



A Study on Diabetes Based Contents Produced by Health Influencers in Social Media

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Abstract-- This study examines how health influencers on social media create and share content related to diabetes. In the modern digital landscape, people increasingly turn to online platforms for health-related information, which significantly affects their knowledge, perceptions, and everyday health decisions. Because of this growing reliance on social media for medical guidance, it becomes essential to analyse the accuracy and effectiveness of the information shared by influencers. A key focus of this research is understanding how influencers present diabetes-related topics, including the methods they use to communicate their messages and whether their content aligns with medical evidence. Since their posts, videos, and discussions can shape how people understand and manage diabetes, it is crucial to assess whether the information they provide is factually correct or not? Additionally, this study looks at the broader effects of such content—whether it encourages positive health choices, spreads misinformation, or influences public attitudes toward diabetes care and prevention. By exploring these aspects, this research aims to provide deeper insights into the role of social media in health communication. It also highlights the responsibility of influencers in ensuring that the information they share is accurate, reliable, and beneficial for public health. The study uses content analysis technique to get an insight to the content.

Keywords-- Influencer, prevention, health communication, content accuracy

I. INTRODUCTION

In the era of globalization, the media sphere is highly influential(Ndiaye & Ndiaye, 2014). We live in the age of social media-driven world, it has transformed how people effortlessly access and share health-related knowledge and information (Kanchan & Gaidhane, 2023). With just an internet connection, individuals can quickly find details about various diseases, treatments, and wellness practices. This easy access to information has made health awareness more widespread and accessible than ever before (Abuhashesh et al., 2021). As more people turn to social media for health advice, it is important to check whether the information they find is trustworthy and accurate or not? Many individuals rely on health influencers to learn about diabetes and other medical topics, but not all content shared online can be believed blindly.

Some influencers provide well-researched and evidence-based information, while others may unknowingly spread outdated or incorrect details.

A social media influencer is someone who creates content in form of video reels in online and has a strong impact on their followers' opinions and choices(Xu, 2023). This is because people trust their knowledge, skills, or personality in a specific area such as fashion, fitness, technology, or travel. Their influence comes from their credibility and the connection they build with their audience. They play a crucial role in the field of health care and communication. These influencers who have large online followings, share their knowledge, experiences, and advice on health and wellness. They provide tips on fitness, nutrition, mental health, and medical treatments, often shaping their audience's perceptions, choices, behaviour and habits.

When it comes to diabetes, social media is filled with lots of content about managing the condition. Diabetes, also called diabetes mellitus, is a condition that causes blood sugar to rise. Many influencers like medical professionals and individuals surviving with diabetes, use social media to provide their content as information by sharing tips on diet, exercise, medications, and lifestyle that can help people to manage their condition effectively. So, people with diabetes follow influencers video for guidance to control blood sugar levels(Hoe et al., 2024). To better understand the quality of diabetes-related content on social media, researchers use a method called content analysis. This approach helps them carefully examine different aspects of the information being shared. By studying various posts, videos, and messages from health influencers, researchers can identify common themes, patterns, and the overall usefulness of the content.

II. LITERATURE REVIEW

2.1 What is Diabetes

“Diabetes is a chronic disease that occurs either when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces(Afroj A. Shaikh et al., 2022). Insulin is a hormone that regulates blood glucose.

Hyperglycemia, also called raised blood glucose or raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious damage to many of the body's systems, especially the nerves and blood vessels (Diabetes- world health organisation(WHO), 2024)".

Diabetes represents a series of metabolic conditions associated with hyperglycaemia and caused by partial or total insulin insufficiency. Exposure to chronic hyperglycaemia can result in microvascular complications in the retina, kidney or peripheral nerves (Ighodaro & Adeosun, 2017). Diabetes is a condition that happens when your blood sugar (glucose) is too high. It develops when your pancreas doesn't make enough insulin or any at all, or when your body isn't responding to the effects of insulin properly(Kale, 2023). Diabetes affects people of all ages. Most forms of diabetes are chronic (lifelong), and all forms are manageable with medications and lifestyle changes. When our body can't make ample insulin or use it according to our body need properly. In other words, if there is not enough insulin or it does not work correctly then the sugar stays in the blood instead of going into the cells. This causes high blood sugar and this is also known as Hyperglycaemia. It is also considered as the main sign of diabetes. It is necessary to control high blood sugar because it can damage different parts of the body, like the nerves, heart, and kidneys.

