

Article

Use of Social Media by Health Science Degree Students in the Field of Organ Donation and Transplantation

Javier Almela-Baeza ¹, Cristiana Ferrigno ^{2,*} and Beatriz Febrero ^{3,4,5}

¹ Department of Communication, Faculty of Communication and Documentation, University of Murcia, 30500 Murcia, Spain; javier.almela@um.es

² Department of Cognitive Sciences, University of Messina, 98121 Messina, Italy

³ General Surgery Service, Virgen de la Arrixaca Hospital, 30120 Murcia, Spain; beatriz.febrero@um.es

⁴ Department of Surgery, Pediatrics, Obstetrics and Gynecology, Faculty of Medicine, University of Murcia, 30120 Murcia, Spain

⁵ Instituto Murciano de Investigación Biosanitaria (IMIB) Pascual Parrilla, El Palmar, 30120 Murcia, Spain

* Correspondence: cristiana.ferrigno@gmail.com

Abstract

Health professionals and institutions, as users and influencers, use social networks to disseminate information and knowledge about health issues, in the case of organ donation and transplantation (ODT) to spread the social benefits of the process and increase the positive attitude towards ODT. The aim of this work was to analyse the perception and use of social networks by university students of health sciences to determine whether, in their opinion, social platforms are suitable for the promotion of ODT after participating in an educational programme specialising in ODT and communication. The students indicated that social networks are a good medium for disseminating messages about ODT, with WhatsApp standing out as the most appropriate after the programme. Eighty-six per cent say that social media can positively influence the attitude towards ODT and 65% have started to follow ODT institutional accounts on social media. Addressing communication in specialisation programmes in the field of health and ODT raises awareness of the responsible use of social media among university health students and strengthens their capacity as prescribers of the social benefits of ODT.

Keywords: health communication; organ donation and transplantation; social media



Academic Editor:

Andreu Casero-Ripollés

Received: 21 February 2025

Revised: 3 April 2025

Accepted: 10 July 2025

Published: 19 July 2025

Citation: Almela-Baeza, J., Ferrigno, C., & Febrero, B. (2025). Use of Social Media by Health Science Degree Students in the Field of Organ Donation and Transplantation. *Journalism and Media*, 6(3), 113. <https://doi.org/10.3390/journalmedia6030113>

Copyright: © 2025 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The development of digital technologies over the last thirty years has affected every sphere of social, individual, and institutional life, according to a phenomenon that [Couldry and Hepp \(2017\)](#) have defined as deep mediatization. The migration towards an ‘onlife’ dimension of existence ([Floridi, 2015](#)) received a further impulse from the Covid-19 pandemic, which fostered the spread and domestication of digital tools even among population segments that were previously unaffected ([Centorrino & Romeo, 2023](#)).

Even before the pandemic, the topic of health had already permeated the digital landscape ([Lovari, 2017](#)), with a prominent role for social media, spreading new practices among professionals (such as doctors, nurses, and students) as well as patients leading to the phenomenon of the e-patient. Social media have offered new opportunities for the public, patients, and health professionals to communicate about health issues, potentially improving health outcomes ([Moorhead et al., 2013](#)).

According to the Instituto Nacional de Estadística (INE, 2024), the users who use the Internet most frequently belong to the youngest age groups, particularly in the 16–24 age bracket, with 99.9 per cent of men and 99.7 per cent of women. GfK DAM, the official digital audience measurement company in Spain, has analysed the consumption habits of sites about health topics, which are visited by more than 20 million people per month, according to data corresponding to the period of February 2024. This represents more than half of the Internet population, specifically 51%.

Virtual communities born on social networks and social media platforms have taken a prominent role in the consumption, production, and sharing of information related to health. On social networks, users with similar interests and share information about illness experiences, therapies, and alternative treatments. Furthermore, the use of social media has proven to be an effective tool to promote positive health behaviour changes (Bellini et al., 2020) like reducing rates of smoking (Luo et al., 2021), alcohol abuse (Flaudias et al., 2015), and use of illicit drugs (Bellini et al., 2020).

In the context of ODT (organ donation and transplantation) social media platforms have gained significant popularity. Social networks, in fact, offer the possibility of enhancing public awareness of organ donation, and effectively contributing to the field of research (Mayol & Dziakova, 2017) which also impacts clinical practice (Henderson et al., 2019).

