were confirmed using HPV by PCR. The AgNOR stain we discovered had a sensitivity and specificity of 93.20 (95% CI: 86.50-97.22%).

### **Conclusion**

These cervical cancer screening programs need to be improved so that more women can use them. It is necessary to run more awareness initiatives to close knowledge gaps. AgNOR can be utilized as a proliferative marker and is a straightforward and affordable alternative screening test. Use of ki-67/p53 cannot be disregarded because it also contributes to the spread of the disease. In order to reduce the morbidity and mortality associated with it, it is crucial to adhere to the government's guidelines for cervical screening.

**Keywords:** housewife, cervical cancer, malignancy, woman, Parity, awareness