2.2 Types of Diabetes

Type 1 diabetes

Type 1 diabetes mellitus (T1DM) is a chronic, autoimmune-mediated metabolic disorder characterized by the destruction of insulin-producing β -cells located in the pancreatic islets of Langerhans (Saberzadeh-Ardestani et al., 2018). This immune response leads to an absolute insulin deficiency. In type 2 diabetes, it is often associated with insulin resistance, Type 1 diabetes is primarily the result of a total failure in insulin production (DeFronzo & Tripathy, 2009).

2.3 Reason of diabetes

Type 1 Diabetes – Causes and Risk Factors

Type 1 Diabetes (T1D) is a chronic condition where the body's immune system, which normally defends against harmful viruses and bacteria, mistakenly attacks the body's own healthy cells. Specifically, it targets beta cells in the pancreas, which are responsible for producing insulin—a hormone that helps control blood sugar levels by allowing glucose to enter cells and provide energy and an imbalance in this, is quite dangerous.

Type 2 Diabetes Causes and Risk Factors

Type 2 Diabetes (T2D) is a long-term condition that affects the way the body processes blood sugar (glucose). In this type of diabetes, the body either does not produce enough insulin or the body's cells do not respond properly to insulin. This is called insulin resistance. As a result, glucose builds up in the blood instead of being used for energy, leading to high blood sugar levels(Shulman, 2000). Unlike Type 1 Diabetes, Type 2 is not an autoimmune disease and is often linked to lifestyle factors.

2.4 Symptoms of diabetes

Diabetes mellitus is a chronic metabolic disorder that presents with a variety of clinical symptoms, often depending on the type and stage of the disease. One of the earliest noticeable signs is increased urination, medically known as polyuria. As blood glucose levels rise above the kidney's threshold to reabsorb sugar, the excess glucose is excreted in the urine, pulling water along with it(Brodsky & Rapoport, n.d.). This leads to excessive loss of fluid.

2.5 Risk factors

Diabetes can happen to anyone, but certain things make a person more likely to get it. One of the most important reasons is family history. If a person's parents or close relatives have diabetes, their chances of getting it are higher. This is because certain genes passed through families can affect how the body handles insulin. In Type 1 diabetes, these genes can cause the immune system to attack the cells in the pancreas that make insulin. However, genes alone are not enough. Environmental factors, such as certain viral infections during childhood, not being breastfed, or being exposed early to cow's milk may also increase the risk of Type 1 diabetes.

On the other hand, Type 2 diabetes is mostly linked to how a person lives. People who are overweight or don't exercise much have a higher risk. When too much fat builds up in the body, especially around the stomach, it becomes harder for insulin to work properly. This is called insulin resistance. Eating unhealthy food like fast food, sugary drinks, and snacks can also lead to this problem. Age matters too. Earlier, Type 2 diabetes was seen in older adults, but now more young people and even children are getting it because of obesity.

2.6 Social Media on Diabetes

Social media plays a growing role in how people understand and manage diabetes. It provides an open space where people with diabetes can share their personal experiences, learn from others, and receive emotional support.

Many people use platforms like Facebook, YouTube, Instagram, and Twitter to talk about managing blood sugar, using insulin, choosing the right food, and exercising regularly. This has helped people feel more supported and motivated, especially teenagers and young adults living with Type 1 Diabetes. Social media is being used more in health programs to support people with diabetes.

III. RESEARCH GAP

While many studies have focused on the role of digital media in health communication and the general use of social media for spreading awareness about diabetes, there is limited research that specifically examines the accuracy of diabetes-related content shared by social media influencers. Influencers on platforms like Instagram, YouTube, and Facebook play a growing role in shaping public perception and behaviour, especially among younger users. Despite their large reach, the quality and credibility of the diabetes-related information shared by influencers have not been widely studied. This research aims to fill that gap by analysing such content and evaluating its accuracy and potential impact on public understanding of diabetes.

3.1 Importance of the study

This study is important because many people use social media to learn about diabetes. It checks if the information shared by health influencers is correct and helpful. The study also shows where improvements are needed and how working with doctors can make the content better. This helps people get safe and trustworthy health advice online.

