

Epidemiology of News: Doom Scrolling, Information Overload, and Other “Media Pathologies” in Our Infected Society

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Abstract

Along with the Covid-19 pandemic, a new type of 'disease' has spread just as rapidly, affecting the world of journalism and information. In addition to the concept of 'infodemic', first proposed by David J. Rothkopf in 2003 in relation to SARS, then taken up by a World Economic Forum study in 2006 to explain the fairness of information in emergencies, and finally used by the World Health Organisation itself to refer to the spread of false, tendentious or incorrect information during the Covid-19 pandemic. 2020 was also the year of a new word: doom scrolling.

This term refers to when a person constantly reads and searches for negative news online, and the consequences this has on our mental health. It is still a relatively new phenomenon, but several experts have already pointed out that doom scrolling is predictably detrimental to a person's mental well-being.

The pandemic has thus confirmed the already known risks of overexposure to a constant flow of information, a problem that affects media professionals, their audiences and institutions, and that can trigger social and psychophysical pathologies such as depression, mood swings, isolation and paranoia.

An attempt will be made here to discuss the issue from a critical point of view and to reconstruct the phenomenon of 'doom scrolling'. Finally, an attempt will be made to define the main lines of public discussion based on the most recent literature available in this period of global crisis.

Keywords: infodemic, doom scrolling, covid-19, journalism, disinformation, crisis

1. Introduction

Communication is a key component in managing an epidemic. However, it can become a problem if the methods, timing and use of information are misused, creating an 'information epidemic'.

In recent years, the tremendous development and widespread use of technological tools and channels through which much of the daily information of millions of people around the world passes, has led to a progressive awareness of the risk of overexposure to a continuous flow of news (Buoncompagni 2018, 2021).

It is a risk that existed before the Covid-19 virus radically affected people's lives, but the pandemic has provided further evidence of how some underlying psychological dynamics can often drive an uncontrolled impulse to consult information sources.

Some experts and psychologists in the United States have begun to talk about "doom scrolling", the practice of constantly scrolling through the most dramatic and depressing news on smartphones or computers, taking up parts of the day that before the pandemic were devoted to other activities. But the tendency to compulsively search for information to keep up with the facts is a phenomenon that affects people of all ages, whether they are information professionals or not, as well as segments of the population with both high and low levels of education.

It is no coincidence that some of the (not only Anglo-Saxon) jargon used to describe the various contexts of information use ('consumption', 'news feed', 'clickbait') also draws on semantic spheres linked to food, a human experience whose pathological dimensions, linked to excesses and bad habits, are known and still being studied.

"Most of us still don't understand that news is to the mind what sugar is to the body," Swiss entrepreneur Rolf Dobelli, author of the recent self-help book *Stop Reading the News*, wrote in the Guardian in 2013.

Since then, the number of interventions reflecting on the causes and long-term effects, both individual and collective, of news 'addiction' has continued to grow, as has the amount of advice offered to try to curb the phenomenon.

Before proceeding with the analysis, it is important to specify that the article aims to provide a general overview of the issue of doomscrolling, highlighting the pathological aspects of media and technology use in the hyper-information society. For this reason, the methodology used is based on an in-depth analysis of the scientific literature, supported by recently published data and examples.

2. The News, the Media, the 2008 Crisis

In 2008, at the height of the financial crisis and in the final days of a hectic US presidential election campaign, a New York Times article reported on a kind of 'news addiction' that many people in the US were developing (Williams, 2008).

A Brooklyn accountant who worked for a film production company, Yana Collins Lehman, then 36, said she felt something was wrong with her daily routine when she heard her five-year-old son start repeating phrases such as 'I'm John McCain, and I approve this message' (the American phrase uttered by the candidate at the end of each campaign commercial). It is such a loss of productivity, such a compulsion," said Collins Lehman, describing his habits.