2. Literature Review

In the field of ODT social media have been used by individuals and institutions to disseminate information and raise awareness among the population and by patients, families, and transplant hospitals to help with the search for living donors (Chang et al., 2013; Henderson et al., 2017; Henderson, 2018). On social media there are a numerous accounts related to health topics. Younger segments of the population, particularly teenagers, use these channels, such as YouTube, on which ‘science web videos’ have become popular (Morcillo et al., 2018), as the main source of information on health issues (Harris et al., 2020). In the field of organ donation and transplantation, a study by Ruck et al. (2019) has revealed that on Twitter there is an existing, active social media community that publicly affiliates with living organ donation. This study has also highlighted that living donors have an active role as social media peer educators.

A study conducted by García-Méndez et al. (2022) on twenty-eight health-related accounts has shown that social media can be a quality tool for health dissemination. Previous studies have highlighted that some users, especially younger people, prefer to consume and are more receptive to contents produced by content creators or influencers instead of institutions (Welbourne & Grant, 2015; Harris et al., 2020).

Nonetheless, campaigns about ODT are fundamental to spread knowledge and awareness about this topic. Awareness campaigns about the need to donate organs and to inform one’s close family about attitude towards ODT are linked to the reduction in family refusals when faced with organ donation (Almela-Baeza et al., 2023).

Within the realm of communication about organ donation and transplantation, alongside the more traditional channels of dissemination, scholars have noted that a great deal of importance has been gained by online platforms and social media. Social media not only help to expand the target audiences, but they are also important channels to spread messages seemingly without mediation thanks to users who themselves become disseminators of these messages (Ducci & Antonioni, 2019).

In the contemporary hybrid and convergent media ecosystem (Chadwick, 2013; Jenkins, 2006), characterised by ubiquity and user empowerment to consume, share, and create content (Aguado, 2018), public institutions and non-profit organisations, among the main actors in the communicative dynamics of social communication, must inhabit the digital

spaces frequented by citizens. An example, in this sense, is represented by the Organización Nacional de Trasplantes (ONT), the main Spanish governmental body for ODT which began its activities on social networks at the end of 2017 on Twitter under the username @ONT_esp. To date, the social channels on which it is present include Twitter and Instagram. Another organization in this field is the Fundación Josep Carreras that carries out a project to fight leukaemia with research and dissemination about this topic. The foundation has official profiles on all the major social media platforms: Facebook, Instagram, X, YouTube, LinkedIn and TikTok.

One of the first studies on the effectiveness of social media on the field of ODT is by [Cameron et al. \(2013\)](#), who found that this topic has been present on social media since 2012, when Facebook in the United States offered users the possibility to include information on their willingness to donate organs in their personal profile. The analysis, published in the American Journal of Transplantation, showed that Facebook has indeed raised awareness of organ donation. In fact, on the 1 May 2012, Facebook introduced the possibility for member users to specify 'Organ Donor' status on their personal profile, with the possibility of sharing this choice with their friends and contacts and the opportunity to be referred to educational links on organ donation issues. On the first day of the 'Organ Donor' initiative on Facebook, there was a 21.1-fold increase in the actual number of new donors from an average of 616 registrations per day to 13,054. During the observation period (the study lasted 13 days), there were 39,818 registrations, of which 32,958 were attributable to the Facebook effect. However, in the field of organ donation and transplantation, there is, indeed, a difference between countries that rely on presumed consent or "opt-out" (where the wishes about donation has to come from the relatives or the family of an individual) and countries that employ a system of informed consent or "opt-in", where people can express their intention to be donors by registering in the national system. The model adopted by a country influences the effectiveness of a campaign. In countries that adopt an "opt-out" model, strategic campaigns about ODT focus on informing society of the social benefits of the ODT process but the effectiveness of the campaign is difficult to evaluate ([Almela-Baeza et al., 2023](#)). The ONT recommends promoting dialogue between family members, since families have the last word about donation in "opt-out countries". Family interaction ODT is decisive, encouraging community dialogue on this topic ([Shaw et al., 2017](#); [Madden et al., 2020](#)).