3.2 Theoretical framework

Agenda setting theory

Agenda setting theory was first introduced by Maxwell McCombs and Donald Shaw in 1972 through their study on the 1968 U.S. presidential election. The theory states that the media influences the public by determining which topics are most important. In other words, media may not tell people what to think, but it tells them what to think about. It plays a crucial role in shaping what they think about.

However, with the rise of digital platforms and influencer-driven content, the theory has expanded to social media, where influencers act as agenda-setters. In the context of this research, health influencers determine which diabetes-related topics gain visibility and engagement among online audiences.

Through frequent posting, storytelling, and engagement, these influencers influence public conversations on Diabetes awareness and prevention such as lifestyle changes, early symptoms. Management techniques diet plans, exercise routines, medical treatments. Misinformation or myths.

In social media diabetes-based contents provides that information the influencer wanted to share as their knowledge of information to affect the behaviour and thinking capabilities of the viewers.

Objectives Of the Study

1. To understand contents provided by social media influencers
2. To find out the presence of misinformation
3. To identify potential risks of benefits involved in information provided by social media influencers on diabetes.

Research Questions

1. How the contents on diabetes are presented in social media?
2. How influencers frame diabetes-based discussions & medical advice?
3. How credible are the information produced by social media influencers?

IV. METHODOLOGY

This study follows a mixed-method approach, combining content analysis and qualitative interviews to examine how diabetes-related information is presented by health influencers on social media. The researcher focuses on social media platforms where health influencers actively engage audiences with diabetes-related content. The primary platforms considered for analysis include 'YouTube' as it is widely used for health communication. Purposive sampling method has been used and 5 videos with more than 1 million views are taken into consideration from five different channels by five different influencers. Data used in the study are both primary and secondary by nature. Data from videos are secondary data and data collected from health practitioners by interview are primary data. Content analysis is used to study diabetes related materials available on social media (YouTube), which have more than 1 million views, focusing on how information is shared and what messages are being promoted. Interviews are conducted to check accuracy of shared content through opinions of health practitioners. For analysing the videos, thematic analysis technique is used.

Channel: Diabexy

Influencer: Lokendra Tomar

Link:

<https://youtube.com/shorts/UV8CQUvGLkA?si=SJn2a3yk57j6ljrB>

Topic: What to eat and avoid in diabetes

V. ANALYSIS

Through thematic analysis, this video 'What to eat and avoid in diabetes' presents several core messages: The video explains how carbohydrates affect blood sugar levels and emphasizes the importance of choosing the right type. It categorizes carbohydrates into "good" (low glycaemic load) and "bad" (high glycaemic load). The video warns against consuming refined carbohydrates, including: Grains, pulses, sugar. It explains that these foods cause rapid spikes in blood glucose levels, making them unsuitable for diabetic individuals. The video promotes low glycaemic load carbohydrates, such as: Millets (e.g., bajra, ragi, Legumes (e.g., chickpeas, lentils, kidney beans) non-starchy vegetables (e.g., spinach, broccoli, cauliflower). It claims that these foods provide sustained energy without causing blood sugar spikes. The presenter explains how different foods can be ranked based on their impact on blood sugar rather than just their carbohydrate content. The language is simple and easy to understand, making it accessible for a broad audience. The language is simple and easy to understand, making it accessible for a broad audience.

Channel: Dr. V Mohan

Influencer: Dr. V Mohan

Link: <https://youtu.be/l5qIcj-RylA?si=Rjewicd7TzMIVRuX>

Topic: "Easy Diet Tips to Control Diabetes"

Content Analysis of "Easy Diet Tips to Control Diabetes" by Dr. V. Mohan. The video aims to provide simple and practical dietary tips to help individuals manage and control diabetes effectively. Dr. V. Mohan, a well-known diabetologist. The video emphasizes the importance of a well-balanced diet that includes carbohydrates, proteins, and healthy fats in the right proportions. It suggests incorporating whole grains, lean proteins, healthy fats, and fibre-rich foods to maintain stable blood sugar levels. Dr. Explains how overeating can spike blood sugar levels, even if the food is healthy. Fiber is emphasized as a key element for diabetes control, as it slows down digestion and prevents sudden sugar spikes.

Healthy fats like olive oil, nuts, and seeds are encouraged to improve insulin sensitivity. The video briefly mentions the role of exercise along with dietary changes, recommending at least 30 minutes of physical activity daily. With 2.9 million views and 50K likes, the video has received a high level of engagement from the audience.

