

Werner Schupp

Social networks and social media are influencing a growing number of people and intervening in social life increasingly often. In 2021, an estimated 4.4 billion people worldwide were said to be using social networks<sup>1</sup>. Many people now spend more time using social media than they do consuming news in analogue formats, such as print media, radio and television. Clinics, practices, professional societies and patient associations are implementing social media in their public communications, but individuals are also generating content and reaching a large audience. An analysis conducted in 2017 by the Emerging European Alliance of Associations for Rheumatology (EULAR) Network (EMEUNET) showed that among the young rheumatologists (aged up to 39 years) surveyed, 71% were already actively using at least one social media platform in a professional context<sup>2</sup>.

The reduction of being to information

Social networks and social media are web-based platforms that enable user-generated content to be disseminated and exchanged with other users. The content that is displayed to users is determined by an algorithm that selects similar posts based on the content they have viewed previously<sup>3</sup>. The selection process is based on algorithms stored on the platform and is not user-determined.

So-called influencers achieve wide reach within social networks. They are often regarded as trustworthy experts by their subscribers, known as followers, and thus influence many of them. Doctors, researchers and patients act as medical influencers, sometimes reaching millions of users<sup>4</sup>. On Twitter in particular, academically active rheumatologists promote publications they have written or that are important to them, provide information about digital teaching offers and resources ('from Twitter to bedside'), initiate collective projects and share clinical experiences. According to Haase et al<sup>3</sup>, the fact that content is not necessarily verified scientifically is especially important, as it means there is room for misinformation and unethical behaviour. The content is not peer reviewed per se.

As a source of information and knowledge, the internet has gained popularity rapidly, and this has only increased due to the pandemic situation. Here, YouTube is of particular importance. Many videos have high information content for physicians, students and patients alike. The information can be updated much faster and usually in a less complicated way than is the case for classic textbooks. Digital content is also becoming increasingly accessible and often available free of charge. On social media too, high-quality information serves as a counterweight to correct misinformation and draw users' attention to valid sources<sup>5</sup>.

Within the scientific community, the use of social media to discuss new findings or promote one's own research results is gaining in importance<sup>6,7</sup>. Almost all major scientific journals have a social media presence. To respond to this development, some journals now have their own social media editors. Current papers can be analysed and discussed with the authors. Congress content can also be disseminated via social media, which increases its reach significantly<sup>3</sup>. If social networks are used, however, data protection regulations and copyright must be adhered to. Under no circumstances should patient-sensitive data be shared on social media; this applies to patient images in particular<sup>3</sup>.

Low-threshold access to social media and its easy availability also present difficulties if there is no higher-level controlling authority. The success of messages or campaigns is measured by their frequency of dissemination and the amount of user interaction received (likes, shares, comments, retweets). Unfortunately, this also increases the tendency to spread content that engages in targeted emotionalisation and even deliberately provokes scandal<sup>8</sup>.

Students in 12th grade, aged around 17 or 18 years, spend an average of 6 hours a day on social media, and the trend is rising<sup>9</sup>. Most younger people born in around the year 2000 have been using the internet since they learnt to read and write. They learn to read and write at school; online, however, they often encounter incorrect usage of the written language, particularly on social media, which leads to confusion and mistakes. In most cases, they have not been sensitised to the written peculiarities of social networks. They often struggle to understand long and complex texts, but it is only through reading such texts that young people learn complex thinking. Reading and writing are forms of thinking. Whoever learns to speak also learns to think, and whoever wants to think must learn to speak. In other words, being able to read complex texts and process complex speech is central to the human approach to the world because this makes thinking possible. But what is the reality? Only 40% of young people in Germany who attend secondary school still read books regularly<sup>10</sup>.

Are social media platforms social? Matthias Eckoldt<sup>11</sup> answers this question with an unequivocal no: "These media are certainly not social, because they place egoism above the common good." The focus is on one's own selfaffirmation, not on prosperous togetherness. Whenever photos, videos and messages are posted, they are commented on and liked. The user gets caught in a feedback loop for social recognition with considerable addictive potential. This recognition is often anonymous and provides temporary satisfaction that quickly dissolves into nothingness, precisely because the pictograms, infantile in style, are about as nutritious as fast food. Friendship is reduced to gifts of smileys; the critic becomes an enemy and can be exposed almost uncontrollably.

Today, digital image and film processing is so advanced that an authentic original cannot be distinguished from a 'deepfake'. Some deepfakes can be produced by amateurs or are available at a low cost. Have they already found their way into scientific posts?

What used to be simply called a lie, a term accurately expressing what it was, is now known by many on social media as an 'alternative fact'. A lie becomes the truth, which makes the use of the lie easier and, in moral terms, less burdensome for individuals who do not wish to speak the actual truth, since the liar is in a bubble with likeminded people.

