



Enviado 18/11/2020
Aprobado 16/02/2021
Publicado 19/04/2021

MARKETING DE INFLUENCIA: EDUCACIÓN SANITARIA ONLINE

Influencer marketing: online health education

Ainhoa García Rivero¹

Universidad Complutense de Madrid. España.
ainhoa02@ucm.es

Emma G. Carbonell-Curralo

Universidad Complutense de Madrid. España.
emmacarb@ucm.es

Ana Magán-Álvarez

Universidad Complutense de Madrid. España.
anamagan@ucm.es

Rafael Barberá-González

Universidad Complutense de Madrid. España.
rbarbera@ucm.es

Cómo citar el artículo

García Rivero, A., Carbonell-Curralo, E. G., Magán-Álvarez, A. y Barberá-González, R. (2021). Marketing de influencia: educación sanitaria online. *Revista de Comunicación y Salud*, 11, 19-57. <https://doi.org/10.35669/rcys.2021.11.e268>

Resumen

Internet y las redes sociales han supuesto un antes y un después en el intercambio de información sanitaria. Este proceso ha generado consecuencias como la pérdida de control sobre la información disponible, así como el riesgo de educar en salud de una manera errónea. En el presente estado de la cuestión se aborda, entre otros temas, el

¹ **Autor principal:** Ainhoa García Rivero. Universidad Complutense de Madrid. ainhoa02@ucm.es

marketing de influencia en la promoción de productos y servicios relacionados con el ámbito de la salud para, a continuación, ofrecer una perspectiva actual de los procesos comunicativos entre la ciudadanía y las figuras influyentes del panorama online. Gracias a una encuesta online, se han podido identificar varios influencers que compartían en Instagram alguna recomendación sobre productos de salud. Con esta muestra, se han analizado diferentes publicaciones y se han obtenido diversas conclusiones. Algunos de los resultados obtenidos en el análisis de estos perfiles es que los *influencers* obtienen más reconocimiento y repercusión que los perfiles de profesionales y expertos sanitarios. Además, los *posts* que versan sobre productos relacionados con la salud obtienen grandes datos de engagement a pesar de ser contenido comercial, lo que significa una buena aceptación por parte del público. La clave del éxito de las campañas de marketing de influencia en el sector de la salud reside en la enorme confianza que depositan los seguidores sobre los *influencers*, lo que supone un verdadero riesgo, pues en la mayoría de los casos no se trata de información veraz y de calidad.

Palabras Clave: Educación sanitaria; Redes sociales; Estrategias de e-salud; Marketing de influencia; Salud electrónica; Instagram.

Abstract

Internet and social networks represent a turning point in healthcare information exchange. This process has generated consequences such as the loss of control over the information available, or the risk of health education in a wrong way. The state of the question addresses the marketing of influence on health-related products and services. Consequently, this article aims to offer a present-day perspective about the communication processes between citizens and influential characters from the online scene. Thanks to an online survey, plenty of influencers that shared any recommendation of health products have been identified. Thanks to this sign, different publications have been analysed and several conclusions have been obtained. Some of the obtained results in the analysis of these profiles is that influencers gain more recognition and repercussion rather than professional profiles and sanitary experts. In addition, the posts that are related to sanitary products achieve an enormous quantity of engagement datum despite being commercial content, which means a good public acceptance. The key to success in marketing campaigns of influence in the health sector is the gigantic trust that the followers have on influencers, which means a big risk because, most of the times, it is not a good source of trustful information.

Keywords: Health Education; Social Networking; e-Health Strategies; Influencer Marketing; Online Health; Instagram.

1. INTRODUCTION

This literature review deals with the effects that the use of the Internet has had, both for the generation of online conversations in the health field and for encouraging the purchase of articles aimed at health promotion.

The platforms that have been generated on the Internet over time have brought different benefits depending on the practices they have enabled. On the one hand, the empowerment of patients to take on a more active role and inform themselves about aspects related to their health and, on the other hand, the possibility of developing faster and more immediate interactions between health professionals and the public.

The establishment of mobile applications or social networks brings with it the emergence of high-impact prescribers who encourage habits in their followers, whether in their consumption or in their habits. Faced with this situation, brands have resorted to influencer marketing as a communication tool, achieving greater reach by using influencers as intermediaries between their product and their target audience.

This scenario represents a new challenge for health communication, where factors such as the quality of the information provided by users who, despite having great social influence, are not experts in the subjects they address, come into play. Consequently, the role played in this context by health professionals is fundamental, as they do have the capacity to promote communication that favours health literacy among citizens, unlike non-specialist influencers.

Despite the fundamental importance of joint collaboration between institutions, companies, educational bodies and health professionals, this article shows a series of cases, obtained from Instagram, which exemplify situations in which communication for development is promoted, as well as those in which commercial communication in the field of health is promoted.

2. OBJECTIVES

The specific objectives of this literature review are as follows:

1. To find out the existing relationships between the Internet and the health field.
2. To find out the link between influencer marketing and the health sector.
3. To identify the influence of social networks on citizens' health education.

The secondary objectives of this third objective are as follows:

1. To determine whether non-professional influencers have more or less influence than expert influencers in the field of health.
2. To find out what the posts of health-related products published by influencers on Instagram are like.

3. METHODOLOGY

In order to carry out this research, a series of objectives were set out, as mentioned above, and the Health Sciences Descriptors were consulted in order to locate the terms

with which to begin the research and, consequently, to search for information related to the object of study.

Next, a review of the literature was carried out in order to detect and recover useful materials with which to approach this article. The research sources used were mostly primary sources, most of them being scientific articles. Likewise, after defining the context, we proceeded to identify and analyse a series of examples in Spain to illustrate the problem addressed and the discourse of the article.

The reason why Instagram has been selected as the platform for analysis is related to the data provided in the latest Annual Network Study published by IAB Spain (2020). Based on this document, it can be stated that Instagram is a social network generated for entertainment, this being the objective for which 81% of the Spanish population uses social networks. In addition, it offers high visibility among organisations at a commercial level and is the social network where most influencers are followed.

In order to offer some examples of the communicative processes between the public and the influential figures of the online panorama, a sample has been chosen consisting of personalities who stand out on Instagram, who include in their publications content related to the topic to be investigated and who have public recognition in Spain. When selecting these public figures, the number of followers was taken into account based on the classification proposed by IAB Spain (2019), which considers an influencer to be someone with between 250,000 and one million followers, and a top influencer to be someone with more than one million followers.

Thus, based on an online survey, we proceeded to analyse seven influencers and three top influencers with recognition by the non-fan public. This survey has allowed us to find out which influencers people remember first when they are asked about health-related product publications. With this information, we proceeded to analyse their profiles and extract examples from them that could exemplify the discourse of this work.

Analysing the nature of the sample, we observed six influencers of a non-native nature (those who were famous before becoming successful on social networks) and another four of a native nature. According to IAB (2019), native influencers are those who have gained a following "as a result of the actions he or she displays on social media, where he or she first became known" (p. 7). However, non-native influencers are known for their work in other media and have managed to transfer this recognition to their social media profiles, such as sportsmen, singers, etc.

Thus, we proceed to point out examples in which these personalities disseminate content with an advertising objective. Four variables are taken into account: type of advertising (implicit or explicit), express mention of the brand, inclusion of hashtags specific to the campaign and the absence or presence of the product in the shared image. In addition, the engagement of these publications is calculated in order to know the degree of acceptance by the communities of these influencers, as well as the affinity generated between them.

Table 1. *Analysis sample.*

Influencer	Number of followers	Native or non-native Influencer?	Reason for being known (non-native speakers)
Georgina Rodríguez (@georginagio)	19,2 millones	Non-native	Sentimental relationship with footballer Cristiano Ronaldo.
Pilar Rubio (@pilarrubio_oficial)	4,8 millones	Non-native	Spanish presenter, actress and model.
Estefanía Unzu (@verdeliss)	1,2 millones	Native	-
Laura Matamoros (@_lmflores)	887 mil	Non-native	Relative of public figures: daughter of television collaborator Kiko Matamoros and niece of model and actress Mar Flores.
Adara Molinero (@adara_molinero)	858 mil	Non-native	Reality TV contestant (Big Brother)
Rocío Camacho (@rocioccamacho)	607 mil	Native	-
Pablo Pérez (@blon_doblefilo)	617 mil	Non-native	<i>Freestyler</i> in Battles of Roosters
Azahara Luque (@curly.azahara)	584 mil	Non-native	Reality contestant (Big Brother)
Lucía Galán (@luciamipediatra)	295 mil	Native	-
Marian García (@boticariagarcia)	259 mil	Native	-

* **Note:** number of followers verified in May 2020.

