Research Article

SCIENCE MAPPING OF HEALTH SECTOR KICKBACKS: A BIBLIOMETRIC ANALYSIS

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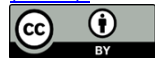
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ABSTRACT

Background: Health kickbacks is the central part of the this study to report corruption in the areas of infrastructural projects, purchase of drugs and medical equipment, supply of services, job transfer or promotion and natural disaster management. Because it is now a widely accepted reality that corruption occurs whenever there is government engagement in the sectors, the supply of public services or goods may be negatively impacted as a result of corruption. This has the potential to have devastating effects in a variety of spheres, including the social, political, economic, and administrative spheres in health sector.

Material and Methods: This research is under the shed of bibliometric analysis of the publications on corruption in health by taking the temporal development using the dimension database connecting 2014-23 publications. Science Mapping is a type of bibliometric study used by co-citation analysis to show the intellectual and bibliometric structure of a study area in this research. The study investigation contained more than 6000 of the publications by the keywords, journals and topic of analysis. Science mapping is the part of bibliometric analysis technique is used by the researcher by implementing citation analysis and co-citation analysis to acknowledge influential publications by the clustering the visuals on corruption in health studies.

Findings: The findings indicated intellectual structure was the prolific contributor in terms of cited references, Health policy and planning journal in terms of source, Hutchinson 2018 as citation network document. Previous literature revealed foundation corruption base of governance, financial, operation, competitive management in health related practices being reported by the global studies. The study added to the body of knowledge.

KEY WORDS

Kickbacks, Corruption, Health Sector, Bibliometric Analysis

1 | INTRODUCTION

Kickback refers to the amount given to someone while buying goods and services. In this act, a person is paid after the completion of a task, while in corruption, a person is paid before doing a task through a secretive method.[1] It is, therefore, challenging to combat in any sector when it is done under a secretive ways. Conceptually, corruption is ill-use of government power for private gains.[2]Kickbacks in health sector is carried out in a series of ways like in doing the task of infrastructure project, medicine and medical apparatus purchasing, services delivery, transfer or promotion of jobs and in natural disaster management. This serious concern exists and continues to become a social sector dilemma across the world. Corruption affects various factors such as governance, institutions, merits, and economic development.[3]Corruption, counting fraud, kickbacks, and embezzlement in many fields, i.e., project construction, health, education, and others, is the sole source of wasting public property. Economically speaking, economic growth totally depends on a healthy labour force, which is inextricably linked to an improved health sector. Corruption is impeding the health sector, and one of the core reasons is the lack of budgetary support by the government.[4]Pakistan, as a developing nation, has been struggling to achieve the MDGs, and health is the most

important goal of them all. Three out of the 15 MDGs refer to the health sector. Pakistan needs a special watchdog and initiatives to ensure transparency and provide pure, free medicines to its people. To improve the sector, the country has taken steps towards public-private partnerships and framed policies to improve human resources and infrastructure.[5]Corruption is seen by the common people as an entire prohibited act as well as wrongdoing. It is understood as an occupation on the rights of someone(Scheinost, 2016).[6]Corruption can badly affect the provision of public services or goods, as it is now a recognized fact that corruption occurs when there is government intervention in the sectors, which has devastating impacts in many ways, including socially, politically, economically, and administratively. It also impairs badly the meritocracy of a nation. Corruption has more impacts in the developing world as compared to the developed world.[7]The dishonest acts are exacerbated when the government stockholders are assigned to distribute financial resources within sectors. The media has specially focused on corrupt actions by stockholders, and it has become the word repeatedly pronounced by politicians in their political campaigns. It is named like kickbacks, bribery, embezzlement, nepotism, etc. It is not limited to a country; different levels of corruption exist in both developing and developed countries.[8]In West African countries, the act of corruption reflects the government's role in its established institutions to provide public goods, particularly health and education.[2]A study estimated that nearly $340 billion is embezzled across the globe each year. Corruption in other country like Ukraine, it has very destructive impacts on socio-economic development, exacerbates social unrest by spoiling the image of public services.[9] Corruption is the name of nepotism and network of favoritism and creates sefarish-culture in the institution that easily leads to an occupation of a single family over office, authorities and resources. And sometimes, it is gendered.[10] Previous literature consider the qualitative review studies, quantitative surveys to test the hypothesized model in finance, project management and governance and other organizational aspect. This research aimed to open the literature contribution in intellectual structure of the corruption kickbacks by the tools of science mapping technique under bibliometric analysis.

