

## BIBLIOMETRIC ANALYSIS OF ISLAM AND COVID-19 RESEARCH: WHAT WE HAVE LEARNT?

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**Abstract:** *Islam and Covid-19 research are the main topics of this study. This bibliometric study analysed research papers published in Scopus related to the topic of Islam and Covid-19. Scopus database was chosen and publication data was extracted in February 2021. Research in this topic is relatively new judging from the retrieved research paper collected in the data collection process. From the retrieved result of 56 paper, VOSviewer software was used to visualize the co-occurrence of key words in the data collection. Significance issues such as Hajj, Umrah, Ramadan fasting and how the Turkish government handles the issue of religious community such as mass congregation in Friday Jumaah and so on. This paper concludes that current researches are concerned on issues of travelling to Kingdom of Saudi Arabia. Ramadan fasting is also an issue with the emergence issue of vaccines.*

**Keywords:** *Islam, Covid-19 pandemic, bibliometric analysis*

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### Introduction

The global pandemic has affected how people live their life and even more so how the Muslim performs their religious' obligations. Scientific community has thus far made hundreds of studies on the phenomena and solution to overcome the Covid-19 pandemic. This study is a bibliometric analysis of the scientific production of Islam and Covid-19 research. Aiming to synthesize these publications, researchers are resorting to bibliometric analyses from the perspectives of the disciplines such as biology, medicine, socioeconomics, tourism, and more recently environmental studies with emphasis on bibliometric output done by Casado-Aranda, Sánchez-Fernández and Viedma-del-Jesús (2021), Meng, Bai, & Wang, (2022), Guo, Li, Guo,

Li, & Yang, (2021), Zhang, Fang, Chen, & Congshan, (2019), and and Ashfaq, Da'na, & Al-Ghouti, (2022).

The sheer volume of readily available information can prevent users from focusing on the most relevant and interesting papers. Consequently, there have been research methods into finding means of identifying relevant and specifically pertinent documents. These solutions make use of different data sources such as content, metadata, collaborations, and citations to find relevant papers, (Shahid et al., 2020). To understand such vast amount of information and knowledge, this study applied a bibliometric study on scientific production from Scopus database.

The basic assumption from such bibliometric study is that new knowledge and information will be useful in understanding and optimistically discover new solutions to the global pandemic. In general, Islam has always been way ahead in the achievement of knowledge scientifically, spiritually, and many other fields.

### **Methodology**

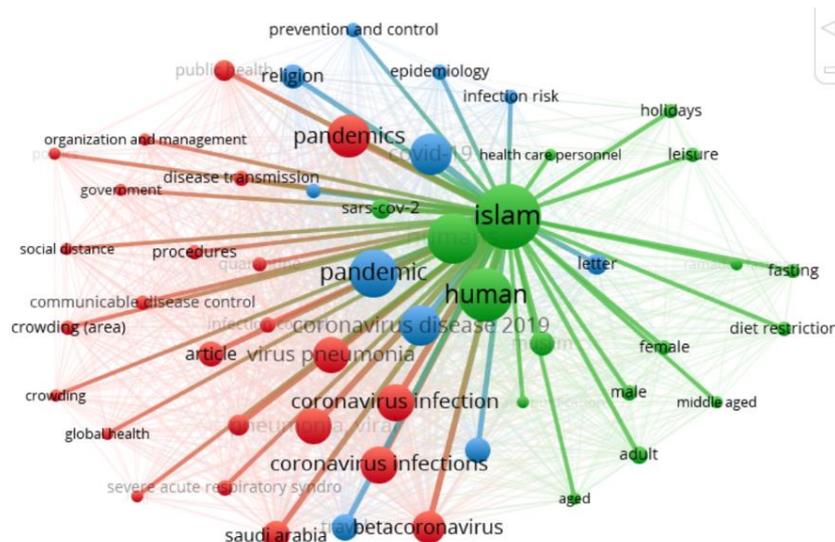
This study draws significant topics and key terms from retrieval result from Scopus database. Scopus is an indexing and citation database, curated by independent subject matter experts. It provides powerful discovery and bibliometric analytics tools in the hands of researchers, librarians, institutional research managers, and funders. Scopus generates updated researcher profiles, creating richer connections between people, published ideas, and institutions. In addition to protecting the integrity of the scholarly record, Scopus helps bolster institutional research performance, rank, and reputation commonly recognized in journal impact factor, authors' h-index and other metrics, (Elsevier B.V., 2019). Scopus was chosen because of its eminent status among scientists, researchers and academicians. The search strategy aiming at extracting any type of documents (articles, conference, review, etc.) was performed in Scopus beginning with general search (keyword: Islam) which returned 32,711 results. First refinement was conducted to specify documents that are related to Covid-19 research, (keyword: Covid-19) which returned 98 documents. Second refinement was made to specify only documents that mentioned Islam in the paper which returned 56 documents. The search code used was as follows, ( TITLE-ABS-KEY ( islam ) ) AND ( Covid-19 ) AND ( LIMIT-TO ( EXACTKEYWORD , "Islam" ) ). Data retrieval was made on 13<sup>th</sup> February 2021 consisting of 30 articles, 13 letters, 7 reviews, 3 editorials, and 3 notes.