Source: *own elaboration*

4. DISCUSSION

4.1. The Internet and the health sector

Since the consolidation of the Internet in the 1980s, "an instrument of modal, interactive, horizontal, global, free and uncontrolled communication" (Castells, 2003, p. 8) has been installed in society, with which people have been able to generate and

access digitalised information. This phenomenon has led to a restructuring of social constructions to the point of generating a culture of autonomy (Castells, 2003).

The field of health, immersed in the characteristics of the digital context, has also undergone these alterations. As Monteagudo (2001) explains, the effect of both the Internet and "digital communication technologies goes far beyond the implementation of health portals aimed at consumers or professionals" (p. 25). Thus, the relationship between health and the Internet can be approached from different perspectives, giving rise to concepts such as:

- *E-health*: refers to the set of tools and infrastructures provided by digital networks for the purpose of prevention, diagnosis or lifestyle management in relation to health (Monteagudo, 2001; Cernadas et al., 2019).
- *Medical Informatics*: scientific field focused on the analysis of medical data, as well as its storage, retrieval and use to solve problems and make decisions (González and Molina, 2003).
- *Telemedicine*: provision of health services at a distance through interactive consultation and diagnostic services (DeCS, n.d.).

Thus, on the one hand, the way in which people outside the medical field access health information has changed and, on the other hand, the different agents involved in health practices (doctors, nurses, pharmacists, patients, etc.) exchange information with each other online. Specifically, Díaz de León (2019) indicates how the actors who can "adopt and appropriate ICT for health purposes" are the general population and "health service providers (whether professional or technical)" (p. 179).

In fact, today the activities, services and systems within e-health that seek to promote "health, disease control and health care globally" (Rodríguez, 2019, p. 28) cover a different spectrum of activities than a few years ago. This is due to the irruption of certain practices through social networks, where users have acquired an "active and even protagonist role in the dissemination of online messages", generating a model of media autonomy called self-communication (Campos et al. 2010).

4.2. New e-health strategies

Thanks to the paradigm shift in which vertical media mutate into horizontal networks (Castells 2009; Campos et al. 2010), a participatory culture around knowledge creation and dissemination has been fostered.

Participatory culture allows people to share in the virtual world a series of "ideas, perspectives, trends, attitudes, etc.", as García-Núñez and García-Huerta (2018, p. 458) explain, which will have repercussions in the real world. Thus, this type of interactive and multiple communication will have a strong impact on whether a user tries a product, a service or performs certain practices.

For Hartzband and Groopman (2010), nothing has revolutionised the practice of medicine more than the emergence of the Internet, since the normalisation of its use has given patients access to information that, in the past, was only under the control of health professionals. In relation to this change in medicine brought about by the influence of the Internet on health information, Wilson and Risk (2002) expressed their concern, during the first years in which this phenomenon was beginning to be studied, that the large amount of information available on the Internet would make it difficult for users to access the best quality information.

The term infobesity, translated from information overload, refers, as Jaubert and Dolbeau-Bandin (2020) point out, to the information overload caused by the saturation of information from outside. Consequently, in the field of health information, the user not only suffers from saturation by collecting useless, erroneous and incomplete data, but also casts doubt on the doctors who subsequently treat them (Salud sin Bulos and Doctoralia, 2019).

In fact, one of the arguments found by patients for not using this source is precisely that it has been discouraged by health professionals themselves (Abt-Sacks et al., 2013). However, over the years, the use of this tool has increased as the number of health-related searches has risen (Villaescusa et al., 2013).

Specifically, according to Eurostat data (2020), in Spain in 2019, 60% of the population used the Internet to search for information on health issues, five points above the European Union average of 55% (Eurostat, 2020). But if there is one situation in which the search for health information has increased exponentially, it was during the Covid-19 pandemic. According to data from Comscore (2020), usage skyrocketed the week of 24 February 2020 to 1 March 2020, when the danger of the virus was beginning to be seen as a possible reality. In the case of Spain, the search for health information has increased during the pandemic by 66% compared to the pre-Covid-19 situation compared to data from the week of 30 December 2019 to 5 January 2020.

Linked to this, it is worth noting that, as a result of this health crisis, the term infodemic has emerged. According to Aguado-Guadalupe and Bernaola-Serrano (2020), the oversaturation of information and its rapid dissemination, coupled with misinformation, "has meant that the World Health Organization (WHO) had to warn about the threat of rumours, hoaxes and false data that were spreading, giving rise to what has become known as infodemia" (p. 290). In fact, "the situation led the WHO (...) to set up a section on its website to refute the myths that were circulating on social networks" (Aguado-Guadalupe and Bernaola-Serrano, 2020, p. 290-291). It is therefore corroborated that social networks are not the most appropriate medium for finding reliable information on health issues; to the point that the WHO has had to intervene to try to alleviate the wave of hoaxes that circulated through them in relation to Covid-19.

This is in line with Khan (2020), who states that superfluous information and content overshadowed the useful and essential information being disseminated on social media about Covid-19. Here we find another interesting aspect, and that is the fact that the little

useful information that is shared on social media goes unnoticed compared to other types of content.

4.3. Reasons for consulting health information

According to Solé (2003), the behaviour by which the population consults information on health issues on the Internet is justified by the possibility of free access to knowledge that comes not only from professionals, but also from the general public, even though they are aware that they may receive information that lacks scientific rigour. Therefore, it can be deduced that the user values online conversation and peer-to-peer advice thanks to the mechanisms that enable the horizontal communication inherent to participatory culture.

Regardless of the tastes or tendencies of citizens, access to the information made available by the Internet in the field of health is a debate that has been demonstrated in the literature that has been generated so far. Several studies have analysed the positive and negative effects that free access to health information can have on the population (Santamaría-Ochoa et al., 2016; Sanz-Lorente and Castejón, 2019).

Farré et al. (2012) explain that the European Union has revised its strategies for disseminating scientific information so that its message does not lose legitimacy or rigour in a media environment contaminated by the public use of social networks (p. 381). Nevertheless, it should be noted that, thanks to the Internet, it is possible to provide users with tools that allow them to take an active role in their health care. Some authors already speak of patient empowerment as one of the main positive aspects of the impact of the Internet in the field of health (Hawn, 2009; Arantón, 2014).

Among the benefits of this empowerment, other authors have concluded that "a "well-informed" patient improves their adherence to treatments and faces the self-management of their illness in a more autonomous and responsible way, it is necessary to provide the population with culturally adapted health websites of scientific quality" (Abt-Sacks et al., 2013, p. 246).

In addition, many authors defend the usefulness of the Internet for health service planning and health surveillance with the observed patterns of information sharing traffic on the Internet (Eysenbach, 2009). It could even be argued that the Internet is a field of action for health professionals themselves, who have at their disposal a multitude of tools that facilitate interaction with patients in the form of online consultation (Sanz-Lorente and Castejón, 2019). For example, thanks to technological advances, we find initiatives such as the Dejal@Bot project, an "independent clinical trial conducted in Primary Health Care to help patients quit smoking assisted by a chatbot" (Ávila-Tomás et al., 2019, p. 56). It is also worth noting that as a result of Covid-19, public Primary Care in the Community of Madrid itself has resorted to technology and, specifically the WhatsApp application, to be able to attend to its patients without the need to make an appointment in person.

On the other hand, the emergence of virtual patient communities, as Moreira and Camara (2012) point out, boosts the assimilation of health-related knowledge and exemplifies the procedure in which patients acquire independence. These authors address the empirical demonstration that "one of the origins of the causes of death of patients is the lack of social links or social networks of contacts" as social relations have an impact on "the physical and mental health of patients" (p. 49). Other authors find multiple advantages to these user networks that "facilitate emotional support, exchange of information, experiences and self-help advice and even health care when a health professional participates as a moderator" (Jiménez-Pernett et al., 2007, p. 47). In contrast, and despite the above, authors such as Leis et al. (2013) cast doubt on the usefulness of groups, such as Facebook groups, as they have become a focus for promotional information about products such as, for example, dietary products.

4.4. Health literacy

Faced with the virtual panorama of hoaxes and commercial interests, Solé (2003) states that "the ethics of health information must be respected on the web, clearly distinguishing between what is scientific information and what is advertising" (p. 181), which means that the authors must be identified, the sources of information must be provided, the date the website was updated, it must be stated that the material provided does not replace the opinion of a doctor and, of course, whether the portal is being sponsored by a brand (p. 182).

Although miscommunication on the part of the website could have harmful effects on any individual, when estimating the effects that easy access to health-related information can have, the particular vulnerability of young people who use the Internet as one of their main ways of obtaining information as a fast, free and, a priori, confidential medium should be taken into account.

