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1. Riwayat Submit
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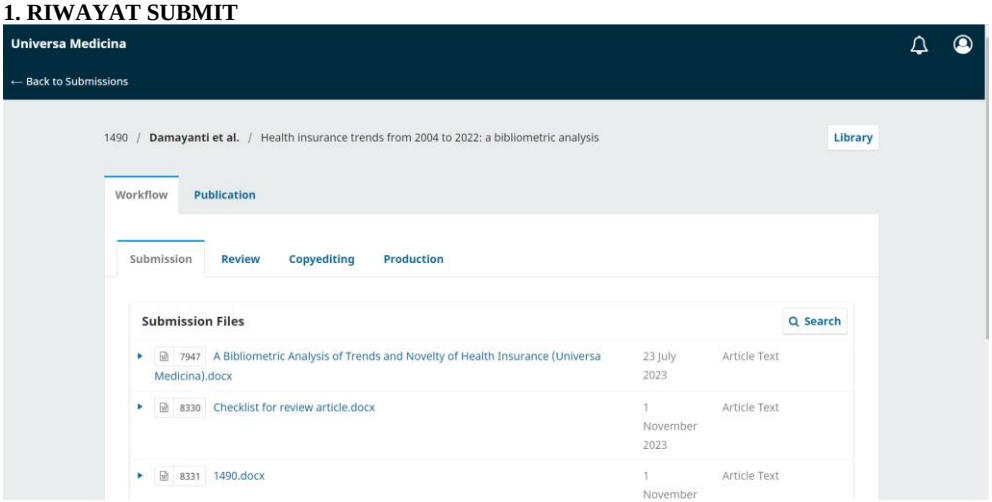
1. RIWAYAT SUBMIT



2. MANUSKRIP YANG DISUBMIT

A Bibliometric Analysis of Trends and Novelty of Health Insurance

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Abstract

Health system goals proposed at the international, national, or regional level are usually not measured against human rights standards and instruments. Universal Health Insurance is expected to be able to provide benefits. Health services are provided in the form of medication and care. However, there is no bibliometric analysis of health insurance publications to find out trends and novelties. This study aims to determine the trend of the number of publications and visualize the linkages on the topic of health insurance through bibliometric analysis. The research method uses systematic reviews with the steps following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagrams which use 661 scientific articles from the Dimensions database. Review articles using an application using Vosviewer. The results of this study contribute to the development of a research roadmap on health insurance. The limitation of this research is that the app.dimension.ai database continues to experience updates in publications and citations from time to time. Therefore, the bibliometric analysis of health insurance can be reviewed in the next few years and years. In addition, this bibliometric analysis only extracts scientific article data from the app.dimension.ai database. Further research is in order to add to other databases for a broader and more comprehensive understanding of health insurance. bibliometric analysis of health insurance can be reviewed in the next few years and years. In addition, this bibliometric analysis only extracts scientific article data from the app.dimension.ai database. Further research is in order to add to other databases for a broader and more comprehensive understanding of health insurance. bibliometric analysis of health insurance can be reviewed in the next few years and years. In addition, this bibliometric analysis only extracts scientific article data from the app.dimension.ai database. Further research is in order to add to other databases for a broader and more comprehensive understanding of health insurance.

Keywords: bibliometrics analysis, health insurance, novelty, trend

Introduction

Health system goals proposed at the international, national, or regional level are usually not measured against human rights standards and instruments (1). Maternal and perinatal health problems are national problems that need to get top priority. Inequality in the risk of death cannot be separated from the issues surrounding the health policy debate (2). A community's health degree is assessed through several indicators including the Maternal Mortality Rate and the Infant Mortality Rate (3). The Health Policy in the Law regulates the right to health(4).

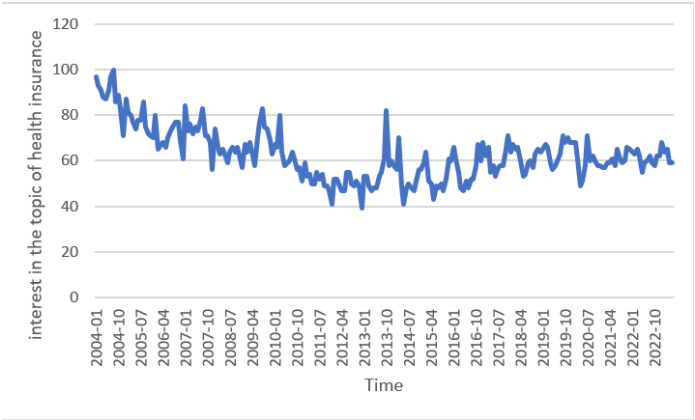
Rights are everything that has been attached to human beings, which has been owned since humans were born into the world and are absolute or cannot be contested by other parties, and cannot be separated from their essence so that their nature remains sacred (5). Health is one of the basic human needs, therefore health is a right for every citizen that is protected by law(6). Every country recognizes that health is the

biggest capital to achieve prosperity. The role of the state in meeting the basic needs of the people is needed, especially in the form of comprehensive health services (7).

Universal health insurance is expected to provide benefits(5). Meanwhile, to accelerate the achievement of the Millennium Development Goals (MDGs) in 2015, in particular to reduce maternal and infant mortality, the Ministry of Health launched the Maternity Guarantee program. In reducing the Maternal Mortality Rate and the Infant Mortality Rate, cooperation from all sectors is needed (3).

The national health insurance is part of the national social security system which is organized using a mandatory (mandatory) social health insurance mechanism based on its objective, namely to meet the basic needs of adequate public health which is provided to everyone who has paid contributions or whose contributions are paid by the Government.(8). This shows that national health insurance is an important and useful topic. Therefore, national health insurance is a hot topic for research.

Over time, interest in the topic of health insurance worldwide has declined. This interest data can be searched through Google Trends by typing in the keyword: health insurance. A search was carried out from January 2004 to December 2022 by selecting web searches and all categories yielded the data presented in Figure 1. This data was taken on June 3, 2023.



In addition to time, interest in Health insurance topics that can be reviewed by country. Interest in the topic of Health insurance by country can be seen in Figure 2.

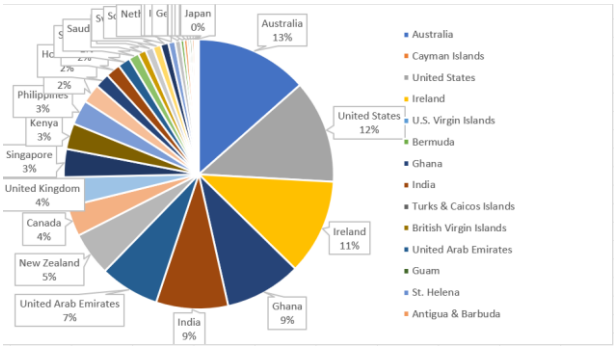


Figure 2 Histogram of interest by country in health insurance

Data Source: Google Trends

The data illustrates interest in general health insurance topics. On the other hand, researchers who wish to research the topic of health insurance require more specific information, for example scientific publications in the form of scientific articles and scientific seminar proceedings on the topic of health insurance. Therefore, information on the topic of health insurance in the form of scientific articles is necessary and very important.

In research, researchers need information about trends and updates for health insurance in the future. This is a problem that arises among researchers. However, there is no bibliometric analysis of health insurance publications to find out trends and novelties. The questions that will be answered in this study are (1) how is the development of the number of publications on the topic of health insurance, (2) how is the development of the number of citations on the topic of health insurance, (3) how is the development of the number of publications on the topic of health insurance in terms of the research field, (3) how is the network visualization on the topic of linear regression, (7) how is the publication cluster on the topic of health insurance in terms of co-occurrence, (8) how is the visualization overlay on the topic of health insurance,

Bibliometric analysis is a scientific and quantitative method for assessing published articles, which can help researchers to find development trends and research hotspots of a particular research field, providing future research development for researchers (9). Bibliometric analysis helps the researcher to identify emerging areas and future directions of the research domain with the help of visualization tools (10). Bibliometric analysis has been used by various authors to evaluate information theory listed in the Scopus database (10), to evaluate immigration and environmental degradation (11), and to investigate trends in this study since 2010 (12). Thus, bibliometric analysis is a scientific and quantitative method for assessing published articles, which can help researchers to find development trends and research hotspots of a particular research field, providing future research development for researchers.

The results obtained are invaluable for those who continue to develop scientific research on the theme of health insurance for midwives and who require past studies and future data, such as academics, scientific researchers, research institutes, higher education institutions, and health workers (13).

This study aims to determine the trend of the number of publications on the topic of health insurance, the number of citations, research fields on the topic of health insurance, published journals, authors, the relationship between topics, topic clustering, future research topic directions, rare health insurance topics, linkages between the authors, and the research group related to the topic of health insurance through bibliometric analysis.

To achieve the objectives of this research, this work is structured as follows. The first part describes the background, problems and research objectives. The second part describes the literature study and the methods used, data collection, and data analysis. The third part presents the results of the research followed by discussion. The fourth section provides conclusions, limitations, and recommendations.

Literature Study

Health Services

The National Health Service, which offers universal access to health care, is facing increasing pressure. The National Health Service is regionally based, with local authorities responsible for the organization and delivery of health services (14). Health services are provided in the form of medication and care (15)Health service providers must contribute in providing health services (16). Health workers, medical and non-medical, are responsible for providing optimal service (17).

Medical personnel, in this case doctors, have the responsibility for the treatment being carried out (8). Treatment measures and determination of needs in the treatment process is the authority of the doctor (18). Patient safety and health development is an absolute foundation for doctors in carrying out their professional practice (19). A doctor must make every effort as possible to treat his patient (20). To create legal protection for patients, the parties must understand the rights and obligations attached to them, including health service providers so that they are responsible for the profession given to recipients of health services (21). Midwives as health workers must understand midwifery practices well (22). Health workers, especially midwives, are the main factor in delivery insurance services (23). Midwives, in particular, with many tasks and have a major role in delivery insurance services experience difficulties with limitations, so there must be a balance between patients receiving delivery insurance and health workers who provide delivery insurance services (24).

Health Insurance

Financial protection is one of the important dimensions of Universal Health Converage (UHC) (25). In low and middle income countries (LMICs) (26), government-sponsored health insurance is increasingly being promoted as a means of protecting against catastrophic costs and financial hardship resulting from health costs, to achieve Universal Health Coverage (UHC) (27).

Nowadays BPJS Health as a service facility in fulfilling human rights in the health sector has again become the target of criticism from various circles of society, especially regarding the occurrence of various frauds

in the health services of the National Health Insurance program implemented by the Social Security Administering Body at First Level Health Facilities and Advanced Health Facilities (28).

Method

There are five types of study metrics for data analysis, namely: Scientometrics, Bibliometrics, Cybermetrics, Informetrics, and Altmetrics (29). As in (30), Bibliometrics analysis was used in the study. Bibliometrics analysis is more suitable for quantitatively analyzing the distribution of research papers, terms, and keywords in determining research trends (30). In addition, bibliometric analysis is a research method used in library and information science to evaluate research performance (31). Bibliometric analysis is very important in assessing research impact as studies are ranked based on the citations received (32).

The data used in this study is based on online searches via https://app.dimensions.ai/. Data were taken on June 2, 2023. The research method used a systematic review (Systematic Review) with the stages following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart.(33). The stages in PRISMA include identification, screening, and including as shown in Figure 5. Stage 1 (Identification) detects 661 records from dimensions.ai, taking into account, for each main search term health insurance, "type documents of articles and proceedings" and "all published data in the data range from 2010 to 2022. In stage 2 (screening), the option "article title, abstract" was selected in the field of each search term, resulting in 60 records being excluded. In phase 3 (included), the final sample yields article 601, which is accessible.

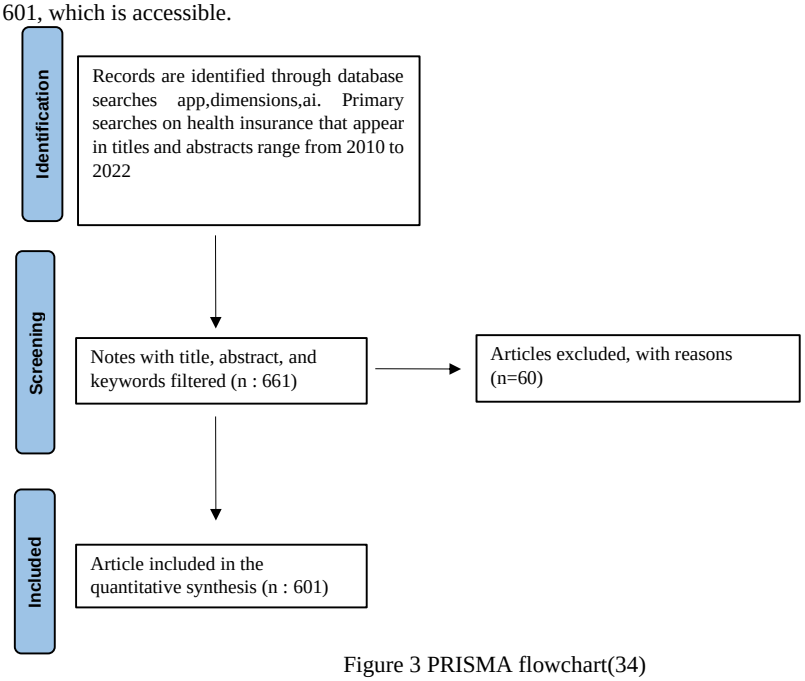


Figure 3 PRISMA flowchart(34)

Data were analyzed using VOSviewer. VOSviewer is a computer program for creating and viewing bibliometric maps (35). Type if data is selected create a map based on text data. In this research, the analysis is reviewed from co-occurrence.

Procedure for co-occurrence analysis (36)as follows. Selected data source read data from references manager files. Choose fields selected fields from which terms will be extracted are title and abstract fields. Counting method is selected full counting. Threshold is selected minimum number of occurrences of a term is 10. Choose number of terms is selected 135.

Results and Discussion

This section describes the results of research and discussion.