The potential of cheating and bribery in public offices has grown more than after the emergence of COVID-19 pandemic.[8]The use corrupt practices and bribery in public administrations has been peaked than ever. Also, the health sector is more susceptical to corruption and misuse of power than other sectors due to its complicated functions as well as easy availability of its resources to the office barriers. Moreover, corruption and bribery subvert the confidence in public procurements, disrupt the health market, waste resource and most importantly endangers the lives of millions of people. Corruption is closely linked with a lack of heed by the hierarchal position authorities. Their special focus on the sector can make it possible to minimize the mention of acts in the sector.[11]Corruption and ill-governance in the sector have badly damaged the meritocracy of true appointments of the right persons to function the system effectively. Also, it weakens the function of the institution. In addition, the health sector is one of the most important sectors in any country, as it provides life-related medicines and has an immense ability to save lives. But it has been affected by a series of kickbacks and acts of corruption, including taking money, misusing power, not performing duties, and so on. Furthermore, the products of bribery and corruption are not only used in power struggles and to earn a lot of money, but they also fulfill the requirements of society to live with honor and respect. Different studied are in views that kickbacks and corruption in health as well as other sectors pause the administrative setup by violating the rules and regulations of the procedures through unlawful means. Both kickbacks and corruption spoil the meritocracy and exploit the rights of others. Kickbacks can also be in other sectors, i.e., education and other social sectors. Any kickback in any sector can damage the purity and transparency of the procedures in that sector. Existing literature reported unequal distribution of rights and power among employees and peopleDonthu, Kumar, Pandey, and.[12] It is commonly understood All nations, including the United States, China, and India, are impacted by acts of bribery in the health sector. Pakistan is no exception torestricts people's access to high-quality medical care. Which negatively impacts patient care and exploits patients, establishing a framework for accountability is all necessary to combat corruption. Additionally, it is crucial to promote communication among medical professionals given the drastic change in the resources provided to the healthcare system in Pakistan. We employed bibliometric methodology to understand the intellectual structure of the corruption in health sector. As discussed by,[13] academics use bibliometric analysis for a wide range of purposes, such as discovering novel trends in article and journal performance, collaboration patterns, and research constituents, or delving deeper into the underlying intellectual structure of a domain in the existing literature. The data at the heart of bibliometric analysis tend to be massive (e.g., hundreds, if not thousands of citations and publications, number of occurrences of keywords and topics), and objective in nature (e.g., performance analysis), so its interpretations often rely on both objective and subjective evaluations established through informed techniques and procedures. In other words, bibliometric analysis is useful for interpreting and mapping the cumulative scientific knowledge and evolutionary nuances of well-established fields since it makes sense of vast volumes of unstructured data in rigorous ways.

2 | MATERIAL AND METHODS

Study at hand explores the phenomenon of interest that is "corruption in health" from the global literature perspective. Starting from the multi-perspective keyword and terms like "corruption", "governance corruption" corruption in Asia" and retrieved records are saved in bibliometric file between the time span of 2014-23.The study at hand is based on the dimension database for the data collection by adopting systematic steps see fig.1. Dimension is well recognized data source and well equipped with bibliometric data by selecting English language and journal articles, books, conference proceedings results in publications.

Science Mapping is bibliometric analysis technique to expose the relationship of the research constituents.[14,15]. The science mapping pools citation analysis, co-citation analysis, co-word analysis, bibliometric coupling and co-authorship analysis to portray intellectual and bibliometric structure of a research area.

