THE ROLE OF SOCIAL MEDIA AS SOCIAL SUPPORT FOR POSTPARTUM DEPRESSION: USING VOSVIEWER MAP FOR BIBLIOGRAPHIC REVIEW ANALYSIS

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ABSTRACT

Background: Postpartum period is a time of physiological changes for recovery from pregnancy, and also a psychological transition in which women gain competence and confidence in their role as mothers. The most significant factor on the development of maternal competence is social support. Today's widely accepted sources of social support are various social media platforms. To overcome this gap, this research uses VOSviewer to analyze text data from publications or reports related to the role of social media. Methods: This research was conducted by making maps based on text data. The first step, the researcher uses publish or perish to search using Google Scholar journal data related to social media as social support for postpartum depression from 2018 to 2022. The second step uses VOSviewer to create maps based on text data from reference managers with field titles and binary calculations as methods. For the third step, the researcher chose a threshold with a minimum number of occurrences of 3 terms, and the researcher found 1996 terms, 56 meet the threshold. From 56 meet of the threshold, 34 number terms are selected. Results and Discussion: On July 13, 2023, there were 86 articles analyzed and the researchers found 4 clusters, cluster 1 had 11 items, cluster 2 had 10 items, cluster 3 had 9 items adn cluster 4 had 4 items. From the 3 clusters, three visualizations were obtained consisting of network, overlay and density visualization. Conclusion: Results mapping based on keywords social media as social support for postpartum mother. Most of the research on trial has been done. The data map of the network visualization social media as social support for postpartum depression is a review.

Keywords: Bibliometric, social media, social support, postpartum depression, VOS viewer
INTRODUCTION

After giving birth, women and newborns require care and supervision. The first few days after birth, when the majority of maternal and child deaths take place, are the time when more than 3 in 10 mothers and infants around the world do not receive postpartum care (WHO, 2022).

The postpartum period is a very important transitional period, postpartum care must be a continuous procedure and comprehensive postpartum visits must be carried out to ensure the health of mother and child. Comprehensive postpartum screening should include a thorough evaluation of the mother's physical, social, and psychological well-being, as well as mental and emotional health, sexuality, contraceptive use, birth spacing, sleep patterns, fatigue levels, physical recovery from childbirth, chronic disease management, and maintenance of general health, feeding and baby care (Cunningham, 2018).

In addition to experiencing physiological changes as the body recovers from pregnancy, the postpartum period is also a psychological transition in which women gain competence and confidence in their role as mothers (Baker & Yang, 2018).

The prevalence of postpartum depression is very worrying. This causes an increase in cases and a greater psychological burden due to the pandemic. Recent studies have shown that postpartum mothers' levels of anxiety and depression are increasing. Postpartum depression lasts for at least two weeks and is characterized by depressed mood, loss of interest and pleasure, decreased energy leading to increased tiredness and decreased activity, feelings of worthlessness and guilt. Psychological problems that often occur are postpartum blues and postpartum depression. Estimates of postpartum depression's prevalence range from 7 to 51% globally (Gallardo et al., 2021).

Today the use of Information Technology (IT) is being intensified. Information technology has changed the paradigm of human life, almost all aspects of human activity are influenced by the role of IT to support life (Daryanto, 2013). Recently mobile technology has contributed to reducing delays in accessing maternal health in low or middle income countries (Oyeyeni and Wynn, 2015). The convenience of getting different types of information and facilitating the communication process, one of which is the usage of social media, are two benefits of technology use, particularly the use of the internet in (Balsa & Akbar, 2016). Social support was identified as the most significant factor on the development of maternal competence. Emerging and widely accepted sources of social support today include various social media platforms. The fact that mothers use social media as a source of support could be a positive development. Mothers, particularly those with several small children, frequently feel alone and isolated, which can result in stress, anxiety, and depression, all of which may have long-term health effects on unborn children and young children. (Baker & Yang, 2018)

To address this gap, this study employs VOSviewer to analyze text data from publications or reports related to postpartum depression.

PURPOSE

The purpose of our study is to determine the development of research related to social media as social support for postpartum depression in terms of the distribution of bibliometric images and trends in research or publication of articles in the Google Scholar database using VOSviewer software. This bibliometric research has proven effective in providing data that can then be used as a basis for making policies, further research and other stakeholders to improve the quality of research.

METODE

The research method uses bibliometrics analysis (Van Eck & Waltman, 2021; Zou et al., 2018). A statistical and quantitative technique called bibliometrics is used to examine the features of academic influence and scientific output. Visualizing bibliometric
data through bibliometric mapping, information visualization, and imaginative design (Zou et al., 2018). Data is taken within the context of global research and all papers are gathered from the Scopus database, one of the largest databases of peer-reviewed journals worldwide. On July 13, 2023, an online search utilizing the keywords "social media as social support, postpartum mother" and the criteria "title, keywords, and abstract (topic area)" was launched. The articles are from sources that were published between the years of 2018 and 2022. The Publish or Perish Application aids in the deeper finding of articles in research journals when searching Google Scholar database. Additionally, articles are theme- and open-access status-filtered. Articles that satisfy the criteria are subsequently exported in *.ris format to the Mendeley Application for database repair. A bibliometric map created from the final article is entered into the VOSviewer for trend analysis and visualization. With VOSviewer, you may generate keyword maps based on the bibliometric network or get an overview of publication maps, nation maps, journal maps, or maps based on network co-citations. It can be changed as needed to eliminate less pertinent keywords by changing the keyword frequency. Additionally, data mining, mapping, and classification of articles collected from database sources can be done using the VOSviewer software (Van Eck & Waltman, 2021)

This research was conducted by making maps based on text data. The first step, the researcher uses publish or perish to search using Google Scholar journal data related to social media as social support for postpartum mother from 2018 to 2022. The second step uses VOSviewer to create maps based on text data from reference managers with field titles and binary calculations as methods. For the third step, the researcher chose a threshold with a minimum number of occurrences of 3 terms, and the researcher found 1996 terms, 56 meet the threshold. From 56 meet of the threshold, 34 number terms are selected.