Results

A search from 2010 to 2022 yielded 661 scientific article publications. The number of health insurance publications per year from 2010 to 2022 is presented in Figure 3. The highest increase occurred in 2021 with an increase of 6539. Meanwhile the lowest increase occurred in 2010 with an increase of 1404.

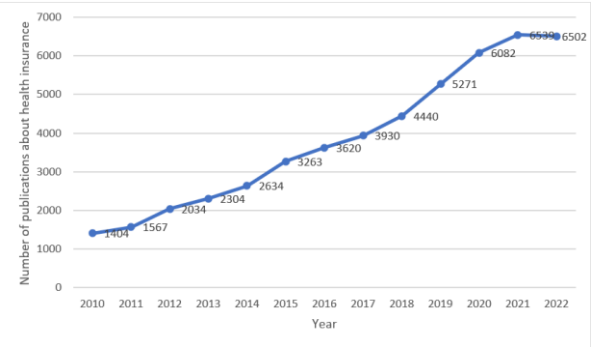


Figure 4 Number of health insurance publications from 2010 to 2022 (source:https://app.dimensions.ai/)

The number of health insurance citations per year from 2010 to 2022 is presented in Figure 5. The highest increase occurred in 2022 with an increase of 161555. Meanwhile the lowest increase occurred in 2010 with an increase of 688.

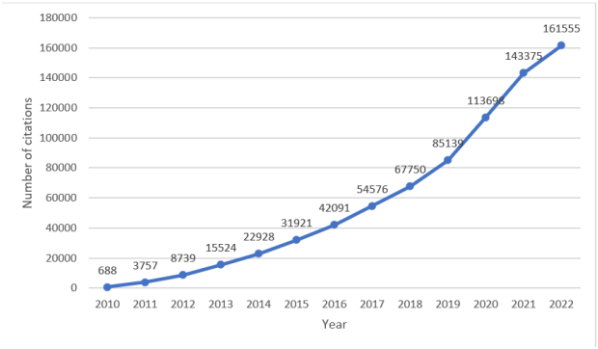


Figure 5 Number of citations for the topic of health insurance from 2010 to 2022 (source:https://app.dimensions.ai/)

Based on the field of research, publications can be grouped. The number of publications in terms of research fields is presented in Figure 6.

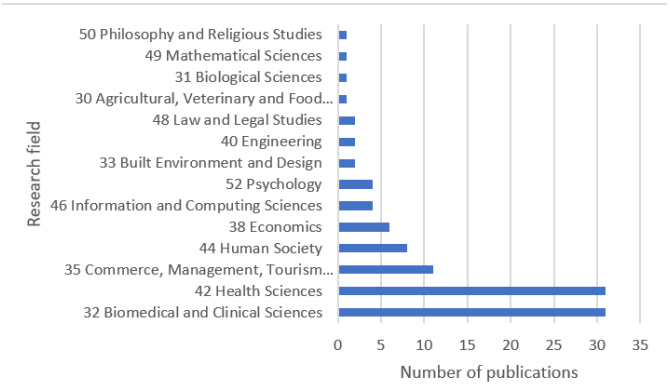


Figure 6 Number of publications in terms of research fields (source: https://app.dimensions.ai/)

Network visualization of these 9344 terms is presented in Figure 7.

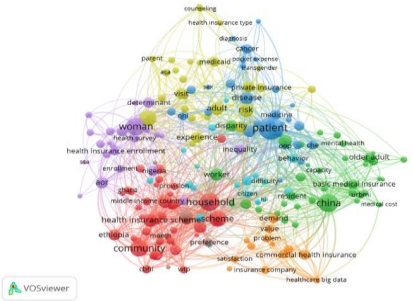


Figure 6 Network visualization (source: VOSviewer)

Selection of the number of terms as much as 9344. Two items connected by a line indicates that the two items appear together in a title and abstract. Conversely, two items not connected by a line indicate that the two items do not appear together in the title and abstract. In Figure 7, there are 135 items, 3 clusters, 5910 links, and a link strength of 14617.

Overlay visualization is presented in Figure 8

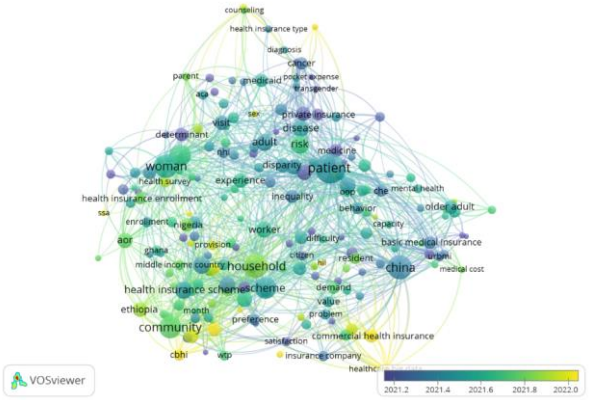


Figure 8 Overlay visualization (source: VOSviewer)

VOSviewer also provides an overlay visualization map. Overlay visualization of these 135 terms is presented in Figure 8.

Overlay visualization provides analysis based on health insurance keywords from 2010 to 2022 to observe trends in research titles related to health insurance. Based on the visualization of the map overlay in Figure 8, the yellow nodes imply that the keywords are of current research interest. For example, current research trends in health insurance focus on women, households, and patients.

Density visualization of these 135 terms is presented in Figure 9.

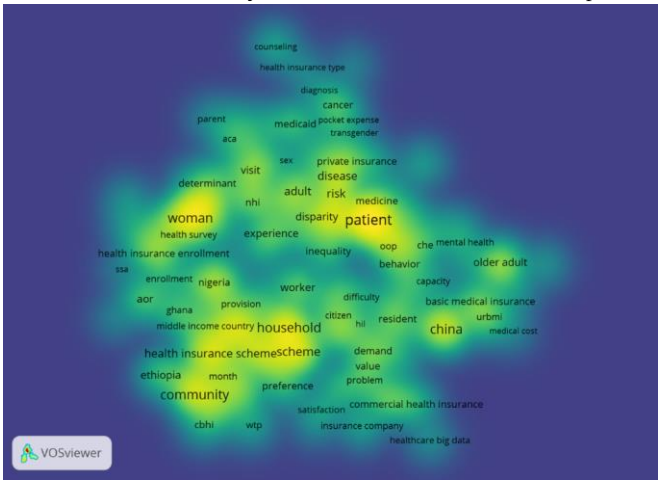


Figure 9 Density visualization (source: VOSviewer)

Figure 9 shows a visualization of density with the number of items which are found in several items, including the health insurance scheme, community, and medicine. Some items with yellow knots mean that they have been widely used as topics in previous journal publications. Thus, the recommended research topics related to health insurance are topics that have visualization of density in the low category, for example counseling, type of health insurance, and medical costs.

Discussion

Figure 1 shows that the number of publications increases exponentially from year to year (dotted line).This study shows that from 2010 to 2022, the smallest number of health insurance publications occurred in 2010 and the highest in 2021 with an average of 3815 (Figure 10). The number of publications fluctuates from year to year. Therefore the need for research on health insurance for ongoing research so that from year to year the topic of health insurance is increasing.

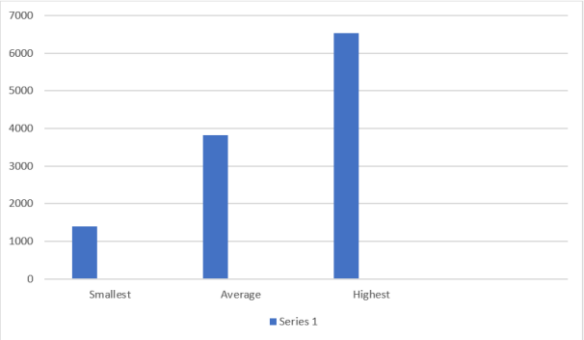


Figure 10 Histogram of the increase in the number of publications for the smallest, average, and highest forhealth insurance topics.

The smallest increase in the number of health insurance citations occurred in 2010 and the highest in 2022 with an average of 57,826 (Figure 11). The number of citations increases exponentially from year to year. The most cited article was entitled 'Rheumatoid arthritis increases the risk of deep vein thrombosis and pulmonary thromboembolism: a nationwide cohort study' (37) 150 citations, followed by an article entitled 'Association Between Parkinson's Disease and Inflammatory Bowel Disease' (38) 138 citations. Therefore, this article can be used as a reference in research that reviews health insurance.

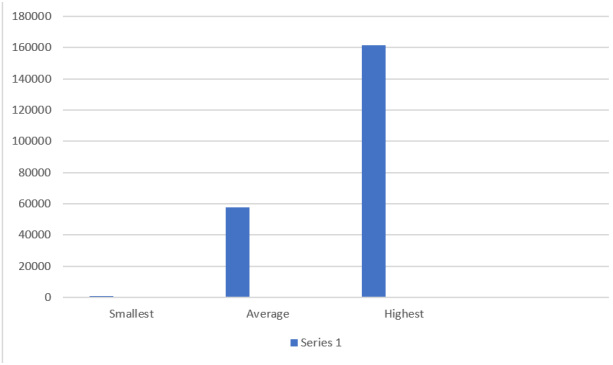


Figure 11 Histogram of the smallest, average, and largest increase in the number of citations for a topichealth insurance.

Figure 6 shows that Biomedical and clinical sciences and Health Sciences are ranked first based on research fields with 31 articles, followed by Commerce, Management, Tourism and Services with 11 articles.

In the network visualization (Figure 7), two terms are connected by a line indicating that the two terms appear together in a title and abstract. Conversely, two terms not connected by a line indicate that the two terms do not appear together in the title and abstract. The research data reveals that there are 135 terms, 3 clusters, 5910 links, and link strength of 14617. Therefore, novelty for further research on the topic of health insurance can be obtained through research on terms that are not directly connected, for example counseling, health insurance type , and medical costs.

Based on Figure 5 it shows that of the 135 items, there are 3 clusters. Cluster 1 (53 items), cluster 2 (41 items), cluster 3 (41 items),these clusters are presented in Table 1.

Table 1 Clusters for health insurance topics (Source: Vosviewer)

Cluster	Number of items	Cluster member items
1	53	Availability, case, cbhi, community, context, decision, determinant, enrollment, Ethiopia, expenditure, factor, financial protection, gender, ghana, government, health insurance enrollment, health insurance scheme, healthcare, healthcare service, household, india, indonesia, informal sector, interview, likelihood, majority, middle income country, month, national health insurance, nhis, Nigeria, oop, order, perception, pocket, pocket expenditure, policymaker, premium, prevalence, probability, program, region, respondent, scheme, social health insurance, stakeholders, sub-Saharan Africa, total, uhc, universal health coverage, willingness.
2	41	Aca, adolescent, adult, affordable care act, change, child, children, chip, combination, eligibility, employment, enrollment, expansion, family, final rule, health insurance

		program, health outcome, increase, January, law, life, Medicaid, Medicaid expansion, Medicaid program, medicare, outcome, patient protection, period, plan, private insurance, provision, public health insurance, public health insurance program, rate, reduction, state, united state, united states, way.
3	41	Article, awareness, challenge, china, chronic disease, citizen, country, covid, development, disease, document, future, governance, health status, health system, healthcare utilization, hospital, implication, insurer, issue, korea, lesson, medical insurance, national health insurance, nhi, older adult, pandemic, private health insurance, problem, process, progress, recent year, recommendation, reimbursement, resource, review, sample, self, September, south korea.

Overlay visualization (Figure 8) provides analysis based on the keyword health insurance from 2010 to 2022 to observe trends in research titles related to linear regression. Based on the visualization overlay map in Figure 8, the yellow term implies that the keywords are of current research interest. Therefore, for health insurance research trends, it shows that for trends, the keywords included include women, household, and patient.

Recently, participation in this topic has focused on health insurance emergence of Universal Health Coverage (UHC) as a global policy because it embraces the progressive language of inclusion, solidarity, and social justice and advocates for everyone's right to universal health care for "all" those in need "no financial hardship" (39). Patient safety and health development is the cornerstone of the health insurance program (28) In 2019 the UN General Assembly noted that at least half of the world's population does not have access to basic health services (40). Health services are provided in the form of medication and care (21). National Social Health Insurance Program (JKSN) (41) aimed at providing comprehensive health service benefits, ranging from preventive services such as immunization and family planning to services for catastrophic diseases such as heart disease and kidney failure (28). In the JKN-BPJS Health Implementation Manual (42), in the sub-chapter on First Level Health Services for Obstetrics and Neonatal, it is stated that this service is an effort to ensure and protect the process of pregnancy, childbirth, postpartum, handling post-miscarriage bleeding and post-delivery family planning services and related complications with pregnancy, childbirth, puerperium and postpartum family planning (43).

The various sub-periods in which scholarly activity on this topic developed during 2010-2022 represent a rich set of key terms. In the title, abstract and keywords of the articles in the sample, VOSviewer has identified different keywords. This makes it possible to validate the breadth of the study axis in research activities.Emerging global health challenges, in general, and conflict-imposed health care, climate change, and a lack of economic growth are already impacting well-being and meeting development goal (44).

Density visualization (Figure 9) shows a visualization of the density of terms indicated by colors. Blue color indicates high density while yellow color indicates low density. High density means that the

topic has been widely used in previous research while low density means that the topic is still little used in previous research. Therefore, the recommended research topics related to health insurance are topics that have a low category of visualization density, for example counseling, type of health insurance, and medical costs. This topic has great opportunities for research related to health insurance. Because in previous research there was still a lot to discuss about the scope of the health insurance scheme, community, and medicine in the health care system which is actively developing and accompanied by a significant increase in the amount of scientific literature (45). Opportunity analysis on research topics can provide some insights for researchers and educational practitioners to identify which research directions are important (46). Through content analysis, it was found that the researcher pays attention to these topics (47).

The scope of the research is very broad and involves a lot of research content which causes the research to be out of focus. The research methods used may include qualitative, quantitative, and mixed research (48). Issues related to health insurance are the focus of research in the development of health sciences. The results of the bibliometric analysis show that the field of study of health insurance is broad and interdisciplinary (49). The current study differs from previous bibliometric analyses (50)and literature review (51).