Social networks also represent an effective and costless channel of communication for healthcare organizations and professionals and an important source of information for patients ([Mouelhi et al., 2017](#)). For example, in kidney transplantation social media have the potential to influence the outcomes of patients on the kidney transplant waiting list by helping the search for a living donor instead of waiting for a deceased donor ([Henderson et al., 2020](#)). The transplant community uses social media to help transplant candidates find a living donor, promote deceased donor registration, help transplant related organisations, promote community and social networking amongst patients on the waiting list and potential living donors ([Henderson et al., 2017](#)). In addition, social media can be used for educational purposes to increase awareness and knowledge—as this is fundamental to increase willingness to donate—in hard-to-reach segments of populations and they can represent an opportunity for patients to use their social media networks to increase LDKT, reducing time on the waitlist and improving quality of life both before and after transplant ([Kazley et al., 2016](#)).

Among health professionals, social media are increasingly being used to disseminate research results, promote scientific conferences, improve communication with colleagues, and facilitate self-management of patients with chronic diseases ([De Angelis et al., 2018](#)). A study conducted on 4000 American doctors ([Ventola, 2014](#)) has revealed that more than

90% of the respondents use social media for personal activities, and 65% use it for professional reasons. Healthcare professionals' activities on social networks can be summarised in three main categories: self-branding, reputation management and relationships with colleagues; communication with patients with specific pathologies; training and continuous learning in the medical field (Lovari, 2017).

A study (Guerra et al., 2022) has shown that the most widely used social media by health professionals for professional purposes is LinkedIn, followed by Twitter (now X), Facebook, YouTube, Instagram and TikTok. In the field of ODT, transplant health professionals have demonstrated effective and successful use of social media to promote deceased donation and expand living donor transplantation (Henderson et al., 2019). According to a study by Bellini et al. (2020), health professionals working in the field of organ donation and transplantation recognise an effective role of social media platforms in increasing the number of living donors; in breaking down barriers to promote organ donation; in sharing information in encrypted form; in providing knowledge and educational content for trainees and colleagues worldwide; and in providing knowledge for research purposes.

3. Theoretical Framework

Internet has influenced the transformation of the traditional paradigm of health and medicine. Terms such as "Medicine 2.0" (Eysenbach, 2008) and "Health 2.0" (Van de Belt et al., 2010) describe not only changes in communicative processes and services provided by healthcare institutions but also the emergence of innovative trajectories facilitated by the adoption of participatory platforms (Lovari, 2017). These developments have been further fostered by processes of disintermediation, which are closely linked to digitalization and platformization (van Dijck et al., 2018), a process that is progressively infiltrating both institutions and social practices, producing an inextricable relationship between online platforms and social structures.

According to Chou et al. (2013), the use of social media in health promotion offers several benefits, including the opportunity to reach difficult audiences, such as teenagers, immigrants, and ethnic minorities, fostering public participation and cost-effectiveness. The low production cost of health-related messages on blogs and social media compared to traditional communication campaigns contributes to this efficiency. Although there is no doubt that there is a need to continue to produce health campaigns (on both social and mass media), it is difficult to evaluate the efficiency of health campaigns in quantitative terms (Anker et al., 2016).

Online platforms became a source of information for various population segments, particularly among younger users. However, the uncontrolled circulation of unverified or fake news can lead to phenomena such as misinformation and post-truth, amplified by filter bubbles and echo chambers (Sunstein, 2017). Health misinformation has been defined as 'information that is contrary to the epistemic consensus of the scientific community regarding a phenomenon' (Swire-Thompson & Lazer, 2020, p. 434). Despite the rise of sceptical attitudes towards scientific knowledge is not exclusively attributed to the pandemic's contingency (Pellizzoni, 2021; Tipaldo et al., 2022), COVID-19 health emergency is a relevant example in this sense. Since the beginning of the pandemic, the amount of information and news circulating led the president of the WHO to use the term 'infodemic', described as 'too much information including false or misleading information in digital and physical environments during a disease outbreak' (WHO, n.d.).

Although some studies have shown that social media can have an impact on health-related behaviour, e.g., eating behaviour (Friedman et al., 2022), evaluating the effectiveness of health campaigns on social media is a complex process and most research has focused on the potential of social media to create awareness (Ghahramani et al., 2022).