Channel: Freedom from Diabetes

Influencer: Dr. Pramod Tripathy

Link:

<https://youtu.be/9c2GLV1zWi0?si=FEXAwLOEUAgWUoN>

Topic: "Best Vegetables for Diabetes"

Content Analysis of "Best Vegetables for Diabetes" – Freedom from Diabetes. This video, produced by Freedom from Diabetes, aims to educate viewers on the best vegetables for diabetes management. It provides insights into how certain vegetables impact blood sugar levels and offers dietary recommendations for diabetic individuals. The video highlights that vegetables play a crucial role in blood sugar control due to their fibre content, low glycaemic index (GI), and nutrient density. The presenter discusses the best vegetables for diabetes control, explaining their benefits and why they are ideal for a diabetic diet: The video effectively educates viewers on diabetes-friendly vegetables, offering practical dietary advice backed by scientific reasoning. By categorizing vegetables based on their impact on blood sugar levels, the content helps diabetics make informed food choices. It emphasizes the inclusion of the vegetables such as okra (lady finger), bottle gourd, bitter gourd etc. these vegetables are highlighted for their low glycemia index, high fiber content, and beneficial nutrients that aid in blood sugar regulation. For instance, bitter gourd contains compounds that mimic insulin, helping to lower blood glucose levels. However, the video could be strengthened

Channel: healthifyMe

Influencer: Tushar Vashisht

Link:

<https://youtube.com/shorts/sOMonKO2rbk?si=Qg2F4SBzXn5VnK2n>

Topic: "Six Foods That Are Excellent for Diabetes".

Content Analysis of "Six Foods That Are Excellent for Diabetes". The video aims to educate viewers about six natural foods that can help in managing diabetes effectively.

It highlights how certain herbs, seeds, and natural ingredients can regulate blood sugar levels, improve insulin sensitivity, and contribute to overall well-being. The video discusses the following six foods and their role in diabetes management. They are Fenugreek Seeds, Insulin Leaf, Cinnamon, Apple Cider, Flaxseeds, Chia Seeds. The video is a useful and practical guide for people looking to incorporate natural remedies into their diabetes management plan.

Channel: KenDberryMD

Influencer: Dr. ken D. berry

Link: https://youtube.com/shorts/c-0LGbsuU9M?si=69Cl_Fit4lYnl8nT

Topic: "Three Fruits Diabetics Should Avoid"

Content Analysis: "Three Fruits Diabetics Should Avoid" by Ken D Berry MD (YouTube Short)- The video aims to give concise dietary advice to diabetic individuals by highlighting three fruits that may negatively impact blood sugar levels. The video identifies the following fruits diabetics should avoid or consume cautiously: Bananas, Grapes due to it Contains natural sugar, and sweet varieties may spike glucose levels. Cherries due to it Contains natural sugar, and sweet varieties may spike glucose levels.

VI. SUMMARY OF INTERVIEWS FROM HEALTH PRACTITIONERS

The researcher conducted the research by interviewing three medical experts to check the accuracy. Details of health practitioners involved in the study are given below.

Dr. Swarnalata Guru (Balasore)

Dr. Tarakanta Pati (Balasore)

Hiranyamayee Dash (Balasore)

Summary of findings of the interviews conducted with health practitioners are presented below. As most of the answers were same that is why the findings are presented in summarized manner.

Overall videos are good by quality as they are representing things with accuracy about the diabetes. In social media not everyone is putting correct information about diabetes, but these videos are good and have provided correct information about the diabetes. The more focus should be on how to take care of the patient and myths should be clarified in better manner. They have opined the videos be informative and no needs of correction.

All the health experts have agreed to the fact that these videos are informative in nature and they may influence public perception positively. Answering regarding the common patterns or trends used by influencers to discuss diabetes-related topics, the health experts have expressed that the influencers are good in effective visual presentation. They also expressed that the videos by health influencers on diabetes are good and don't contain any misinformation.

VII. CONCLUSION

It can be concluded that, the content analysis of diabetes-based contents produced by health influencers in social media reveals a strong message to the people suffering from diabetes. This research helps us understand the reliability and usefulness of diabetes-related information shared by health influencers on social media. By studying both the content and expert opinions, the study shows that social media is an important source of health information. However, the accuracy and impact of this information depend on the person sharing it. The fact that many videos contained correct medical information and it shows that most of the social media influencers have shared information in responsible manner.

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