This study helps readers understand the dynamics of trends in the development of research topics through research findings. It can also help researchers quickly identify priority research problems, help them find the most influential references and select the most influential or important researchers and institutions to collaborate with (52). Through the analysis of the results, it will help researchers to find major journal contributions directing and encouraging the development of further research achievements in scientific research institutions (53).

Conclusion

This study conducted a bibliometric analysis of health insurance publications through app.dimension.ai from 2010 to 2022. This research shows several results. Among the many publications on the topic of health insurance, the trend is increasing, the number of citations on the topic of health insurance has increased. The connection between the topic of health insurance and several other topics can be analyzed using VOSviewer, namely network visualization, overlay visualization, and density visualization.

This research demonstrates themes, trends, prolific authors, core journals, leading country ratings and collaborations, and health insurance research groups. This study provides a systematic review of health coverage over time. The results of research on trends in health insurance include women, household, and patient. Topics related to health insurance that have opportunities in research are counseling, types of health insurance, and medical costs. The closeness of the relationship between the topic of health insurance and other topics, namely the factor of financial protection, healthcare, medicaid programs, public health insurance, public health insurance, medical insurance.

Although this research has contributed in providing insight into the development of health insurance publications from 2010 to 2022 through app.dimension.ai, this research has limitations. The app.dimension.ai database continues to experience updates in publications and citations from time to time. Therefore, the bibliometric analysis of health insurance can be reviewed in the next few years and years. In addition, this bibliometric analysis only extracts scientific article data from the app.dimension.ai database. Further research in order to add to other databases for a broader and more comprehensive understanding of health insurance.

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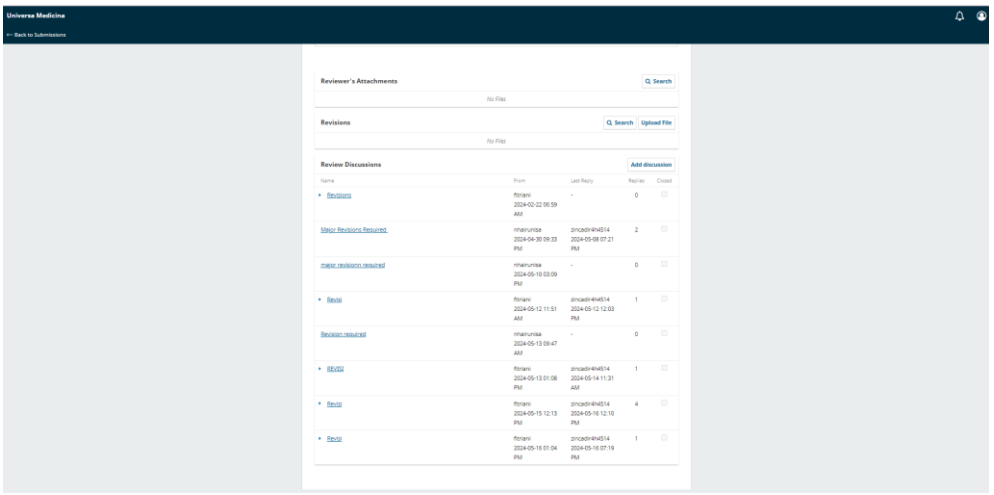

A Bibliometric Analysis of Trends and Novelty of Health Insurance

Trends and Novelty of Health Insurance : a bibliometric analysis

Abstract

Health system goals proposed at the international, national, or regional level are usually not measured against human rights standards and instruments. Universal Health Insurance is expected to be able to provide benefits. Health services are provided in the form of medication and care. However, there is no bibliometric analysis of health insurance publications to find out trends and novelties. This study aims to determine the trend of the number of publications and visualize the linkages on the topic of health insurance through bibliometric analysis. The research method uses systematic reviews with the steps following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagrams which use 661 scientific articles from the Dimensions database. Review articles using an application using Vosviewer. The results of this study contribute to the development of a research roadmap on health insurance. The limitation of this research is that the app.dimension.ai database continues to experience updates in publications and citations from time to time. Therefore, the bibliometric analysis of health insurance can be reviewed in the next few years and years. In addition, this bibliometric analysis only extracts scientific article data from the app.dimension.ai database. Further research is in order to add to other databases for a broader and more comprehensive understanding of health insurance. bibliometric analysis of health insurance can be reviewed in the next few years and years. In addition, this bibliometric analysis only extracts scientific article data from the app.dimension.ai database. Further research is in order to add to other databases for a broader and more comprehensive understanding of health insurance. bibliometric analysis of health insurance can be reviewed in the next few years and years. In addition, this bibliometric analysis only extracts scientific article data from the app.dimension.ai database. Further research is in order to add to other databases for a broader and more comprehensive understanding of health insurance.

Keywords: bibliometrics analysis, health insurance, novelty, trend

Introduction

Health system goals proposed at the international, national, or regional level are usually not measured against human rights standards and instruments (1). Maternal and perinatal health problems are national problems that need to get top priority. Inequality in the risk of death cannot be separated from the issues surrounding the health policy debate (2). A community's health degree is assessed through several indicators including the Maternal Mortality Rate and the Infant Mortality Rate (3). The Health Policy in the Law regulates the right to health(4).

Rights are everything that has been attached to human beings, which has been owned since humans were born into the world and are absolute or cannot be contested by other parties, and cannot be separated from their essence so that their nature remains sacred (5). Health is one of the basic human needs, therefore health is a right for every citizen that is protected by law(6). Every country recognizes that health is the

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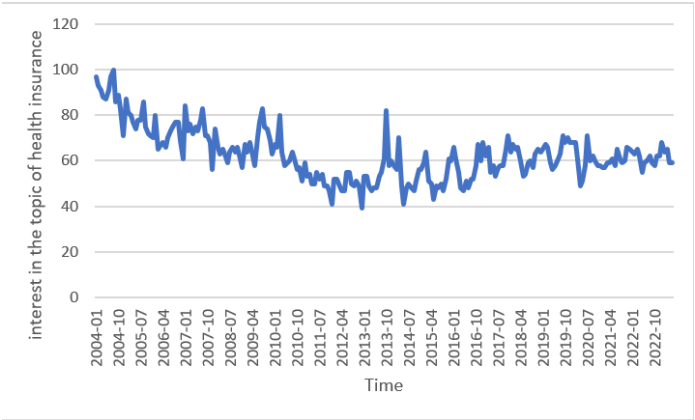
biggest capital to achieve prosperity. The role of the state in meeting the basic needs of the people is needed, especially in the form of comprehensive health services (7).

Universal health insurance is expected to provide benefits(5). Meanwhile, to accelerate the achievement of the Millennium Development Goals (MDGs) in 2015, in particular to reduce maternal and infant mortality, the Ministry of Health launched the Maternity Guarantee program. In reducing the Maternal Mortality Rate and the Infant Mortality Rate, cooperation from all sectors is needed (3).

The national health insurance is part of the national social security system which is organized using a mandatory (mandatory) social health insurance mechanism based on its objective, namely to meet the basic needs of adequate public health which is provided to everyone who has paid contributions or whose contributions are paid by the Government.(8). This shows that national health insurance is an important and useful topic. Therefore, national health insurance is a hot topic for research.

Over time, interest in the topic of health insurance worldwide has declined. This interest data can be searched through Google Trends by typing in the keyword: health insurance. A search was carried out from January 2004 to December 2022 by selecting web searches and all categories yielded the data presented in Figure 1. This data was taken on June 3, 2023.



In addition to time, interest in Health insurance topics that can be reviewed by country. Interest in the topic of Health insurance by country can be seen in Figure 2.

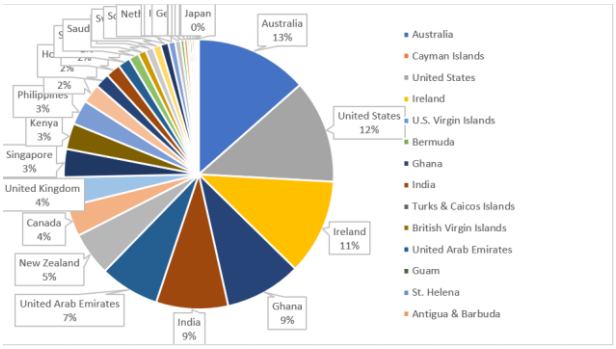


Figure 2 Histogram of interest by country in health insurance

Data Source: Google Trends

The data illustrates interest in general health insurance topics. On the other hand, researchers who wish to research the topic of health insurance require more specific information, for example scientific publications in the form of scientific articles and scientific seminar proceedings on the topic of health insurance. Therefore, information on the topic of health insurance in the form of scientific articles is necessary and very important.

In research, researchers need information about trends and updates for health insurance in the future. This is a problem that arises among researchers. However, there is no bibliometric analysis of health insurance publications to find out trends and novelties. ~~The questions that will be answered in this study are (1) how is the development of the number of publications on the topic of health insurance, (2) how is the development of the number of citations on the topic of health insurance, (3) how is the development of the number of publications on the topic of health insurance in terms of the research field, (3) how is the network visualization on the topic of linear regression, (7) how is the publication cluster on the topic of health insurance in terms of co-occurrence, (8) how is the visualization overlay on the topic of health insurance,~~

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~~Bibliometric analysis is a scientific and quantitative method for assessing published articles, which can help researchers to find development trends and research hotspots of a particular research field, providing future research development for researchers (9). Bibliometric analysis helps the researcher to identify emerging areas and future directions of the research domain with the help of visualization tools (10). Bibliometric analysis has been used by various authors to evaluate information theory listed in the Scopus database (10), to evaluate immigration and environmental degradation (11), and to investigate trends in this study since 2010 (12). Thus, bibliometric analysis is a scientific and quantitative method for assessing published articles, which can help researchers to find development trends and research hotspots of a particular research field, providing future research development for researchers.~~

~~The results obtained are invaluable for those who continue to develop scientific research on the theme of health insurance for midwives and who require past studies and future data, such as academics, scientific researchers, research institutes, higher education institutions, and health workers (13).~~

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This research aims to determine the number of publication trends on the topic of health insurance, number of citations, research fields on the topic of health insurance, journals published, authors, relationships between topics, grouping of topics, direction of future research topics, rare health insurance topics, relationships between authors , research group, network visualization, overlay visualization and density visualization related to the topic of health insurance through bibliometric analysis. Therefore, a bibliometric analysis will provide a comprehensive system for investigating the articles on the topic of interest.

~~To achieve the objectives of this research, this work is structured as follows. The first part describes the background, problems and research objectives. The second part describes the literature study and the methods used, data collection, and data analysis. The third part presents the results of the research followed by discussion. The fourth section provides conclusions, limitations, and recommendations.~~

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Literature Study

Health Services

The National Health Service, which offers universal access to health care, is facing increasing pressure. The National Health Service is regionally based, with local authorities responsible for the organization and delivery of health services (14). Health services are provided in the form of medication and care (15)Health service providers must contribute in providing health services (16). Health workers, medical and non-medical, are responsible for providing optimal service (17).

Medical personnel, in this case doctors, have the responsibility for the treatment being carried out (8). Treatment measures and determination of needs in the treatment process is the authority of the doctor (18). Patient safety and health development is an absolute foundation for doctors in carrying out their professional practice (19). A doctor must make every effort as possible to treat his patient (20). To create legal protection for patients, the parties must understand the rights and obligations attached to them, including health service providers so that they are responsible for the profession given to recipients of health services (21). Midwives as health workers must understand midwifery practices well (22). Health workers, especially midwives, are the main factor in delivery insurance services (23). Midwives, in particular, with many tasks and have a major role in delivery insurance services experience difficulties with limitations, so there must be a balance between patients receiving delivery insurance and health workers who provide delivery insurance services (24).

Health Insurance

Financial protection is one of the important dimensions of Universal Health Converage (UHC) (25). In low and middle income countries (LMICs) (26), government-sponsored health insurance is increasingly being promoted as a means of protecting against catastrophic costs and financial hardship resulting from health costs, to achieve Universal Health Coverage (UHC) (27).

Nowadays BPJS Health as a service facility in fulfilling human rights in the health sector has again become the target of criticism from various circles of society, especially regarding the occurrence of various frauds in the health services of the National Health Insurance program implemented by the Social Security Administering Body at First Level Health Facilities and Advanced Health Facilities (28).

Methods

There are five types of study metrics for data analysis, namely: Scientometrics, Bibliometrics, Cybermetrics, Informetrics, and Altmetrics (29). As in (30), Bibliometrics analysis was used in the study. Bibliometrics analysis is more suitable for quantitatively analyzing the distribution of research papers, terms, and keywords in determining research trends (30). In addition, bibliometric analysis is a research method used in library and information science to evaluate research performance (31). Bibliometric analysis is very important in assessing research impact as studies are ranked based on the citations received (32).

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A bibliometric analysis is employed to analyze the collected data on the selected subject.

The data used in this study is based on online searches via https://app.dimensions.ai/. Data were taken on June 2, 2023. The research method used a systematic review (Systematic Review) with the stages following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart.(33). The stages in PRISMA include identification, screening, and including as shown in Figure 5. Stage 1 (Identification) detects 661 records from dimensions.ai, taking into account, for each main search term health insurance, "type documents of articles and proceedings" and "all published data in the data range from 2010 to 2022. In stage 2 (screening), the option "article title, abstract" was selected in the field of each search term, resulting in 60 records being excluded. In phase 3 (included), the final sample yields article 601, which is accessible.