The crisis was one of the first occasions on which events with a broad global impact took place in a technologically changed context compared to a few years earlier. The 'hunger for information' during crises and emergencies is reminiscent of the harrowing months after 9/11, except that in 2001 there were no iPhones, no Twitter, no YouTube, and blogs and social networking were in their infancy. The explosion of information technology, combined with an unusual confluence of dramatic and ongoing news events, has led many people to surrender their lives to an obsession with news. According to Eric Klinenberg, professor of sociology at New York University, one of the most significant and unusual aspects of this period was that the effects of the financial crisis seemed to affect every aspect of the daily lives of millions of people. And this prevented them from separating their activities, work from leisure and family. "It is as if these spheres are collapsing on top of each other," said Klinenberg. In addition, the news was both highly relevant and extremely volatile, in some ways reminiscent of the pandemic news flow.

In those days, financial markets would move hundreds of points in an hour, just as the results of election polls changed frequently. News in those days had an incredibly short shelf life, and if you checked the headlines after half an hour, the world might already have changed.

Underlying this desire to keep up to date, some sociologists have argued, was in many cases a belief that the accumulation of information could give people a sense of control over their destinies, which at the time seemed completely tied up with elusive and uncontrollable events.

The distinguished US psychologist Kenneth Gergen (2000), a professor at Swarthmore College in Pennsylvania, provided a further level of insight into some of the less obvious implications of constant collective exposure to the flow of news. In some circumstances, information can serve as a kind of "social currency, the subject of serial discussions that bind the community together. In other words, they work just like TV series or sporting events.

Then there are other contexts where knowledge is seen as 'power', and in those cases having information can help to improve social status. But this system stops working in a moment of uncertainty, when the criteria by which this knowledge is defined become fragile and unstable from day to day, and anyone can simply say what someone else said yesterday.

3. (Negative) Information Overload and Its Effects

In March 2020, during the first weeks of the emergency caused by the Covid-19 pandemic, several news websites around the world received many more visits than usual, in many cases setting new traffic records. Broadcasters also saw an increase in viewership among younger people, who are usually less interested in the evening news. "If our daily news intake were

measured in calories, many of us would have gained even more weight in recent weeks," journalist Maddy Savage wrote in an article for the BBC, using another food metaphor (Savage, 2020).

Just over a month later, at the end of April, traffic on many websites and television ratings for several networks had returned to pre-pandemic levels. In a survey conducted by the Pew Research Center, 71 per cent of Americans said they felt the need to stop following the news. About 4 in 10 also reported feeling worse emotionally after watching the news, and about half said they had difficulty determining what was true and what was not about the pandemic (Mitchell, Oliphant, & Shearer, 2020).

According to Ulrik Haagerup, former Danish editor and founder of the Constructive Institute, people understand the need for decent journalism in times of crisis (Foundation Hironnelle, 2018).

In addition to the general 'coronavirus fatigue' syndrome that many people experience, several psychotherapists pointed to the more specific risks associated with the hyper-stimulation produced by the news flow for people with a history of mental health problems. "Anxiety looks at the possible and amplifies it, focusing on the possible rather than the probable," British psychotherapist John-Paul Davies, spokesman for the national body for all registered professionals (UK Council for Psychotherapy), told the BBC. According to Davies, people with a predisposition to anxiety who read certain news stories about the economy, for example, strongly believe that their jobs are in danger and that they will lose them and then be forced to leave their homes (Savage, 2020).

The inherent difficulty with these people, according to Davies, is that it is the fear that drives them to compulsively check the information: to alleviate it. In the case of people with a history of depression, the result may be the opposite: they may switch off and become apathetic after overexposure to news about the coronavirus and decide to seek alternative and potentially dangerous sources of stimulation, such as alcohol or food.

Studies described on The Conversation website point out that the way people watch, read and listen to the news, which has changed dramatically in recent years due to the development of IT tools, is not only changing the routines of millions of people, but also the way these people are then influenced by the news (March 2020). One of the most striking differences between digital platforms such as social media and traditional 'one-way' news channels such as television and radio is that the news consumer is no longer a 'passive receiver'. Reactions to social media posts, searches and sharing of content act as immediate feedback that can guide what is offered to the news consumer. But the very availability of on-demand content also puts them in a position to use it in potentially unlimited ways.

The results of a 2003 study suggested that young people who used the Internet to get information and videos and pictures of the attacks after 9/11 showed more symptoms of post-traumatic stress disorder (PTSD) than those who followed the news only on television or in newspapers (Saylor, Cowart, Lipovsky, Jackson, & Finch, 2003).