However, given the widespread use of social media, organisations could exploit the advantages of health campaigns on social media, including the possibility of creating specific messages for equally specific target segments of the population (de Vere Hunt & Linos, 2022).

Media perform a framing function, producing cognitive and social effects on the audiences they target, who consume information (Rubinelli et al., 2010). This is particularly evident when considering—as in this study—the topic of organ donation and transplantation. Some authors (Cucchetti et al., 2012) have demonstrated that a good level of knowledge about organ donation is essential for promoting a favourable inclination toward organ donation and for reducing donation refusal. Media, being the main source of information, have a role in preserving or weakening public confidence in organ transplantation (Martínez-López et al., 2023; Matesanz, 2003).

4. Materials and Methods

To analyse the use, habits and perception of social media of university health science students in the context of organ donation and transplantation, we conducted a quantitative survey through a questionnaire that we submitted to students participating in a specialised educational programme ODT via Google Forms with informed consent. The hypotheses of the study are: (1) to determine whether, for them, social networks are appropriate for the promotion of the social benefits of ODT; and (2) to find out whether including communication training content in the programme increases the students' in ODT-related social media profiles and content. Finally, the study aims to find out what are the social media habits of the students of the programme, which social media are the most suitable in their opinion to disseminate content about the social benefits of ODT, and whether these can influence the positive attitude of society.

4.1. Study Population

The educational programme specialising in ODT is offered to all students of the Bachelor's Degrees in Medicine and Nursing at the University of Murcia in the academic year 2023/2024. This is a consolidated programme that began in the academic year (2000/2001) and is offered to students of the Medicine and Nursing Degrees. In the academic year 2023/2024 there are 575 students enrolled in the six years of the Medicine Degree and 395 students enrolled in the four years of the Nursing Degree. The selection of the study sample is made up of 143 students enrolled in the educational programme of which 101 ($n = 94$) belonged to students of the Degree in Medicine and 51 ($n = 49$) to the Degree in Nursing, which represents 15% of the students enrolled in the Degrees in Health Sciences at the University of Murcia.

4.2. Design of the Educational Program

The educational programme is promoted and subsidised by the ONT through the Autonomic Coordination of Transplants of the Region of X, with the academic supervision of the University of Murcia, which certifies the programme with university activity credits (CRAU) awarded to participating students. The CRAU credits are the academic recognition in credits to students of undergraduate degrees for participation in academic activities of a teaching nature organised by the university in accordance with the provisions of articles 46.2.i of the Organic Law 6/2001, of 21 December, on universities and 10.9 of Real Decreto 822/2021, of 28 September, which establishes the organisation of university education and the procedure for ensuring its quality. The subject is a complement to the curriculum of the Bachelor's Degrees in Medicine and Nursing and focuses in depth on the clinical and psychosocial issues involved in the process of organ donation.

The educational programme has a value of 3 European Credit Transfer System (ECTS) (75 h). The programme is divided into six sessions of five hours each, through an online platform where the student participates actively through random answers to questions integrated by the teacher in his presentation, in addition to chat or verbal questions. In addition, students put into practice what they have learnt in four activities tutored and evaluated by the academic committee of the course and with a total of 45 teaching hours, which complete the 3 ECTS credits.

4.2.1. Training Sessions

The training sessions, given by professionals of recognised academic prestige in the field of ODT, deal with subjects related to the clinical and psychosocial foundations related to the process of organ donation. The subjects were grouped into six sessions:

Session 1: The Spanish model of donation and transplants, cinema as a didactic resource in ODT.

Session 2: Indications and results of liver, kidney, heart and bone marrow transplantation, nutrition in transplantation.

Session 3: The family interview in organ donation, practical immersive video session

Session 4: Types of organ donation, legal framework, immigration and immunology.

Session 5: Lines of research, communication of bad news, quality of life in the patient.

Session 6: The media and social media in organ donation and transplantation.