As the part of science mapping, researcher used a pool of analysis (i) co-citation analysis to showcase the co-cited publications which are thematically similar (ii) citation analysis to expose the intellectual structure of the previous publication on "corruption in health" sector to understand the dynamics of the field.
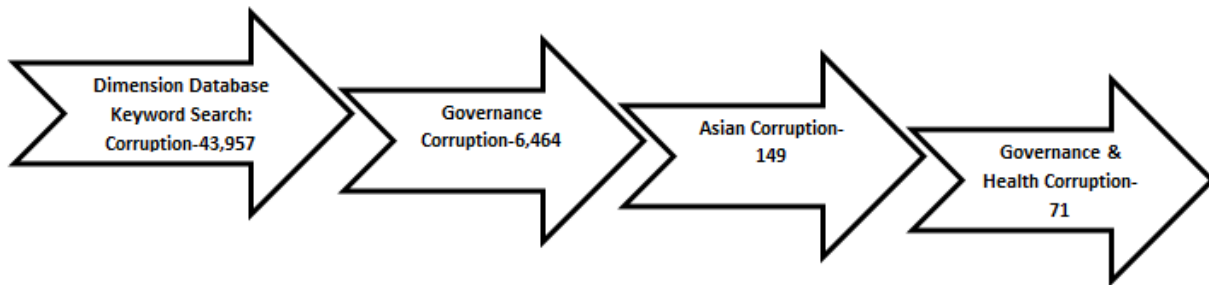

Figure 1: Systematic Steps of Bibliometric Data Collection

3 | RESULTS

Co-citation analysis along with cited reference aimed to explore and discuss the past publication and references in the subject area and well suited for the business scholars.[16]Descriptive results of the study indicates that gaitonde, et al., (2016) with 12-citation, Hutchinson, et al., (2018) with 15-citation, Mackey, tk, et al. (2018) with 11-citation, Vian, t (2007) with 11-citation by the selected documents.

Table 1 Citation reference of the previous work on corruption in health

ID	Citation reference	Citation	Citation Link Strength
1	gaitonde, et al., (2016). Cochhrane database of system…..	12	16
2	Hutchinson, et al., (2018). International journal of ………	15	16
3	Mackey, tk, et al. (2018), bulletin of the world health….	11	13
4	Vian, t (2007). Health policy and planning ……	11	9

"Co-citation network" is formulated in this study using Co-citation as the "type of analysis" and cited references as the "unit of analysis" along with fraction counting as "counting method" to explore the foundational literature. The line thickness, proximity of the papers and the size indicate co-citation link on the foundational literature with high co-citation. The results of the Co-citation network indicate that four-publications are co-cited in exploration of the corruption in health studies as proposed thematic similarity[17,18] and showcasing the intellectual structure of the field of study.
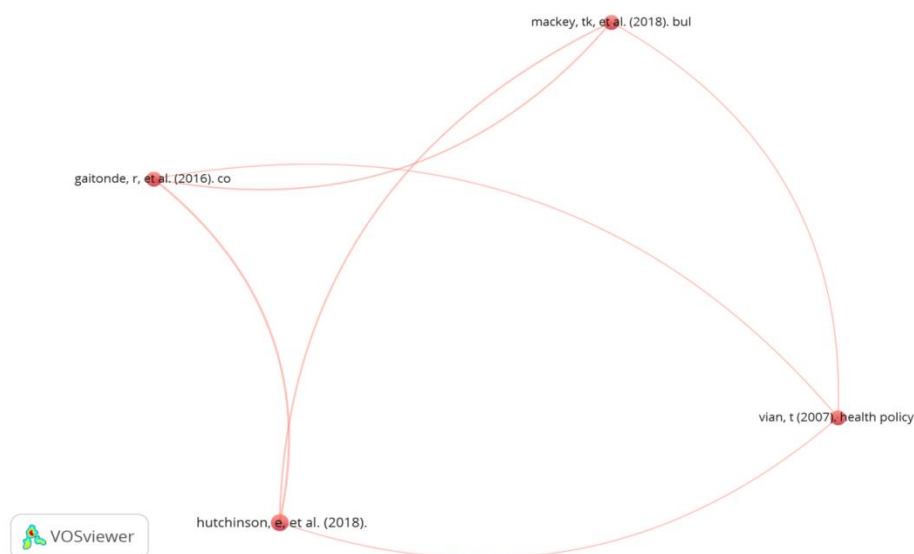
Figure 2: Co-Citation and Cited Reference

