Original Article

A Bibliometric Analysis On Ovarian Cancer Among Gen Y

Durga Prasad Singh Samanta[a], Dr. B.Chandra Mohan Patnaik[b], Dr. Ipseeta Satpathy[c], Dr. Samrudha Nayak[d], Dr. Deepti Mishra[e], Sonali Priyadarshini[f], Shelly Khuntia[g]

[a] Research Scholar, KSoM, KIIT University, Bhubaneswar, Odisha, India.
[b] Professor, KSoM, KIIT University, Bhubaneswar, Odisha, India.
[c] Senior Professor, KSoM, KIIT University, Bhubaneswar, Odisha, India.
[d] Assistant Professor, Birla Global University, Bhubaneswar, Odisha, India.
[e] Assistant Professor, Centurion University, Bhubaneswar, Odisha, India.
[f] Assistant Professor, Utkal University, Bhubaneswar, Odisha, India.
[g] Assistant Professor, KIIT University, Bhubaneswar, Odisha, India.
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Abstract

The paper is based on a two-step procedure known as "Systematic Literature Network Analysis (SLNA)" (Colicchia & Strozzi, 2012): a systematic literature review (SLR) and a subsequent analysis of the subset of pertinent articles obtained through a bibliographic network analysis (NA): specifically, the citation network analysis, the co-occurrence networks analysis, and the basic statistics. The first qualitative evaluation is primarily based on the researchers' opinions regarding the choice of keywords and relies on an explanatory approach, whereas the bibliometric evaluation offers more objective insights through quantitative and statistical data (Aliyev et al., 2018). The most influential author names, journal titles, article titles, article keywords, and publication years are only a few examples of the bibliographic data examined by bibliometric approaches. The topic of the study is ovarian cancer among GenY, from reservoir of academic databases like Pubmed and Scopus, the authors have accumulated list of publications relating to keywords which are ovarian cancer, family risk, IVF and smoking which was limited to the area of medical, human, female, ovary, cancer and health

1. INTRODUCTION

Ovarian cancer occurrence changes internationally, similar to that of numerous different cancers.[3] The threat factors that cause ovarian cancer can be faulted for the epidemiological fluctuation of the illness in different geographic regions Non-Latino white women (12.0 per 100,000) had the best recurrence of ovarian cancer, trailed by Latino (10.3 per 100,000), non-Latino black (9.4 per 100,000), and Asian/Pacific Islander women (9.2 per 100,000).Ovarian cancer mortality, notwithstanding, pursues a particular direction because of variations in admittance to symptomatic and treatment administrations, with African populaces seeing the best casualty rates. Measurements demonstrate that chance elements can be dispensed with or diminished to keep away from 33% to two fifths of all cancer cases. Since arranging and keeping away from issues require data of ovarian cancer's recurrence, mortality, territorial assortment, and hazard factors, we looked through the world yet couldn't find an intensive exploration on the infection's threat factors[4].

The clinico-pathologic prognostic elements and existence of more young versus more elderly women with epithelial ovarian cancer ought to be analyzed[5]. From 1988 to 2001, information on patients with ovarian cancer from the Reconnaissance, The study of cancer transmission, and Outcome Program were gathered in a study conducted by Mohammed et al.,. This information was then dissected utilizing Kaplan-Meier gauges. Of the 28 165 patients, 400

were under 30 (exceptionally young), 11 601 were somewhere in the range of 30 and 60 (young), and 16 164 were north of 60 (more established). Stage I-II sickness was available in 261 (65.3%), 4664 (40.2%), and 3643 (22.5%) of the exceptionally young, young, and more established patients, separately (P 0.001).With evaluations of 5-year infection explicit survival at 78.8% versus 58.8 and 35.3%, separately, for young and more established gatherings, separately, extremely young women showed a significant survival advantage across all stages (P 0.001). Indeed, even subsequent to revising for race, stage, grade, and careful treatment, there is as yet an survival differential across the age gatherings. women of regenerative age (16-40 years) who went through uterine-saving therapies for stage I-II epithelial ovarian cancer had tantamount survival rates to the people who went through ordinary medical procedures (93.3% versus 91.5%, P=0.26)[6]. Contrasted with more established patients, more young women having epithelial ovarian cancer had a higher opportunity of survival[7].

1.1 THE MILLENNIAL GENERATION: WHO ARE THEY?

The Millennial generation, on the note to demographer David Foot, consists of people who were born within 1980 and 1995. (2000) Foot and Stoffman He frequently calls the Millennials "Baby Boom Echo" because they are the Baby Boomers' kids (1946–65). Some ideas contend that Millennials as a whole are influenced by historical events and experiences from the same era (cf. Gilleard, 2004). This concept of a "generation" is based on Mannheim's sociology of generations thesis from 1952, which claims that individuals from the same generation have more characteristics than only their year of birth. The environment Millennials were exposed to throughout their formative years therefore has an impact on their values, attitudes, and behaviors.

