Comparison of Diagnostic Efficacy of Liquid Based Cytology (LBC) and the Conventional Pap Smear – A Prospective Indian Study

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Abstract #559

Introduction/Background Cervical Cancer is the fourth most common cancer affecting women worldwide. It is curable if detected early by screening. In this part of the world, where conventional screening method is used, it becomes important to analyze the newer LBC for screening.

Methodology This was a prospective observational study over a period of one year. 457 subjects between 21–65 years were recruited who underwent cytology screening by both conventional Pap Smear and LBC. The following parameters were compared for both methods: a) Sensitivity and Specificity (histopathology as the gold standard) b) Number of unsatisfactory smears c) Ease of test- duration required for sample interpretation

Cytology report of ASCUS+ was taken as positive. All subjects with positive cytology underwent colposcopy-directed biopsy

Results Out of 457 samples, 4.3% were positive by conventional method and 7.2% by LBC. Conventional PAP Smear had an unsatisfactory rate of 14%. There were no unsatisfactory smears in LBC. On evaluating High-Grade Conventional Pap Smears for CIN 2 +, the Sensitivity was 14.2%, Specificity 97.5%, PPV 33.3%, NPV 91.8% with accuracy of 91.1% whereas high-grade LBC for the detection of CIN 2 or worse, the Sensitivity was 100%, Specificity 96.4%, PPV 70%, NPV 100% with Accuracy of 96.6%. Conventional Smears were screened in 4 minutes/slide and LBC in 2.2 minutes/slide respectively (P<0.05).

Conclusion There is a significant reduction in the number of unsatisfactory smears with LBC when compared to conventional cytology. On comparing the Cytology of high-grade smears for CIN 2+, LBC had more Sensitivity, Positive Predictive Value and Negative Predictive Value with a high Accuracy even though Specificity was comparable. The most accurate results are got by LBC when a high-Grade Cytology threshold is used to detect High Grade Biopsies. LBC has the best balance of Sensitivity and Specificity. LBC also requires lesser time for interpretation of results.

Disclosures None

Assessing the Knowledge and Attitudes of School Teachers Towards HPV Vaccination in Kazakhstan

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Abstract #609

Introduction/Background Cervical cancer is the second most common cancer among women in the Republic of Kazakhstan. In 2013, Kazakhstan implemented a pilot project for HPV vaccination as a key prevention measure in eliminating cervical cancer. Nevertheless, the project was terminated in 2017 due to massive parental refusal, but it is scheduled to resume in 2024. Teachers’ better knowledge of the HPV vaccine has been linked to stronger recommendations to parents and students and increased coverage during school-based HPV vaccination, which is a common strategy in many countries. This study aimed to evaluate the knowledge and attitude of schoolteachers towards HPV vaccination.

Methodology This pilot cross-sectional study was conducted among Kazakhstani schoolteachers from January to March 2022 by electronic questionnaire.

Results The study involved 176 schoolteachers in Kazakhstan, and the results showed that the average knowledge score for HPV and HPV vaccination was 7.2±3.0 out of 12 possible. The findings indicated that women had significantly higher knowledge compared to men (7.5±3.2 and 4.3±3.4, respectively, P=0.02). Teachers aged 30–39 had better knowledge than those aged 60 and above (7.9±2.5 and 3.8±3.0, respectively, P=0.01). Respondents in the Central region of Kazakhstan had better awareness of HPV and vaccination compared to those in the southern regions (8.9±2.5 and 5.6±3.2, respectively, P=0.04). Knowledge differences were also found among teachers with different work experience, income, and nationality. Only 55.9% of the participants reported being aware of the HPV vaccine. Most of the schoolteachers believed that adolescent awareness should be increased, with a majority preferring health professionals (79.7%) and parents (67.3%) to be the primary informants.

Conclusion The study revealed that schoolteachers in Kazakhstan have limited knowledge about HPV and HPV vaccination. Developing educational interventions for teachers and healthcare professionals to improve knowledge and awareness about HPV and vaccination can facilitate the successful implementation of the HPV vaccination program in Kazakhstan.

Disclosures The authors declare no conflict of interest.
Introduction/Background The identification of women with a hereditary predisposition to breast and ovarian cancer from the segregation of the presence of a familial known pathogenic variant in BRCA1 is a strategy that allows the recognition of ovarian cancer’s high-risk women, which may provide risk-reducing salpingo-oophorectomy, reducing the risk of cancer of the peritoneum, fallopian tubes and ovaries from around 71 to 96%. The objective of this pilot study is to evaluate the cost-effectiveness of family segregation of genetic pathogenic variants for BRCA1 in families with hereditary predisposition to breast and ovarian cancer in the Brazilian National Health System (SUS).

Methodology It will be calculated the treatment’s cost of Pernambuco’s Hereditary Cancer Program’s women diagnosed with ovarian cancer and a germline pathogenic variant in BRCA1; the cost of the genetic test for women in the family; the possible cost in the treatment of malignant neoplasms diagnosed in these women, calculating the penetrance of ovarian cancer in this specific population, comparing the cost with the genetic tests and the risk-reducing surgeries.

Results An interim analysis reveals that the media of the treatment’s cost of women diagnosed with ovarian cancer and a germline pathogenic variant in BRCA1 was R$ 52286,7; the cost with the genetic tests and the risk-reducing surgeries were R$ 285 and R$ 975,4, respectively. These risk reduction strategy could avoid the cost of R$ 40478,71 for every prevented ovarian cancer.

Conclusion The primary analysis should be considered a cost-effectiveness of family segregation of genetic pathogenic variants for BRCA1 in Pernambuco’s families with hereditary predisposition to breast and ovarian cancer in the Brazilian National Health System (SUS).

Disclosures The authors has no conflict of interest.

Results Result; The average age of the 275 responders was 36.9 years old. Sixty percent of respondents learned about HPV vaccines mostly from the media or from health workers/health services. Around 77.5% agreed to vaccinate their children against HPV (85.5% for daughters and 78.6% for sons). However, just 15.3% of parents vaccinated their daughters, while only 6.5% immunized their sons. Respondents exhibited an excellent comprehension of both HPV infection and cervical cancer (more than 70% answered correctly). However, only 34.8% of responders received a cervical cancer screening. Antibiotics cannot be used to treat HPV, according to 61% of respondents, while the rest believe they can.

Conclusion Conclusion; This study shows there is discrepancies between knowledge and adherence to HPV vaccination. The discrepancies should be answered with national/regional system or strategy.

Disclosures No disclosures