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| **The analysis of cervical screening data in 2 million Chinese female physical examination population in 2017** |
| **Background/Objectives**  Cervical cancer is the fourth most common cancer in women and seventh overall worldwide, with a third of new cases occurring in China. The high mortality rate from cervical cancer could be reduced through a comprehensive approach that includes prevention, early diagnosis, effective screening and treatment programmes. However, the national wide cervical screening data has not been reported previously. Therefore, we conducted the study to analyse cervical screening data of 2 million Chinese adult female who had physical examination in 2017.  **Methods**  The study population included 5,522,658 females aged 18 years and above who attended physical examination in 30 provinces and cities in China. Among them, 2,045,607 participants who participated in the Thinprep Cytology Test (TCT), a common cervical screening method, were the final analysis population. The positive result is defined as an abnormal result including undefined atypical squamous epithelial cells, low-grade squamous intraepithelial lesions, highly squamous intraepithelial lesions and squamous cell carcinoma. All analyses were conducted using SAS 9.4.  **Results**  The average age of the analysis population was 43.0±11.6 years old and the positive detection rate was 2.4% (with 48,991 females with abnormal results). The positive rate increases by age, reaches a maximum of 2.9% in the age group of 55-64, then slightly decreases in the older age groups. The rates also vary widely by geographic area, with a higher positive result in the northwest, north, central and south regions of China compared with the other regions.  **Discussion**  Public awareness of cervical screening should be increased among Chinese female population. The findings indicate that further efforts are needed to promote the implementation of a population-based cervical cancer prevention and control program in China, in particularly among the priority population to detect and control the risk of cervical cancer at early stage.  **Keywords**  Cervical screening; national physical examination population, China, Big data |