Despite the fact that scientists have used various birth year confines to classify millennials, in practice precise birth year boundaries are far less dominant than shared historical events and experiences accompanying social change. The authors review the historical events that shaped their lives, in this chapter, we use the term “millennials' ' to be consistent with the literature. The factors that affected millennials are their Boomer parents, such as rising divorce rates, more women entering the workforce, and quickening technology change, have had a significant impact on Millennials as a generation. Baby Boomers were wealthier than their parents, the socioeconomic context in which the Millennial generation was raised was likewise largely middle class. This has caused many pundits to label the Millennial generation as entitled and pampered.

1.2 OVARIAN CANCER

Ovarian cancer, the deadliest of the gynecologic cancers, is as yet the 6th most common cancer related reason for death for women in the US. In 2004, there were 16 090 ovarian cancer related fatalities in the US, with an expected 25 580 new cases of the sickness being recognized. Notwithstanding upgrades in careful and fundamental treatment, the 5-year survival rate for ovarian cancer patients in cutting edge stages is still under 30%. In any case, just 20% of patients with obtrusive epithelial ovarian cancer are women in regenerative age, making it for the most part a sickness of postmenopausal women.According to certain examinations, patients who are more young enjoy a benefit with regards to survival since they are bound to have beginning phase, lower-grade sickness and s with a generally safe of threat. In any case, more young age is certainly not a dependable indicator of improved survival. In any case, as per various different examinations that have been distributed, age is a vital prognostic component, with more seasoned patients having more awful results than more young women[8].

1.3 OBJECTIVE OF THE STUDY

This study aims to conduct a systematic review of literature through SLNA systematic literature network analysis by using VOS viewer. The object the study are: (i) Accumulation of literature and analyzing the parameters that could be a reason for ovarian cancer in women, (ii) The second objective is to undertake literature analysis among millennials, (iii) The third objective is to link and map the publications of literature with countries, authors and time.

1.4 SCOPE OF THE STUDY

The paper is based on a two-step procedure known as "Systematic Literature Network Analysis (SLNA)" (Colicchia & Strozzi, 2012): a systematic literature review (SLR) and a subsequent analysis of the subset of pertinent articles obtained through a bibliographic network analysis (NA): specifically, the citation network analysis, the co-occurrence networks analysis, and the basic statistics. Due to its scope, practicality, and conformity with the most recent literature, Pubmed and Scopus were selected as the reference database for the creation of the research. Block and Fisch (2020) and Fala-gas et al. (2017) claim that Scopus has a wider range of journals and a quicker and more thorough citation analysis than other research databases like Web of Science (WoS). From reservoir of academic database Scopus, the authors have accumulated list of publications relating to keywords which are ovarian cancer, family threat, IVF and smoking which was limited to the area of medical, human, female, ovary, cancer and health where 7351 papers were retrieved and with a 60% taken from the out from these 7351 papers were finally selected which had a higher keywords repetition more than 10 were put in VOS viewer software. The result has been shown in Fig.2 , Fig. 3 and Fig.4.

2. REVIEW OF LITERATURE

2.1 FAMILY HISTORY

In terms of gynecological cancer, ovarian cancer is the most well-known cause of cancer death, accounting for around 225.000 new cases (3.7% of all female cancers) and more than 140,000 fatalities (4.2% of all female casualties) per year[9]. In the United States, 14,270 predicted deaths and 21,980 evaluated new cases were expected in 2014[10-11]. The high level stage at conclusion and awful visualization found in ovarian cancer patients are linked to a lack of productive early discovery apparatuses and a perilous design[12]. With a five-year relative survival rate of 44% at all stages and races, overall survival (operating system) is the least fortunate of all gynecologic procedures cancers. More than one-fifth of ovarian cancer cases have a hereditary component. A germline mutation in the BRCA qualities, which causes DNA fixation abnormalities, accounts for 65-85% of hereditary ovarian tumors[13]. BRCA1 and BRCA2 transporters have a greater lifetime risk of pancreatic, prostate, and breast cancer (up to 85% for breast cancer and up to 54% for ovarian cancer). However, other silencer characteristics and oncogenes have also been linked to hereditary ovarian cancer (i.e., TP53, BARD1, CHEK2, RAD51, and PALB2). More than a quarter of Ovarian cancers are benign, and a germline alteration in the BRCA genes accounts for 65-85% of these hereditary anomalies. Overall, several additional silencer qualities and oncogenes, for example, TP53, confuse fix (MMR) qualities, and other qualities involved in twofold strand breakage repair, have been linked to innate ovarian cancer[14]. Although the system of hereditary ovarian tumorigenesis is currently thought to have no fewer than 16 characteristics, certain alterations are still unknown and cannot be detected by unambiguous testing. Aside from BRCA 1 and BRCA 2, 2, surrenders in characteristics that maintain doubly abandoned breakdowns provide distinct intrinsic ovarian cancer pathways[15]. BRCA negative malignancies convey the BRCAness profile, a particular aggregate with characteristics and behavior resembling BRCA-related malignancy, via a flaw in the homologous recombination framework. These persons, like BRCA change transporters, would most likely benefit from platinum-based therapy as well as PARP inhibition, albeit at a cost At this stage, we require authorized testing to differentiate individuals with "BRCAness" profiles who have mutations in ATM, CHEK2, RAD51, BRIP1, and PALB2[16]. Recent advancements in NGS innovation have made it possible to examine many cancer helplessness features at the same time, unfathomably increase throughput, decrease expenditures and postponements, and work on the subatomic determination of hereditary ovarian cancer[17].