Data was exported for analysis in the Vosviewer software for data visualization and GEPHI for data network link distribution. Data visualization in Vosviewer focused on visualizing co-occurrence of important key terms from the data collection while GEPHI file format can rank the network link and total link strength from each individual key terms. In the data analysis, there are two standard weight attributes, referred to as the Links attribute and the Total link strength attribute. For a given item, the Links and Total link strength attributes indicate, respectively, the number of links of an item with other items and the total strength of the links of an item with other items, (Van Eck & Waltman, 2020).

### **Result**

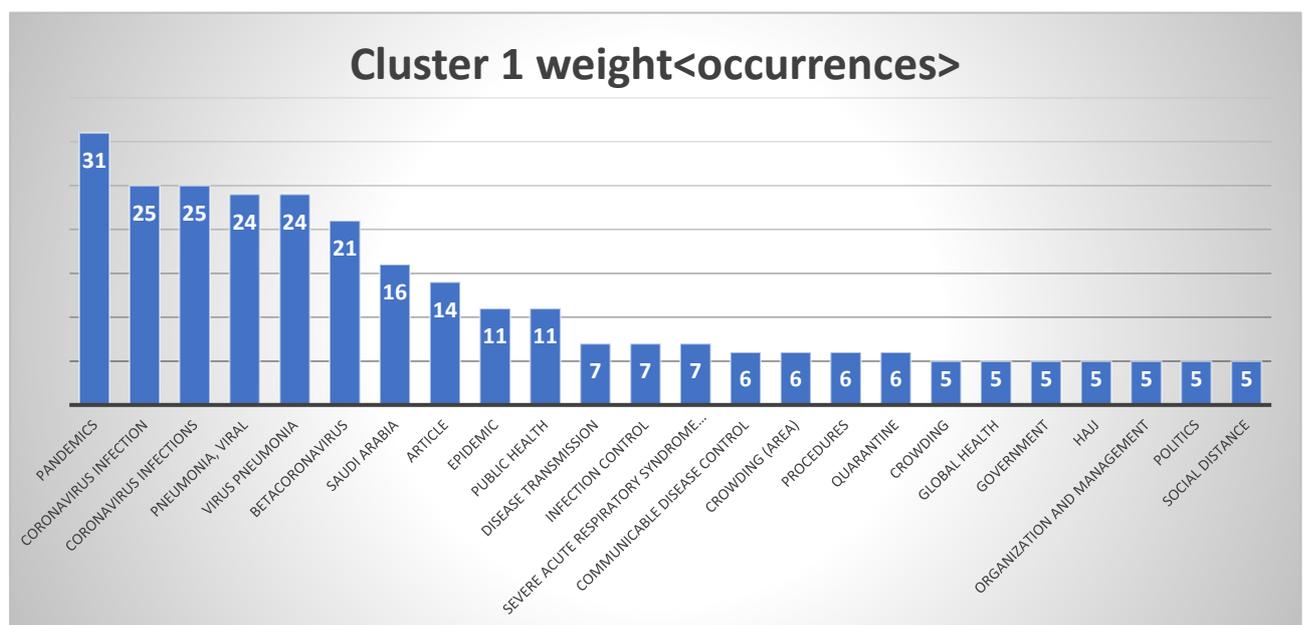
Data retrieval from Scopus database has returned 56 documents ranging from 2020 and 2021. Understandably, the publication year is recent since the virus breakout first occurred in late 2019. Documents filtered by country is dominated by Saudi Arabia (18), United States (9), Pakistan (7), United Kingdom (6), Iran (5), France (4), Egypt (3), India (3), Indonesia (3), and Mali (3). Documents filtered by affiliation is also dominated by Ministry of Health Saudi