4.2.2. Session 6: The Media and Social Media in Organ Donation and Transplantation

This session, given by communication professionals, delves into the importance of the media and social networks in the ODT and their influence on the attitude of the population, as well as fake news in social networks and the importance of disseminating the social benefits of the ODT process. The session ends with a round table discussion on the figure of Pablo Ráez, a teenager from Malaga who died of acute myeloblastic leukaemia. Before he died he managed to mobilise the population of his town through social networks, increasing the percentage of donations by 1300% in 2016, with 11,201 new bone marrow donors.

4.3. Measurement Instrument

The students answered a questionnaire before and after the educational programme. The variables analysed were: the means by which they had received information about ODT; use of social media; information received about ODT on social media; opinion on whether social media is a good way to disseminate content related to ODT; opinion on the most suitable networks for disseminating content related to ODT; whether the student knew the ODT's profiles on social media and whether the student had followed accounts about ODT before and after the course. Satisfaction with the course in general and satisfaction with session 6 related to media and social networks were also asked. The questionnaires were anonymous and correlated. The entire data collection process has the favourably approved by the ethics committee of the University of Murcia with ID:3816/2022.

4.4. Statistical Analysis

IBM SPSS Statistics software was used (version 24). A descriptive analysis was carried out. The Wilcoxon test was used to analyse whether there were differences between two paired ordinal variables and the Friedman test was used to determine whether there were significant differences between two independent ordinal variables.

5. Results

All students completed the forms before and after the educational programme. Most of the students, 73.42% ($n = 105$), were female. Thirty per cent ($n = 43$) had not received

any prior information about ODT before starting the course in their training centres. In terms of communication channels, 56% ($n = 80$) had received positive information prior to the course on TV, 29% ($n = 42$) on the radio, 49% ($n = 70$) in the press, 67% ($n = 96$) on the internet and 65% ($n = 93$) on social media. No students reported having received negative information before starting the course. Regarding the usefulness and quality of the course, all students considered the course to be useful or very useful, with session 6 ‘The media and social networks in organ donation and transplantation’ being the second best rated by 88% ($n = 127$).

5.1. Use of Social Media

Regarding the students’ habit of using social networks, 46% ($n = 65$) of the students indicated frequent or very frequent use of the social network Instagram, followed by TikTok with 30% ($n = 43$), and X (formerly Twitter) and YouTube with 21% ($n = 30$). As for the instant messaging platform WhatsApp, on which information can only be shared with a closer circle of relations (such as relatives and friends), 77% ($n = 110$) of students used it frequently or very frequently.

5.2. Information About ODT on Social Media Before the Educational Programme

In terms of the networks through which they have received positive information before the course, Instagram stands out with 43% ($n = 61$), WhatsApp with 33% ($n = 47$) and X and YouTube with 31% ($n = 45$) respectively. No students reported having received negative information about ODT on social networks.

5.3. Social Media to Disseminate ODT Content

Regarding the question of whether social networks are a suitable medium for disseminating ODT-related content, there is a significant difference ($p < 0.001$) between the rating before the educational programme which is equal to 3.62 ± 0.97 and the rating after the programme 4.55 ± 0.647 in post ($n = 143$), as can be seen in Tables 1 and 2.

Table 1. Student feedback on whether social media in general are a good medium for disseminating ODT messages.

	<i>n</i>	Mean	Std. Deviation	Min	Max
Before the programme	143	3.62	0.970	1	5
After the programme	143	4.55	0.647	3	5

$p < 0.05$: statistically significant.

Table 2. Test Statistics^a.

	Feedback Before-After
Z	−8.353 ^a
Asymp. Sig. (2-tailed)	0.000

a. Based on negative ranks.

In Table 3 we can see the students’ opinion on which social networks are most suitable for disseminating ODT messages independently with the following mean values and standard deviation.

Table 3. Are networks a suitable medium for disseminating ODT content? By social network before and after the programme.

	<i>n</i>	Mean	Std. Deviation	Minimum	Maximum
Before programme					
Instagram	143	3.26	1.092	1	5
TikTok	143	3.13	1.162	1	5
X	143	3.07	1.098	1	5
Facebook	143	2.91	1.054	1	5
WhatsApp	143	2.71	1.046	1	5
Telegram	143	2.56	0.997	1	5
YouTube	143	3.66	1.113	1	5
After programme					
Instagram	143	3.73	0.965	1	5
TikTok	143	3.54	1.118	1	5
X	143	3.38	1.106	1	5
Facebook	143	3.25	0.923	1	5
WhatsApp	143	3.47	1.255	1	5
Telegram	143	3.20	0.995	1	5
YouTube	143	3.85	1.000	1	5

$p < 0.05$: statistically significant.