Thus, many authors agree that among the main difficulties that may arise in the search for health information are, on the one hand, the users' own skills to find the right information (Henwood et al., 2003) and, on the other hand, the quality of the information that users obtain when using the network (Martín et al., 2014; Sanz-Valero et al., 2006).

However, the implementation of health literacy: HLE is essential. A term translated from health literacy which, according to Falcón and Luna (2012), emerged as a complex concept during the 1970s in the Anglo-Saxon world. Specifically, the authors point out that the WHO defines HEA as the set of "social and cognitive skills that determine a person's level of motivation and ability to access, understand and use information in ways that enable them to promote and maintain good health" (p. 92).

Falcón and Luna (2012) explain that this concept refers both to the individual's ability to understand a leaflet or information provided by a health professional, and the ability to "access, interpret, interpret, judge and use appropriate information to make informed

decisions". HEA is therefore crucial for individuals to act for their health and public health, as it will depend on "the individual capacities of citizens" (p. 92).

But for an improvement in HEA to take place, a "multifactorial, multidisciplinary and multisectoral approach" is required, involving both educational and health actions to ensure that citizens' behaviours are optimised. It is necessary to reinforce "sustainable changes in behaviour" with the collaboration of "the pharmaceutical and food industry, the scientific and informative media, the representation of groups of health professionals, patients and users, and, of course, those with political responsibilities" (Falcón and Luna, 2012, p. 97).

At this point, based on the contributions of Martínez and Sosa (2016), a distinction must be made between health communication and communication for development and social change, since the former refers to messages of a commercial nature, and the latter refers to those whose objective is to build a healthy society by achieving a change in power relations. In order to achieve this goal, as many individuals and communities as possible must be involved. On the origin of communication for development, Martínez and Sosa state:

It arose from a strategic process adopted by international cooperation agencies in the 1950s, in the United States by the United States Agency for International Development (USAID) and in the United Nations by UNFPA through behavioural campaigns for nutrition and human development issues. In turn, FAO used education for farmer training and healthy agricultural technologies and UNICEF for the well-being of children and their mothers. Likewise, development communication bases its intentions on psychosocial and persuasion theories as well as public relations by focusing on individual behavioural changes through the dissemination of messages to audiences with converging characteristics (2016, p. 73).

4.5. Influencer marketing and health education

The Internet is home to a variety of media from which to access health information, including blogs, forums, social networks and mobile applications, among others. Different authors have analysed each of these, as well as the influence they have on health communication.

For example, blogs that, in the field of food and nutrition education, arouse the interest of readers and promote the health of individuals are considered an educative tool (Rojas et al., 2018). Mobile health applications are also seen as an ally in health education, as well as the creation of web repositories that include reliable and safe sources of information. All of this represents a new way of empowering and placing users at the centre (Fernández and Ramos, 2013).

Gil-Torres et al. (2020) talk precisely about mobile applications. In their work, they point out that "the predominant discourse features in the COVID19 apps were, predictably, those linked to health and information" (p. 350). In fact, the authors highlight

the fact that "informational apps have been more in demand" (p. 351) considering the large media coverage given to the pandemic caused by Covid-19. We see, therefore, that people have turned to technology to seek health information, as has happened in social networks. Mobile applications, as demonstrated, also play an important role in online health education.

But there is no doubt that social networks are platforms that, once analysed, several authors find to be systems of patient empowerment. For this reason, in 2009 the World Health Organisation announced the emergence of social networks as a new and evolving area, urging the presence of health professionals on them to provide citizens with accurate information. This meant "an opportunity for health professionals to explore, listen and engage" (McNab, 2009, p. 566).

Two realities converge at this point, as social networks are not merely a space for the propagation of content. As Castelló (2010) states, the receiver no longer only occupies the position of audience, but "in addition to being a consumer-producer (crossuser), the brand fan (fansumer) becomes a professional consumer (prosumer)". Thus, brands not only make use of the classic and organic diffusion exercised by the anonymous consumer, but also benefit from the opinion leaders of the online media who are able to generate repercussions for their product and consequently spread a point of view about a specific company, brand or product.

It is true that, prior to the emergence and normalisation of social networks, brands already made use of the media and influencers. However, with the horizontalisation of communication structures and the phenomenon of influencer marketing, the way in which brands access their target audiences is simplified.

Advertising campaigns in the health sector, Alvarez (2014) details, have always had little appeal from the point of view of agencies. Firstly, because of the restrictive regulations that apply to this type of campaign and, secondly, because until not so long ago, "those responsible for the communication of laboratories and health products tended to be doctors and pharmacists, with little expertise in advertising and communication" (p. 109).

However, in recent years, the advertising sector has sought to generate products that are closer to the consumer. Thus, the article by Álvarez (2014) highlights the creation of the Spanish Association of Health Advertising Agencies or the Chair of Communication and Health in the Faculty of Information Sciences at the Complutense University. In this context, recent years have opened the door to influencer marketing strategies, one of the ways used by companies to reach their target audiences.

4.6. Influencers and recommendations on health habits

To clarify this concept, according to the Interactive Advertising Bureau Spain (IAB), influencers are those people "who have the potential to create engagement, drive conversation and/or influence the purchase decision of products/services to a target

audience" (IAB Spain, 2019). This type of marketing is a new way of transferring word-of-mouth to the digital environment (Dueñas et al., 2020) and of generating viral marketing that does not target individual customers, but networks of customers (Aguado and García, 2009).

With the aim of identifying the effects that influencers can have on their followers, Pilgrim and Bohnet-Joschko (2019) established three categories: knowledge transfer, benevolence and personal identification, the latter being those followers with a greater sense of perceived familiarity with the influencer, to the point of seeking their advice as if they were a friend.

There are more and more articles that investigate the phenomenon of influencers and that try to delve into their relationship with consumption processes (Dueñas et al., 2020), since it has been observed that the Internet is one of the channels that most influences purchasing decisions, as well as the recommendations made by a well-known person, such as influencers (Castelló-Martínez and Del Pino Romero, 2015).

In relation to this, the report Libro Blanco de Marketing de Influencers del IAB Spain (2019), points out how decisive it is that influencers are recognised in their most specialised niche so that advertisers turn to them when addressing a topic in which they are opinion leaders: gaming, lifestyle, music, sport, cooking, etc.

Bearing in mind, on the one hand, that a new approach to the consumer-brand/product relationship has been generated and, on the other hand, that citizens currently use the Internet to make health queries, compare information or find out about new health-related practices, opinion leaders have seen this field as a niche in which to act.

With regard to these recommendations on health habits, it should be noted that, according to Byrne, Kearney and MacEvilly (2017), influencer marketing plays a fundamental role in public health. The authors emphasise that influencers are increasingly powerful in changing their followers' behaviour around food and dietary choices. In their study (Byrne, Kearney and MacEvilly, 2017) they reveal that influencers motivate their followers to eat a healthier diet. However, they reiterate the poor qualification and scientific rigour on which they base these recommendations, thus sharing false or misleading information that can negatively affect the health of their followers, as some people follow advice on gluten-free or dairy-free diets without considering the effect it may have on their health. In fact, Baudrillart et al. (2018) question the quality of information shared by influencers on health issues.

With regard to the classification of influencers in the health sector, Ferret (2019) indicates that the profiles that brands turn to most are those of "healthy living, healthy recipes, athletes or mothers concerned about the wellbeing of their families". For his part, Deprez (2016) focuses on influencers specialising in the pharmaceutical field and, therefore, highlights some reliable sources of information on health.

In relation to the food field, and motivated by the increase in childhood obesity, many researchers have begun to take an interest in the eating habits of young people and their relationship with the appearance of unhealthy foods presented by influencers (Coates et al., 2019). In fact, linked to the quality of information, it is important to mention that a Scottish study presented at the European Congress on Obesity has shown that only one in nine influencers met the necessary criteria to disseminate health-related information (El País, 2019).

Linked to the field of food is also the concept of the ideal of beauty, which can be reflected in the content and comments on the social networks of many influencers. It is precisely from the perspective of eating disorders that authors such as Larrain and Arrieta (2010) have analysed this concept, which is mainly promoted by the media.

In our current culture, beauty and thinness are two concepts that are closely related. Seva and Casadó (2015), aware of the role of the media in promoting the ideal of female beauty, found in the analysis of publications in magazines and social networks, a socially accepted figure as the "ideal body" that is difficult to achieve, simply because of genetics, and which has an impact on the insecurities of the followers of these profiles.