Arabia (9), Emory University, USA (6), Rollins School of Public Health (6), Alfaisal University (6), AP-HM Assistance Publique - Hôpitaux de Marseille (4), IRD Institut de Recherche pour le Développement (4), King Saud Hospital Riyadh (4), Aix Marseille Université (4), IHU-Méditerranée Infection (3), and King Saud University (3). Co-occurrence analysis was also performed in which Vosviewer software to analyse the frequency of key terms in the data collection. The analysis of frequency was divided into logical clusters as follows:

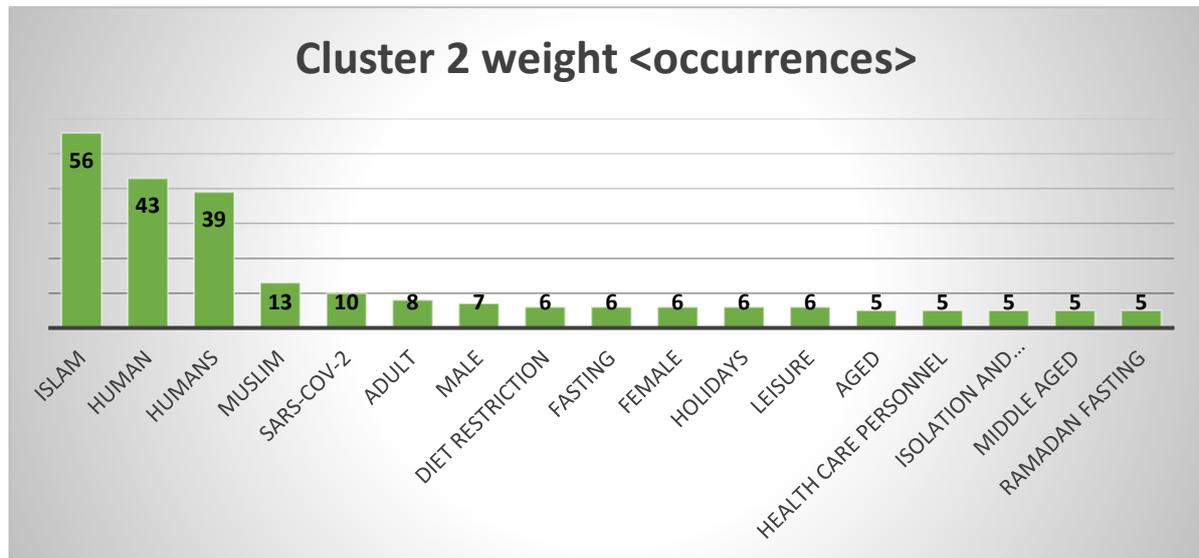


**Figure 1: Co-occurrence of Islam and Covid-19 Research in Scopus**

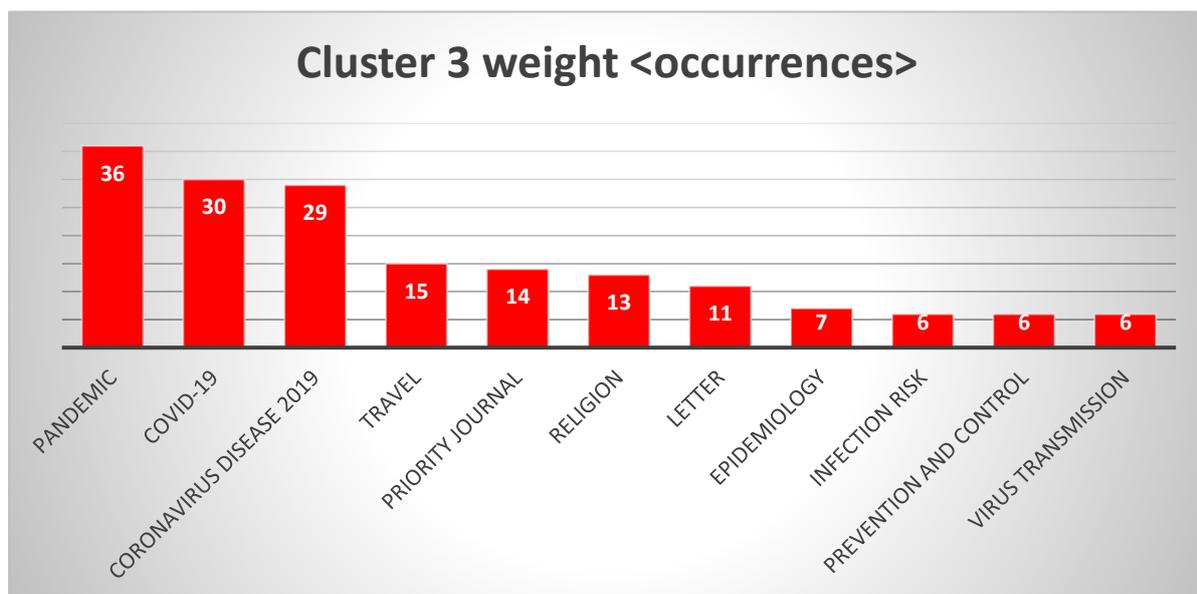
In the micro-analysis of the co-occurrence, three major clusters were identified. Cluster 1 in blue are generally about research on the global pandemics with relation to Islamic pilgrimage at the tail end of the frequency. Cluster 2 in green is the core cluster in the network which, as depicted in Figure 1, centralized in Islam key terms. Significant key terms in this cluster are dieting and fasting, Ramadan, isolation, and purification. Cluster 3 in red centred on pandemic key terms that are related to issues of travellers.