In Table 4 we can compare the variation in the rating before and after the educational programme that the students give to each social network individually. The results show significant differences ($p < 0.01$), in all social networks with $p < 0.01$ except Youtube with $p = 0.029$. In addition, the results indicate that WhatsApp is the social network that has a higher increase in its rating after the educational programme compared to the opinion at the beginning of the educational programme.

Table 4. Test Statisticsa.

	Instagram	TicTok	X	Facebook	WhatsApp	Telegram	YouTube
Z	−5.219 ^b	−4.407 ^b	−3.355 ^b	−3.656 ^b	−5.468 ^b	−5.311 ^b	−2.179 ^b
Asymp. Sig. (2-tailed)	0.000	0.000	0.001	0.000	0.000	0.000	0.029

Wilcoxon Signed Ranks Test. b. Based on negative ranks.

5.4. Knowledge of Institutional Social Profiles Behind the Educational Programme

In terms of following social media profiles related to ODT, 60% ($n = 85$) did not follow any ODT accounts but started to do so after the course, 29% ($n = 41$) followed accounts before the course and increased the number of accounts followed after the course. Sixty-five per cent ($n = 93$) of the students did not know the social profiles of the ONT and started to follow them after the course, while 9% ($n = 13$) already knew and followed some of the ONT's social media profiles.

5.5. Influence of Social Media Content on the General Population

After completing the educational programme, 86% ($n = 123$) of the students indicated that the content disseminated on social media about the social benefits of ODT can positively influence the attitude towards organ donation of social media consumers.

6. Discussion and Conclusions

Social media have a great potential to foster communication and have a determining influence on the population, especially on health-related issues in general (Lovari, 2017) and on specific health issues such as ODT (Cameron et al., 2013). Health professionals are assiduous consumers of social networks, both personally and professionally (Ventola, 2014). Healthcare professionals use social media to improve their personal brand and to communicate with both colleagues and patients (Lovari, 2017). This study reveals that university students in the health sciences have a high consumption habit, which corresponds to users of the same age range and academic level, and is characterized by the use of Instagram, Tik Tok, as freely accessible social networks, and WhatsApp, as a social network for communication with family and friends. According to data from the IAB report (IAB Spain, 2023), in fact, WhatsApp is the most used social network in Spain, followed by Instagram (particularly for 12–34-year-olds). TikTok also remains among the five social networks preferred by users, particularly for users under 24 years old. Health communication on social media has created a new ecosystem where health professionals are able to communicate directly with the public (Moorhead et al., 2013). Therefore, there is a need for students to be trained in social media use and interaction and to be able to move beyond being observers or opinionators on social media to being prescribers of health issues. Students in the ODT education programme were trained on the use, interaction and consequences of social networking sites.

In the digital ecosystem disinformation is a major problem for health-related topics (Sunstein, 2017). The consumption of shared health information by non-accredited users creates controversy among users (Swire-Thompson & Lazer, 2020), who are increasingly seeking information from such sources, especially among younger users (Welbourne & Grant, 2015; Harris et al., 2020). This educational programme focuses on misinformation and trains health students to detect fraudulent information and invites them to not only be a consumer, but to interact in the ecosystem as an authoritative source, thus helping to limit the spread of misinformation and fake news. However, in this study, students indicate that they have not received negative information about the process of organ donation, in addition to stating that it is a good way to share information that invites society to have a favourable attitude towards ODT.

In the field of ODT, it is essential to be well informed; several studies indicate that good knowledge about the process of organ donation is fundamental to reduce family refusal and thus increase the number of donations (Cucchetti et al., 2012). Traditional media and social networks are crucial in promoting awareness in society (Martínez-López et al., 2023; Matesanz, 2003). In our study, 56% of students indicate having received positive information from traditional media such as TV or the Internet and 67% were informed by social networks. In relation to social media, Instagram with 43% is the social media through which they have received the most positive information about ODT. As for the opinion of whether social networks are suitable for promoting ODT, it is good before the course and increases significantly after the educational programme, as shown in Tables 1 and 2. If we analyse the networks separately, all of them increase significantly after the educational programme, with WhatsApp standing out as the most suitable, as we can see in Table 3. This is very significant in countries with an Opt-out system, where the family has the final say when it comes to donation, as WhatsApp is a social network which is popular with families, thus inviting family members to talk about ODT and to find out the opinion of relatives. Moreover, in this case, as they are students of health sciences and well trained in ODT, they become excellent prescribers of the social benefits of ODT.