But eating habits are not the only health issue that influencers talk about, as there have also been cases in which they recommend the use of certain drugs. In Spain, health organisations have begun to observe an increase in these practices, and in late 2019 and early 2020 several news items were published in the Spanish media warning about the growing demand in pharmacies for medicines recommended by influencers (Redacción Médica, 2019; Linde, 2020; García, 2020).

The Ministry of Health began to intervene in this problem in November 2019, working with Google and social networks to remove this type of content (Negrete, 2019). Previously, the General Council of Medical Associations, the General Council of Pharmacists' Associations and the General Council of Dentists' Associations had already joined forces on this issue, to remind that these actions pose a risk to patients' health (Redacción Médica, 2020). For its part, the General Council of Official Associations of Pharmacists has developed a campaign against misinformation generated on social networks and to "warn of the risks of medicines that are advertised without any control by the so-called influencers (...) without scientific training", as well as an argument responding to the main problems encountered with the information of medicines on social networks (Cgcof, 2020).

On the other hand, the study by Isorna, De la Cruz and Villanueva (2020) focuses on how tobacco companies use young and popular influencers to post smoking pictures "as part of a marketing strategy documented in more than 40 countries" (p. 104). In Spain, despite the ban on tobacco advertising, the law is often broken, as is the case with alcohol-related advertising. Linked to tobacco, we also find numerous influencers on social networks recommending vaping shops or brands (Figure 1), promoting the use of these electronic cigarettes without making any mention of the risks of consuming these substances.

However, influencers are not only used to advertise products as such, but are also used to report on health-related initiatives or campaigns. This is the case of the #Diabetesportucorazón campaign, in which Lilly and Boehringer Ingelheim brought together doctors, patients, journalists and influencers in a "heart-healthy workshop" for Alberto Chicote to cook heart-healthy recipes (Lilly, 2020). This event allowed numerous influencers to share tips and information on their social media channels about type 2 diabetes (DM2).

4.7. Examples of influencers and their recommendations on health habits

The recommendations that influencers make are usually about products for everyday use. In this way, they aim to generate a sense of credibility in their followers by supposedly attesting to the results of a particular item. Health-related products are no exception, with public figures sharing information that apparently improves the health literacy of their followers. It should be borne in mind that the information these individuals disseminate is not always truthful, as advertising and economic interests taint the content with personal convenience. Consequently, if followers do not detect or play down this factor, they will accept and internalise information that is unscientific or unreliable.

Analysing the health publications of some influential people in Spain, it can be seen how they speak in favour of certain medicines, vitamin supplements, online pharmacies, mobile health applications, etc. This phenomenon is exemplified below by means of various content extracted from the Instagram platform.

In August 2019, influencer Rocío Camacho (@rocioccamacho) reported the results of having used Isdin Hydro Oil photoprotector since the beginning of the summer and also recommended it for promoting a "beautiful" and "healthy" tan (figure 2). However, in June of the same year, she published how she was preparing her skin for the summer with another sun cream. This time from Lancaster Beauty (figure 3). In this post, Camacho also explained how the product protected the skin and allowed for a "beautiful and healthy tan". With more than 600,000 followers, brands turn to her to get coverage and affinity in their communication, without even taking into account her collaboration with competing brands. Its followers, however, are quite impacted by the advertising of different sunscreen brands in the same time frame. It is key to highlight the fact that these products are considered "healthy" without even explaining why they are so.

On the other hand, Azahara Luque (@curly.azahara), a former contestant of the reality show Gran Hermano 15, encouraged her followers through Instagram stories in May 2020 to use a telemedicine app called Savia (Figure 4). To do so, she explained all the medical specialities available on the app and shared her experience with her more than 580,000 followers by commenting on how well the app was helping her to contact doctors at a time when she was suffering from mastitis and health centres were closed due to Covid-19.

On the other hand, there are examples of teeth whitening, which are trending on social networks and more and more young people are resorting to them despite having practically no information about their benefits and risks. Thus, Georgina Rodríguez (@georginagio), current partner of footballer Cristiano Ronaldo, frequently recommends Hi Smile teeth whitening on Instagram (Figure 5), despite the fact that dentists point out that it is necessary for patients to have a prior examination to give them a proper diagnosis before undergoing this type of treatment (Tardón, 2015). This event takes on special importance when the celebrity's advice reaches more than 19 million people around the world.

The profile of the presenter and model Pilar Rubio (@pilarrubio_oficial) contains images of her day-to-day life, generally photos of her sports routines, her pregnancies, her family and her work. In this line, related to maternity and physical training, in January 2020 Rubio announced a food supplement that she recommended along with exercise and a healthy diet (figure 6); and in March of the same year she published an image (figure 7) of the third edition of *Embarazada ¿y ahora qué?*, the book on care during and after pregnancy that she co-wrote with Caroline Correia. It is important to highlight the fact that a reporter, model and presenter becomes co-author of a book on pregnancy advice, a very delicate subject and one on which she has been proclaimed an expert, not because of her academic training, but because of her personal experience.

The influencer Estefanía Unzu, with more than one million followers, is a youtuber known for sharing the day-to-day life of her large family on her channel Verdeliss, as well as for participating in the reality show *Gran Hermano Vip*. On her Instagram profile (@verdeliss) we find recommendations on products related to the care of her children. One of them is the product BabyRub, which, although it is not a medicine as such, is used for congestion or colds in babies (figure 8). Similarly, it also makes recommendations for Femibion products, a polyvitamin for breastfeeding and pregnancy (Figures 9 and 10). Of these posts, it is particularly noteworthy that it shares important medical information such as "helps the normal formation of thyroid hormones and thyroid function" or simultaneously recommends the intake of folic acid during pregnancy "to cover the 400mgc and thus help the correct development of the baby's neural tube". This information is very specific and should not be disseminated by someone who is not an expert in the field because, when followers read this, their confidence in her grows and they blindly trust what she shares despite not having any training in health sciences.

Another example can be found in the advertising of Fitvia products (tea with stimulants). Adara Molinero, a former reality TV contestant, published in June 2019 a photo (figure 10) consuming this product and recommending it in relation to her post-partum recovery. She pointed out that this product activates the metabolism and favours the burning of calories. Rocío Camacho, for her part, recommends a different tea from the same brand (figure 12), "perfect for purifying toxins" and "eliminating fluid retention". As can be seen, the brand's communication strategy is based on influencer marketing to try to show the product as a regulating and healthy agent. Despite being a consumer product, and not a medicine, it is related to health, especially considering the text that

accompanies the publications we have just presented, which shows how the product can contribute to the health of consumers depending on the flavour chosen.

In reference to the pandemic caused by Covid-19, an example is the case of Laura Matamoros (@_lmflores), a fashion influencer, who shared on her profile that she had been tested for Covid-19 antibodies and the positive result of the test. Alongside this news (Figure 13), she noted her joy at having generated antibodies and, consequently, becoming immune to the disease. The main problem with these statements is that at that time it was not yet known for sure whether having the disease subsequently generates the immunity that Matamoros mentioned. Therefore, information without scientific rigour can certainly reach a large number of people, considering the more than 880,000 followers she has on Instagram. Ultimately, this case is just one example of how influencers' recommendations can transmit data that can lead followers away from truthful notions about a topic.

The number of influencers who promote certain types of consumer behaviour is intrinsically related to the ideal body image, which, as Seva and Casadó (2015) point out, encourages "attitudes and activities related to the cult of the body" (p. 71) to be addressed on the Internet. This includes the promotion of "diets, abundant physical exercise, miraculous beauty products, weight loss tricks" and a long list of mobile applications, among other advice (p. 71).

Based on all these examples, it is important to highlight the words of Carlos Mateos (Cgcof, 2020), coordinator of the #SaludsinBulos campaign, who mentions that "most influencers share their content through Instagram, whose publications are more ephemeral and difficult to trace", referring to publications in stories, such as Azahara Luque's post on the mobile app or Laura Matamoros' post on the Covid-19 coronavirus.

In addition, regarding the recommendation of medicines on social networks, Guillermo Martín, owner of the account @farmacia_enfurecida, states that the prescription and consumption of medicines is a crime (according to Royal Decree 1416/1994) as it can cause allergies, reactions, saturation in medical centres, mistakes such as confusing an antibiotic with a cosmetic, as happens with certain shampoos or wipes. This, says Martín, is a practice that can be sanctioned on Google and YouTube, but on Instagram, "where most influencers are found", no measures have yet been taken (iSanidad, 2020).

Similarly, we can find professionals sharing useful and scientifically rigorous information through social media. As we have already mentioned, the WHO believed that the presence of health professionals on social media was necessary to provide accurate information on these platforms (McNab, 2009). Therefore, the fact that professionals are involved in health education through social networks is something very positive for patients in particular and citizens in general, since it is truthful, rigorous information, and within the reach of most of the population.