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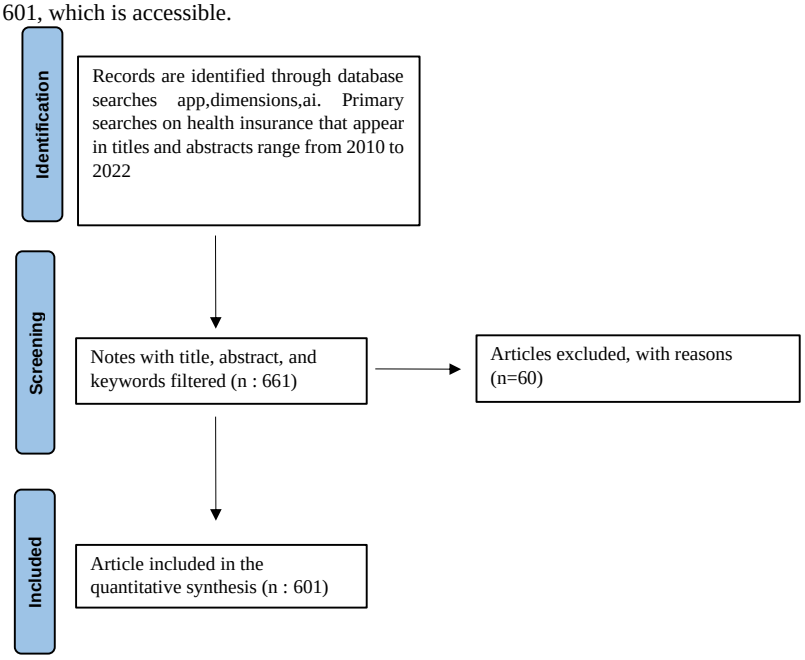

Figure 3 PRISMA flowchart(34)

Software and data cleaning

The collected articles were analyzed using the VOSviewer. Information obtained at the first stage was exported to an Excel spreadsheet for analysis and organization

Data were analyzed using VOSviewer. VOSviewer is a computer program for creating and viewing bibliometric maps (35). Type if data is selected create a map based on text data. In this research, the analysis is reviewed from co-occurrence.

Procedure for co-occurrence analysis (36)as follows. Selected data source read data from references manager files. Choose fields selected fields from which terms will be extracted are title and abstract fields. Counting method is selected full counting. Threshold is selected minimum number of occurrences of a term is 10. Choose number of terms is selected 135.

Results and Discussion

This section describes the results of research and discussion.

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Results

Time distribution

A search from 2010 to 2022 yielded 661 scientific article publications. The number of health insurance publications per year from 2010 to 2022 is presented in Figure 3. The highest increase occurred in 2021 with an increase of 6539. Meanwhile the lowest increase occurred in 2010 with an increase of 1404.

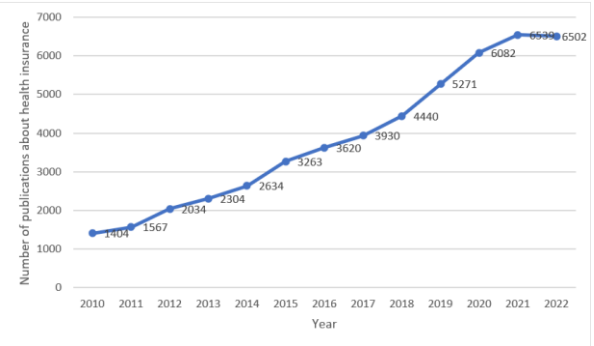

Figure 4 Number of health insurance publications from 2010 to 2022 (source:https://app.dimensions.ai/)

The cited articles

The number of health insurance citations per year from 2010 to 2022 is presented in Figure 5. The highest increase occurred in 2022 with an increase of 161555. Meanwhile the lowest increase occurred in 2010 with an increase of 688.

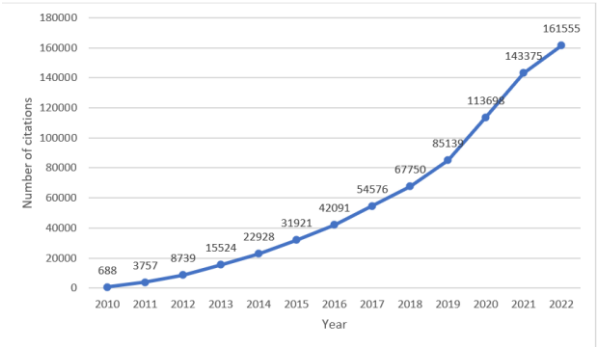

Figure 5 Number of citations for the topic of health insurance from 2010 to 2022 (source:https://app.dimensions.ai/)

Subject area

The subject area of articles was also anaylsed .....Based on the field of research, publications can be grouped. The number of publications in terms of research fields is presented in Figure 6.

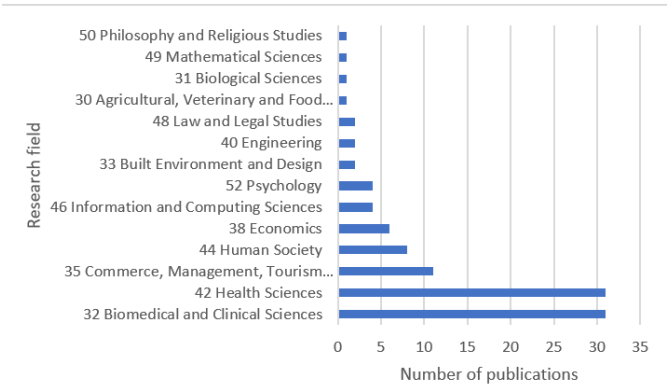

Figure 6 Number of publications in terms of research fields (source: https://app.dimensions.ai/)

Network visualization of these 9344 terms is presented in Figure 7.

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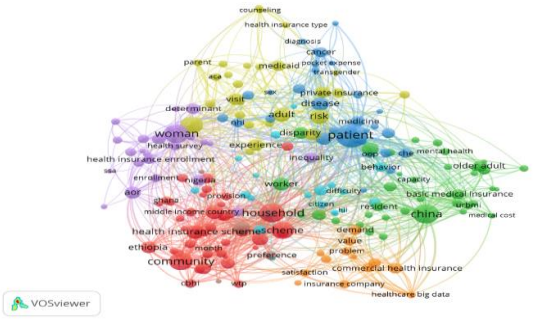

Figure 7 Network visualization (source: VOSviewer)

Selection of the number of terms as much as 9344. Two items connected by a line indicates that the two items appear together in a title and abstract. Conversely, two items not connected by a line indicate that the two items do not appear together in the title and abstract. In Figure 7, there are 135 items, 3 clusters, 5910 links, and a link strength of 14617.

Cluster analysis of keywords

Overlay visualization is presented in Figure 8

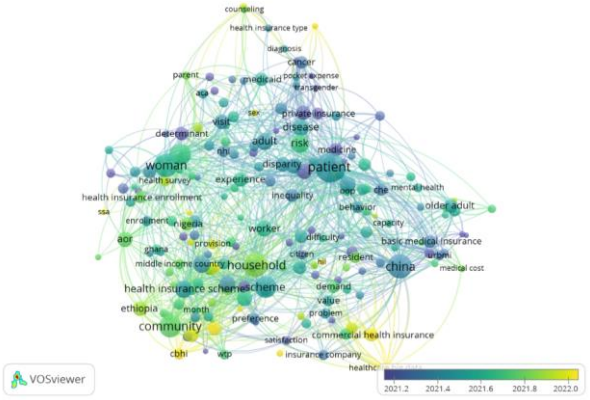

Figure 8 Overlay visualization (source: VOSviewer)

VOSviewer also provides an overlay visualization map. Overlay visualization of these 135 terms is presented in Figure 8.

Overlay visualization provides analysis based on health insurance keywords from 2010 to 2022 to observe trends in research titles related to health insurance. Based on the visualization of the map overlay in Figure

8, the yellow nodes imply that the keywords are of current research interest. For example, current research trends in health insurance focus on women, households, and patients.

Density visualization of these 135 terms is presented in Figure 9.

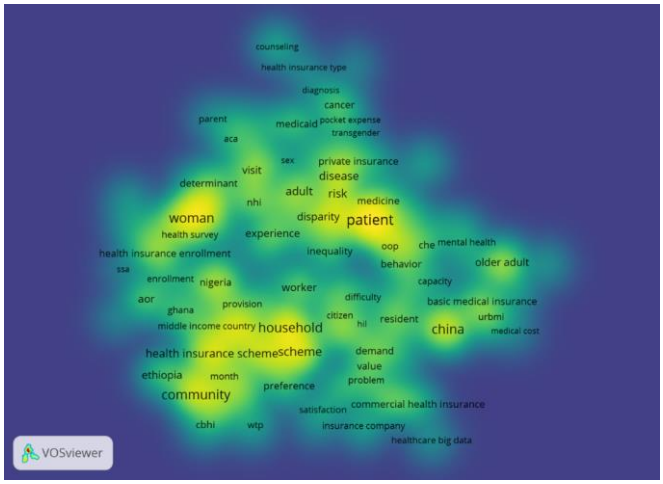

Figure 9 Density visualization of keywords (source: VOSviewer)

Figure 9 shows a visualization of density with the number of items which are found in several items, including the health insurance scheme, community, and medicine. Some items with yellow knots mean that they have been widely used as topics in previous journal publications. Thus, the recommended research topics related to health insurance are topics that have visualization of density in the low category, for example counseling, type of health insurance, and medical costs.

Discussion

Figure 1 shows that the number of publications increases exponentially from year to year (dotted line).This study shows that from 2010 to 2022, the smallest number of health insurance publications occurred in 2010 and the highest in 2021 with an average of 3815 (Figure 10). The number of publications fluctuates from year to year. Therefore the need for research on health insurance for ongoing research so that from year to year the topic of health insurance is increasing.

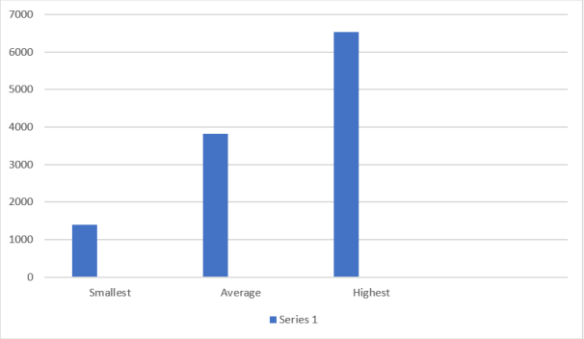

Figure 10 Histogram of the increase in the number of publications for the smallest, average, and highest forhealth insurance topics.

The smallest increase in the number of health insurance citations occurred in 2010 and the highest in 2022 with an average of 57,826 (Figure 11). The number of citations increases exponentially from year to year. The most cited article was entitled 'Rheumatoid arthritis increases the risk of deep vein thrombosis and pulmonary thromboembolism: a nationwide cohort study' (37) 150 citations, followed by an article entitled 'Association Between Parkinson's Disease and Inflammatory Bowel Disease' (38) 138 citations. Therefore, this article can be used as a reference in research that reviews health insurance.

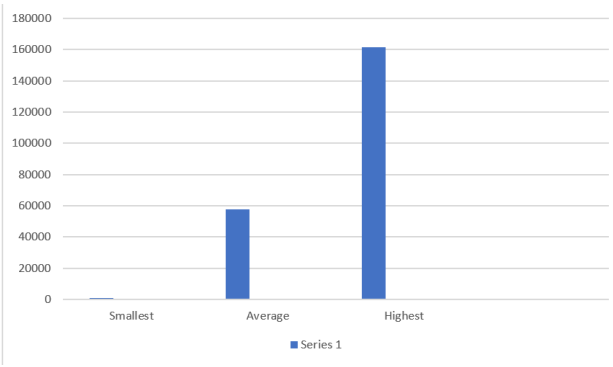

Figure 11 Histogram of the smallest, average, and largest increase in the number of citations for a topichealth insurance.

Figure 6 shows that Biomedical and clinical sciences and Health Sciences are ranked first based on research fields with 31 articles, followed by Commerce, Management, Tourism and Services with 11 articles.

Network visualization can be used to enrich bibliometric analysis assessments. In particular, network visualization highlights the relative importance of research constituents, which is not necessarily reflected through publications or citations. Network visualization is used to enrich discussions of research areas in bibliometric studies (39). In the network visualization (Figure 7), two terms are connected by a line

indicating that the two terms appear together in a title and abstract. Conversely, two terms not connected by a line indicate that the two terms do not appear together in the title and abstract. The research data reveals that there are 135 terms, 3 clusters, 5910 links, and link strength of 14617. Therefore, novelty for further research on the topic of health insurance can be obtained through research on terms that are not directly connected, for example counseling, health insurance type , and medical costs.

Based on Figure 5 it shows that of the 135 items, there are 3 clusters. Cluster 1 (53 items), cluster 2 (41 items), cluster 3 (41 items),these clusters are presented in Table 1.

Table 1 Clusters for health insurance topics (Source: Vosviewer)

Cluster	Number of items	Cluster member items
1	53	Availability, case, cbhi, community, context, decision, determinant, enrollment, Ethiopia, expenditure, factor, financial protection, gender, ghana, government, health insurance enrollment, health insurance scheme, healthcare, healthcare service, household, india, indonesia, informal sector, interview, likelihood, majority, middle income country, month, national health insurance, nhis, Nigeria, oop, order, perception, pocket, pocket expenditure, policymaker, premium, prevalence, probability, program, region, respondent, scheme, social health insurance, stakeholders, sub-Saharan Africa, total, ~~uhc,~~ universal health coverage, willingness.
2	41	Aca, adolescent, adult, affordable care act, change, child, children, chip, combination, eligibility, employment, enrollment, expansion, family, final rule, health insurance program, health outcome, increase, January, law, life, Medicaid, Medicaid expansion, Medicaid program, medicare, outcome, patient protection, period, plan, private insurance, provision, public health insurance, public health insurance program, rate, reduction, state, united state, united states, way.
3	41	Article, awareness, challenge, china, chronic disease, citizen, country, covid, development, disease, document, future, governance, health status, health system, healthcare utilization, hospital, implication, insurer, issue, korea, lesson, medical insurance, national health insurance, nhi, older adult, pandemic, private health insurance, problem, process, progress, recent year, recommendation, reimbursement, resource, review, sample, self, September, south korea.

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Overlay visualization (Figure 8) provides analysis based on the keyword health insurance from 2010 to 2022 to observe trends in research titles related to linear regression. Based on the visualization overlay map in Figure 8, the yellow term implies that the keywords are of current research interest. Therefore, for health insurance research trends, it shows that for trends, the keywords included include women, household, and patient.

