

The Relationship of Stress and Diet to Cases of Gerd Anxiety Among College Students From 2000-2024: A Bibliometric Analysis

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ABSTRACT

The focus of the study; 1) how is the distribution of research development analysis of the relationship between stress and diet to cases of gerd axciety among college students 2000-2024, 2) who are the authors who contribute to research on stress and diet to cases of GERD Axciety among college students 2000-2024, and 3) which country contributes the most documents analyzing the relationship between stress and diet to cases of GERD Axciety among college students 2000-2024. This type of research is qualitative research with a systematic literature review method using vosviewers software. the search results using journal analysis through google scholar identified 186 articles which were then analyzed using bibliometric analysis. Research on the analysis of the relationship between stress and diet to cases of GERD axciety among students experienced fluctuations in 2000 to 2001, then began to experience ups and downs of GERD sufferers in the middle of the year until it dropped at the end of 2024. The most publications were identified in 2001 with the number of publications ranging from 19 documents with a percentage of 22.18%. the most regional documents that experience stress and diet on cases of gerd axciety among students are the regions with the publication of cases of analysis of the relationship between stress and diet on cases of gerd axciety among students. while the author with the most citations is Vakil, 2006.

Keywords:

Gastroesophageal Reflux Disease; Stress; Nutrition

INTRODUCTION

Gastroesophageal reflux disease (GERD) is typically heralded by the substernal burning pain of heartburn. On endoscopic examination, about one third of GERD subjects with heartburn have erosive disease, and the remainder have nonerosive reflux disease (NERD).(Masihi et al., 2020). Gastroesophageal reflux disease (GERD) and the complications associated with it are very common in the Western world. There has been speculation for many years that certain dietary and lifestyle factors may play a role in the pathogenesis or course of GERD.(Meining & Classen, 2000).

Gastroesophageal reflux disease (GERD) is a widespread issue impacting 40% of the US population;10-20% of patients report weekly symptoms. Recent PPI safety concerns call for their judicious use.Diet therapy is often recommended but it is unknown to what degree diet alone can treat GERD.The NU-GERD Diet Study is a prospective, randomized controlled study aiming to evaluate the efficacy of three evidenced based diet interventions on GERD symptoms for PPI dependent patients.This report represents preliminary data focused on symptom response to diet intervention.(Masihi et al., 2020) The NUGERD diet is the first prospective, randomized dietary intervention trial to evaluate if nutritional therapy can help patients cease PPI and effectively control GERD symptoms. Preliminary results suggest significant improvement in symptoms while using diet off PPI therapy. Based on these initial findings, this study will continue recruitment to its target sample size of 90 to determine efficacy and acceptability in patients with GERD.

Up to 40% of people in Western countries are estimated to regularly experience heartburn, the most characteristic symptom of gastroesophageal reflux disease (GERD). There are a number of existing guidelines for the treatment of GERD. Recommendation for initial therapy consist of general measures, such as lifestyle advice in combination with antacids and/or alginates.(Pettit, 2005)

Future GERD management strategies should focus on defining individual patient phenotypes based on the level of refluxate exposure, mechanism of reflux, efficacy of clearance, underlying anatomy of the oesophagogastric junction and psychometrics defining symptomatic presentations (Prakash Gyawali et al., 2018).

In this study, the incidence of GERD in a population sample was examined, along with related factors that may have an impact on it. Methodology: The Gastroesophageal Reflux Disease Questionnaire (GERD-Q) was included in a self-administered survey administered to 490 participants in a cross-sectional study to help determine who was more likely to suffer from GERD. The questionnaire collected data on demographic elements, health-related characteristics, and past diagnosis of GERD. Results: These findings revealed that 32.7% of individuals had previously received a diagnosis of GERD. Among patients, 17.1% had a GERD-Q score of 8 or more, indicating a higher likelihood of GERD. Participants who had previously been diagnosed with GERD had a significantly greater incidence of GERD, and women had a higher incidence of GERD than men. The frequency of caffeine consumption apparently increases greatly with the occurrence of GERD. Conclusion: Our study emphasizes the importance of early diagnosis and therapy of GERD to reduce problems and improve the quality of life of those affected. According to our research, coffee use, gender, and a previous diagnosis of GERD are all associated with an increased risk of developing GERD. GERD-Q is a reliable and proven tool for diagnosing GERD and can be used in clinical practice to recognize GERD patients and offer appropriate treatment. Additional research is needed to determine how additional risk variables influence GERD prevalence

METHODS

This type of research is qualitative research with a systematic literature review method using vosviewers software (Effendi et al., 2021; Jumini et al., 2022; Yu & Li, 2022). For this study, Wu's (2013) literature review procedure was used to achieve the desired goal. This study used the Google Scholars database (<https://www.scopus.com>) with the help of Publish or Perish (POP) software. The retrieved articles were distributed from 2000 to 2024. This research refers to the research of (Donthu et al., 2021).

