Review Article

Cervical cancer in India: A scientometric study of publications, 2003-2012

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Abstract

The paper examines 1141 Indian papers in cervical cancer, as covered in Scopus database during 2003-2012, experiencing an annual average growth rate of 13.05% and citation impact of 5.04. The world cervical cancer output (28,174 papers) came from several countries, of which the top 10 (United States, China, UK, Japan, Germany, France, Italy, India, etc.) accounts for 75.59% share of the global output during 2003-2012. In terms of relative citation index (RCI), only five countries registered the value above 1: The Netherlands (1.37), France (1.20), Spain (1.14), Brazil (1.09) and Australia (1.03). India's global publication share and global publication rank was 4.05% and 8th during 2003-2012. India's accounts for 1.83% citation share and 14th rank in global citations output. Its average citation per paper and RCI was 5.04 and 0.45 and hold 13th rank among top 15 countries in both of them. The Indian cervical cancer output came from several organizations and authors, of which the top 14 contributed 53.99% and 22.17% share, respectively during 2003-2012. India's international collaborative share in cervical cancer was 12.74%, which decreased from 13.96% during 2003-2007 to 12.12% during 2008-2012. Medicine accounted for the largest share (83.17%) of output in mouth cancer, followed by biochemistry, genetics and molecular biology (31.90%), pharmacology, toxicology and pharmaceutics (4.29%) and immunology and microbiology (3.59%) during 2003-2012. Radiotherapy and screening (with 18.05% share each), followed by diagnosis (16.74%), genetics (10.96%), prognosis (10.34%), chemotherapy (10.25%) account for major publications share among treatments methods used in Indian cervical cancer output during 2003-2012. Delhi (with 21.21% share) contributed the largest share (21.21%) among Indian states and union territories to Indian papers in cervical cancer, followed by Maharashtra (18.05%), Uttar Pradesh (13.32%), Karnataka (11.57%), Tamil Nadu (9.90%), West Bengal (9.47%), Chandigarh (7.36%) etc., during 2003-2012. The medical colleges contributed the highest publications share (27.34%) to Indian publications in cervical cancer during 2003-2012, followed by research institutes (24.36%), institutes of national importance (20.25%), hospitals (14.29%), universities (13.15% and others (2.19%), etc., during 2003-2012

Key words: Bibliometrics, cervical cancer, India, publications, scientometrics

INTRODUCTION

Cancer is a group of many related diseases. All cancers begin in cells, the body's basic building blocks. Normally, cells grow and multiply in an orderly way. However, damaged genes can cause them to behave abnormally. They may grow into a lump called a tumour, which may be benign (not cancer) or malignant (cancer). Polyps, cysts, and genital warts are types of benign growths on the cervix. A malignant tumour is made up of cancer cells, which if are not treated may spread beyond their normal boundaries and into surrounding tissues by metastasis, becoming invasive cancer. There are five main types of gynecologic cancers that affect women reproductive organs: cervical, ovarian, uterine, vaginat and vulvar. Cervical cancer (or cancer of the cervix) arises from the tissues of the cervix, which is the lower part of the uterus that connects to the vagina. The functions of the cervix include: (i) Producing some of the moistness that lubricates the vagina, (ii) producing the mucus that helps sperm travel up to the fallopian tube to fertilize an egg from the ovary and (iii) holding a developing baby in the uterus during pregnancy. During childbirth, the cervix widens to allow the baby to pass down into the birth canal (vagina).[1]