According to Graham Davey, Professor of Psychology at the University of Sussex and

Editor-in-Chief of the Journal of Experimental Psychopathology, writing in Time in May 2020, 'the way the news is presented and the way we access the news has changed significantly in the last 15-20 years, and often these changes have been detrimental to overall mental health'. Davey argues in some research that the abundance of 'increasingly visual and shocking' information, such as audio and video clips circulating on smartphones and negative news on television programmes, not only increases the risk of acute stress, sleep problems and mood swings, but also generally exacerbates viewers' concerns, even if they are not directly related to the news they are learning.

As confirmed by other studies of the effects of previous attacks, notably 9/11 and the Boston Marathon bombing, the likelihood of developing PTSD symptoms tends to increase as exposure to news of tragedies, crises and natural disasters increases. And the likelihood of this overexposure is partly related to certain impulses that make bad news more interesting than good news.

For several years, social psychologists and psychophysicologists have been studying and describing the effects of a cognitive distortion known as the negativity bias, which is active in a wide range of psychological phenomena. It is described as our tendency, partly for evolutionary reasons, to pay more attention to negative stimuli than to neutral or positive ones. And even when it comes to information, bad information tends to be processed more thoroughly than good information.

"In a state of nature, our survival depends on finding rewards and avoiding harm, but avoiding harm takes precedence," sums up Loretta Breuning (2015), former professor of management at California State University. The human brain, she says, is attracted to alarming information because it is programmed to detect threats, not ignore them.

The tendency of readers to pay more attention to bad news is a fact that even editors knew long before the workings and mechanics of social media provided new evidence. If it bleeds, it leads" is an old American expression - which can be translated, not too literally, as "if it's violent, it gets ratings" - that has been used for decades to describe a type of approach that is well rooted in the television journalism of some networks, aware of the greater interest aroused by gory content and, in many cases, its greater profitability.

From this point of view, the proliferation of information channels favoured by the development of the Internet and digital technologies has not led to a distortion of certain traditional approaches, especially when the offer is supported by business models based on advertising and calibrated on the digital equivalent of the old ratings.

According to the Lebanese essayist Nassim Nicholas Taleb, the amount of information we are exposed to in modernity is turning people from serene to neurotic. In his book *Antifragile: Things that Gain from Disorder*, Taleb distinguishes between 'noise' and 'signal' in the daily flow of news. He argues that we should only pay attention to the latter and ignore the former, which he defines as "a generalisation that goes beyond the actual sound and is used to describe random information that is completely useless for any purpose".

To explain the perverse effects of information overload, Taleb draws a parallel with the medical

concept of iatrogenesis, the case where certain unanticipated effects, even negative ones such as dysfunction, disease or even death itself, are attributed to therapeutic, preventive or diagnostic interventions by doctors.

"Consider the iatrogenicity of newspapers. Every day they have to fill their pages with a range of fresh news - especially news that has been covered by other newspapers. But to do it right, they should learn to be quiet when there is no big news. Newspapers should be two lines long on some days, two hundred pages long on others, depending on the strength of the signal".

Instead, according to Taleb, "noise" generates emotional and excessive reactions, and the abundance of "timely" data available every day prevents people who are immersed in it from perceiving even the proportional increase in "false data" and the inescapable "toxic" part.

"The best solution is to look only at the big changes in data or assumptions, never the small ones," argues Taleb, whose thinking is also partly based on the belief that "meaningful signals still find their way to us".

Many of Taleb's arguments are echoed by Rolf Dobelli, author of *Stop Reading the News*, who at least partly rejects the difference between noise and signal in terms of the opposition between "new" and "relevant". Dobelli argues that it is very difficult to identify what is relevant and much easier, even for the media themselves, to identify what is simply new. And he believes that the media are constructed to make people believe that knowing the news is a 'competitive advantage', which he sees as the same reason why being cut off from the news stream creates anxiety.

The risk Dobelli describes is that, on the contrary, the accumulation of information can make people lose sight of the big picture and "distort the lens" for reading individual stories, reinforcing prejudices and cognitive biases.

The information provided on the day of an event is necessarily basic and insufficient, writes the author, attributing instead to books and long formats (in-depth analyses, essays, documentaries) a better ability to restore the context of the information, even if they arrive a few months or a year late.