**Chart 1: Cluster 1 - Covid-19 and Hajj**

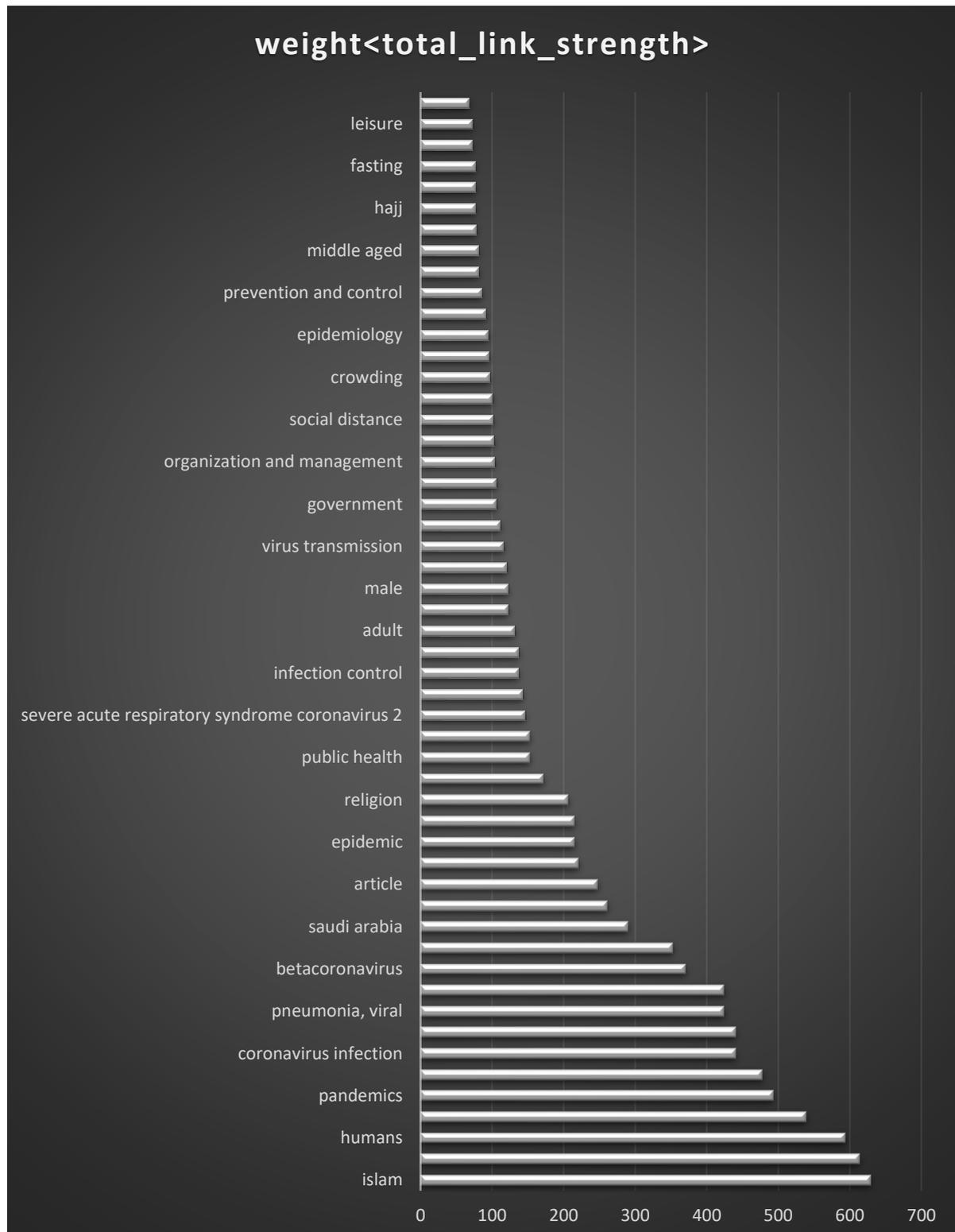


**Chart 2: Cluster 2: Ramadan fasting, Isolation and Purification**



**Chart 3: Cluster 3 - Travel during pandemic**

In terms of network total link strength, as can be seen in Figure 1, Islam is the central topic of all the key terms in the data collection. Weight of total link strength is in Chart 4. Travelling, Hajj, isolation and purification are at the mid strength of the total link and the weaker links are diet restriction and Ramadan fasting. It is important to note that issue of public health is at the mid to the highest total link strength which can be assumed that Islam prioritizes public health amid religious duties such as travelling and pilgrimage to Saudi Arabia in performing the fifth Islamic pillars, the Hajj rituals. The results shown in the data visualization and network total link strength warrant further reading into the specific literatures in the data collection. Nevertheless, Vosviewer and GEPHI captures of bibliometric data may and may not be sufficient to truly appreciate what have been learnt. Thus, manual reading and analysis is needed in the discussion section.



**Chart 4: Cluster 3 - Total weight of total link strength**

## Discussions and Findings

Closer examination of documents retrieved revealed that Saudi Arabia, travel and Hajj are among the highly reported key terms in Islam and Covid-19 research. Adly et al. (2020) and Tobaiqy et al. (2021) studied the preventive measures undertaken by the Kingdom of Saudi Arabia to stop the spread of Covid-19 virus among incoming and outbound pilgrimage. Ebrahim and Memish's (2020) article on the virus superspreader potential dangers among Umrah pilgrims is the most highly-cited paper published in the prestigious journal, the Lancet. Yezli and Khan (2020) discussed the possible bold measures such as intermittent social distancing, informed by trends in disease surveillance data may be an option, where interventions could be relaxed temporarily for short periods and reinforced if the number of cases starts to rise.

Turkish's responses on how the Islamic practice is performed during Covid-19 is reported in several papers. Dursun, Ulu-Kilic, Alabay, Benli, & Çelik (2020) stated that the first confirmed Covid-19 case reported from Turkey was on March 11, 2020, after a man returned to Turkey from Europe. The following day, Turkish citizens who are abroad were evacuated back to the country and quarantined as a part of national infection control measures. During early Covid-19 emergence, religious authorities worldwide have taken