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Journal of Cancer Research and Immuno-Oncology

Mini Review

Scientific Productions on Cervical Cancer from India: A Bibliometric Analysis

Roshan Umate*

Department of Data Manager, Datta Meghe Institute of Medical Sciences, Maharashtra, India

ABSTRACT

Cervical cancer is the most common cancer in women, with an estimated 570,000 new cases worldwide in 2018, and represents the third leading cause of cancer-related deaths in women worldwide. Bibliometrix is an important tool for the study and analysis of scientific activities of a researcher, institute, and University. Bibliometrix is very much helpful in the assessment of qualitative indicators of research impact like peer review, grants received, patents and awards received. This is the study of Bibliometric analysis of the publications affiliated to the "Health Sciences University in Central India" published between 1992 to 2020 in web of science databases.

Keywords: Bibliometric; Scopus; Web of Science; Indexing; Publications; University

INTRODUCTION

Cervical cancer is the foremost common cancer in ladies, with an assessed 570,000 unused cases around the world in 2018, and speaks to the third driving cause of cancer-related passings in ladies around the world [1]. This Cervical Cancer (CC) is one of the foremost common cases in ladies, with 570,000 unused cases and 311,000 passings detailed in 2018 around the world. CC is the driving cause of cancer-related passings in ladies with harmful tissue and the fourth driving cause of cancer-related passings in ladies. This underscores the need for modern procedures to treat the infection. The primary infection (arrange IA-IB1) is more often than not treated surgically. The localized progressed malady (IB2-IVA) can be treated with Concomitant Chemo-Radiotherapy (CCRT), whereas repetitive and progressed illness (organize IVB) is treated with chemotherapy and palliative radiotherapy counting intra-cavity brachytherapy (IC-BT) [2]. The anticipation of CC by screening and immunization has diminished the rate of the malady in later a long time; in any case, the in general forecast of patients [2,3].

Cervical Cancer (CC) is one of the foremost common cases in ladies, with 570,000 modern cases and 311,000 passings in 2018 around the world. CC is the driving cause of cancer-related passings in ladies with terminal cancer and the fourth driving cause of cancer-related passings in ladies. This underscores therequire for unused methodologies to treat the illness. The primary infection (organize IA-IB1) is treated with surgery. Progressed nearby illness (IB2-IVA) can be treated with CCRT, whereas repetitive and progressed illnesses (organize IVB) are treated with chemotherapy and palliative radiotherapy counting intra-cavity brachytherapy (IC-BT). Early discovery and anticipation of CC by screening and immunization has decreased the rate of the malady in later a long time; in any case, the by and large forecast of patients with repetitive and progressed malady remains destitute. Cisplatin-based chemotherapy has already been the standard of care for patients with repetitive cancer and cervical cancer [4].

LITERATURE REVIEW

Bibliometrics, the term coined by Pritchard in 1969 is one of the analytical methods, frequently used in library and information sciences for analysing scientific literature. It facilitates the analysis of impact of research outputs, quality and impact of research. Bibliometrics is an important tool for the study and analysis of scientific activities of a researcher, institute, and University [3]. The bibliometric data of researchers and institutions is essential for various purposes like applying for accreditation, project calls, funding grants, University strategic purposes, assessment of scientific outputs, reporting to public administration, accreditation of PhD programmes and outline research policies and dissemination activities of the institution. Bibliometrics is very much helpful in the assessment of qualitative indicators of research impact like peer review, grants received, patents and awards received [5,6].

Correspondence to: Dr. Roshan Umate, Department of Data Manager, Datta Meghe Institute of Medical Sciences, Maharashtra, India, E-mail: roshanumate111@gmail.com

Received: November 12, 2021; **Accepted**: November 26, 2021; **Published**: December 03, 2021

Citation: Umate R (2021) Scientific Productions on Cervical Cancer from India: A Bibliometric. J Cancer Res Immunooncol.7: 139.

Reference investigation is a usually utilized bibliometric technique which depends on building the reference chart, a system or diagram portrayal of the references between records. Many exploration fields use bibliometric strategies to investigate the effect of their field, the effect of a lot of analysts, the effect of a specific paper, or to recognize especially significant papers inside a particular field of examination. The bibliometrics likewise has a wide scope of different applications, for example, in unmistakable etymology, the advancement of thesauri, and assessment of per user usage. Historically, bibliometric strategies have been utilized to follow connections among scholarly diary references. Reference investigation, which includes looking at a thing's alluding reports, is utilized in scanning for materials and breaking down their merit. Citation files, for example Institute for Scientific Information's Web of Science, permit clients to look forward in time from a realized article to later distributions which refer to the known thing [7]. The information from reference records can be broke down to decide the fame and effect of explicit articles, writers, and publications [8,9].

Using reference investigation to measure the significance of one's work, for instance, is a huge piece of the residency audit process. The information researchers like wise use reference examination to quantitatively survey the center diary titles and watershed distributions specifically trains; interrelationships between writers from various organizations and ways of thinking; and related information about the human science of the scholarly community. Some increasingly down to business utilizations of this data incorporates the arranging of review catalogues, "giving some sign both of the period of material utilized in an order, and of the degree to which later distributions supplant the more established ones";demonstrating through high recurrence of reference which reports ought to be chronicled; contrasting the inclusion of optional administrations which can assist distributers with measuring their accomplishments and rivalry, and can help curators in assessing "the viability of their stock" [10].There are additionally a few restrictions to the estimation of reference information. They are frequently inadequate or one-sided; information has been to a great extent gathered by hand (which is costly), however reference files can likewise be utilized. The inaccurate referring to of sources happens constantly. Consequently, further examination is required to genuinely comprehend the method of reasoning behind referring to permit it to be certainly applied.