Recently, participation in this topic has focused on health insurance emergence of Universal Health Coverage (UHC) as a global policy because it embraces the progressive language of inclusion, solidarity, and social justice and advocates for everyone's right to universal health care for "all" those in need "no financial hardship" (40). Patient safety and health development is the cornerstone of the health insurance program (28) In 2019 the UN General Assembly noted that at least half of the world's population does not have access to basic health services (41). Health services are provided in the form of medication and care (21). National Social Health Insurance Program (JKSN) (42) aimed at providing comprehensive health service benefits, ranging from preventive services such as immunization and family planning to services for catastrophic diseases such as heart disease and kidney failure (28). In the JKN-BPJS Health Implementation Manual (43), in the sub-chapter on First Level Health Services for Obstetrics and Neonatal, it is stated that this service is an effort to ensure and protect the process of pregnancy, childbirth, postpartum, handling post-miscarriage bleeding and post-delivery family planning services and related complications with pregnancy, childbirth, puerperium and postpartum family planning (44).

The various sub-periods in which scholarly activity on this topic developed during 2010-2022 represent a rich set of key terms. In the title, abstract and keywords of the articles in the sample, VOSviewer has identified different keywords. This makes it possible to validate the breadth of the study axis in research activities.Emerging global health challenges, in general, and conflict-imposed health care, climate change, and a lack of economic growth are already impacting well-being and meeting development goal (45).

Density visualization (Figure 9) shows a visualization of the density of terms indicated by colors. Blue color indicates high density while yellow color indicates low density. High density means that the topic has been widely used in previous research while low density means that the topic is still little used in previous research. Therefore, the recommended research topics related to health insurance are topics that have a low category of visualization density, for example counseling, type of health insurance, and medical costs. This topic has great opportunities for research related to health insurance. Because in previous research there was still a lot to discuss about the scope of the health insurance scheme, community, and medicine in the health care system which is actively developing and accompanied by a significant increase in the amount of scientific literature (46). Opportunity analysis on research topics can provide some insights for researchers and educational practitioners to identify which research directions are important (47). Through content analysis, it was found that the researcher pays attention to these topics (48).

The scope of the research is very broad and involves a lot of research content which causes the research to be out of focus. The research methods used may include qualitative, quantitative, and mixed research (49). Issues related to health insurance are the focus of research in the development of health sciences. The results of the bibliometric analysis show that the field of study of health insurance is broad and interdisciplinary (50). The current study differs from previous bibliometric analyses (51)and literature review (52).

This study helps readers understand the dynamics of trends in the development of research topics through research findings. It can also help researchers quickly identify priority research problems, help them find the most influential references and select the most influential or important researchers and institutions to collaborate with (53). Through the analysis of the results, it will help researchers to find major journal contributions directing and encouraging the development of further research achievements in scientific research institutions (54).

Conclusion

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~~This study conducted a bibliometric analysis of health insurance publications through app.dimension.ai from 2010 to 2022. This research shows several results. Among the many publications on the topic of health insurance, the trend is increasing, the number of citations on the topic of health insurance has increased. The connection between the topic of health insurance and several other topics can be analyzed using VOSviewer, namely network visualization, overlay visualization, and density visualization.~~

This research demonstrates themes, trends, prolific authors, core journals, leading country ratings and collaborations, and health insurance research groups. This study provides a systematic review of health coverage over time. The results of research on trends in health insurance include women, household, and patient. Topics related to health insurance that have opportunities in research are counseling, types of health insurance, and medical costs. The closeness of the relationship between the topic of health insurance and other topics, namely the factor of financial protection, healthcare, medicaid programs, public health insurance, public health insurance, medical insurance.

~~Although this research has contributed in providing insight into the development of health insurance publications from 2010 to 2022 through app.dimension.ai, this research has limitations. The app.dimension.ai database continues to experience updates in publications and citations from time to time.~~ Therefore, the bibliometric analysis of health insurance can be reviewed in the next few years and years. In addition, this bibliometric analysis only extracts scientific article data from the app.dimension.ai database. Further research in order to add to other databases for a broader and more comprehensive understanding of health insurance.

Conflict of interest

Describe

Acknowledgments

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Author contributions

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Funding

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Data availability statement

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4. MANUSKRIP SETELAH REVIEW

Health Insurance Trends from 2004 to 2022: a bibliometric analysis

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Abstract 293 words

The goal of health systems implemented at the international, national, or regional level is to improve health through all available means, including the efforts of the community itself, including the general public, special education, military, and government effectively and efficiently, so as to improve the degree of public health at all levels. Health issues are national issues that need top priority. The inequality of mortality risk cannot be separated from the issues surrounding the health policy debate. The level of public health is assessed through several indicators. Health Policy in law regulates the right to health. Proposed health system goals at the international, national, or regional level are usually not measured under human rights standards and instruments. Universal Health Insurance is expected to provide benefits. Health services are provided in the form of medicines and treatments. This study aims to determine the trend in the number of publications and visualize the linkage of health insurance topics through bibliometric analysis. The research method uses a systematic review with steps following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram using 661 scientific articles published between 2004 and 2022 followed by certain inclusion and exclusion criteria. from the Dimensional database. Review the article using the app using Vosviewer. The results of this study contributed to the development of a research roadmap on health insurance. The limitation of this study is that the database app.dimension.ai and google scholar continue to experience updates in publications and citations from time to time. Therefore, bibliometric analysis of health insurance can be reviewed in the next few years. In addition, this bibliometric analysis only extracts scientific article data from app.dimension.ai database. Further research is to add another database for a broader and more comprehensive understanding of health insurance.

Keywords: Bibliometric analysis, health insurance, recency, trends

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Introduction

The goal of health systems implemented at the international, national, or regional level is to improve health through all available means, including the efforts of the community itself, including the general public, special education, military, and government effectively and efficiently, so as to improve the degree of public health at all levels, Health issues are national issues that need top priority [(1)]. The inequality of mortality risk cannot be separated from the issues surrounding the health policy debate [(2)]. The level of public health is assessed through several indicators [(3)]. Health Policy in law regulates the right to health [(4)].

Rights are everything that has been inherent in man, which has been possessed since man was born into the world and is absolute or inviolable by others, and cannot be separated from its essence so that its essence remains sacred [(5)]. Health is one of the basic human needs, therefore health is a right for every citizen that is protected by law [(6)]. Every country recognizes that health is the greatest capital to achieve prosperity . The role of the state in meeting the basic needs of the people is urgently needed, especially in the form of comprehensive health services [(7)].

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Universal health insurance is expected to provide benefits. Meanwhile, to accelerate the achievement of the Millennium Development Goals (MDGs) in 2015, especially to reduce maternal and infant mortality, the Ministry of Health launched the Maternity Insurance program. In reducing Maternal Mortality and Infant Mortality Rates, cooperation from all sectors is needed [8].

The National Health Service, which offers universal access to health care, is facing increasing pressure. The National Health Service is regionally based, with local authorities responsible for the organization and delivery of health services [9]. Health services are provided in the form of medicines and treatments [10]. Health care providers must contribute to providing health services [11]. Health workers, medical and non-medical, are responsible for providing optimal services [12].

Medical personnel, in this case doctors, have responsibility for the treatment carried out [13]. Treatment measures and determination of needs in the treatment process are the authority of the doctor [14]. The development of patient safety and health is an absolute foundation for doctors in carrying out their professional practice [15]. A doctor must make every possible effort to treat his patients [16]. To create legal protection for patients, parties must understand the rights and obligations attached to them, including healthcare providers so that they are responsible for the profession provided to healthcare recipients [17]. Midwives as health workers must understand midwifery practices well [18]. Health workers, especially midwives, are a major factor in maternity insurance services [19]. Midwives, especially with many tasks and have a large role in childbirth insurance services, have difficulties with limitations, so there must be a balance between patients receiving childbirth insurance and health workers who provide maternity insurance services [20].

Financial protection is one of the important dimensions of Universal Health Converage (UHC) [21]. In low- and middle-income countries (LMICs) [22]. Government-sponsored health insurance is increasingly promoted as a means of protection against catastrophic costs and financial hardship due to health costs, to achieve UHC [23].

Currently, *Badan Penyelenggara Jaminan Sosial* (BPJS) *Kesehatan* as a service facility in fulfilling human rights in the health sector has again become the target of criticism from various circles of society, especially regarding the occurrence of various frauds in health services, the National Health Insurance program implemented by the Social Security Organizing Agency at Level I Health Facilities and Advanced Health Facilities [24].

National health insurance is part of the national social security system which is organized using a mandatory social health security mechanism based on its purpose, namely to meet the basic needs of decent public health provided to everyone who has paid contributions or whose contributions are paid by the Government [13]. This shows that national health insurance is an important and useful topic.

Over time, interest in the topic of health insurance around the world has declined. This interest data can be searched through Google Trends by typing in the keyword: health insurance. The search was

conducted from January 2004 to December 2022 by selecting a web search and all categories yielded the data presented in Figure 1. This data is taken on June 3, 2023.

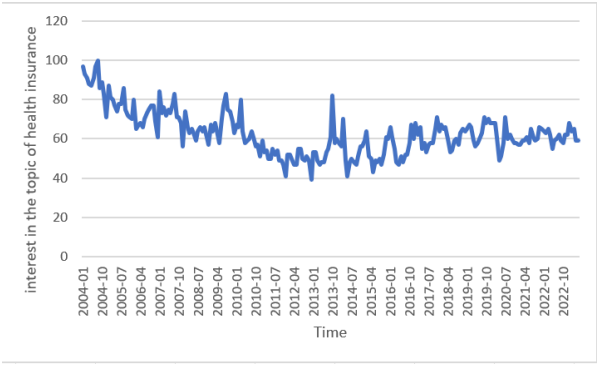

Figure 1. Interest in the topic of health insurance

In addition to time, interest in health insurance topics that can be reviewed by the state. Interest in the topic of health insurance by country can be seen in Figure 2.

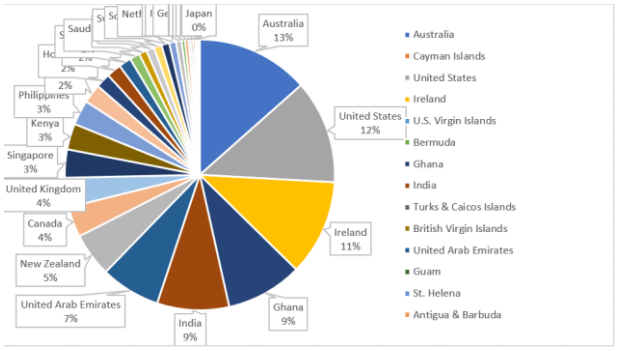

Figure 2. Histogram of interest by country in health insurance
Data Source: Google Trends

The data illustrates interest in the topic of general health insurance. On the other hand, researchers who want to research the topic of health insurance need more specific information, for example scientific publications in the form of scientific articles and proceedings of scientific seminars on the topic of health insurance. Therefore, information on the topic of health insurance in the form of scientific articles is necessary and very important.

This study aims to determine the number of publication trends on health insurance topics, number of citations, research fields on health insurance topics, journals published, authors, relationships between topics, topic grouping, future research topic directions, rare health insurance topics, relationships between authors, research groups, network visualization, overlay visualization and density visualization related to

health insurance topics through analysis bibliometrics. Therefore, bibliometric analysis will provide a comprehensive system for investigating articles on topics of interest.

Methods

Bibliometric analysis is used to analyze the data collected on the selected subject. The data used in the study was based on online searches through https://app.dimensions.ai/. Data taken on June 2, 2023. The research method uses a systematic review with stages following the flowchart of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) [(25)]. The stages in PRISMA include identification, screening, and include as shown in Figure 5. Phase 1 (Identification) detected 661 records from dimensions.ai by writing down health insurance keywords that appeared in titles and abstracts ranging from 2010 to 2022, taking into account, for each primary health insurance search term, "article document types and processes" and "all published data in the data range from 2010 to 2022. At stage 2 (filtering), the option "article title, abstract" is selected in the field of each search term, so 60 records are excluded. In phase 3 (included), the final sample produces section 601, which is accessible.

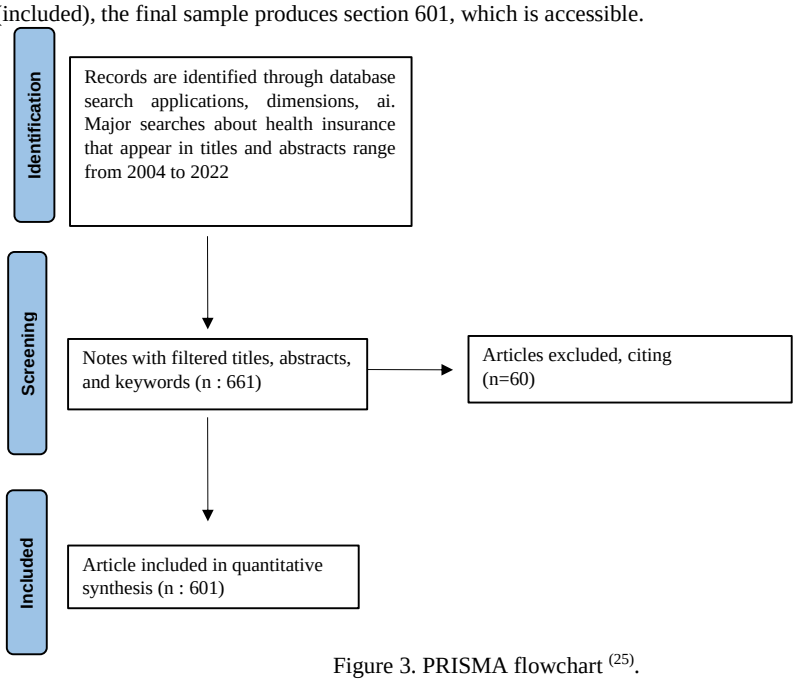

Figure 3. PRISMA flowchart [(25)].