In the sample of this study we found two examples. On the one hand, the case of Dr. Lucía Galán (@lucíamipediatra) with more than 290,000 followers. This paediatrician and member of the Unicef Advisory Council has written six books, and through her Instagram she shares news, advice and recent studies that can influence children's health. Like the rest, Galán has also made reference to Covid-19, but focusing on the youngest children. In most cases, Galán uses Instagram to share some of the information she has, but she usually redirects her followers to her personal website, where she shares the full content of her articles or research.

On the other hand, we find the pharmacist Marian García (@boticariagarcia), who has more than 250,000 followers. Like Galán and unlike the aforementioned profiles, the administrator of this profile has a background in the field of health, and demonstrates her knowledge not only by sharing information through social networks, but also by collaborating in disseminating it in other media (radio, press, television...). In fact, García has collaborated on several occasions on Zapeando, the afternoon programme on La Sexta. In his profile he shares news and information of interest related to Covid-19. However, before this health crisis arose, he was already sharing news of interest in the sector, as well as advice and hoaxes about food and healthy habits.

One aspect to note about these profiles is that sponsored posts are minimal, in contrast to the rest of the profiles. Professionals, after all, aim to disseminate information and educate the population about health through social networks. However, non-professional influencers promote health-related products without any scientific knowledge, so the information they offer is more commercial and less informative.

Table 2. Data collected from the sample profiles disseminating promotional content.

<i>Figure</i>	<i>Influencer</i>	<i>Content</i>	<i>Explicit advertising?</i>	<i>Do they mention the brand's Instagram profile?</i>	<i>Are campaign hashtags included?</i>	<i>Is the product shown in the shared image?</i>	<i>Followers/ Likes of the publication/ Engagement of the publication</i>
Figure 1	Pablo Pérez (@blon_doblefillo)	Vappers	Yes (#Ad)	Yes	Yes	Yes	617 thousand / 38.897/ 6,30%
Figure 2	Rocío Camacho (@rocioccamacho)	Photoprotector Hydro Oil	Yes (#Ad)	Yes	Yes	Yes	607 thousand / 20.102/ 3,31%
Figure 3	Rocío Camacho (@rocioccamacho)	Photoprotector Lancaster Beauty	Yes (#Ad)	Yes	Yes	Yes	607 thousand / 24.360/ 4,01%

Figur e 4	Azahara Luque (@curly.azahara)	Telemedic ine App <i>Savia</i>	Yes	Yes	Yes	- ²	584 thousand / ³
Figur e 5	Georgina Rodríguez (@georginagio)	Tooth whitener <i>Hi Smile</i>	Yes	Yes	No	Yes	19,2 million/ 751.030/ 3,95%
Figur e 6	Pilar Rubio (@pilarrubio_ofi cial)	Food suppleme nt <i>Ensure Max Protein</i>	Yes (#Ad)	No	Yes	Yes	4,8 million/ 139.418/ 2,90%
Figur e 7	Pilar Rubio (@pilarrubio_ofi cial)	Book <i>Embaraza da ¿y ahora qué?</i>	Yes	Yes ⁴	No	Yes	4,8 million/ 41.440/ 0,86%
Figur e 8	Estefanía Unzu (@verdeliss)	Comfortin g Ointment Reconfort ante <i>BabyRub</i>	Yes (#Ad)	No	Yes	Yes	1,2 million/ 64.584/ 5,38%
Figur e 9	Estefanía Unzu (@verdeliss)	Food suppleme nt <i>Femibion</i>	Yes (#Ad)	No	No	Yes	1,2 million/ 40.957/ 3,41%)
Figur e 10	Estefanía Unzu (@verdeliss)	Food suppleme nt <i>Femibion</i>	Yes (#Ad)	Yes	Yes	Yes	1,2 million/ 61.446/ 5,12%
Figur e 11	Adara Molinero (@adara_molin ero)	Tea with stimulants <i>Fitvia</i>	Yes	Yes	No	Yes	858 thousand / 15.584/ 1,81%
Figur e 12	Rocío Camacho (@rociocamacho)	Tea with stimulants <i>Fitvia</i>	Yes	Yes	No	Yes	607 thousand / 12.208/ 2,01%
Figur e 13	Laura Matamoros	Informatio n about	No	-	-	-	887 thousand / ³

² It is not a product, but a service.

³ This is a post on Instagram stories, so this post has no likes given its nature.

⁴ It is a book, so the brand is the title of the book itself. In addition, the personal and professional profile of the co-author is mentioned, advertising these profiles simultaneously.

	(@_lmflores)	COVID-19					
--	--------------	----------	--	--	--	--	--

* **Note 1:** Engagement has been calculated using the formula provided by Núñez (n.d.), dividing the number of likes by the number of followers and multiplying by 100.

* **Note 2:** The number of followers was consulted in May 2020.

Source: *own elaboration, (2020)*

It is worth noting that the BOE (2002) states that "commercial communications made by electronic means must be clearly identifiable as such, and the natural or legal person on behalf of whom they are made must also be clearly identifiable" (p. 16). In five of the eleven publications containing explicit health advertising, the advertising nature of the message is not indicated at any point, disregarding the rules outlined in the BOE.

5. CONCLUSIONS

Although the use of the Internet and social networks has many advantages for the health field, it also entails a number of risks. Mainly because of the amount of information posted by people driven by economic interest rather than conviction based on social progress.

Influencer marketing is a growing practice in the sector, so Instagram is full of information related to medicines, healthy products, or references to diseases and pathologies. However, prescribers who are either professional content creators, celebrities or TV influencers have a higher recognition and number of followers than health professionals with a health background, as can be seen in Table 1.

Consequently, those influencers who disseminate commercial information among their content can achieve a high penetration among users based on content of low scientific rigour. The reality is that these publications, despite being commercial content, achieve high engagement data, with only two of the eleven publications not achieving the ideal engagement. According to De Lima (2019), engagement should exceed 2% to consider that the publication has been related and has achieved a good acceptance among the influencer's community.

Another aspect to consider about these promoted posts is to point out how common it is for the influencer to mention the brand, as well as the inclusion of photographs of the product itself and, less frequently, hashtags specific to the campaign. With these elements, we can affirm that although explicit advertising is carried out, on numerous occasions it is not identified as such, which is obligatory in Spain.

As we have seen, these types of publications are very well accepted among the population. As a result, people trust these recommendations, even when they deal with pharmacological products that require prescription or assessment by a doctor or pharmacist. The reason for this, as Pilgrim and Bohnet-Joschko (2019) have already analysed, has to do with the effect of closeness that these influencers generate in their

followers, reaching, in the most extreme cases, a level of personal identification that makes the influencers be perceived as friends to ask for advice.

It should also be noted that the professional health influencers analysed have far fewer followers than the rest of the profiles. This could mean that, as a result, more people receive information from those who disseminate commercial information than from those professionals in the sector who share truthful information on social networks. The result of this is the influence on users of content characterised by its lack of scientific rigour rather than truthful, educational and quality content.

There is therefore a need for institutions to generate and publicise new e-health strategies that guarantee healthy living, promote wellbeing and resolve the issues raised in this review. For, although official bodies have become more active in health education strategies, especially in the wake of the Covid-19 pandemic, there is a need for initiatives to combat citizens' adherence to influential figures that do not support health literacy.

6. REFERENCES

- Abt-Sacks, A., Pablo Hernando, S., Serrano Aguilar, P., Fernández Vega, E. y Martín Fernández, R. (2013). Necesidades de información y uso de Internet en pacientes con cáncer de mama en España. *Gaceta Sanitaria*, 27(3), 241-247. <https://doi.org/10.1016/j.gaceta.2012.06.014>
- Aguado-Guadalupe, G. y Bernaola-Serrano, I. (2020). Verificación en la infodemia de la Covid-19. El caso Newtral. *Revista Latina de Comunicación Social*, 78, 289-308. <https://doi.org/10.4185/RLCS-2020-1478>
- Aguado, G. y García, A. (2009). Del Word-of-mouth al Marketing viral: aspectos claves de la comunicación a través de redes sociales. *Comunicación y Hombre*, 5. <https://comunicacionyhombre.com/article/del-word-of-mouth-al-marketing-viral-aspectos-claves-la-comunicacion-traves-redes-sociales/>
- Álvarez, A. (2014). "Publicidad y salud": un manual práctico para conocer los cambios. *Revista de Comunicación y salud*, 4(1), 109-114. [https://doi.org/10.35669/revistadecomunicacionysalud.2014.4\(1\).109-114](https://doi.org/10.35669/revistadecomunicacionysalud.2014.4(1).109-114)
- Arantón Areosa L. (2014). Prescribir Links y Apps para empoderar a los pacientes. *Enfermería Dermatológica*, 8(22), 44-49. <http://www.anedidic.com/descargas/dermared/22/prescribir-links-y-apps.pdf>
- Ávila-Tomás, J. F., Olano-Espinosa, E., Minué-Lorenzo, C., Martínez-Suberbiola, F. J., Matilla-Pardo, B. y Serrano-Serrano, E. (2019). Nuevas herramientas de comunicación digitales entre profesionales de la salud y pacientes. A propósito del proyecto Dejal@Bot. *Revista de Comunicación y Salud*, 9(2), 55-70. [https://doi.org/10.35669/revistadecomunicacionysalud.2019.9\(2\).55-70](https://doi.org/10.35669/revistadecomunicacionysalud.2019.9(2).55-70)