Table 2 Citation source of the previous work on corruption in health

ID	Source	Citation	Citation Link Strength
1	The lancet	30	310
2	Health policy and ,planning	38	290
3	Social science & medicine	30	252
4	The bmj	25	236
	Bmc health service research	26	231
6	Health policy	26	225
7	Bulletin of the world health organization	24	182
8	International journal health policy and management	32	142

This research established "Co-citation network" using Co-citation as the "type of analysis" and cited source as the "unit of analysis" along with fraction counting as "counting method" to explore the foundational knowledge of corruption in heath. The line thickness, proximity of the papers and the size indicate co-citation link on the existing literature with high co-citation. Top-5 with high citation in the field of corruption in health being visualized, Health policy and planning journal with highest 38-citation, International journal health policy and management with 32-citations,The lancet with 30-citation, Social science & medicine with 30-citations, Bmc health service research with 26-citations. 8-journal shared the co-citation to explore influential publication in the area of corruption in health sector by contributing the research area.
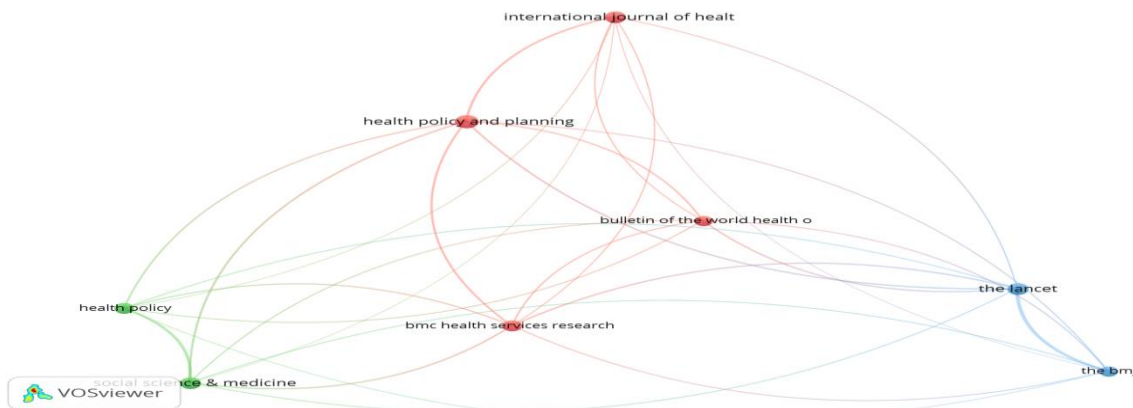
Figure 3: Co-citation and Cited Source

Table 3 Citation documents of the previous work on Corruption in Health"

ID	Document	Citation	Citation Link Strength
1	Hutchinson 2018	68	6
2	Hutchinson 2020	20	4
3	Mackey 2019	10	3
4	Reynolds 2019	5	2
5	Gaitonde 2019	7	2
6	Lu 2019	5	1
7	Dyer 2006	19	1
8	Paredes-solis 2011	21	1
9	Mostert 2015	54	1
10	Fotaki 2019	6	1
11	Kohler 2020	33	1
12	Arostegui 2011	8	1
13	Nishtar 2010	11	0
14	Yousafzai 2015	10	0
15	Cockcroft 2011	19	0
16	Kurji 2016	57	0
17	Huss 2010	28	0
18	Sekalala 2020	12	0
19	Patel 2015	177	0
20	Krupic 2015	6	0