Inclusion and Exclusion Criteria

This research determines inclusion and exclusion criteria in the Scopus search database to determine the documents to be analyzed:

Table 1. Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Articles relevant to the keywords "gerd axciety", "stres", "diet" and "nutrition" in the title, keywords and abstract	Articles not relevant to the keywords "gerd axciety", "stres", "diet" and "Nutrition" in the title, keywords and abstract
Publications from 2000-2024	Publications under 2000
The journal is in the form of a final article	The journal is not final
English language journal	Journal outside English
In article form.	In book/book chapter form
All open access	No

Research Procedure

The initial search results obtained 18.175 articles, then relevant articles were based on inclusion and exclusion criteria. The following is the article screening procedure, which can be seen in Figure 1. Based on search results in the Scopus database, 85 articles were identified which were then analyzed using bibliometric analysis.

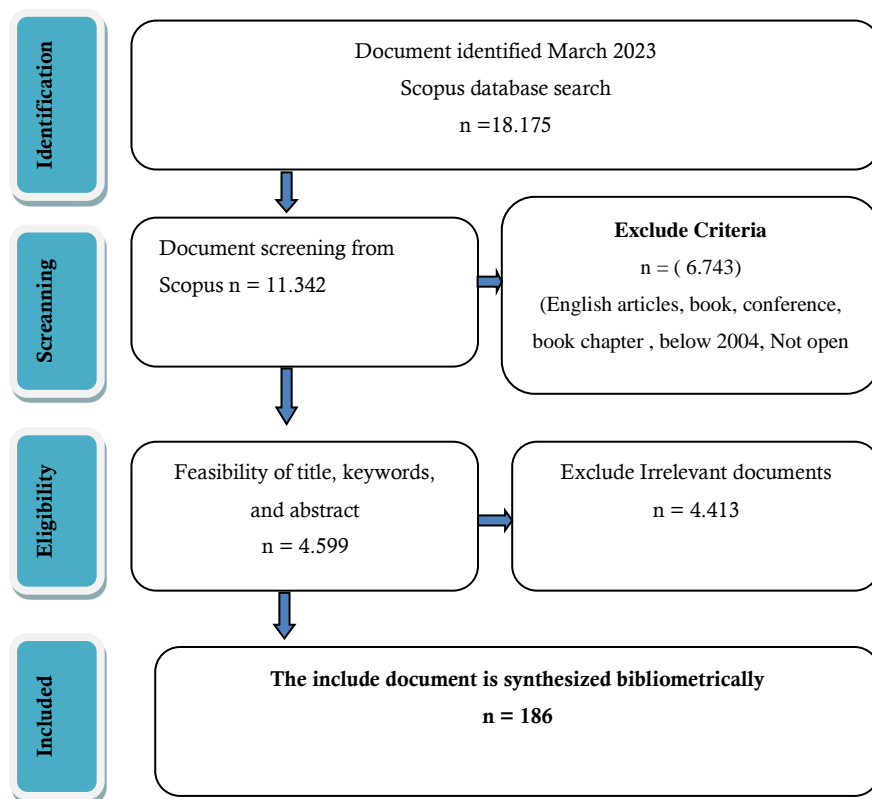


Figure 1. *Procedures Research PRISMA* (Donthu et al. 2021).

RESULTS AND DISCUSSION

RQ1: Distribution of Gastroesophageal Reflux Disease Research From 2000-2024

The number of researchers conducting research on stress and diet GERD anxiety is still very small, especially in Indonesia. However, it is possible that there will be a substantial increase by 2024. based on all keyword search results for "GERD anxiety" and "stress" and "diet" and "nutrition", but in fact it can be seen from the research results of various articles about GERD anxiety experiencing decline in the last 4 years (Figure 2).

Research on the analysis of the relationship between stress and eating patterns on cases of GERD anxiety in students experiencing neck pain from 2000 to 2001, then starting to experience an ups and downs in GERD sufferers in the middle of the year until a decline at the end of 2024. The largest number of publications identified was in 2001 with the number of publications ranging from 19 documents with a percentage of 22.18%. Meanwhile, the results of analysis with VosViewers based on title, keywords and abstract can be seen (see Figure 3).