4. The Phenomenon of Doom Scrolling

Having described the landscape of information overload and some of its effects, we now come to the other important point: doom scrolling. This media practice is the compulsive search for bad news online: a habit that has become more pronounced with the pandemic.

Doom scrolling is a neologism that entered the Oxford Dictionary in 2020: the word refers to the tendency to compulsively seek out bad news online, scrolling through text on our mobile phones (or tablets, or PCs) to learn about the misfortunes of the world. A habit that became even more widespread during the swine flu pandemic, when there was no shortage of time or bad news, and which particularly affected people who were already suffering from anxiety and depression.

At this point, you might ask, why are we looking for bad news?

Doom-scrolling, as already mentioned, is a typical human (media habit) practice. We are curious, and just like when we pass a car accident, we slow down to see what has happened. This is exactly what happens when we scroll through the news on our mobile phones: as soon as we come across a headline or a clickbait Facebook post, we stop to read it.

Doom-scrolling was common before the pandemic, especially among people suffering from anxiety and depression. Undoubtedly, due to confirmation bias (i.e. the tendency to read only what agrees with one's own thinking), people suffering from depression tend to look for news online that confirms their negative view of the world and of life. And the pandemic, which has exacerbated the psychophysical malaise, has certainly not helped people to give up this bad habit.

It is likely that, at least for a short time, during the first lockdown in 2020, we all did a bit of doom-scrolling. This is the name given, in recent months, to the scrolling and consumption of dramatic, depressing and sad online news, one after the other, on our smartphones or computers, in American social networks and newspapers.

The coronavirus pandemic has resulted in bad news coming from all sides and has drastically reduced activities that were used as a form of distraction - from sports to going out with friends - encouraging us to be more glued to our screens. It is still a relatively new phenomenon, but several experts have already pointed out that doom-scrolling is detrimental to mental well-being (Saindon, 2021). In English, doom means something like 'doom' and 'misfortune', while scrolling is the verb - now also used in Italy - to describe scrolling down the wall of a social network or an online article using the thumb on a smartphone. Sometimes "doom surfing" is used instead of "doom scrolling".

Merriam Webster's dictionary has included it among the words that have not yet been well researched and confirmed, as they do not yet meet the criteria to be included as proper words.

The main contributor to the term's fame in the US was Karen Ho, a journalist at Quartz, who posted regular reminders on Twitter throughout the pandemic about the importance of doing something other than reading news about the growing cases of infection, restrictions, economic collapse and job losses (<https://twitter.com/karenkho/>).

Last October, illustrator Christoph Niemann depicted doom scrolling particularly effectively in an animated drawing for the New Yorker.

Clinical psychology professor Mary McNaughton-Cassill has linked this media practice to people's innate need to 'look for threats', be they poisonous berries or rival tribes. According to McNaughton-Cassill, we are predisposed to pay more attention to bad news than good, and when we are nervous and under stress, we trigger a natural response that raises blood pressure and heart rate. The causes of doom scrolling are not only human, but also technological. The algorithms that run social networks are designed to keep people glued to their screens and to amplify the emotions that keep us looking, especially negative ones, explained David Jay of the Center for Humane Technology (Nguyen, 2020).

The many messaging platforms such as Twitter, Facebook, Instagram and other social networks are designed as never-ending message boards where you can potentially scroll and scroll without ever reaching the end. As a result, people never feel fully updated and satisfied that they have got the facts right.

In an interview with NPR (National Public Radio), clinical psychologist Amelia Aldao explained that doom-scrolling forces people into a "vicious cycle of negativity" that fuels anxiety by constantly discovering new threats from which we instinctively feel the need to protect ourselves. Among the tips to curb this negative behaviour, Aldao recommends setting timers to limit the time spent online, often asking yourself if what you read online is really what you were looking for and wanted to know, and trying to alternate these moments with other only positive ones, preferably offline (Navarro, 2020).

5. (Open) Conclusions

In order to try to reduce the risk of being emotionally conditioned by negative news or of basing one's reflections on distorted interpretations of reality, the best way seems to be to keep in mind that as human beings we are subject to biases, which are also very clear to those who produce the news (de Hoog, Verboon 2020). These biases mean that we are more likely to be influenced by negative news and more likely to think that what we see is more widespread than it is.

