

TRENDS IN CERVICAL CANCER INCIDENCE IN LATVIJA IN 1983-2013

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Cervical cancer is the third most common cancer form in the world for woman and the fourth most common cause of woman death [1]. Cervical cancer incidence is closely linked to the quality of health care system in the country. Various developed countries reached a significant reduction in the cervical cancer incidence with well organised cancer screening programmes [2]. Cervical cancer is the sixth most common cancer site for Latvian women after breast, skin, colorectal, uterine and ovarian cancer [3].

The aim of the study is to calculate age standardized cervical cancer incidence rates and to show the incidence time trends as indicators of changes in health care system in Latvia during past thirty years.

The study included data obtained from the population-based Latvian cancer registry. The sample included 5890 women with diagnosed and histologically confirmed cervical cancer in the period from 1983 to 2013. Age-standardized rates were calculated by direct standardization method using world standard population [4],[5]. Incidence changes were detected with join point regression method using the National Cancer Institute program Joinpoint Software 4.1.0 [6]. Connection point regression is a technique that is used to analyse changes over time. With calculations are defined time periods when rates change linearly, as well as the time points at which these periods are changing. Each calculation for the period is fixing annual percentage changes (APC) and its 95% confidence interval. Data processed using MS Excel 2010 and IBM SPSS 20.0 programs.

Cervical cancer incidence trends changes twice, in 1990 (95% CI: 1988 – 1993), and 1993 (95% CI: 1992 – 1998) divided incidence trend into 3 periods: in the period 1983 to 1990 incidence was initially decreasing, in 1990 - 1993 increasing dramatically and in 1993 - 2013 continues increasing with an annual percentage of 3,8% (95% CI: 3,1 – 4,6). Early cancer stage group have two major time periods: 1983 - 1992, an annual percentage decrease is 3.2% (95% CI: 0,8 - 5,5) per year; and 1992-2013 APC started increase of 2.7% (95% CI: 2,0 – 3,4) per year. Advanced cancer forms trends changed twice: until 1989 trends did not changed significantly, in the period till 1993 has increased dramatically, with 51.6% (95% CI: 24,6 – 84,4); the third period, from 1993 to the 2013th, APC continues to grow by 3.8% (95% CI: 2, 7 – 4,9). Cervical cancer incidence trends shows changes during different economic and political periods in Latvia [7], however trends does not show any changes since organised screening programme started in Latvia in 2009.

References

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