measures to suspend rituals which could jeopardize public health. However, Turkish authorities delay to suspend gathering for ritual practices came after March 13, when millions of men gathered in the mass congregation for Friday prayer, (Alyanak, 2020). Akbulut and Ekin (2020) reported the Turkish authorities' precautions in relation to Hajj and Umrah in protecting pilgrims against Covid-19 and one of the measures taken is thermal camera checks for international arrivals including arrivals from Kingdom of Saudi Arabia. The list of returning Umrah pilgrimages have to be reported to Ministry of Health. Other than that, flyers and brochures summarising what to do against Covid-19 were also distributed to the pilgrims in Kingdom of Saudi Arabia. In addition, disinfectant liquids were delivered to the hotels where Umrah pilgrims were staying in Kingdom of Saudi Arabia and Umrah departures from Turkey were prohibited as well as assigning health personnel to the Umrah returning flights. Apart from that, a 14-day period of quarantine was implemented for pilgrims returning from Umrah pilgrimage. A flight ban was applied to Kingdom of Saudi Arabia where refund options were given to pilgrims.

## Conclusion

In response to the discussion, it can be concluded that Covid-19 pandemic has greatly affected the whole world. Clinical research as well as research publication are growing fast in line with the superfast spreading of the pandemic. It covers a vast array of field including Islamic studies. This can be transparently seen in the number of Scopus publication where 56 documents were retrieved through the bibliometric study only starting the year 2020 until 2021. Studies done related to Covid-19 namely Hajj-Umrah, Ramadhan fasting, and pilgrims are among the debatable issues emerged. This pandemic has brought about new norm that affected communication, work operation, education, way of connecting with people and so on.

However, the spread of virus is not a new topic in Islam as it had occurred in the time of Prophet Muhammad (PBUH) and had been discussed thoroughly in the Al-Quran and As Sunnah. Nevertheless, the impact and wisdom of this pandemic have proven a weighty amount of the truth of Islamic teaching. Plenty of aspects can be learnt and that it brings about huge number of positive impacts from the aspects of health, social, education, administration, economic, business, self-discipline as well as religious duties. In recent updates, vaccine is actively distributed around the globe in the effort to protect human beings from this fatal virus.

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