Health professionals linked to ODT claim that social networks are effective in promoting the social benefits offered by ODT, especially in educational settings (Bellini et al., 2020).

It is important that institutions such as the ONT, through its communication plan, get as many followers as possible and it is essential that they carry out specific campaigns among health professionals and students, as they are excellent prescribers of the benefits that the ODT process brings to the health system (Almela-Baeza et al., 2023). In this educational programme, the ONT's social media activity is promoted, and students are encouraged to follow accounts related to ODT. By the end of the programme, 60% of the students have started following the ONT on their social media accounts, compared to only 9% of the students before the programme. In addition, 86% of the students believe after the programme that social media posts about ODT have a positive influence on the attitude towards ODT in the social media-consuming population.

Health science students consider social media as a good way to promote the social benefits of organ donation and this opinion increases after participating in the specialised ODT educational programme that includes communication topics, highlighting WhatsApp is a social network with limited access, which allows dialogue between friends and family, thus making it possible to know opinions about ODT and to offer recommendations as trained professionals. In addition, the students' interest in organ donation and related social media profiles increases after the educational programme. Finally, a high percentage of students state that the messages spread on social media have a positive influence on the attitude towards ODT of social media users.

This study has several limitations. Firstly, the sample could be larger and stratified by courses, to determine whether academic progression changes the point of view. The educational programme could also be implemented in other universities in Spain or in other European universities where the donation system is different from ours, i.e., to compare results between the Opt-in and Opt-out system. In addition, we do not have a control group to compare the opinion on the use of social networks and their importance in ODT so that we could know if the course is the cause of this change or not. The students were also not asked about what type of content was more effective in their opinion (patient testimonials, institutional information content, donation programmes. . .). But most important of all, we cannot correlate the results of this study with a possible decrease in family rejection. In countries like Spain, where the system by which organs are obtained is Opt-out, we do not know whether the family's "yes" is determined by a consensual personal decision, whether they have received prior information or not, whether this information has come through social networks or, in this case, through a future health professional well trained in ODT and through their advice.

Looking to the future, the educational programme aims to continue gaining reputation among health students in terms of interest and training in communication for students who want to specialise in ODT. One of the proposals for the future is to export this model to other Spanish or European communities with a different system (opt-in versus opt-out) through the ONT and to measure the impact of social networks on students. It would also be interesting to include on the course a classification of the different types of content that are shared on the accounts with the greatest impact on ODT and thus assess which ones have the greatest impact and produce the greatest engagement.

Author Contributions: Conceptualization, J.A.-B., C.F. and B.F.; methodology, J.A.-B., C.F. and B.F.; software, J.A.-B., C.F. and B.F.; validation, J.A.-B., C.F. and B.F.; formal analysis, J.A.-B., C.F. and B.F.; investigation, J.A.-B., C.F. and B.F.; writing—original draft preparation, J.A.-B., C.F. and B.F.; writing—review and editing, J.A.-B., C.F. and B.F.; visualization, J.A.-B., C.F. and B.F.; supervision, J.A.-B., C.F. and B.F.; project administration. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board (or Ethics Committee) of University of Murcia (ID:3816/2022).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data is contained within the article.

Conflicts of Interest: The authors declare no conflict of interest.