Of course, this does not mean that no news is good news. News has great power and helps us stay connected and informed. But in a world where we are surrounded by news twenty-four hours a day, seven days a week, it is important to be aware of our cognitive biases and the distortions they create. We need to take control of our news consumption, rather than allowing it to control us.

As for the work of those in charge of information, Stuart Soroka, a professor of media languages and political science at the University of Michigan, argues in an article in the *Pacific Standard* that the press should continue to be 'negative' because it helps to expose all forms of corruption, thereby holding those in power accountable. But Soroka says the media should weigh bad news against other information in the same way that the brain constantly scans the environment for possible threats. There is another danger of focusing too much on the negative in the news: forgetting that bad news is good news because it shows that society still cares when bad people do bad things. If it is true that a daily barrage of bad news can lead to cynicism, is it not also true that a barrage of good news can lead to complacency? The right thing to do, according to Marshall McLuhan, would be to dose the media.

According to James Breiner (2021), Professor of Communication at the University of Navarra in Pamplona and an expert in digital journalism and new business models, journalists are only doing their job by alerting us to potential dangers, but in the highly polarised debate of recent years, everyone has learned that conflict is news. Effective journalism means reading the news the way a long-term investor would (Breiner, 2021).

This 'dimension' of journalism, Breiner explains, should instead read the news as a long-term investor would. Wise investors take note of what predicts sudden financial collapses as well as what heralds big stock market rallies.

What we are seeing, even in the information chaos of the pandemic, is not a public service, but a battle for who can wield the most political power over others and who can make the most money. Meanwhile, we have millions of people who feel they are not being listened to by any of the existing powers. As a result, journalism is not helping to solve the problems. Among the practices suggested to readers by various specialists during the pandemic, many recommended reducing exposure to the flow of news about the coronavirus. To recapitulate what has been written above, there are some basic steps to take to limit the contagion and the information epidemic.

Firstly, limit yourself to consulting only one weekly bulletin and choose reliable news sites, focusing on facts rather than assumptions; target newspapers that provide public service information and be very critical of those that filter the world for you.

Another step in overcoming coronavirus news addiction is to get help from another person, if they are trustworthy and well-informed. Liz Martin, a therapist, suggests using someone else to keep you updated, depending on how relevant it is to know. If you spend less time scrolling through your social media feed, reading articles shared on WhatsApp or watching all the news and information programmes, you'll have more time for other activities, whether it's reading a book, listening to music or exercising. It is also likely, many argue, that this more balanced allocation can put into perspective events that are difficult to isolate and contextualise in the uninterrupted flow of daily news.

In conclusion, as with all addictions, the first step to stopping doom-scrolling is recognising that you have a problem. If you know that you are compulsively looking for bad news online, you can decide to stop and do something else.

Set limits, allow yourself to scroll through the news for half an hour in the morning, a few minutes in the afternoon, but no more. And if you are tempted to pick up the phone, try to replace it with an alternative activity such as reading, cooking or exercising. These are all healthier alternatives to scrolling.

From a research perspective, it is important to note that recognising what has been reported has implications for clinical work with 'fragile' people, especially children.

From a scientific perspective, clinicians should assess the number of social media sites used by patients during the pandemic, especially if symptoms of depression are reported. However, it is equally important to classify different levels of 'technology addiction' according to socio-demographic factors.

Useful strategies can be suggested and disseminated through reports or experts from local institutions. Such recommendations may include turning off notifications on mobile devices to minimise stress-inducing intrusions, or engaging in safe and enjoyable activities without a mobile device. Scheduled breaks from COVID-19-related media may be useful. In addition,

identifying coping behaviours that do not involve social media may prove useful, as individuals with such symptoms may turn to social media as a coping strategy.

The epidemiological status of news is a major challenge posed by the COVID-19 pandemic; staying informed is associated with a psychological cost. Strategies to limit doomscrolling and engage in positive activities may offset the detrimental effects of engaging in these behaviours. Exploring the interactive effects of media exposure, related stressors and protective factors on mental health is essential to determine the broader impact of the pandemic and how to respond to these events.

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