Software and data cleaning

The collected articles are analyzed using VOSviewer. The information obtained at the first stage is exported to an Excel spreadsheet for analysis and organization

The data was analyzed using VOSviewer. VOSviewer is a computer program for creating and viewing bibliometric maps [26]. Type: if data is selected, create a map based on the text data. In this study, the analysis was reviewed from concurrent events.

Procedure for joint event analysis [27] as follows. The selected data source reads data from the reference manager file. Select the selected field The fields from which the terms will be extracted are the title and abstract fields. The counting method is selected full count. The selected threshold, the minimum number of occurrences of a term is 10. Select the number of selected terms 135.

Result

Time distribution

A search from 2002 to 2022 yielded 661 scientific article publications. The number of health insurance publications per year from 2004 to 2022 is presented in Figure 3. The highest increase occurred in 2022 with an increase of 222331. Meanwhile, the lowest increase occurred in 2004 with an increase of 28030.

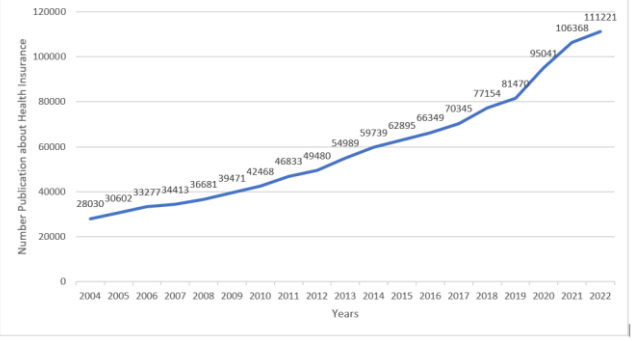

Figure 4. Number of health insurance publications from 2004 to 2022 (source:https://app.dimensions.ai/)

Cited articles

The number of health insurance quotes per year from 2010 to 2022 is presented in Figure 5. The highest increase occurred in 2022 with an increase of 3680333. Meanwhile, the lowest increase occurred in 2004 with an increase of 10120.

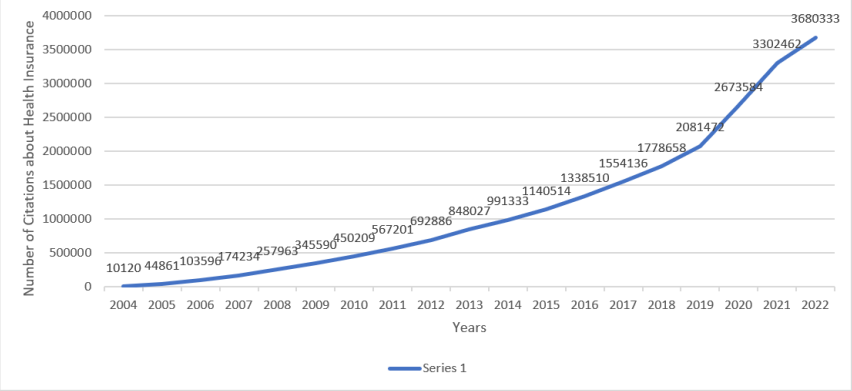

Figure 5. Number of citations for health insurance topics from 2004 to 2022 (source:https://app.dimensions.ai/)

Subject field

The subject area of the article is also analyzed based on its field of research related to the topic of health insurance so that it can be grouped. The number of publications in terms of the field of research is presented in Figure 6.

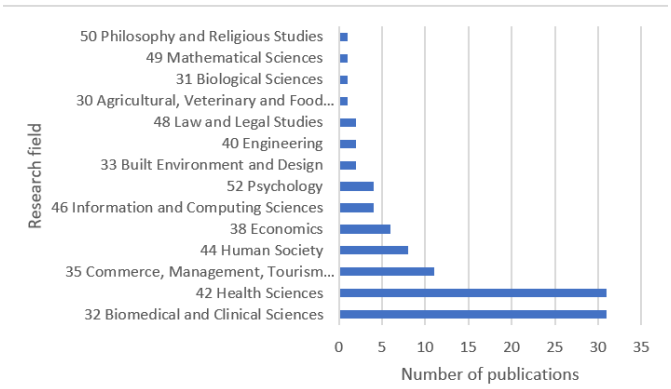

Figure 6. Number of publications in terms of research field (source: https://app.dimensions.ai/)

The most research fields related to the topic of health insurance are in the field of health sciences and biomedical and clinical sciences research, which is as many as 31 publications.

The network visualization of the term 9055 is presented in Figure 7.

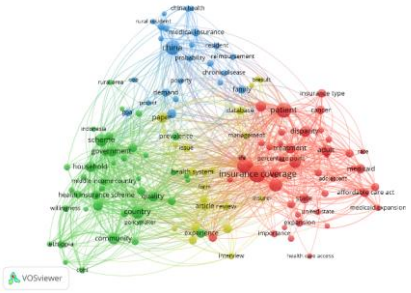

Figure 7. Network visualization (source: VOSviewer)

The selection of the number of terms is 9055. Two items connected by a line indicate that both items appear together in the title and abstract. Conversely, two items that are not connected by a line indicate that they do not appear together in the title and abstract. In Figure 7, there are 130 items, 4 clusters, 4976 links, and a link strength of 12583.

Keyword cluster analysis

The overlay visualization is presented in Figure 8

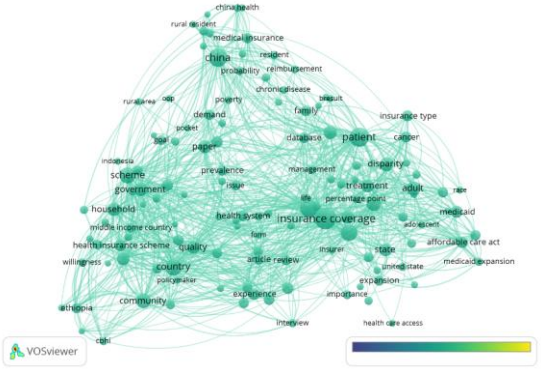

Figure 8. Overlay visualization (source: VOSviewer)

VOSviewer also provides overlay visualization maps. An overlay visualization of these 130 terms is presented in Figure 8.

The overlay visualization provides analysis based on health insurance keywords from 2004 to 2022 to observe trends in health insurance-related research titles. Based on the map overlay visualization in Figure 8, the yellow nodes imply that keywords are of current research interest. For example, current research trends in health insurance focus on women, households, and patients.

The density visualization of these 130 terms is presented in Figure 9.

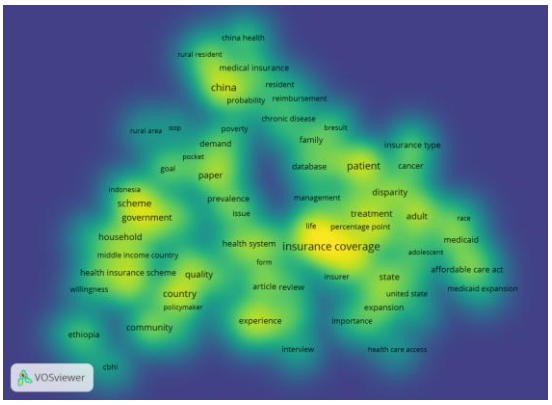

Figure 9. Visualization of health insurance keyword density (source: VOSviewer)

Figure 9 shows a density visualization with the number of items found in multiple items, including health insurance schemes, communities, and medications. Some items with yellow knots mean that they have been widely used as topics in previous journal publications. Thus, recommended research topics related to health insurance are topics that have visualization of density in low categories, such as counseling, types of health insurance, and medical costs.

Discussion

Figure 1 shows that the number of publications increases exponentially year over year (dotted line).The research shows that from 2010 to 2022, the smallest number of health insurance publications occurred in 2004 and was highest in 2022 with an average of 59306 (Figure 10). The number of publications fluctuates from year to year. Therefore, the need for research on health insurance for research that continues to be carried out so that from year to year the topic of health insurance is increasing.

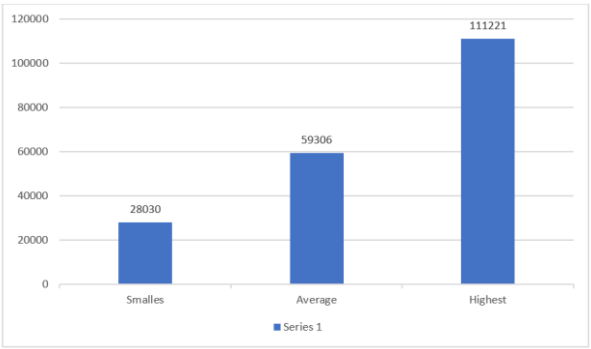

Figure 10. Histogram of increasing number of publications for the smallest, average, and highest health insurance topics.

The smallest increase in the number of health insurance citations occurred in 2010 and the highest in 2022 with an average of 1159773 (Figure 11). The number of citations is increasing exponentially year by year. The most cited article was titled 'Rheumatoid arthritis increases risk of deep vein thrombosis and pulmonary thromboembolism: a national cohort study' [(28)] 150 citations, followed by an article titled 'Association Between Parkinson's Disease and Inflammatory Bowel Disease' [(29)] 138 citations. Therefore, this article can be used as a reference in research that reviews health insurance.

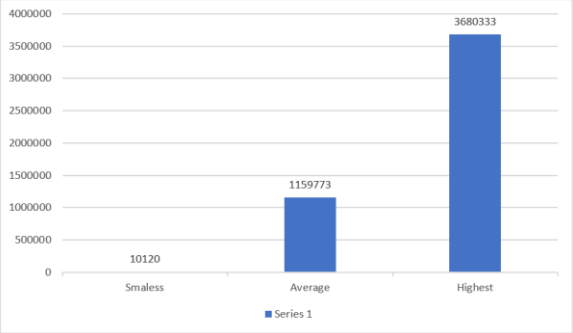

Figure 11. Histogram of the smallest, average, and largest increase in the number of citations for a health insurance topic.

Figure 6 shows that Biomedical and clinical sciences and Health Sciences ranked first by research area with 31 articles, followed by Trade, Management, Tourism and Services with 11 articles.

Network visualization can be used to enrich the assessment of bibliometric analysis. In particular, network visualization highlights the relative importance of research constituents, which is not always reflected through publications or citations. Network visualization is used to enrich the discussion of research areas in bibliometric studies [(30)]. In network visualization (Figure 7), two terms are connected by a line indicating that the two terms appear together in the title and abstract. Conversely, two terms that are not connected by a line indicate that the two terms do not appear together in the title and abstract. The research data shows that there are 130 terms, 4 clusters, 4976 links, and 12583 link strengths. Therefore, novelty for further research on the topic of health insurance can be obtained through research on terms that are not directly related, for example counseling, types of health insurance, and medical costs.

Figure 5 shows that out of 130 items, there are 4 clusters. Cluster 1 (44 items), cluster 2 (41 items), cluster 3 (24 items), cluster 4 (21 items) these clusters are presented in Table 1.

Table 1. Cluster for health insurance topics (Source: Vosviewer)

Group	Number of items	Cluster member items
1	44	aca, adolescent, adult, affordable care act, association, cancer, change, confidence interval, covid, diagnosis, disease, disparity, employer, enrolment, expansion, health care access, health insurance literacy, health insurance status, implication, importance, increase, insurance converage, insurance status, insurance type, January, life, Medicaid, Medicaid expansion, medicare, mortality, outcome, pandemic, patient, percentage point, previous study, private insurance, race, reduction, self, sex, state, treatment, united state, united states.
2	41	Aor, associated factor, cbhi, cbhi scheme, community, county, cross sectional study, education, Ethiopia, experience, financial protection, gender, government, health facility, health insurance policy, health insurance schem, health survey, healthcare service, household, Indonesia, marital status, member, middle income county, national health insurance, national health insurance scheme, nhi, nhis, Nigeria, odds ratio, policymaker, prevalence, quality, region, residence, respondent, rural area, scheme, social health insurance, uhc, universal health converage, willingness.
3	24	Basic medical insurance, catastrophic health expenditure, che, china, china health, chronic disease, comparison, demand, development, family, financial burden, goal, medical insurance, older adult, oop, pocket, poverty, probability, reimbursement, resident, retirement longitudinal, rural resident, society, urban resident.
4	21	Article, bconclusion, bmethod, bresult, database, form, framework, health system, insurer, interview, issue, lack, literature, management, order, paper, process, provider, provision, review, systematic review.

The overlay visualization (Figure 8) provides an analysis based on health insurance keywords from 2004 to 2022 to observe trends in linear regression-related research titles. Based on the visualization overlay map in Figure 8, the term yellow implies that keywords are of current research interest. Therefore, for trends health insurance research shows that for trends, keywords included include women, households, and patients.

Recently, participation in this topic has focused on health insurance the emergence of Universal Health Coverage (UHC) as a global policy as it embraces the progressive language of inclusion, solidarity, and social justice and advocates for everyone's right to universal health care for "all" those in need of "no financial hardship" (31). Patient safety and health development are the cornerstones of health insurance programs [(24)] In 2019, the UN General Assembly noted that at least half of the world's population did not have access to basic health services [(32)]. Health services are provided in the form of medicines and treatments [(17)]. National Social Health Insurance Program (JKSN) [(33)] Aimed at providing comprehensive health service benefits, ranging from preventive services such as immunization and family planning to

catastrophic disease services such as heart disease and kidney failure [24]. In JKN-BPJS Kesehatan Implementation Guidelines [34], in the subchapter of Obstetrics and Neonatal First Level Health Services, it is stated that this service is an effort to guarantee and protect the process of pregnancy, childbirth, postpartum, postpartum bleeding management and postpartum family planning services as well as complications related to pregnancy, childbirth, puerperium and postpartum [35].

The various sub-periods in which scholarly activity on this topic developed during 2004-2022 represent a rich set of key terms. In the title, abstract and keywords of the articles in the sample, VOSviewer has identified different keywords. This makes it possible to validate the breadth of the axis of study in research activities.Emerging global health challenges, in general, and conflict-imposed health care, climate change, and lack of economic growth are already impacting well-being and meeting development goals [36].