The bibliometrics are presently utilized in quantitative exploration appraisal activities of scholastic yield which is beginning to undermine practice based examination. The indexation of journals is another key issue reflecting quality of published materials. The web of Science is one of the publisher-independent and the best citation database trusted globally. The web of science database marks the basis of most of the bibliometric studies. As per the records of Journal Citation Reports (JCR)-2019, the ISI Web of Science database includes 11877 journals from about 81 countries. Scopus being the biggest and well known abstract and citation database of scientific literature, is very convenient for accessing the research outputs in medical literature and it's smart features facilitate easy tracking and analysis. Scopus and Web of Science databases are multidisciplinary and differ in terms of their coverage, focus, and the analytical tools. It is an open-source instrument for quantitative exploration in scientometrics and bibliometrics that incorporates all the principle bibliometric strategies for investigation. With biblioshiny, the gleaming application presented from adaptation 2.0, bibliometrix has gotten exceptionally simple to utilize in any event, for the individuals who have no coding abilities. Bibliometrix bundle gives different schedules to bringing in bibliographic information from SCOPUS, Clarivate Analytics' Web of Science, PubMed, Digital Science Dimensions and Cochrane databases, performing bibliometric examination and building information lattices for co-reference, coupling, logical joint effort investigation and co-word investigation [11].

Bibliometrix is an exceptional instrument, created in the measurable figuring and realistic R language, as per a consistent bibliometric work process. R is profoundly extensible on the grounds that it is an item situated and utilitarian programming language, and along these lines is truly simple to computerize investigations and make new capacities. As it has an open-programming nature, it is additionally simple to find support from the clients' locale, principally made by noticeable analysts. Subsequently, bibliometrix is adaptable and can be quickly updated and can be incorporated with other measurable R-bundles. That why, it is helpful in a continually changing science, for example, bibliometrics. Today bibliometrix is something other than a measurable device. It is turning into a network of global designers and clients who trade questions, impressions, suppositions, and models inside an open source venture.

Bibliometrix incorporates all the primary bibliometric strategies for investigation, however we use it particularly for science mapping and not for estimating science, researchers, or logical efficiency. Orchestrating past exploration discoveries is one of the most significant assignments in propelling a line of examination. Different strategies exist to sum up the measure of logical action in a space, however bibliometrics can possibly present a deliberate, straight forward and reproducible survey process [12].

This is applicable during a time when the quantity of scholastic distributions is ascending at an extremely quick pace and it is progressively unfeasible to monitor everything that is being distributed; and when the accentuation on observational commitments is bringing about voluminous and divided examination streams, and a challenged field. Writing audits are progressively assuming a urgent job in incorporating past exploration discoveries to viably utilize the current information base, advance a line of examination, and give proof based bits of knowledge into the act of practicing and continuing expert judgment and skill [13]. The mind-boggling volume of new data, theoretical turns of events and information are the milieu wherein bibliometrics gets valuable, by giving an organized investigation to a huge assortment of data, to gather inclines after some time, topics explored, recognize moves in the limits of the orders, to distinguish most the prolific researchers and organizations, and to show the "master plan" of surviving exploration [14].This study was conducted for Bibliometric

analysis of the publications affiliated to the Health Sciences University in Central India published between 1992 to 2020 in Web of Science databases.

DISCUSSION

This retrospective observational study included accessing the publications affiliated to the Health Sciences University in Central India on Scopus and Web of Science databases with predefined search criteria. The results were compiled and compared for Scopus and Web of Science databases followed by graphical representation of key bibliometric findings for the period of 1992-2020. This retrospective observational study included online access Web of Science database through Login into corresponding website followed by Affiliation search. The search query input for Web of science database was List of total 356 documents was obtained for the years 1992-2020 [15].

Key bibliometric information was retrieved which included author name, affiliation, journal name, publication title and year and document type. The Bibtex file of Web of science lists were exported to R-Studio Application [16]. Imported data was downloaded and used to create bibliographic data frame. Basic information of publications was summarized using descriptive statistics which included number of citations, citation density, journals, publication year, authors, institution, and country of origin [17].

In web of science publications, journal articles comprised a major part (76.40%) followed by Review (18.82%) and Editorial material (1.96%) and Letter (2.24%) Annual Percentage Growth Rate was 12.63 in web of science.

In Web of science database publications Number of Authors 2586 with 3312 Author Appearance. Authors of 8 single-authored documents were 8 whereas Authors of multi-authored documents were 2578. Documents per Author were 0.139, Authors per Document were 7.18 Co-Authors per Documents were 9.2. No. of Authors and Co-authors per document are higher WOS based publication (Figure 1).

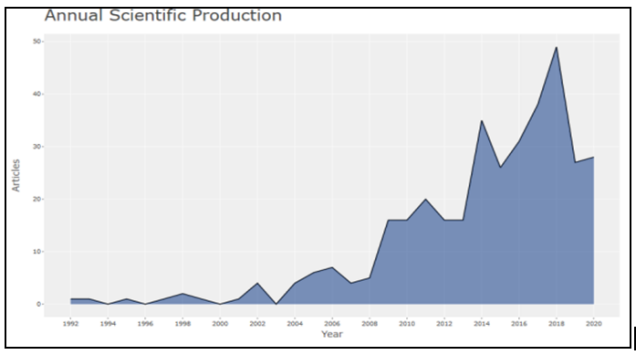

Figure 1: Average article citation per year.

CONCLUSION

The progress of the Health Sciences University in terms of Scientific Production in both databases is good over last three years. The collaboration Index for Publications showed progress in both Indexing Databases. The trend of publications and citations in both databases is variable over the period of last three years and is expected to improve further in coming years.

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