- Baudrillart, M. A., Pelletier, K., Zimmerli, V. y Badillo, P. Y. (2018). Identification et typologie des e-influenceurs: analyse des flux d'information sur Twitter dans le domaine de la prévention en santé. *Colloque international - Réseaux sociaux, traces numériques et communication électronique*, 685-696. <https://archive-ouverte.unige.ch/unige:105814>
- BOE. (2002). Ley 34/2002, de 11 de julio, de servicios de la sociedad de la información y de comercio electrónico. <https://www.boe.es/eli/es/l/2002/07/11/34/con>
- Byrne, E., Kearney, J. y MacEvilly, C. (2017). The role of influencer marketing and social influencers in public health. *Proceedings of the Nutrition Society*, 76(OCE3), E103. <https://doi.org/10.1017/S0029665117001768>
- Campos, F., Gago, M. y López, A. M. (2010). Desarrollo de una nueva herramienta de análisis y gestión de la conversación de los medios sociales. *Virtualis*. <https://www.revistavirtualis.mx/index.php/virtualis/article/view/26/15>
- Castelló, A. (2010, 19 de julio). *Crossuser, prosumer, fansuser y persuser*. Observatorio Comunicación en Cambio. <https://comunicacionencambio.com/crossuser-prosumer-fansuser-y-persuser/>
- Castelló-Martínez, A. y Del Pino Romero, C. (2015). La comunicación publicitaria con influencers. *Redmarka: Revista Académica de Marketing Aplicado*, 14, 21-50. <http://hdl.handle.net/2183/22922>
- Castells, M. (2003). La dimensión cultural de internet. *Andalucía Educativa*, 36, 7-10. <https://n9.cl/gvgy5>
- Castells, M. (2009) *Comunicación y poder*. Alianza Editorial.
- Cernadas, A., Bouzas-Lorenzo, R., Mesa del Olmo, A. y Barral, B. (2019). Opinión de los facultativos y usuarios sobre avances de la e-salud en atención primaria. *Atención Primaria*. <https://doi.org/10.1016/j.aprim.2019.05.008>
- Cgcof. (2020). Influencers prescriptores de medicamentos. [Argumentario]. <https://n9.cl/cofteruel>
- Cgcof. (2020, 3 de febrero). Una campaña del Consejo General de Farmacéuticos y #SaludsinBulos alerta sobre los consejos de influencers sobre medicamentos. [Nota de prensa]. <https://n9.cl/portalfarma>
- Coates, A. E., Hardman, C. A., Halford, J. C. G., Christiansen, P. y Boyland, E. J. (2019). Food and beverage cues featured in youtube videos of social media influencers popular with children: an exploratory study. *Frontiers in Psychology*, 10, 21-42. <https://doi.org/10.3389/fpsyg.2019.02142>

- Comscore (2020). *Coronavirus pandemic and online behavioural shifts*. Comscore. <https://n9.cl/wu51>
- De Lima, Y. (2019). *¿Cómo saber si tu engagement es bueno o malo?* Lima Marketing Digital. <https://www.lima-marketingdigital.com/engagement-en-instagram/>
- Deprez, F. (2016). La twittliste du secteur pharmaceutique. *Netsources*, 123, 14-15.
- Descriptores en Ciencias de la Salud (DeCS). Telemedicina. <https://n9.cl/rkri>
- Díaz de León, C. (2019). Salud electrónica (e-Salud): un marco conceptual de implementación en servicios de salud. *Gaceta Médica de México*, 155(2), 176-183. <https://www.medigraphic.com/cgi-bin/new/resumenI.cgi?IDARTICULO=86526>
- Dueñas, P. P. M., Domínguez, C. S. y Coronil, A. G. (2020). El influencer marketing y el proceso de compra de los estudiantes universitarios. En Liberal Ormaechea, S. y Mañas Viniegra, L. (coord.), *Las redes sociales como herramienta de comunicación persuasiva*, (pp.91-106). Madrid: McGraw-Hill Interamericana de España.
- EUROSTAT. (2020). *Individuals using the internet for seeking health-related information*. Eurostat. <https://ec.europa.eu/eurostat/databrowser/view/tin00101/default/table?lang=en>
- Eysenbach, G. (2009). Infodemiology and infoveillance: framework for an emerging set of public health informatics methods to analyze search, communication and publication behavior on the Internet. *Journal of Medical Internet Research*, 11(1). <https://doi.org/10.2196/jmir.1157>
- El País. (2019, 16 de mayo). *Desconfía de los influencers de salud: solo uno de cada nueve da buenos consejos*. El País. https://elpais.com/elpais/2019/05/13/buenavida/1557758806_589528.html
- Falcón, M. y Luna, A. (2012). Alfabetización en salud: concepto y dimensiones. Proyecto europeo de alfabetización en salud. *Revista Comunicación y Salud*. 2(2), 91-98. <http://www.revistadecomunicacionysalud.es/index.php/rcys/article/view/130>
- Farré, J., Gonzalo, J. L., Lores, M., Lozano, N. y Prades, J. (2012). Comunicación de riesgos y seguridad alimentaria en la era 2.0. *El Profesional de la Información*. 21(4), 381-384. <https://doi.org/10.3145/epi.2012.jul.08>
- Fernández Salazar, S. y Ramos Morcillo, A. J. (2013). Prescripción de links y de aplicaciones móviles fiables y seguras, ¿estamos preparados para este nuevo reto. *Evidentia*, 10(42). <http://www.index-f.com/evidentia/n42/ev4200.php>

- Ferret, C. (2019, julio). *Combinar estrategia de salud con influencers, una receta de éxito*. PMFarma. <http://www.pmfarma.es/articulos/2666-combinar-estrategia-de-salud-con-influencers-una-receta-de-exito.html>
- García Núñez, R. y García Huerta, D. G. (2018). Una aproximación a la cultura de Internet y participativa. *Sincronía*, 74, 452-466. <https://www.redalyc.org/jatsRepo/5138/513855742024/html/index.html>
- García, M. (2020, 15 de febrero). *Por qué algunos influencers son una amenaza para la salud*. El Mundo. <https://n9.cl/elmundo>
- Gil-Torres, A., Martín-Quevedo, J., Gómez-García, S. y San José-De la Rosa, C. (2020). El coronavirus en el ecosistema de los dispositivos móviles: creadores, discursos y recepción. *Revista Latina de Comunicación Social*, 78, 329-358. <https://www.doi.org/10.4185/RLCS-2020-1480>
- González, G. y Molina, G. (2003). La Informática Médica y los Sistemas de Información. <http://medicinadefamiliares.cl/Trabajos/infosiscgs.pdf>
- Hartzband, P. y Groopman, J. (2010). Untangling the Web—patients, doctors, and the Internet. *New England Journal of Medicine*, 362(12), 1063-1066. <https://www.nejm.org/doi/full/10.1056/NEJMp0911938>
- Hawn, C. (2009). Take two aspirin and tweet me in the morning: how Twitter, Facebook, and other social media are reshaping health care. *Health affairs*, 28(2), 361-368. <https://doi.org/10.1377/hlthaff.28.2.361>
- Henwood, F., Wyatt, S., Hart, A. y Smith, J. (2003). 'Ignorance is bliss sometimes': constraints on the emergence of the 'informed patient' in the changing landscapes of health information. *Sociology of Health & Illness*, 25(6), 589-607. <https://doi.org/10.1111/1467-9566.00360>
- IAB Spain. (2019). Libro blanco de marketing de influencers. <https://iabspain.es/estudio/libro-blanco-de-marketing-de-influencers/>
- IAB Spain. (2020). Estudio de Redes Sociales 2020. <https://iabspain.es/estudio/estudio-redes-sociales-2020/>
- iSanidad (2020). *Guillermo Martín (Farmacia Enfurecida): "El principal problema con los influencers no está en YouTube sino en Instagram"*. iSanidad. <https://n9.cl/isanidad>
- Isorna, M., de la Cruz, E. y Villanueva, V. J. (2020). La violencia tabáquica: papel de los medios audiovisuales, influencers y las think tanks. *Revista Española de Drogodependencias*, 45(1), 101-110. https://www.aesed.com/upload/files/v45n1-8_misorna.pdf