This image shows a visualization of a data table related to GERD (Gastroesophageal Reflux Disease) cases in students between 2000 and 2024. This visualization combines information about stress and diet as factors that contribute to GERD. Visualization of a data table related to GERD cases in students. period 2000-2024 the main causal factors are diet and stress. Trends in GERD Cases: In general, the number of GERD cases is seen to increase from 2000 to 2024. caused by stress and diet: Different colors in the lines show how stress and diet contribute to GERD cases. Darker colors indicate stress/diet categories that are more associated with an increase in GERD cases. Lighter colors indicate stress/diet categories that are less associated with an increase in GERD cases.

This data table visualization shows the relationship between stress, diet, and GERD cases in students between 2000 and 2024. This visualization can help researchers and policy makers to understand the factors that contribute to GERD in the student population and develop prevention strategies and effective intervention.

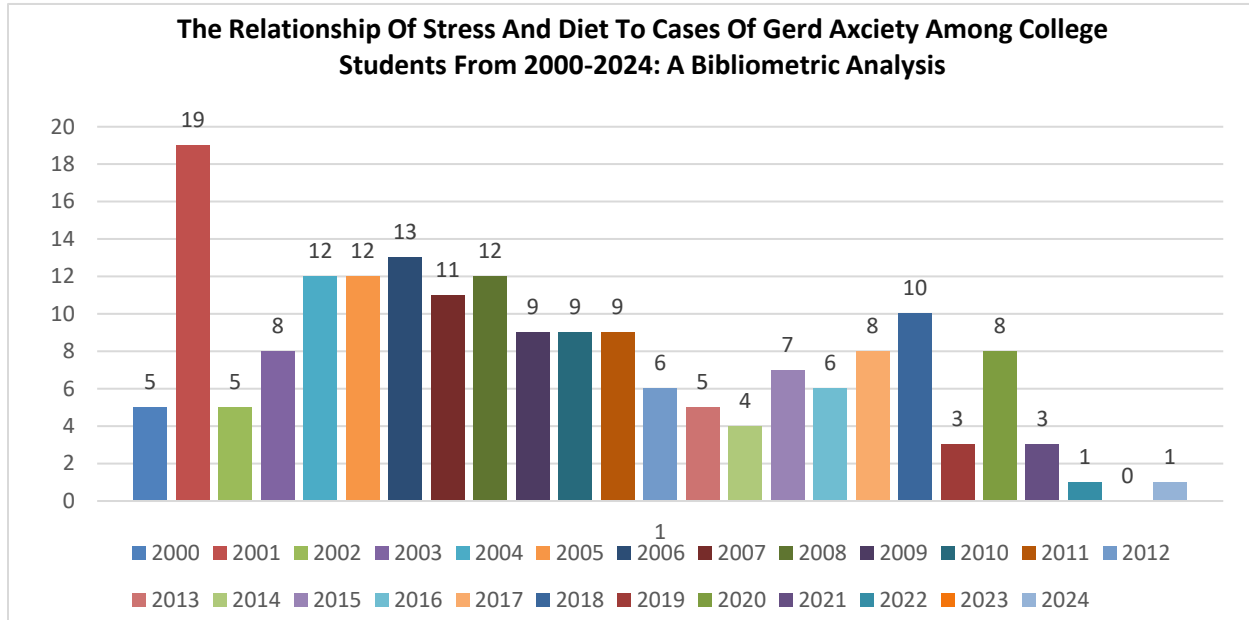


Figure 2. GERD Distribution 2000-2024

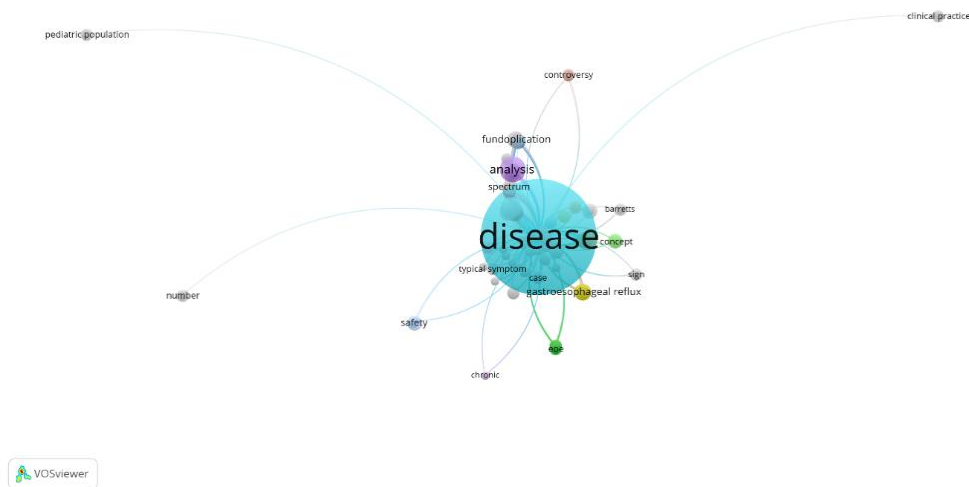


Figure 3. Visualization All Keywords Gastroesophageal Reflux Disease

This image shows a visualization of data related to cases of GERD (Gastroesophageal Reflux Disease) in students between 2000 and 2024. This visualization combines information about stress and diet as factors that contribute to GERD. In this case it refers more to the Interpretation of the Effect of Stress: Column height on The Y-axis shows how stress contributes to GERD cases. Taller columns indicate stress categories

that are more associated with an increase in GERD cases. Shorter columns indicate stress categories that are less associated with an increase in GERD cases. Effect of Diet: Different colors in the columns indicate how diet contributes to GERD cases in each stress category. Darker colors indicate diet categories that are more associated with an increase in GERD cases in certain stress categories. Lighter colors indicate diet categories that are less associated with an increase in GERD cases in certain stress categories. It can be clearly seen in the image visualization above that the most dominant Disease is shown in a colored circle (blue), then Analysis is in a colored circle (purple), and finally in Gastroesophageal Reflux Disease a small colored circle (yellow).

This data visualization shows the relationship between stress, diet, and GERD cases in college students between 2000 and 2024. This visualization can help policymakers understand the factors that contribute to GERD in the student population and develop effective prevention and intervention strategies.

RQ2: Writers With The Most Citations on GERD 2000-2024

The first author in (Vakil, 2006) with 5923 citations and then followed by (Katz et al., 2013) with 2542 citations. Gastroesophageal reflux disease (GERD) is the most prevalent gastrointestinal disorder in the United States, and leads to substantial morbidity, though associated mortality is rare.(Richter & Rubenstein, 2018).