2.2 IVF

A number of factors, including nulliparity, a postponed beginning of menopause, and infertility, have been connected to a higher threat of ovarian cancer, while breastfeeding and utilizing oral contraceptives have been connected to a

lower threat[23]. Two thoughts have been put up to make sense of the cycles by which these factors impact the hazard of ovarian cancer: the "relentless ovulation" speculation and the "raised gonadotropin levels" hypothesis. The purported "unremitting ovulation" thought suggests that the rehashed harm and resulting fix cycles experienced by the ovary's epithelial surface during ovulation improve the probability of DNA damage[24]. Ovarian cancer. This thought is upheld by the steady defensive effect seen with occasions like pregnancy and nursing that bring down the quantity of lifetime ovulations[25]. This thought is additionally upheld by the disclosure that chickens, a type of ceaseless ovulators, have a higher occurrence of ovarian cancer[26].

2.3 SMOKING

Although smoking was not previously recognised as a risk factor for ovarian cancer, the World Organization for Research on Cancer included mucinous ovarian tumors — which account for around one-tenth of all ovarian cancers — to their list of cancers linked to tobacco use in 2009[27]. We discovered 56 ovarian malignancies. The research of cancer transmission focuses on acquiring data on women's smoking habits[28]. Although information on smoking-related hazards was given in about 33% of the 56 exams, just a few findings from 55 of the 56 investigations were disclosed[29].. The majority of studies discovered virtually no link between smoking and the possibility of developing ovarian cancer in general; a few, but not all, the Cooperative Gathering on Epidemiological Investigations of Ovarian Cancer was established to gather and reconsider epidemiological information, both distributed and unpublished, on the connections between various risk factors and the progression of ovarian cancer[30]. 57 This research sought for information from any reviews larger than a certain size that had obtained significant data regarding the link between ovarian cancer risk and women's smoking history, regardless of whether they were published or not spread, to avoid emphasizing results from a few of research that have disseminated their findings[31]. This group combined and reanalyzed information from 51 studies on the influence of smoking on ovarian cancer incidence from around 28 000 ovarian cancer patients[32]. These publications include virtually all epidemiological information on the subject. Despite the fact that it has previously been documented that continued smoking is associated with an excess of mucinitis, we discovered that the increase in ovarian cancer was exclusively in marginally damaging growths rather than in really severe cancers[33]. Furthermore, endometrioid and clear-cell development deficiencies have been linked to current smoking in two additional ovarian cancer subtypes[34]. As a result, smoking had an impact on the total rate of ovarian cancer. Smoking in the past reduced the risk of ovarian cancer because both the considerable good and negative outcomes of present smoking were muffled in prior smokers[35].

When contrasted with research that utilized elective plans, the discoveries of case-control concentrates on utilizing medical clinic controls were subjectively unique[36]. Since the discoveries of the review studies using medical clinic controls and the review concentrates on utilizing populace controls vary essentially, it is suspicious that these inconsistencies are the outcome of specifically incorrect review detailing of smoking[37]. Smoking is connected to various ailments that could require hospitalization, therefore it's possible that emergency clinic controls had higher normal smoking rates than did women in the overall local area[38]. The connection among smoking and the threat of ovarian cancer would be diminished by this change, and it might try to be switched. Along these lines, we did exclude preliminaries with emergency clinic controls in the essential examination[39]. Subtleties of those reviews are in any case given to ensure that all the epidemiological data is distributed[40].