This research established "citation network" indicate that documents on the literature of "corruption in health" using citation as the "type of analysis" and documents as the "unit of analysis" explored the foundational knowledge of corruption in heath. Top-5 with high citation documents in the field of corruption in health being visualized, Patel (2015) includes 177, Hutchinson (2018) with 66, Kurji (2016) with 57, Mostert (2015) with 54 and Kohler (2020) with 33 citations respectively. Moreover, Hutchinson (2018, 2020), Mackey (2019), Reynolds (2019) hold the co-citations.
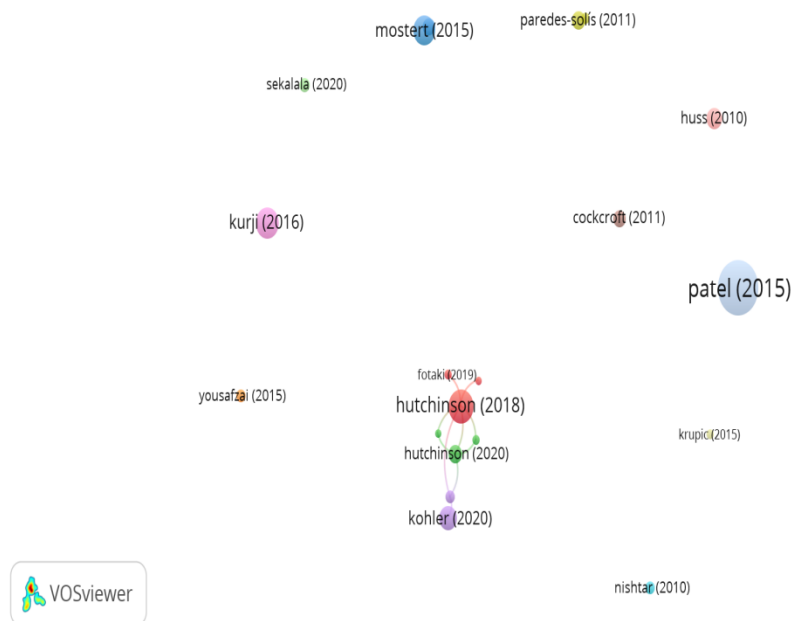
Figure 4: Citation and Document

4 | DISCUSSION AND CONCLUSION

Study at hand used diplomatic analysis to assess the existing body of knowledge on corruption studies in the context of health sector by capturing 71 studies from the dimension database over a period of 2003 to 23. Network visualization and descriptive sour utilized by the study by coupling citation network. The fruitful investigation or mapping showcase evolution and foundation in the knowledge area to poetry the existing studies. The descriptive part of the blue metric results provides the significance of previous work and validation of the subject area. Majority of the reported studies linked governance medicine, absenteeism and managerial corruption to maintain the multidimensional point. Existing studies or significance in highlighting the fundamental areas of health connection with corruption by using the co-citation analysis that adds to the previous study discussion with citation. In conclusion review of the previous work open areas of corruption association with contributing sector of health in traditional way, advanced quantitative methods and net worth are increasing the inside of knowledge area. Previous literature revealed foundation knowledge of governance, financial, operation, competitive management. The generated findings are fruitful for the academics, managerial machine of the health and hospitals to understand corruption using directly rather than conducting studies with time and resources. The study database also showcases the need to do more work in the study to main in the recent future to extend the limiting existing research on the topic of health corruption.

5 | LIMITATIONS

Limitations concern, descriptive analysis is optimal for posing limited foundation knowledge which can be extended. The as the part of science mapping, co-word analysis, bibliometric coupling and co-authorship analysis can be the extension of bibliometric analysis for the future area to explore the influential publication on corruption in heath themes. Dimension database is also limited to the existing literature that can be further enhanced using Scopus and web of science in the field of knowledge. Comparative work can extend the work on the subject are "corruption in health" using the well-known database "Scopus and WOS".

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