- Jaubert, E. y Dolbeau-Bandin, C. (2020). Infox et coronavirus Covid-19: une relative contagiosité? <https://hal.archives-ouvertes.fr/hal-02542132/>
- Jiménez-Pernett, J., García-Gutiérrez, J. F., Martín-Jiménez, J. L. y Bermúdez-Tamayo, C. (2007). Tendencias en el uso de Internet como fuente de información sobre salud. *UOC Papers: Revista sobre la sociedad del conocimiento*, 4, 10. https://www.redalyc.org/pdf/790/Resumen/Resumen_79000411_1.pdf
- Khan, R. E. (2020). Viral News on the Coronavirus: Does it Contribute to Health Communication? *Trípodos*, 47(1), 49-66. http://www.tripodos.com/index.php/Facultat_Comunicacio_Blanquerna/article/view/803
- Larrain Sundt, M. E., y Arrieta Cucurella, M. (2010). Inlujo de las imágenes femeninas presentadas por los medios de comunicación sobre el desarrollo adolescente. *Mercurio Peruano*, 523, 69-80. <https://dialnet.unirioja.es/servlet/articulo?codigo=3691184>
- Leis, A., Mayer, M. A., Torres, J. Rodríguez-González, A., Suelves, J.M. y Armayones, M. (2013). Grupos sobre alimentación saludable en Facebook: características y contenidos. *Gaceta Sanitaria*, 27(4), 355-357. <https://doi.org/10.1016/j.gaceta.2012.12.010>
- Lilly (2020, 12 de febrero). *Chicote afirma que “en San Valentín, más que nunca, es importante cuidar del corazón, sobre todo si tienes diabetes”*. [Comunicado de prensa]. <https://n9.cl/fojb>
- Linde, P. (2020, 9 de enero). *Influencers nocivas para la salud*. El País. https://elpais.com/sociedad/2020/01/08/actualidad/1578509328_514133.html
- Martín Fombellida, A. B., Alonso Sardón, M., Iglesias de Sena, H., Sáez Lorenzo, M. y Mirón Canelo, J. A. (2014). Información sobre medicamentos y automedicación en las redes sociales. *Revista Cubana de Información en Ciencias de la Salud*, 25(2), 145-156. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2307-21132014000200002
- Martínez, C. A. y Sosa, M. A. (2016). Aportaciones y diferencias entre comunicación en salud, comunicación para el desarrollo y para el cambio social. *Revista de Comunicación y Salud*, 6(1), 71-82. [https://doi.org/10.35669/revistadecomunicacionysalud.2016.6\(1\).71-82](https://doi.org/10.35669/revistadecomunicacionysalud.2016.6(1).71-82)
- McNab, C. (2009). What social media offers to health professionals and citizens. *Bulletin of the World Health Organization*, 87, 566. <https://www.who.int/bulletin/volumes/87/8/09-066712/en/>

- Medlineplus (2020, 21 de enero). *Cannabidiol (CBD)*. MedlinePlus. <https://medlineplus.gov/spanish/druginfo/natural/1439.html>
- Moreira, J. y Camara, S. (2012). Saúde Web 2.0 e comunicação em saúde: a participação em comunidades virtuais em Portugal. *Revista de Comunicación y Salud*, 2(2), 47-62. <http://www.revistadecomunicacionysalud.es/index.php/rcys/article/view/127>
- Monteagudo, J. L. (2001). El marco de desarrollo de la e-Salud en España. <https://repisalud.isciii.es/handle/20.500.12105/4956>
- Negrete, B. (2019, 19 de diciembre). *Petición de Sanidad para sacar a los “influencers prescriptores” de YouTube*. Redacción Médica. <https://n9.cl/1rp1>
- Núñez, V. (s.f.). *Fórmula para calcular engagement en redes sociales y CTR*. Vilma Núñez Blog. <https://vilmanunez.com/formula-engagement-redes-sociales-ctr/>
- Pilgrim, K. y Bohnet-Joschko, S. (2019). Selling health and happiness how influencers communicate on Instagram about dieting and exercise: Mixed methods research. *BMC Public Health*, 19(1), 1054. <https://doi.org/10.1186/s12889-019-7387-8>
- Rodríguez, A. (2019). *Evolución de la atención telemática por enfermería en una unidad monográfica de enfermedad inflamatoria intestinal* [Tesis Doctoral, Universidad Complutense de Madrid]. Repositorio E-Prints. <https://eprints.ucm.es/51740/1/T40991.PDF>
- Rojas Piñango, A. J., de la Cruz Sánchez, E. E. y Ramírez Hernández, B. E. (2018). Blog en educación alimentaria y nutricional. Una herramienta de comunicación y educación para promover en salud integral. *Revista de Comunicación y Salud*, 8, 111-126. [https://doi.org/10.35669/revistadecomunicacionysalud.2018.8\(1\).111-126](https://doi.org/10.35669/revistadecomunicacionysalud.2018.8(1).111-126)
- Redacción Médica (2019, 12 de noviembre). *Triple alianza contra los “influencers” que recomiendan fármacos*. Redacción Médica. <https://www.redaccionmedica.com/virico/noticias/-indignacion-video-instagram-marta-carriedo-recomendacion-influencer-antibiotico-receta--2387>
- Salud sin Bulos y Doctoralia (2019). *II Estudio sobre Bulos en Salud. Encuesta a profesionales de la salud en España*. Salud sin bulos. <https://saludsinbulos.com/wp-content/uploads/2019/11/es-II-estudio-bulos-salud.pdf>
- Santamaría-Ochoa, C. D., Catalán-Matamoros, D. y Merced-Macías de León, J. (2016). Utilización de las redes sociales sobre temas de salud en población universitaria de México. *Revista Española de Comunicación en Salud*, 7(1), 15-28. <https://e-revistas.uc3m.es/index.php/RECS/article/view/3165>

- Sanz-Lorente, M. y Castejón Bolea, R. (2019). Redes sociales: Recursos interactivos y la información sobre salud. *Hospital a Domicilio*, 3(4), 269-277. <http://dx.doi.org/10.22585/hospdomic.v3i4.84>
- Sanz-Valero, J., Castiel, L. D., Wanden-Berghe, C. y Juan Quilis, V. (2006). Internet y la búsqueda de información en salud pública: desde la relevancia hacia la «relevancia». *Gaceta Sanitaria*, 20, 159-160. <https://gacetasanitaria.org/es-pdf-S0213911106714753>
- Seva Ruiz, M. y Casadó Marín, L. C. (2015). La construcción de la identidad e imagen corporal en la adolescencia a través de los medios de comunicación social: estrategias para el desarrollo de un modelo de prevención. *Enfermería integral: Revista científica del Colegio Oficial de Enfermería de Valencia*, 108, 68-73. <https://www.enfervalencia.org/ei/108/ENF-INTEG-108.pdf>
- Solé, F. J. (2003). Internet en medicina ¿una ayuda, un problema, una causa de errores...? *Comunicación especial. Actas Urológicas Españolas*, 27(3), 180-184. http://scielo.isciii.es/scielo.php?script=sci_arttext&pid=S0210-48062003000300002
- Tardón, L. (2015, 27 de mayo). *Dentistas denuncian la venta ilegal de un blanqueante dental*. El Mundo. <https://www.elmundo.es/salud/2015/05/27/5565d45446163f5e388b4589.html>
- Villaescusa Martínez, V. y Sáez Villar, L. (2013). Búsqueda de información sobre salud a través de Internet. *Enfermería Global*, 12(3), 197-205. <https://doi.org/10.6018/eglobal.12.3.166301>
- Wilson, P. y Risk, A. (2002). How to find the good and avoid the bad or ugly: a short guide to tools for rating quality of health information on the internet Commentary: On the way to quality. *Bmj*, 324(7337), 598-602. <https://doi.org/10.1136/bmj.324.7337.598>

AUTHORS

Ainhoa García-Rivero

Graduate in Advertising and Public Relations from the Complutense University of Madrid, specialist in Organisational Communication and PhD student in the PhD programme in Audiovisual Communication and Advertising and Public Relations at the same university. Planning Executive at Atresmedia Publicidad. Her main line of research lies in social media communication and the communication of children's products.