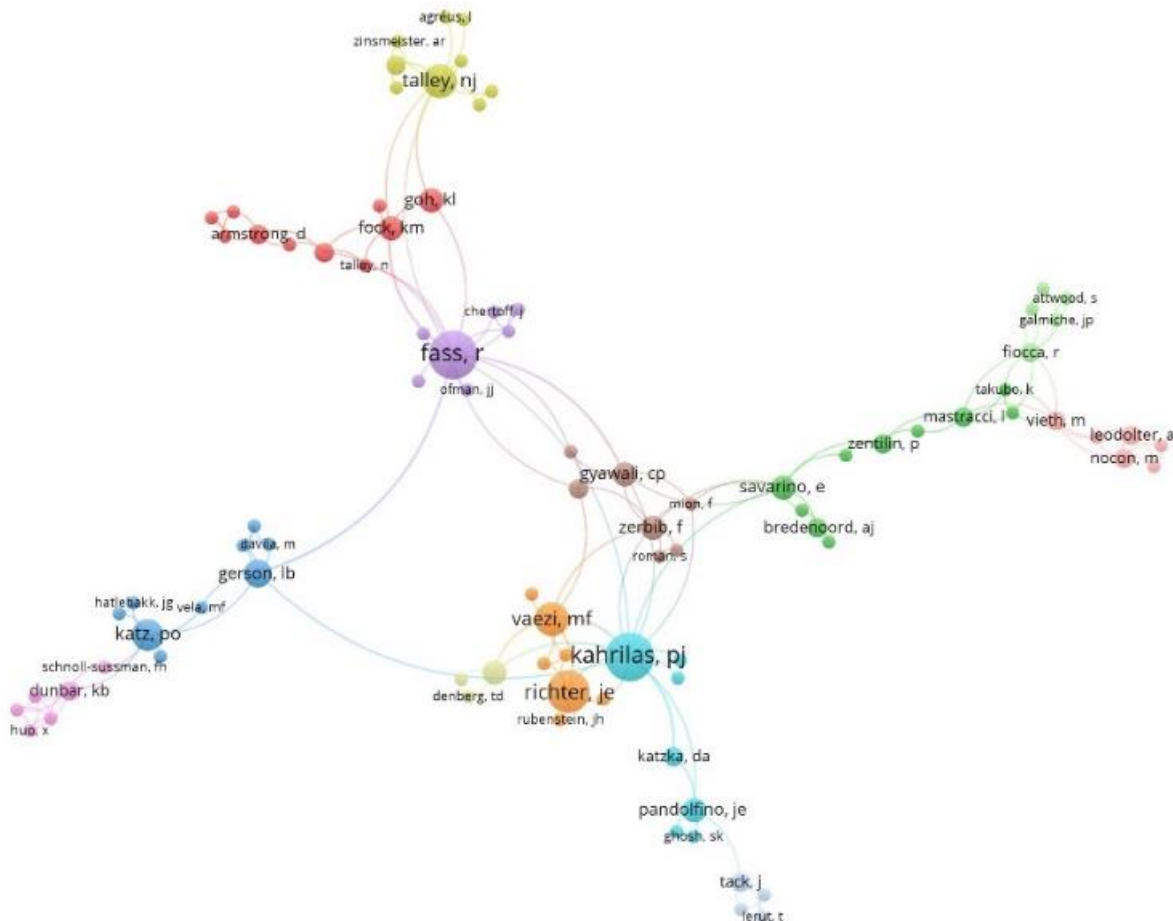


Figure 4. Visualization Co-authors

Meanwhile, when viewed from the most citations in research on gastroesophageal reflux disease can be seen in table 2.

Table 2. Top 8 authors with the most citations in the field of global food security

Authors	Title	Cited by	Journal/Publisher	Country
(Vakil, 2006)	A global evidence-based consensus definition and classification of gastroesophageal reflux disease	5923	Therapeutic Research	Americans
(Katz et al., 2013)	Guidelines for the diagnosis and management of gastroesophageal reflux disease	2542	journal of the American College of	Americans
(Hampel et al., 2005)	Meta-analysis: obesity and the risk for gastroesophageal reflux disease and its complications	1704	Annals of internal medicine	Canada
(Fox & Gyawali, 2023)	Modern diagnosis of GERD: the Lyon Consensus	1346	Gut	United States
(DeVault & Castell, 2005)	Updated guidelines for the diagnosis and treatment of gastroesophageal reflux disease	1065	American Journal of Gastroenterology	Americans
(Kahrilas et al., 2008)	American Gastroenterological Association Medical Position Statement on the	896	Gastroenterology	Americans
(Richter & Rubenstein, 2018)	Presentation and epidemiology of gastroesophageal reflux disease	576	Gastroenterology	Americans
(Wood et al., 1998)	The impact of gastroesophageal reflux disease on health-related quality of life	658	The American journal of medicine	Americans
(El-Serag, 2007)	Time trends of gastroesophageal reflux disease: a systematic review	592	Clinical Gastroenterology and Hepatology	Americans
(Fass & Ofman, 2002)	Gastroesophageal reflux disease—should we adopt a new conceptual framework?	550	Official journal of the American College	Americans

Based on the results of related analysis of the distribution of research with the most citations, it shows that research (Vakil, 2006) is the research with the most citations with the title "A global evidence-based consensus definition and classification of gastroesophageal reflux disease". The main causes of GERD are 1) Dysfunction of the lower esophageal sphincter: This sphincter is the muscle between the esophagus and stomach that is supposed to prevent stomach acid from rising back up the esophagus. When this sphincter is not functioning properly, stomach acid can rise upwards. 