A national cervical cancer screening program was started in Romania in September 2012, financed by the Ministry of Health. The program is based on conventional cytology. HPV testing is not offered in the public health sector. CercCoRom Project (Cervical Cancer Control for Roma and Other Disadvantaged Groups in North-Western Region of Romania) financed by EEA Grants, started in August 2014. The project was designed by the Center of Cancer Control and Prevention from the “Prof. Dr. Ion Chiricuta” Institute of Oncology in Cluj-Napoca, in collaboration with The Cancer Registry from Oslo, Norway. The project aims to evaluate the feasibility of integrating HPV high risk (hr-HPV) as primary test into the screening program. We present here preliminary results of co-testing with cervical cytology and hr-HPV.

**Objectives**

A) To estimate the prevalence of HPV infection and abnormal cytology in an ethnically diverse screening population.

B) To assess the consistency of screening results using hr-HPV and cytology.

**Methods**

A cross-sectional pilot study was conducted. The target population was Roma, other ethnic minorities and other socioeconomic disadvantaged groups from the rural population in the North-Western Region of Romania. Cytological smears and hr-HPV tests were taken concurrently in each woman between June and November 2015 by a mobile health unit. The specimens were tested with Hybrid Capture 2 DNA Test for the qualitative detection of 13 hr-HPV types (16/18/31/33/35/39/45/51/52/56/58/59/68). Positive cytology was considered ASC or worse. Screen positivity rates and agreement between cytology and hr-HPV were estimated by kappa coefficients.

**Conclusions**

This is the first study in Romania to assess the prevalence of HPV infection and abnormal cytology in an ethnically diverse and socioeconomic disadvantaged screening population. Our data indicate that co-testing is feasible for earlier identification of high risk groups for cervical cancer in this context.

**Results**

1049 women were included in the study. Their mean age was 44 years (range 20-64 years). The prevalence of HPV positive results by age group is shown in Table 1. Most participants were Romanian (74%), the remaining being Roma (19%), Ukrainian (6%) and Slovakian (2%). The prevalence of hr-HPV was 14% among the Roma, 12% among Ukrainian, 12% among Romanian and 10% among Slovakian women. The prevalence of positive cytology was 14% among Romanian, 7% among Ukrainian, and 5% among Roma women (Table 1). The population prevalence of positive results was similar for both hr-HPV test and cytology (12%) (Figure 2). However, 66% of the hr-HPV positive women had normal cytology and 9% of women had an abnormal cytology with hr-HPV negative test (Table 2). The consistency of positive results using the two methods was fair (κ=0.25; 95% CI=0.18 to 0.30, p=0.001) (Table 4 and 5). A total of 208 women (20%) were positive by one or two tests, while only 41 (4%) were positive for both tests (Table 2). 100% of HSIL cases were HPV positive, 50% for LSIL, 34.2% for ASC-H, 26% for ASCUS and 20% for AGC (Table 3).

**Tables**

- Table 1. Prevalence of cytological results by ethnicity
- Table 2. Comparison of cytology and HPV tests
- Table 3. Prevalence of HPV tests results by ethnicity and dysplasia
- Table 4. Consistence of positive results for HPV tests and cytology by type of dysplasia

**References**