Can anything be as boring as the truth? Lies are more exciting per se. Tweets based on untrue claims or pure lies spread six times faster on Twitter than fact-based statements<sup>11</sup>. The more the lie is valued, even if only with infantile symbols, the more it spreads. Algorithms know no reason, and thus, in a strict sense, no unreason; "they evaluate data in an extra-moral sense, as it were"<sup>11</sup>. Almost anything can be asserted, just like in the discussions that arise when a group of regulars congregate around a table in a bar. With regard to the banal topics that litter social media, this may still be harmless, but with many topics it poses a danger. We are currently experiencing this relating to the COVID-19 pandemic and the Russian war in Ukraine, and it is extremely burdensome for everyone who has a moral sense. In science, there is no place for such gossip.

Nowadays, moral values are influenced by social media and the input we receive from these platforms. As such, the lies and superficiality we encounter there inevitably affect our morals. Matthias Eckholdt<sup>11</sup> describes this very aptly in his book "Kritik der digitalen Unvernunft - warum unsere Gesellschaft auseinanderfällt" (Critique of digital irrationality - Why our society is falling apart): "The first results of this new cultural technology are already visible in Western societies. Thus, the sole power of the rational seems to be broken. The belief in science is passé, the project of enlightenment has irrevocably reached its end point. The battle waged over centuries against mythological and magical explanations of the world is now lost because the internet algorithms are not programmed for factuality but for dwelling time. Scientific facts are losing their supremacy, alternative explanatory models are equal or even superior, because only the good story that emotionalises and entices people to tell it on social media is rewarded. Truthfulness is no longer considered a criterion in itself."

Does the deconstruction of truth also affect science, and does it affect us directly in terms of our professional and scientifically based work? Is factuality being replaced by alternative facts, which carry more emotional value? Are people who use information from social media – according to a study, adults spend 2 hours a day using these platforms<sup>9</sup> – less critical when it comes to dealing with factuality? On these so-called social media platforms (perhaps it would be more accurate to speak of 'antisocial media'), is it quicker to post content that is not verifiably orientated towards the truth? Has stupidity ceased to be shameful? Let us take our cue from a statement that Charles Bukowski is said to have once uttered: "The problem with the world is that the intelligent people are full of doubts while the stupid ones are full of confidence"<sup>12</sup>.

Dow Amp

## References

- 1. Dean B. Social Network Usage & Growth Statistics: How Many People Use Social Media in 2022? https://backlinko.com/social-media-users. Accessed 1 April 2022.
- Nikiphorou E, Studenic P, Ammitzbøll CG, et al. Social media use among young rheumatologists and basic scientists: Results of an international survey by the Emerging EULAR Network (EMEUNET). Ann Rheum Dis 2017;76:712–715.
- Haase I, Mucke J, Vossen D, et al. Social media Chances and risks for rheumatology [in German] [epub ahead of print 8 April 2022]. Z Rheumatol doi: 10.1007/s00393-022-01201-9.
- Ruffer N, Knitza J, Krusche M. #Covid4Rheum: An analytical Twitter study in the time of the COVID-19 pandemic. Rheumatol Int 2020;40: 2031–2037.
- Swire-Thompson B, Lazer D. Public health and online misinformation: Challenges and recommendations. Annu Rev Public Health 2020;41:433–451.
- 6. Studenic P, Ospelt C. Do you tweet?: Trailing the connection between Altmetric and research impact! RMD Open 2020;6:e1034.
- Ordoñez-Gutiérrez JA, Oviedo-Moreno JM, Patino-Hernandez D, Fernández-Ávila DG. Immunology and social networks: An approach towards impact assessment. Rheumatol Int 2020;40:251–256.
- 8. George DR, Rovniak LS, Kraschnewski JL. Dangers and opportunities for social media in medicine. Clin Obstet Gynecol 2013;56:453–462.
- 9. Twenge JM, Martin GN, Spitzberg BH. Trends in U.S. adolescents' media use, 1976-2016: The rise of digital media, the decline of TV, and the (near) demise of print. Psychol Pop Media Cult 2019;8:329–345.
- Igel L. Jugend schreibt schlecht Medianwandel. Wer mit einem Smartphone aufwächst, versteht of lange Texte nicht mehr. https:// www.freitag.de/autoren/der-freitag/medienwandel-jugend-schreibt-schlecht. Accessed 1 April 2022.
- Eckholdt M (ed). Kritik der digitalen Unvernunft Warum unsere Gesellschaft auseinanderfällt. Heidelberg: Carl-Auer Systeme Verlag, 2022.
- Pastega N. "Dummheit hat Hochkonjunktur!". https://www.sueddeutsche.de/leben/corona-impfgegner-heidi-kastner-fritzl-1.5465565?reduced=true. Accessed 1 April 2022.