

**PRESS RELEASE**

Geneva, 27.11.2024

## **The role of social media in the stigmatization of person living with obesity**

Through an analysis of tweets (now rebranded X) relating to obesity published between April 2019 and December 2022, a study conducted by the Geneva University Hospitals (HUG) has revealed that most of these tweets convey negative sentiments about overweight. The positions taken by influential politicians and celebrities play an important role in shaping public opinion on this issue. The study points the finger at the discrimination suffered by people who are overweight and the role of social networks in the propagation of these criticisms. Understanding public attitudes and perceptions toward obesity is essential for the development of effective health policies, prevention strategies and treatment approaches. Read the [study](#) in the *Journal of Medical Internet Research*

Obesity is a chronic disease that affects people of all ages worldwide and is directly related to multiple co-morbidities, notably type 2 diabetes, cardiovascular, respiratory and digestive diseases as well as cancers. Obesity also causes significant psychological distress. Its prevalence in the global population has increased from 4.6% in 1980 to 16.0% in 2022<sup>1</sup> and this trend is increasing.

### **Almost 7 tweets in 10 are critical**

The study was carried out by Dr. Jorge César Correia, Senior resident in the Therapeutic Patient Education Unit at the HUG, under the supervision of Prof. Zoltan Pataky, Staff Physician, Head off Therapeutic Patient Education Unit at the HUG and Associate Professor at the UNIGE Faculty of Medicine. It was carried out in collaboration with researchers from the Universities of Liverpool and the Greater Manchester Mental Health NHS Foundation Trust.

It examined the sentiments of the general public, political personalities, celebrities and important organizations relating to obesity by analyzing 53,414 tweets published in English on this issue between April 2019 and December 2022 in the midst of the Covid-19 pandemic. Analysis of these tweets revealed that they were mainly negative (69.36%) and on the rise, whereas the neutral (20.91%) and positive ones (9.73%) remained stable.

Tweets connected to obesity were also very often associated with racism, with less judicious life choices and with social ills such as the consumption of illicit substances and alcohol.

---

<sup>1</sup> <https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>



The study demonstrates that negative representations of obesity by influential politicians and celebrities contribute to negative sentiments amongst the general public and to the perpetuation of stereotypes and prejudices toward people who are obese or overweight. This stigmatization may have impacts on the mental health and well-being of these individuals and have adverse effects on public health.

### **The role of celebrities and influencers**

The researchers noted that spikes in criticisms were linked to political events and comments by celebrities in the USA and in the UK. For example, many negative messages were transmitted when overweight celebrities were hospitalized with Covid-19, when the President of the United States announced he wanted to lose weight and when the British government launched its anti-obesity campaign.

The study notes that when prominent people publish negative comments or opinions on obesity, their subscribers are more likely to engage in similar conversations, thus perpetuating the negativity even more. It therefore demonstrates the role of influencers in shaping public opinion on health issues and underscores that public personalities should be aware of the potential consequences of their pronouncements in terms of public health.

### **The impact of social networks on public health messages**

The results of this study have improved understanding of the role of social media in shaping the sentiments, attitudes and health behaviors of the general public on a range of issues, namely obesity in this case.

They will also be useful in the development of effective public health policies, prevention strategies and treatment approaches which today must take account of the unique challenges posed by social media and digital communications in terms of public health.

### **A combination of human analysis and artificial intelligence**

The scientific team conducted an algorithmic and manual analysis to acquire an in-depth understanding of the widespread attitudes and perceptions relating to obesity on Twitter. It used an artificial intelligence-based platform of text classification fine-tuned on around 198 million tweets for different applications, including sentiment analysis in eight different languages.

**DOI :** [doi:10.2196/52142](https://doi.org/10.2196/52142)



### For further information

**HUG, Press and Public Relations Department**  
[presse-hug@hcuge.ch](mailto:presse-hug@hcuge.ch)  
+41 22 372 37 37

**UNIGE, Media Service**  
[media@unige.ch](mailto:media@unige.ch)  
+41 22 379 77 96

#### **The HUG: cutting-edge care, teaching and research**

The University Hospitals of Geneva (HUG) comprise [eight public hospitals and two clinics](#). Their missions are to provide care to the community in all medical specialities, to help train doctors and healthcare staff, and to carry out medical and healthcare research. The HUG is a national reference centre for [influenza](#), [emerging viral infections](#), [meningococcus](#), transplant immunology and the [national reference laboratory for histocompatibility](#). They are WHO collaborating centres [in six areas](#) and [centres of excellence](#) in several sectors. The HUG treats 275,000 people a year, has 2,015 hospital beds and employs 12,800 staff.

More information on [publications-hug](#)

[www.hug.ch](http://www.hug.ch) - [presse-hug@hcuge.ch](mailto:presse-hug@hcuge.ch)

#### **About the University of Geneva**

The University of Geneva (UNIGE) now ranks among the top 100 universities in the world. Founded in 1559 by Jean Calvin and Théodore de Bèze, it welcomes more than 19,000 students in its nine faculties and thirteen centres. interfaculty. Internationally recognised for the quality of its research, it is also a member of the Ligue of European Research Universities (LERU), and is constantly strengthening its links with the European and non-governmental organisations present in Geneva, one of the world capitals of multilateralism.

UNIGE has three missions: teaching, research and community service. [www.unige.ch](http://www.unige.ch)