2.4 NOT BREASTFEEDING

Breastfeeding is connected to a significant decrease in the threat of both the overall ovarian cancer and the deadliest subtype, high-grade serous cancers[41]. The World Wellbeing Association exhorts nursing only for somewhere around a half year and proceeds with it with different feasts for no less than two years. 2,64 Our discoveries back up these ideas, though it ought to be noticed that medical attendant for under 90 days for each youngster still fundamentally brings down the threat of ovarian cancer[42].The most incessant way mothers give supplements to infant babies is by means of breastfeeding. The all out level of breastfeeding start in the US is 76.9%, as per the latest

measurements from the National Immunization Survey in 2012.[43] The diminished threat of breast cancer is the breastfeeding's most significant effect on maternal wellbeing[44]. Moreover, research on breastfeeding's general effect on maternal results shows that it brings down the threat of diabetes, hypertension, hyperlipidemia, and other cardiovascular illnesses[45]. Long haul nursing may likewise enjoy benefits for the baby, for example, lessening the threat of experience growing up with Hodgkin lymphoma[46].The 6th most regular threat and the seventh most common reason for cancer related passings in women is ovarian cancer[47]. Ovarian cancer has a horrendous forecast, with a 5-year survival pace of under 45%, and the starting points of the sickness stay obscure[48]. The "relentless ovulation" speculation, the gonadotropin theory, the retrograde transportation speculation, and apoptosis are a couple of hypotheses with respect to the etiology of ovarian cancer. As per McNeilly AS, these potential outcomes may be associated with breastfeeding's preventive impact on ovarian cancer threat[49].

2.5 GENETIC DISORDER

Hereditary problems including Lynch disorder and BRCA changes, which increment the threat of creating breast cancer, represent 10% to 15% of instances of ovarian cancer. This study set off on a mission to give an exhaustive and current evaluation of the pathology, counteraction, visualization, and therapy of this specific sort of ovarian cancer that contains hereditary transformations[50]. Ovarian cancer that is hereditary has exceptional pathologic and sub-atomic science qualities[51]. Ovarian cancers with BRCA1 and BRCA2 transformations are most often high-grade serous adenocarcinomas[52].The p53 quality is much of the time transformed, the c-myc quality is overexpressed, and the epidermal development factor receptor is overexpressed in BRCA1-transformed tumors[53]. As far as clinical studies show, innate ovarian cancer happens sooner than irregular ovarian cancer[54]. Salpingo-oophorectomy with threat decrease is a strong system for counteraction. Oral contraceptives might be a feasible procedure for chemoprevention. Patients with ovarian cancer that display BRCA1 and BRCA2 changes had expanded movement free survival and in general survival, as per another examination[55].

NOT BEARING A CHILD AT THE RIGHT TIME

[63] Data accumulated somewhere in the range of 1973 and 1997 was consolidated before research that utilized information from public registers.Since then, at that point, there have been critical improvements that affect how patients with ovarian cancer are dealt with. Besides, a great deal of several studies have not thoroughly examined urgent clinicopathologic prognostic variables. As a result, there are few population-based studies that have studied the socioeconomics, clinicopathologic, and survival outcomes of more young women diagnosed with epithelial ovarian cancer. These studies also need meticulous planning and pathology data.

[64] Postmenopausal women are more helpless to ovarian cancer than different women. Although most reviews have portrayed that more young women with ovarian cancer had better results than more established women and have cancers that are further developed and all around separated, a few investigations have uncovered that age is certainly not a significant element. After rectifying for cancer stage and grade, this prescient variable is presently not huge. Furthermore, the majority of these previous examinations on ovarian cancer are established on encounters from a solitary foundation, which incorporate implicit predispositions like patient determination. These examinations have likewise been compelled by a little understanding populace, the consideration of low dangerous expected s, microbe cell or sex rope stromal s, and unstaged cancer because of the low event of young women with obtrusive ovarian cancer. It was recommended doing a huge populace based exploration to look at the clinico-pathologic qualities of more young and more established patients with epithelial ovarian cancer considering the constraints of prior discoveries. Furthermore, we examined in the event that more young age is an independent prognostic element for better survival.the security of uterine-saving a medical procedure in women who are prolific.

[65] Other huge subatomic markers, including p53 articulation, Her2neu, and DNA ploidy, notwithstanding customary pathologic prognostic factors, can likewise give light on the survival aberrations among more young and more

established women. More young patients had cancers with expanded microvascular thickness, as indicated by studies, which might be connected with an unrivaled Our discoveries are reliable with those of other exploration that have observed that survival is emphatically related with more young age. Nonetheless, the ongoing review, which included intensive careful arranging and pathologic information, is one of the greatest populace based examinations to research the segment and clinico-pathologic prognostic factors connected to the survival of more young women with ovarian cancer.