The density visualization (Figure 9) shows the visualization of the term density indicated by color. Blue indicates high density while yellow indicates low density. High density means that the topic has been widely used in previous studies while low density means that the topic is still little used in previous studies. Therefore, recommended research topics related to health insurance are topics that have low visualization density categories, such as counseling, types of health insurance, and medical costs. This topic has great opportunities for health insurance-related research. Because in previous studies there was still a lot of discussion about the scope of health insurance schemes, communities, and medicines in health care systems that are actively developing and accompanied by a significant increase in the amount of scientific literature [37,38]. Analysis of opportunities on research topics can provide some insight for researchers and educational practitioners to identify which research directions are important [39]. Through content analysis, it was found that researchers pay attention to these topics [40].

The scope of research is very broad and involves a lot of research content which causes the research to be unfocused. The research methods used can include qualitative, quantitative, and mixed research [41,42] .Issues related to health insurance are the focus of research in the development of health sciences [43]. The results of bibliometric analysis show that the field of study of health insurance is broad and interdisciplinary [44]. The current study differs from previous bibliometric analyses [45] and literature review [46].

This research helps readers understand the dynamics of trends in the development of research topics through research findings. It can also help researchers quickly identify priority research problems, help them find the most influential references and select the most influential or important researchers and institutions to collaborate with [47,48]. Through the analysis of the results, it will help researchers to find the contribution of major journals that direct and encourage the development of further research achievements in scientific research institutions [49,50].

Conclusion

The bibliometric analysis shows themes, trends, prolific authors, core journals, leading country rankings and collaborations, and health insurance research groups. The study provides a systematic review of health coverage over time. The results of research on health insurance trends include women, households, and patients. Health insurance-related topics that have opportunities in research are counseling, types of health insurance, and medical costs. Topics that have opportunities in the study can improve health services such as providing counseling to patients communicatively and effectively, explaining the types of health insurance that can be used to and helping the community in medical costs. The close relationship between the topic of health insurance and other topics, namely financial protection factors, health, medicaid programs, public health insurance, public health insurance, health insurance.

Therefore, bibliometric analysis of health insurance can be reviewed in the next few years. In addition, this bibliometric analysis only extracts scientific article data from app.dimension.ai database. Further research in order to add another database for a broader and more comprehensive understanding of health insurance.

Conflict of interest

Competing interests: No relevant disclosures

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Author's contributions

The author is solely responsible for the conception and design of the research project, collecting data and writing the manuscript.

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Data availability statement

The data used in this research was accessed via https://scholar.google.com/, https://app.dimensions.ai/, https://trends.google.co.id/, and VOSvierwer.

Declaration of us of AI in scientific writing

None

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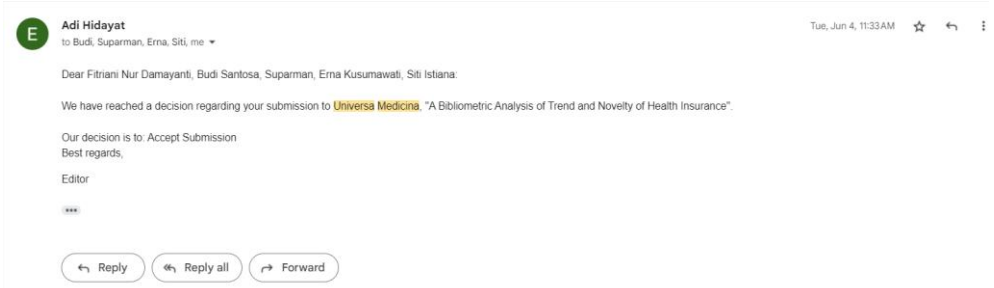

Adi Hidayat
to Budi, Suparman, Erna, Siti, me

Tue, Jun 4, 11:33 AM

Dear Fitriani Nur Damayanti, Budi Santosa, Suparman, Erna Kusumawati, Siti Istiana:

We have reached a decision regarding your submission to Universa Medicina, "A Bibliometric Analysis of Trend and Novelty of Health Insurance".

Our decision is to: Accept Submission
Best regards,

Editor

Reply | Reply all | Forward

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REVIEW ARTICLE

Health insurance trends from 2004 to 2022: a bibliometric analysis

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ABSTRACT

The goal of health systems implemented at international, national, or regional level is to improve health effectively and efficiently by all available means, including community efforts, special education, military, and government, thereby improving public health at all levels. Health issues as national issues need top priority. Inequalities in mortality risk are inseparable from issues surrounding the health policy debate. Public health level is assessed through several indicators. Health Policy in law regulates the right to health. Proposed health system goals at international, national, or regional levels are usually not measured by human rights standards and instruments. Universal Health Insurance is expected to provide benefits. Health services are provided as medicines and treatments. This review aimed to determine trends in number of publications and visualize linkages of health insurance topics through bibliometric analysis. This was a systematic review with steps following Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram using 661 scientific articles published between 2004 and 2022, followed by inclusion and exclusion criteria from Dimensions database. Review of articles was by means of Vosviewer app. Our study results contributed to research roadmap development on health insurance. The limitation is that app.dimension.ai and google scholar databases are periodically updated, such that bibliometric analysis of health insurance should be repeated in the near future. Because this bibliometric analysis only extracted scientific article data from app.dimension.ai database, further research should add another database for broader and more comprehensive understanding of health insurance.

Keywords: Bibliometric analysis, health insurance, recency, trends

INTRODUCTION

The goal of health systems implemented at the international, national, or regional level is to improve health effectively and efficiently through all available means, including the efforts of the community or general public, special education, military, and government, so as to improve the degree of public health at all levels. Health issues are national issues that need top priority.[1] The inequality of mortality risk cannot be separated from the issues surrounding the health policy debate.[2] The level of public health is assessed through several indicators. [3] Health Policy in law regulates the right to health.[4]

Rights are everything that has been inherent in man, which has been possessed since man was born into the world and is absolute or inviolable by others, and cannot be separated from its essence so that its essence remains sacred.[5] Health is one of the basic human needs, therefore health is a right for every citizen that is protected by law.[6] Every country recognizes that health is the greatest capital to achieve prosperity. The role of the state in meeting the basic needs of the people is urgently needed, especially in the form of comprehensive health services.[7]

Universal health insurance is expected to provide benefits. Meanwhile, to accelerate the achievement of the Millennium Development Goals (MDGs) in 2015, especially to reduce maternal and infant mortality, the Indonesian Ministry of Health launched the Maternity Insurance program. In reducing maternal and infant mortality rates, cooperation from all sectors is needed.[8]

The National Health Service, which offers universal access to health care, is facing increasing pressure. The National Health Service is regionally based, with local authorities responsible for the organization and delivery of health services. [9] Health services are provided in the form of medicines and treatments. [10] Health care providers must contribute to the provision of health services. [11] Health workers, medical and non-medical, are responsible for optimal services.[12]

Medical personnel, in this case doctors, have responsibility for the applied treatment.[13] Treatment measures and determination of needs in the treatment process are the authority of the doctor.[14] The development of patient safety and health is an absolute foundation for doctors in carrying out their professional practice.[15] A doctor must make every possible effort to treat his patients. [16] To create legal protection for patients, parties must understand the rights and obligations attached to them, including healthcare providers, so that they are responsible for the professional service provided to healthcare recipients.[17] Midwives as health workers must thoroughly understand midwifery practices. [18] Health workers, especially midwives, are a major factor in maternity insurance services.[19] Midwives, especially those with many tasks and an essential role in childbirth insurance services, have problems with limitations, so there must be a balance between patients receiving childbirth insurance and health workers who provide maternity insurance services.[20]

Financial protection is one of the important dimensions of Universal Health Coverage (UHC) in low- and middle-income countries (LMICs).[21,22] Government-sponsored health insurance is increasingly promoted as a means of protection against catastrophic costs and financial hardship due to health costs, to achieve UHC.[23]

Currently, the Social Security Organizing Agency *[Badan Penyelenggara Jaminan Sosial* (BPJS) *Kesehatan]* as a service facility in fulfilling human rights in the health sector has again become the target of criticism from various circles of society, especially regarding the occurrence of various frauds in health services provided under the National Health Insurance program implemented by the Social Security Organizing Agency at level 1 health facilities and advanced health facilities.[24]

National health insurance is part of the national social security system which is organized using a mandatory social health security mechanism based on its purpose, namely to meet the basic needs of decent public health provided to everyone who has paid contributions or whose contributions are paid by the Government.[13] This shows that national health insurance is an important and useful topic.

Over time, interest in the topic of health insurance around the world has declined. The data on the interest in the topic can be searched through Google Trends by typing in the keyword: "health insurance". For this study, the search was conducted from January 2004 to December 2022 by selecting a web search and all categories that yielded the data presented in Figure 1. These data were taken on June 3, 2023.

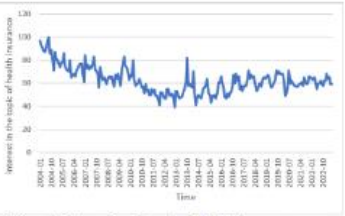

Figure 1. Interest in the topic of health insurance

In addition to time [year of publication], interest in health insurance topics can be viewed by country of publication (Figure 2).

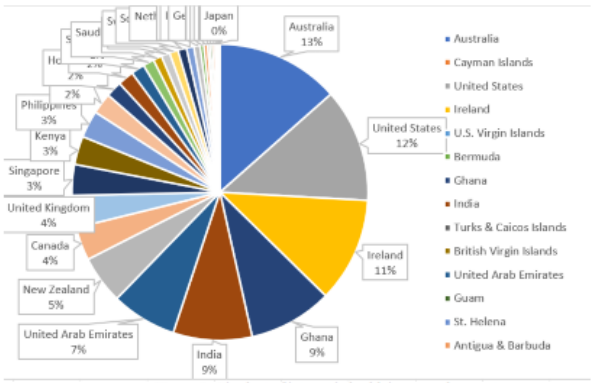

Figure 2. Pie chart of interest in health insurance by country
Data Source: Google Trends

This review aimed to determine the publication trends in health insurance topics, number of citations, research fields on health insurance topics, journals published, authors, relationships between topics, topic grouping, future research topic directions, rare health insurance topics, relationships between authors, research groups, network visualization, overlay visualization, and density visualization related to health insurance topics through bibliometric analysis. Therefore, bibliometric analysis will provide a comprehensive system for investigating articles on topics of interest.

METHODS

Bibliometric analysis is used to analyze the data collected on a selected subject. The data used in the study were based on online searches through https://app.dimensions.ai/ and were taken on June 2, 2023. The research method uses a systematic review with stages following the flowchart of Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).[25] The phases in PRISMA include identification, screening, and articles included, as shown in Figure 3. Phase 1 (Identification) detected 661 records from dimensions.ai by writing down health insurance keywords that appeared in titles and abstracts ranging from 2010 to 2022, taking into account, for each primary health insurance search term, "article document types and processes" and "all published data in the data range from 2010 to 2022". In phase 2 (filtering), the option "article title, abstract" was selected in the field of each search term, so that 60 records were excluded. In phase 3 (articles included), the final sample produced 601 accessible articles.

Software and data cleaning

The collected articles were analyzed using VOSviewer. The information obtained in the first phase was exported to an Excel spreadsheet for analysis and organization. VOSviewer is a computer program for creating and viewing bibliometric maps.[26] To create a map, for "type of data" was selected "create a map based on text data". In this study, the analysis was reviewed from concurrent events.

The procedure for joint event analysis [27] was as follows. For "data source" was selected "read data from references manager files". For "choose fields" was selected "fields from which terms will be extracted are title and abstract fields". For "counting method" was selected "full count". For "threshold" was selected "minimum number of occurrences of a term is 10". For "choose number of terms" was selected 135.

RESULTS

Time distribution

A search from 2002 to 2022 yielded 661 scientific article publications. The number of health insurance publications per year from 2004 to 2022 is presented in Figure 4. The highest increase of 111221 occurred in 2022. Meanwhile, the lowest increase occurred in 2004 with an increase of 28030.

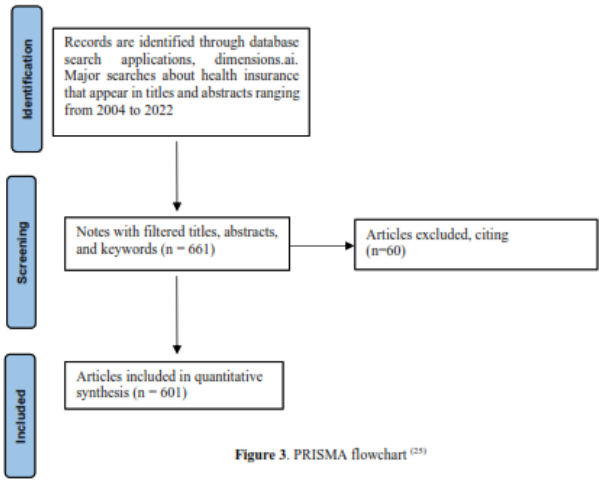

Figure 3. PRISMA flowchart [25]

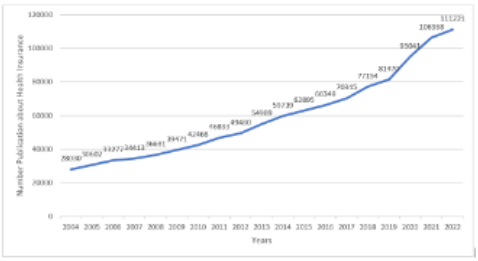

Figure 4. Number of health insurance publications from 2004 to 2022 (source:https://app.dimensions.ai/)

Cited articles

The number of health insurance quotes per year from 2010 to 2022 is presented in Figure 5. The highest increase occurred in 2022 with an increase of 3680333. Meanwhile, the lowest increase occurred in 2004 with an increase of 10120.

Subject field

The subject area of the article is also analyzed based on its field of research related to the topic of health insurance so that it can be grouped. The number of publications in terms of the field of research is presented in Figure 6.