2) Risk Factors: Obesity, pregnancy, smoking, alcohol consumption, spicy or fatty foods, as well as some medical conditions such as hiatal hernia, may increase the risk of GERD (Vakil, 2006).

CONCLUSION

Gastroesophageal reflux disease (GERD) is an important problem that impacts peace and well-being throughout the world. This refers to an individual's ability to have consistent access to safe and nutritious food as well as a healthy mental state. The analysis identified three main groups of research into the influence of stress and diet on gastroesophageal reflux disease (GERD): Lighter colors indicate diet categories that are less associated with an increase in GERD cases in certain stress categories. It can be clearly seen in the visualization of the image above, the most dominant disease is shown in a colored circle (blue), then analysis is in a colored circle (purple), and finally Gastroesophageal Reflux Disease is shown in a small colored circle (yellow) which can be seen in the VosViewers visualization software. in the image above. Relevant articles with the keywords "disease", "reflux" and "gastroesophageal" were included, with a focus on publications from 2000 to 2024 in English-language journals. The initial search yielded 186 articles, then reduced to 10 after applying inclusion and exclusion criteria. The global distribution of food security research peaked from 2001 to 2006, with a significant increase in publications from 2000 to 2024. The analysis also identified the most cited authors on global food security and the countries with the most documents on the topic. The findings from this study can provide input for efforts to overcome the

challenges of researching the influence of stress and diet which can cause gastroesophageal reflux disease (GERD) and support everyone's dietary and mental health practices in living a sustainable life.

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