[66] Finding a transformation in individuals who as of now have cancers might uncover significant data about the pathophysiology of those growths. Thus, this hereditary evaluation at Identification of potential focuses for specific prescriptions, like PARP inhibitors and alkylating compounds, might be helped by conclusion, which can likewise coordinate decision of restorative methodologies. Cutting edge sequencing (NGS) advancements have of late offered an unfathomable opportunity to simultaneously evaluate a few cancer weakness qualities, cut back on expenses and deferrals, and work on the sub-atomic conclusion of genetic ovarian cancer in this setting.3.7% of all cancer in women are ovarian tumors. Operating system is the most terrible of every gynecologic danger and is ordinarily recognized in cutting edge stages with a troubling guess.

[67] It was demonstrated that being younger was a predictive factor for greater survival. independent of maturing-related characteristics such as execution status Thigpen et al. (1993) examined a large group of patients with stage III and IV malignant epithelial ovarian carcinoma from six Gynecologic Oncology centers for comparative results. Preliminary gatherings where strict regulations were observed to guarantee that all patients went through standard adjuvant chemotherapy and comparative surgeries.

[68] The two examinations neglected to find an association between the utilization of contraceptive medications and the threat of fringe ovarian cancers.The connection between openings obtained during IVF treatment and the rate of ovarian cancer has particularly been the subject of a few late examinations. 45 ovarian cancers were found in a partner of 87,403 women who got infertility therapy in Israel after a normal development of 8 years.

[69] In a companion of Australian women looking for treatment for infertility, Stewart et al. took a gander at the effect of IVF on the probability of fringe ovarian tumours.from 1982 until 2002. The gathering had a mean development of 17 years and had 31 fringe ovarian growths. In both unadjusted (for age, schedule year, and financial position) and adapted to (these variables) studies, it was found that IVF therapy was shown to be strongly associated with an increased risk of fringe ovarian malignancies. The experts emphasize that women treated with IVF were not significantly evaluated earlier or at a younger age than women who were not treated with IVF, and they specifically address the possibility of assessing predisposition in their distribution. A comparable companion was used in a subsequent piece to evaluate what IVF treatment meant for the probability of developing obtrusive ovarian cancer ladies who participated in ovarian cancer and were considered current accomplices. The use of IVF did not exclude the potential of developing obtrusive ovarian cancer in general. There was some evidence of a larger impact of IVF therapy among women who did not conceive a child in that state of mind by the end of the study.equality. None of these connections, however, were genuinely huge.

3. RESEARCH METHODOLOGY

The paper is based on a two-step procedure known as "Systematic Literature Network Analysis (SLNA)" (Colicchia & Strozzi, 2012): a systematic literature review (SLR) and a subsequent analysis of the subset of pertinent articles obtained through a bibliographic network analysis (NA): specifically, the citation network analysis, the co-occurrence networks analysis, and the basic statistics. Due to its scope, practicality, and conformity with the most recent literature, Pubmed and Scopus were selected as the reference database for the creation of the research. Block and Fisch (2020) and Fala-gas et al. (2017) claim that Scopus has a wider range of journals and a quicker and more thorough citation analysis than other research databases like Web of Science (WoS). From reservoir of academic databases like Pubmed

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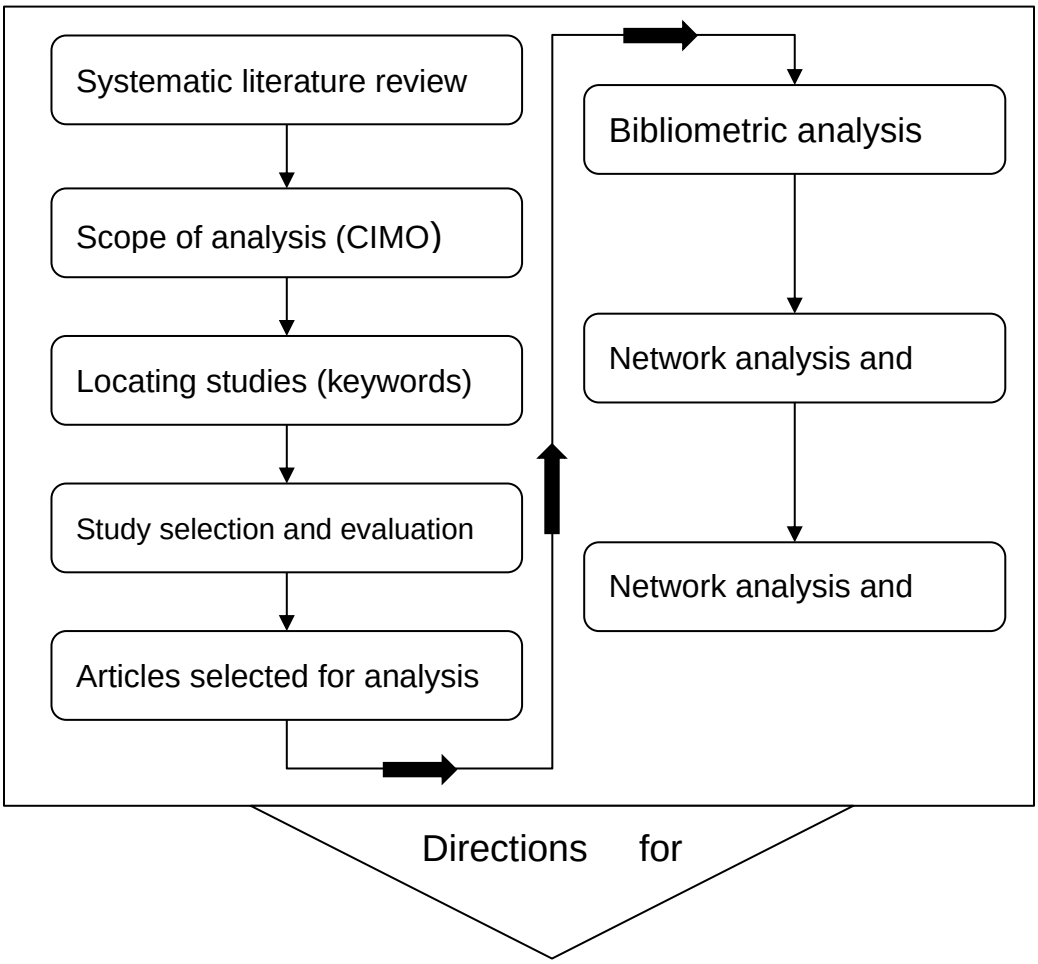