Orcid ID: <https://orcid.org/0000-0003-4879-9950>

Google Scholar: <https://scholar.google.com/citations?user=ZiTINFUAAAAJ>

Emma G. Carbonell-Curralló

Graduate in Journalism from the University of Valladolid and specialised in Organisational Communication from the Complutense University of Madrid. With experience in cultural and health communication.

Orcid ID: <https://orcid.org/0000-0001-8879-6581>

Google Scholar: <https://scholar.google.com/citations?hl=es&user=jBK0gDMAAAAJ>

Ana Magán-Álvarez

Graduate in Audiovisual Communication and Business Administration and Management from the Universidad Rey Juan Carlos de Madrid. With experience in marketing and business development in the entertainment sector.

Orcid ID: <https://orcid.org/0000-0003-0099-8037>

Rafael Barberá-González

Accredited as a Professor Hired Doctor by ANECA (Spanish National Agency for Quality Assurance and Accreditation). PhD in Journalism from the Universidad San Pablo-CEU, a degree in Journalism from this University and a degree in Law from the UCM. Professor in the Faculty of Information Sciences at the UCM, in the Faculty of Communication at the UFV, at IE University and at The College for International Studies. His lines of research focus on political communication and crisis communication. He has published several scientific articles on these subjects.

Orcid ID: <https://orcid.org/0000-0003-0099-8037>

1. ANNEX



Figure 1. Screenshot of vapper brand collaboration
Source: Instagram of Pablo Pérez “Blon” @blon_doblefilo



Figure 2. Screenshot of collaboration with photoprotection product.
Source: Instagram of Rocio Camacho @rocioccamacho



Figure 3. Screenshot of collaboration with photoprotection product.
Source: Instagram of Rocío Camacho @rocioccamacho



Figure 4. Screenshot of mobile application advertisement.
Source: Instagram Stories of Azahara Luque @curly.azahara



Figure 5. Screenshot of an advertisement for tooth whitening products.
Source: Instagram of Georgina Rodríguez @georginagio

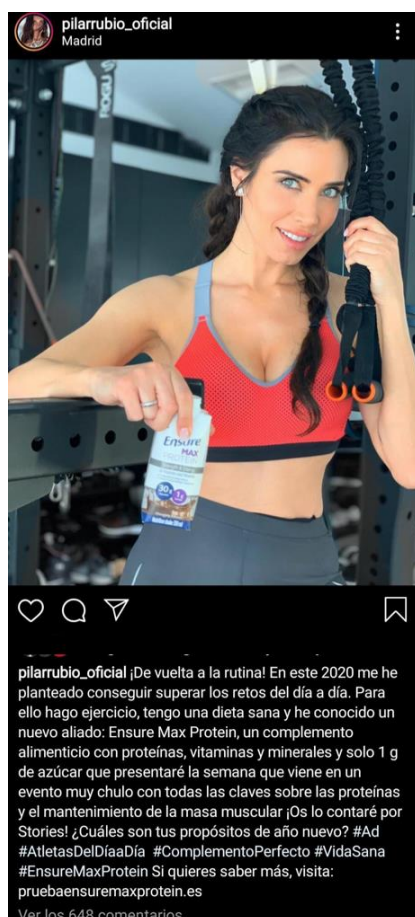


Figure 6. Screenshot of collaboration with food supplement brand.
Source: Instagram of Pilar Rubio @pilarrubio_oficial



Figure 7. Screenshot of an advertisement for a book on motherhood.
Source: Instagram of Pilar Rubio @pilarrubio_oficial



Figure 8. Screenshot of BabyRub recommendation
Source: Instagram of Estefanía Unzu @verdeliss

19:58     

 verdelliss



   ... 

() Les gusta a **paaaaattttty y otras personas**

verdelliss ¡¡¡Emocionada de contaros que me han elegido embajadora de Femibion!!! ¿Por qué tan feliz de estos suplementos en concreto? Porque marcan la diferencia: son polivitamínicos con un tipo de ácido fólico llamado Metafolin®. Esta es una forma activa de folato que no necesita ser transformado, pudiendo así ser utilizado directamente por el cuerpo de la madre. Sabiendo además lo siguiente:

- ✓ La recomendación de suplementar con ácido fólico 1 mes antes del embarazo y hasta 3 después para cubrir los 400mcg y así ayudar a un correcto desarrollo del tubo neural del bebé.
- ✗ Los estudios determinan que un 50% de las mujeres no metabolizan correctamente el ácido fólico por una mutación en una enzima que hace pueda perder parte de actividad.

Más que nunca motivos para apostar por Femibion!!! jeje.

Yo además, dando el pecho, tomo Femibion 2... ahora por el tema del yodo, ya que ayuda a la formación normal de hormonas tiroideas y a la función de la tiroides, importante en la lactancia. Apunte: Siempre he apostado por polivitamínicos en estas etapas jeje. Lo fundamental, la dieta, pero a mí, personalmente, que sean tan completos, me aporta tranquilidad y eso me vale oro 😊 (es lo que tiene ser un poco agonías jeje).

Ya que menciono Femibion 2, que está indicado para el embarazo/lactancia, os cuento que Femibion 1 incluye pequeños cambios en la composición que lo hacen recomendado para la pre-concepción (recordad que el ácido fólico hay que comenzarlo 1 mes antes de la búsqueda) hasta la semana 13 de embarazo.

Espero que os haya sido útil esta info y considerad que mi postura es siempre desde mis vivencias como madre ❤️

Tenéis toda la información disponible en https://www.femibion.com/es_ES/productos/femibion-pronatal-1.html. Femibion son complementos alimenticios, no sustituyen una dieta sana y equilibrada ni un estilo de vida saludable, no se debe superar la dosis diaria recomendada y hay que mantenerlos fuera del alcance de los niños más pequeños.

#Verdeliss [ad]
Ver los 235 comentarios
8 de diciembre de 2019

19:59     

 verdelliss



   ... 

 Les gusta a **raquetiya y otras personas**

verdelliss Me preguntáis mucho que cuando dejaremos la lactancia y en verdad, no tengo respuesta 😊 Bien porque Miren deje de mostrar interés (cada vez la veo comiendo más sólidos y más "desapegada" jugando y explorando), bien porque me apetezca a mí: tengo claro que lo mismo que supe escucharme cuando deseé luchar contra viento y marea para instaurar la lactancia, espero saber escuchar mi voluntad cuando sienta es el momento de destetar 🥰.

Mientras tanto, se sigue repitiendo esta escena jeje, un año ya y muriendo de amor!!! ❤️.

Os enseño la caja de @femibion_es porque os lo recomiendo como polivitamínico durante la lactancia 🙌 (por el tema del yodo, ya que ayuda a la formación normal de hormonas tiroideas y a la función de la tiroides, importantísimo!!!).

Pero ojo, también y especialmente durante el embarazo 🙌, ya que lleva un tipo de ácido fólico llamado Metafolin®. Esta es una forma activa de folato que no necesita ser transformado, pudiendo así ser utilizado directamente por el cuerpo de la madre.

Tengamos en cuenta además:

- ✓ La recomendación de suplementar con ácido fólico 1 mes antes del embarazo y hasta 3 después para cubrir los 400mcg y así ayudar a un correcto desarrollo del tubo neural del bebé.
- ✗ Los estudios determinan que un 50% de las mujeres no metabolizan correctamente el ácido fólico por una mutación en una enzima que hace pueda perder parte de actividad.

Yo no tengo duda: @femibion_es como elección, no hay otro igual respecto a la absorción del ácido fólico 🙌. Os cuento cómo funcionan ambas opciones:

- ♦ Femibion 1: desde 1 mes antes de la concepción y durante las 12 primeras semanas de embarazo.
- ♦ Femibion 2: segundo y tercer trimestre de embarazo y periodo de lactancia.

Igualmente, tenéis toda la información disponible en https://www.femibion.com/es_ES/productos.html. Femibion son complementos alimenticios, no sustituyen una dieta sana y equilibrada ni un estilo de vida saludable, no se debe superar la dosis diaria recomendada y hay que mantenerlos fuera del alcance de los niños más pequeños.

#Verdeliss #1AñoYa #LactanciaMaterna [ad]
Ver los 309 comentarios

Figures 9 y 10. Screenshot of Femibion recommendation
Source: Instagram of Estefanía Unzu @verdeliss



Figure 11. Screenshot of collaboration with the brand Fitvia
Source: Instagram of Adara Molinero @adara_molinero



Figure 12. Screenshot of collaboration with the brand Fitvia
Source: Instagram of Rocio Camacho @rocioccamacho



Figure 13. Screenshot of post about Laura Matamoros
Source: Instagram of El Kiosko Rosa @elkioscorosa