Chapter 1: Epidemiology of Cervical Cancer

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Concepts in cancer epidemiology
  What is epidemiology?
  Measuring the risk or burden of cancer
    Incidence
      Age-standardized incidence (or mortality) rate (ASR)
    Cumulative incidence (or cumulative risk)
    Prevalence
    Survival
    Mortality
  Cancer screening

Descriptive epidemiology of cervical cancer
  Global burden - Incidence and mortality
  Trends in incidence and mortality

Aetiology of cervical cancer

Factors influencing risk of cervical cancer
  Human papillomavirus (HPV)
  Tobacco smoking
  Co-infection with Human Immunodeficiency virus (HIV)
  Co-infection with Chlamydia trachomatis
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Prevention of cervical cancer

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ABSTRACT
Worldwide, cervical cancer is the fourth most common cancer among women, with an estimated 528 000 new cases (7.9% of cancer in women) and 266 000 deaths (7.5% of cancer deaths in women) in the year 2012, and a five-year prevalence of 1.5 million cases (9% of women with cancer). About 85% of the cases occur in developing countries, where cervical cancer accounts for 12% of all cancers in women [1]. The cervical and endometrial cancers originate in the uterus, but differ drastically in terms of aetiology, clinical presentation and characteristics, prognosis and survival. Cervical cancer is a model of viral carcinogenesis, and most common in developing countries; whereas, endometrial cancer is a model of hormonal carcinogenesis, and most common in developed countries. The aim of this chapter is to provide an overview of key concepts in cancer epidemiology and to describe the global patterns and trends in incidence and mortality, aetiology and prevention of cervical cancer.