Fig.1 Framework of the paper

All of the methodology's steps are explained in detail in Figure 1.

Table.1 Documents by countries (Analysis from Pubmed and Scopus publications)

Sl. No.	Country	Doc_Published	Citations
1	China	910	17797
2	United States	536	23874
3	Japan	100	3534

4	United Kingdom	96	3901
5	Germany	87	3140
6	Canada	79	4334
7	South Korea	73	2354
8	Australia	72	3265
9	Italy	56	1319

The visualization of the above table has been shown in Fig.2 which has been created through VOSviewer. The links and network shows the linkages between the countries and the interconnectedness of research and co-authoring among these countries. These linkages also represent the citations as authors of a country look up and read articles from another and cite them in their studies.

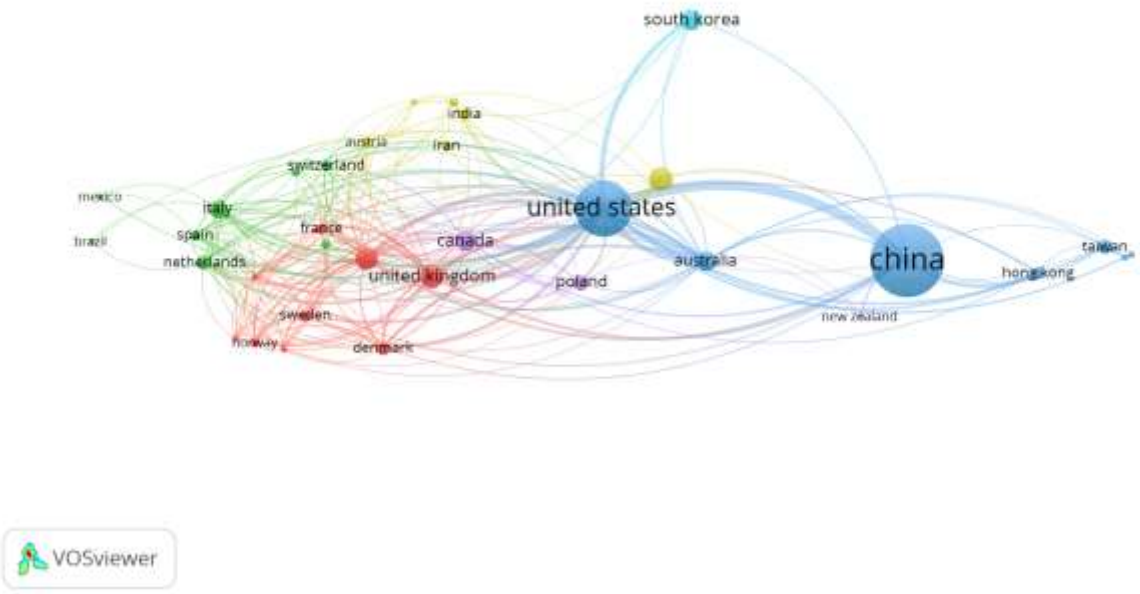

Fig.2 Documents by countries

(VOSviewer)

China stands at the top in research published among all the other countries with a whooping figure of 910 documents and 17797 citations followed by The U.S.A. and Japan. India lies at the top 16th country to have more number of documents published related to ovarian cancer.