The most numerous research fields related to the topic of health insurance are the fields of health sciences and biomedical and clinical sciences research, with 31 publications.

The selected number of terms was 9055. Two items connected by a line indicate that both items appear together in the title and abstract. Conversely, two items that are not connected by a line indicate that they do not appear together in the title and abstract. In Figure 7, there are 130 items, 4 clusters, 4976 links, and a link strength of 12583.

The network visualization of 9055 terms is presented in Figure 7.

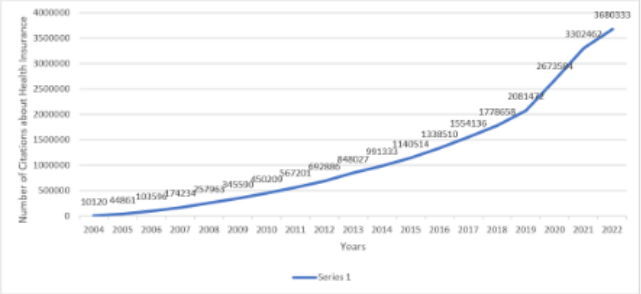

Figure 5. Number of citations for health insurance topics from 2004 to 2022 (source:https://app.dimensions.ai/)

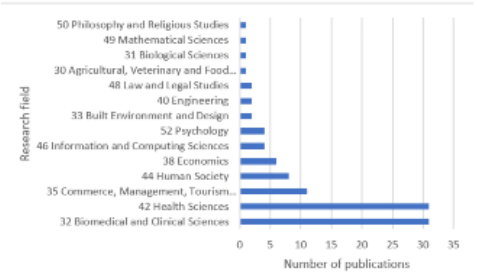

Figure 6. Number of publications in terms of research field (source: https://app.dimensions.ai/)

Keyword cluster analysis

VOSviewer also provides overlay visualization maps. An overlay visualization of these 130 terms is presented in Figure 8.

The overlay visualization provides analysis based on health insurance keywords from 2004 to 2022 to observe trends in health insurance-related research titles. On the overlay visualization map in Figure 8, the yellow nodes imply that keywords are of current research interest. For example, current research trends in health insurance focus on women, households, and patients.

The density visualization of these 130 terms is presented in Figure 9. Figure 9 shows a density visualization with the number of items found in multiple items, including health insurance schemes, communities, and medications. Some items with yellow knots signify that they have been widely used as topics in previous journal publications. Thus, the recommended research topics related to health insurance are the topics that have visualization of density in low categories, such as counseling, types of health insurance, and medical costs.

DISCUSSION

Figure 1 shows that the number of publications increases exponentially year over year. The research shows that from 2010 to 2022, the smallest number of health insurance publications occurred in 2004 and was highest in 2022 with an average of 111221 (Figure 10). The number of publications fluctuates from year to year. Therefore, there is a need for research on health insurance that continues to be carried out so that from year to year the number of articles on the topic of health insurance is increasing.

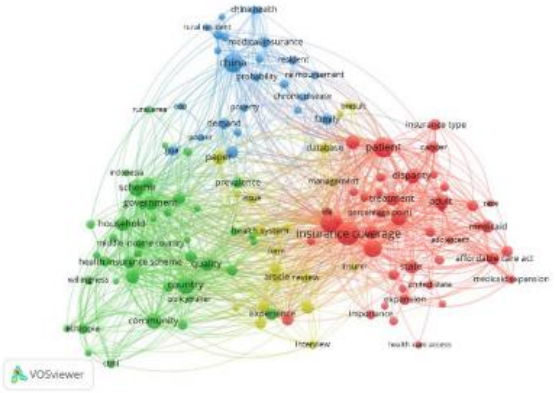

Figure 7. Network visualization (source: VOSviewer)

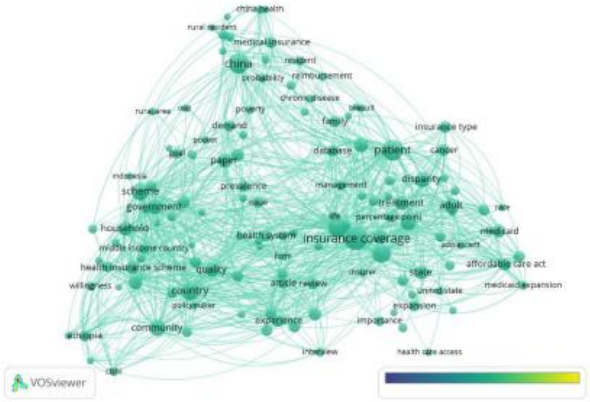

Figure 8. Overlay visualization (source: VOSviewer)

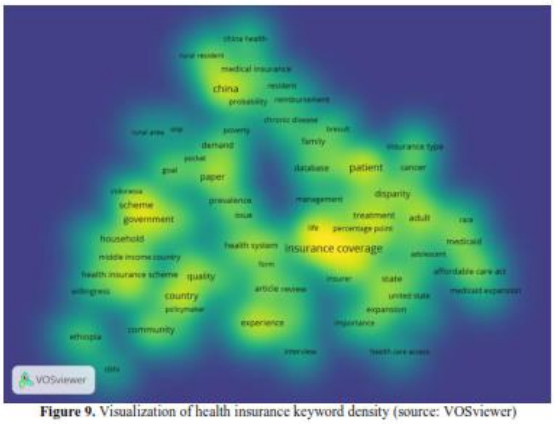

Figure 9. Visualization of health insurance keyword density (source: VOSviewer)

The smallest increase in the number of health insurance citations occurred in 2010 and the highest in 2022 with an average of 1159773 (Figure 11). The number of citations is increasing exponentially year by year. The most cited article was titled 'Rheumatoid arthritis increases risk of deep vein thrombosis and pulmonary thromboembolism: a national cohort study' [28] with 150 citations, followed by an article titled 'Association between Parkinson's disease and inflammatory bowel disease' [29] with 138 citations. Therefore, these articles can be used as a reference in research that reviews health insurance.

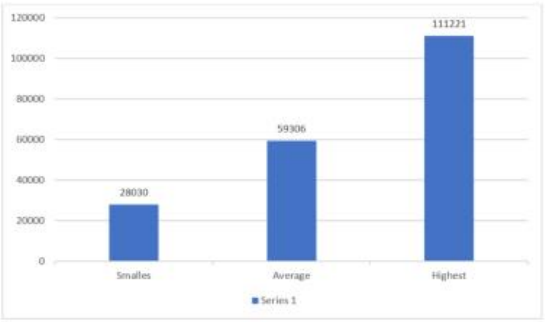

Figure 10. Bar diagram of increasing number of publications for the smallest, average, and highest number of health insurance topics

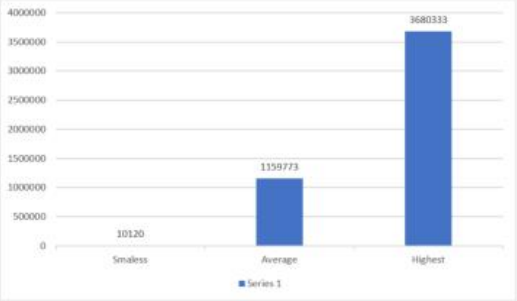

Figure 11. Bar diagram of the smallest, average, and largest increase in the number of citations for a health insurance topic

Table 1. Clusters for health insurance topics (Source: Vosviewer)

Group	Number of items	Cluster member items
1	44	aca, adolescent, adult, affordable care act, association, cancer, change, confidence interval, covid, diagnosis, disease, disparity, employer, enrolment, expansion, health care access, health insurance literacy, health insurance status, implication, importance, increase, insurance coverage, insurance status, insurance type, January, life, Medicaid, Medicaid expansion, medicare, mortality, outcome, pandemic, patient, percentage point, previous study, private insurance, race, reduction, self, sex, state, treatment, united state, united states.
2	41	Aor, associated factor, cbhi, cbhi scheme, community, county, cross sectional study, education, Ethiopia, experience, financial protection, gender, government, health facility, health insurance policy, health insurance schem, health survey, healthcare service, household, Indonesia, marital status, member, middle income country, national health insurance, national health insurance scheme, nhi, nhis, Nigeria, odds ratio, policymaker, prevalence, quality, region, residence, respondent, rural area, scheme, social health insurance, uhc, universal health coverage, willingness.
3	24	Basic medical insurance, catastrophic health expenditure, che, china, china health, chronic disease, comparison, demand, development, family, financial burden, goal, medical insurance, older adult, oop, pocket, poverty, probability, reimbursement, resident, retirement longitudinal, rural resident, society, urban resident.
4	21	Article, bconclusion, bmethod, bresult, database, form, framework, health system, insurer, interview, issue, lack, literature, management, order, paper, process, provider, provision, review, systematic review.

Figure 6 shows that the fields of "biomedical and clinical sciences" and "health sciences" ranked first by research area, both with 31 articles, followed by the field of "commerce, management, tourism, and services" with 11 articles.

Network visualization can be used to enrich the assessment of bibliometric analysis. In particular, it highlights the relative importance of research constituents, which is not always reflected through publications or citations. Network visualization is used to enrich the discussion of research areas in bibliometric studies.[30] In network visualization (Figure 7), two terms that are connected by a line indicate that these terms appear together in the title and abstract. Conversely, two terms that are not connected by a line indicate that they do not appear together in the title and abstract. The research data shows that there are 130 terms, 4 clusters, 4976 links, and 12583 link

strengths. Therefore, novelty for further research on the topic of health insurance can be obtained through research on terms that are not directly related, for example counseling, types of health insurance, and medical costs.

Figure 5 shows that out of 130 items, there are 4 clusters. Cluster 1 (44 items), cluster 2 (41 items), cluster 3 (24 items), and cluster 4 (21 items) are presented in Table 1.

The overlay visualization (Figure 8) provides an analysis based on health insurance keywords from 2004 to 2022 to observe trends in linear regression-related research titles. Based on the visualization overlay map in Figure 8, the yellow-colored terms imply that the keywords are of current research interest. Therefore, trends of health insurance research show that for trends, keywords include women, households, and patients.

Recently, participation in this topic has focused on the emergence of Universal Health Coverage (UHC) as a new global health direction as it embraces the progressive language terms of inclusion, solidarity, and social justice and advocates for everyone's right to universal health care without financial hardship.[31] Patient safety and health development are the cornerstones of health insurance programs.[24] In 2019, the UN General Assembly noted that at least half of the world's population did not have access to basic health services. [32] Health services are provided in the form of medicines and treatments.[17] The National Social Health Insurance Program (JKSN) [33] aims at providing comprehensive health service benefits, ranging from preventive services such as immunization and family planning to catastrophic disease services such as heart disease and kidney failure.[24] In JKN-BPJS Kesehatan Implementation Guidelines,[34] in the subchapter of Obstetrics and Neonatal First Level Health Services, it is stated that this service is an effort to guarantee and protect the processes or stages of pregnancy, childbirth, postpartum period, postpartum bleeding management, and postpartum family planning services as well as complications related to pregnancy, childbirth, puerperium, and postpartum.[35]

The various sub-periods in which scholarly activity on this topic developed during 2004-2022 represent a rich set of key terms. In the title, abstract and keywords of the articles in the sample, VOSviewer has identified different keywords. This makes it possible to validate the breadth of the axis of study in research activities. Emerging global health challenges, in general, and conflict-imposed health care, climate change, and lack of economic growth are already impacting well-being and meeting development goals.[36]

The keyword density visualization map (Figure 9) shows the visualization of the term density indicated by color. Blue indicates high density while yellow indicates low density. High density means that the topic has been widely used in previous studies while low density means that the topic was little used in previous studies. Therefore, the recommended research topics related to health insurance are the topics that have low visualization density categories, such as counseling, types of health insurance, and medical costs. These topics offer great opportunities for health insurance-related research, because in previous studies there was still a lot of discussion about the scope of health insurance schemes, communities, and medicines in health care systems that are actively developing and accompanied by a significant increase in the amount of scientific literature.[37,38] Analysis of opportunities for research topics can provide some insight for researchers and educational practitioners to identify which research directions are important.[39] Through content analysis, it was found that researchers pay attention to these topics.[40]

The scope of research is very broad and involves a large amount of research content which causes the research to be unfocused. The research methods used can include qualitative, quantitative, and mixed research. [41,42] Issues related to health insurance are the focus of research in the development of health sciences. [43] The results of bibliometric analysis show that the field of study of health insurance is broad and interdisciplinary.[44] The current study differs from a previous bibliometric analysis [45] and literature review.[46]

This research helps readers to understand the dynamics of trends in the development of research topics through research findings. It can also help researchers to quickly identify priority research problems, find the most influential references, and select the most influential or important researchers and institutions to collaborate with. [47,48] Analysis of the results will help researchers find the contribution of major journals that direct and encourage the development of further research achievements in scientific research institutions. [49, 50]

CONCLUSION

The bibliometric analysis shows themes, trends, prolific authors, core journals, leading country rankings and collaborations, and health insurance research groups. This review provides a systematic review of health coverage over time. The results of research on health insurance trends include women, households, and patients. Health insurance-related topics that have opportunities in research are counseling, types of health insurance, and medical costs. Topics that have opportunities in the study can improve health services such as providing counseling to patients communicatively and effectively, explaining the types of health insurance that can be used to help the community with medical expenditures. There is a close relationship between the topic of health insurance and other topics, namely financial protection factors, health, medicaid programs, public health insurance, and personal health insurance.

Therefore, bibliometric analysis of health insurance can be reviewed again in the next few years. In addition, this bibliometric analysis only extracts scientific article data from the app.dimension.ai database. Further research should add another database for a broader and more comprehensive understanding of health insurance.

Conflict of Interest

Competing interests: No relevant disclosures.

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Author Contributions

All authors are responsible for the conception and design of the research project, data collection, and writing of the manuscript. All authors have read and approved the final manuscript.

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Data Availability Statement

The data used in this research was accessed via https://scholar.google.com/, https://app.dimensions.ai/, https://trends.google.co.id/, and VOSviewer.

Declaration of Use of AI in Scientific Writing

None.

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