RESULTS

Viewer term VOS-viewer must have at least two terms to be used. The results of the analysis produced 4 clusters (red, green, yellow and blue), each of which illustrates the relationship between the two topics. Three different visuals that can be used by VOSviewer to display bibliometric mapping are network visualization (Figure 1), overlay visualization (Figure 2), and density visualization (Figure 3).

Figure 1. Topic Area Visualization Using VOSViewer Using Network Visualization (Source: VOSviewer)

Keyword labels are represented by the colored circles. There is a strong relationship between circle size and the keywords when they appear in the title and abstract. As a result, the size of letters and circles depends on how frequently they appear. The larger the letters and circles, the more frequently a keyword appears.
Figure 2. Topic Area Visualization Using VOS-Viewer Using Overlay Visualization
(Source: VOSviewer)

33 publications were found in the extraction results using the title, keywords, and abstract, including 8 articles published in 2022 and 5 articles each in 2021, 2020, and 2019. There were also 2 articles published in 2018. Data are gathered in a research journal format because that is how they are put up when tracing with the Publish or Perish tool.

Figure 3. Topic Area Visualization Using VOS-Viewer Using Density Visualization
(Source: VOSviewer)

It is showed the density visualization of the research, the brighter the more researched, the darker the less researched.

DISCUSSION

Figure 1 shows clusters in each of the topic areas studied. Keywords support, social medium, postpartum depression are in dominant territory even though they are in different clusters. It can be interpreted that the three keywords are most often associated with the use of social media as a form of support for postpartum depression.

There were 33 articles analyzed and the researchers found 4 clusters, cluster 1 had 11 items, namely barrier, breastfeeding, childbirth, exclusive breastfeeding, facilitator, health, intervention, motherhood, postpartum period, postpartum women, qualitative study. Cluster 2 had 10 items namely associated factor, china, cross sectional study, meta analysis, perinatal depression, postpartum depression, predictor, prevalence, risk factor, and systematic review. Next cluster 3 had 9 items namely child, infant, parent, perspective, postnatal depression, role, social medium, stress, support. Cluster 4 have 4 items namely covid, maternal mental health, new mother and pandemic. From the four clusters, three visualizations were obtained consisting of network, overlay and density visualization. In the visualization of the topic area, it can be seen that social media for postpartum depression has been used. But not many have done research.

Meanwhile, Figure 2 shows trends from year to year related to current research, where support research for postpartum depression through social media in this study was predominantly conducted in 2019. While Figure 3 shows the depth of research, answering that the darker the color that appears, the more the number of studies.
Based on Figures 1 to 3 information is obtained; Frequently used keywords are key support, social medium, postpartum depression. Based on these data, we can determine the novelty of postpartum depression research. For example, using social media for new mothers has not been widely done in Indonesia. Therefore, the results of this study provide valuable information about the novelty of support research for postpartum depression. Postpartum depression is the most common maternal health problem (Cheng, et al, 2022; Seo et al, 2022). Untreated postpartum depression can make mothers and children vulnerable to negative outcomes, both short and long term ((Hutchens & Kearney, 2020). Adequate social support can protect mothers from postpartum depression (Cheng, et al, 2022; Baker & Yang, 2018). Social media is an information tool that can be used to get social support for postpartum mothers (Stana, 2019; Baker & Yang, 2018).

CONCLUSION

This research was conducted to configure, describe, and analyze systematic literature sharing using a bibliometric approach. This bibliometric approach is important for determining novelty in conducting further research by identifying important themes in each research, field of knowledge, or research that has been conducted so far. Network visualization data map for social media as social support for postpartum is a review. It should be noted that there have been studies on social support through social media in postpartum depression that have been conducted.

REFERENCES


B. Baker, I. Yang, Social Media as Social Support in Pregnancy and the Postpartum, Sexual & Reproductive Healthcare (2018), doi: https://doi.org/10.1016/j.srhc.2018.05.003


Mobile Application for Postpartum Depression Self-Management: Evidence from a Randomised Controlled Trial in South Korea. *Healthcare (Switzerland)*, 10(11). [https://doi.org/10.3390/healthcare10112185](https://doi.org/10.3390/healthcare10112185)

Stana, A., Miller A. (2019) "Being a mom = having all the feels": social support in a postpartum depression online support group. Atlantic journal of communication. 297-310 [https://doi.org/10.1080/15456870.2019.1616736](https://doi.org/10.1080/15456870.2019.1616736)


Zou, X., Yue, W. L., & Vu, H. Le. (2018). Visualization and analysis of mapping knowledge domain of road safety studies. Accident Analysis and Prevention, 118. [https://doi.org/10.1016/j.aap.2018.06.010](https://doi.org/10.1016/j.aap.2018.06.010).