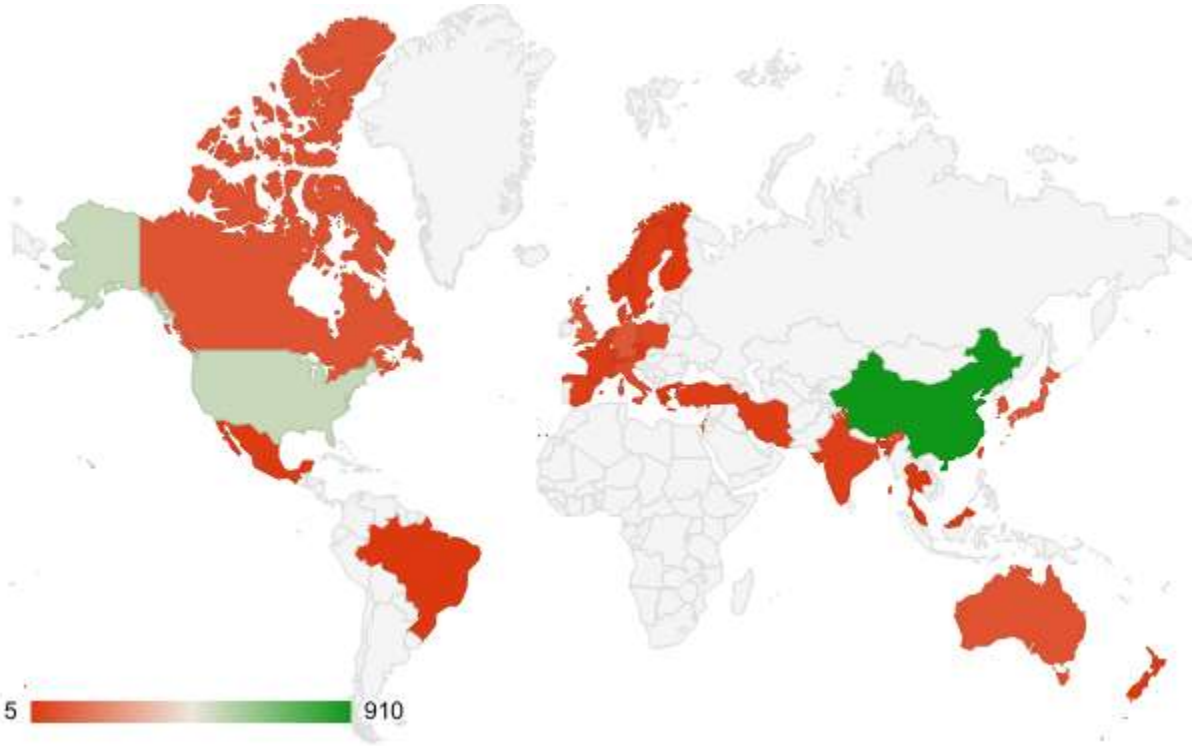

Fig.3 Documents by countries_Geographical representation

(Analysis from Pubmed and Scopus publications)

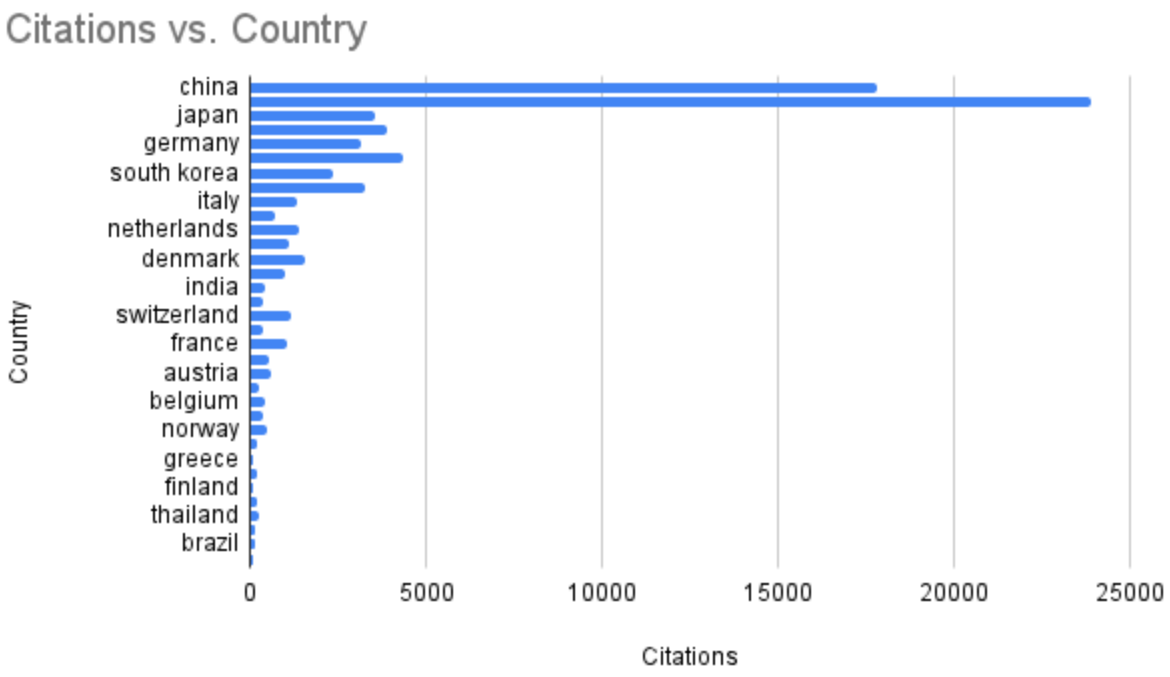

Fig.4 Countries and their citations

(Analysis from Pubmed and Scopus publications)

The U.S.A stands at first with a citation score of 23874, which is followed by China with a score of 17797 and Cannada lies at third with a citation score of 4334.

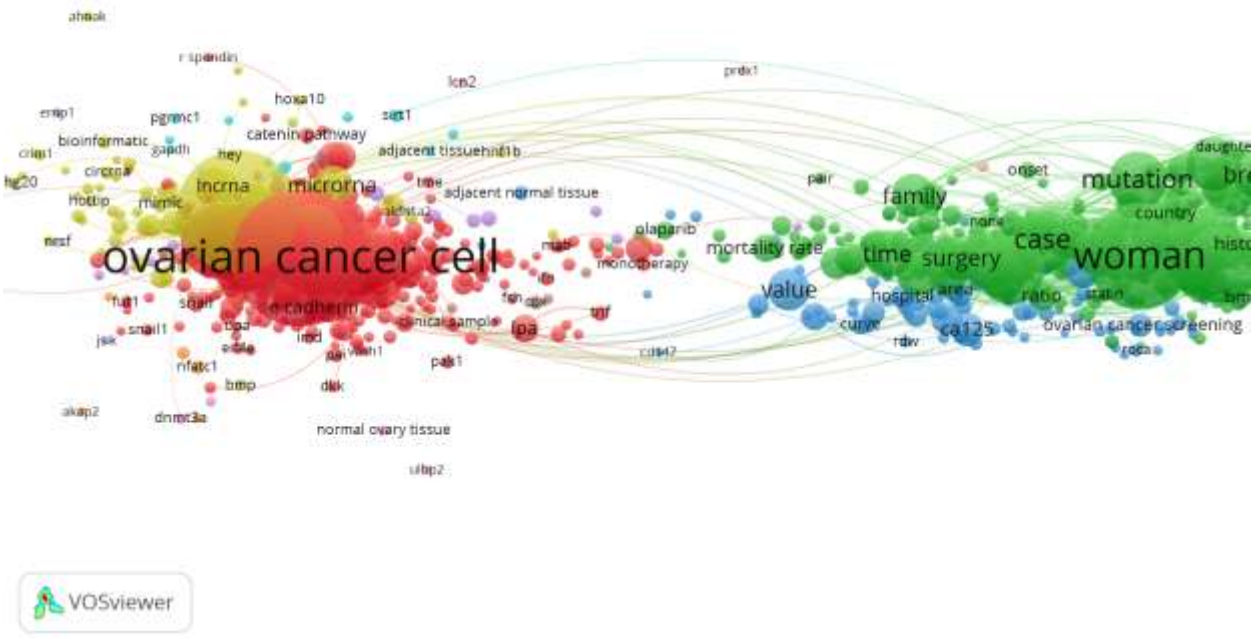

Fig. 5 Co-occurrence author keywords network

(VOSviewer)

4. FINDINGS AND CONCLUSIONS

Major findings from the SLNA of studies has found that Family history of ovarian cancer, their relative threats and lifetime chances of developing ovarian cancer were assessed for women who had 1. a first degree relative afflicted, 2. a mother affected, 3. a sister affected, and 4. women with more than one affected relative. Women without a family history of the disease are substantially less likely to get ovarian cancer than those who have. Except for a very small number of persons who have more than one affected relative, the threat is modest for the majority of family histories.. This research is an attempt to organize research-related materials that have been created in the innovation field of financial institutions. The approach of this study was primarily responsible for its limitations. It starts with a literature search based on citation network analysis, but it cannot fully represent the qualitative contribution of the work to the knowledge base, especially since his VOSviewer represents only part of the entire subset.

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