References

- Aguado, J. M. (2018). El mensaje es el medio: Las aplicaciones de mensajería como interfaz emergente en el ecosistema móvil. *Revista de La Asociación Española de Investigación*, 5(10), 2–9. [\[CrossRef\]](#)
- Almela-Baeza, J., Febrero, B., & Ramírez, P. (2023). Teenagers, audio-visual prosumers and audience generators in the field of organ donation. *Health Communication*, 39(9), 1825–1832. [\[CrossRef\]](#) [\[PubMed\]](#)
- Anker, A. E., Feeley, T. H., McCracken, B., & Lagoe, C. A. (2016). Measuring the effectiveness of mass-mediated health campaigns through meta-analysis. *Journal of Health Communication*, 21(4), 439–456. [\[CrossRef\]](#) [\[PubMed\]](#)
- Bellini, M. I., Parisotto, C., Dor, F. J. M. F., & Kessar, N. (2020). Social media use among transplant professionals in Europe: A cross-sectional study from the European Society of Organ Transplantation. *Experimental and Clinical Transplantation*, 18(2), 169–176. [\[CrossRef\]](#) [\[PubMed\]](#)
- Cameron, A. M., Massie, A. B., Alexander, C. E., Stewart, B., Montgomery, A. R., Benavides, N. R., Fleming, G. D., & Segev, D. L. (2013). Social media and organ donor registration: The Facebook effect. *American Journal of Transplantation*, 13(8), 2059–2065. [\[CrossRef\]](#) [\[PubMed\]](#)
- Centorrino, M., & Romeo, A. (2023). *Media digitali. La costruzione delle relazioni sociali*. FrancoAngeli.
- Chadwick, A. (2013). *The hybrid media system politics and power*. Oxford University Press.
- Chang, A., Anderson, E. E., Turner, H. T., Shoham, D., Hou, S. H., & Grams, M. (2013). Identifying potential kidney donors using social networking web sites. *Clinical Transplantation. The Journal of Clinical Transplantation Research*, 27(3), 320–326. [\[CrossRef\]](#) [\[PubMed\]](#)
- Chou, W. Y., Prestin, A., Lyons, C., & Wen, K. Y. (2013). Web 2.0 for health promotion: Reviewing the current evidence. *American Journal of Public Health*, 103(1), 9–18. [\[CrossRef\]](#) [\[PubMed\]](#)
- Couldry, N., & Hepp, A. (2017). *The mediated construction of reality*. Polity Press.
- Cucchetti, A., Zanello, M., Bigonzi, E., Pellegrini, S., Cescon, M., Ercolani, G., Mazzotti, F., & Pinna, A. D. (2012). The use of social networking to explore knowledge and attitudes toward organ donation in Italy. *Minerva Anestesiologica*, 78(10), 1109–1116. [\[PubMed\]](#)
- De Angelis, G., Wells, G. A., Davies, B., King, J., Shallwani, S. M., McEwan, J., Cavallo, S., & Brosseau, L. (2018). The use of social media among health professionals to facilitate chronic disease self-management with their patients: A systematic review. *Digit Health*, 3(4), 1–13. [\[CrossRef\]](#) [\[PubMed\]](#)
- de Vere Hunt, I., & Linos, E. (2022). Social media for public health: Framework for social media-based public health campaigns. *Journal of Medical Internet Research*, 24(12), e42179. [\[CrossRef\]](#) [\[PubMed\]](#)
- Ducci, G., & Antonioni, S. (2019). Storie ed emozioni nella comunicazione sociale: Un'analisi delle campagne sulla donazione in Italia nel periodo 2013–2018. *Sociologia della Comunicazione*, 58, 5–26. [\[CrossRef\]](#)
- Eysenbach, G. (2008). Medicine 2.0: Social networking, collaboration, participation, apomediation, and openness. *Journal of Medical Internet Research*, 10(3), e22. [\[CrossRef\]](#) [\[PubMed\]](#)
- Flaudias, V., de Chazeron, I., Zerhouni, O., Boudesseul, J., Begue, L., Bouthier, R., Lévrier, C., Llorca, P., & Brousse, G. (2015). Preventing alcohol abuse through social networking sites: A first assessment of a two-year ecological approach. *Journal of Medical Internet Research*, 17(12), e278. [\[CrossRef\]](#) [\[PubMed\]](#)
- Floridi, L. (Ed.). (2015). *The onlife manifesto. Being human in a hyperconnected era*. Springer.
- Friedman, V. J., Wright, C. J. C., Molenaar, A., McCaffrey, T., Brennan, L., & Lim, M. S. C. (2022). The use of social media as a persuasive platform to facilitate nutrition and health behavior change in young adults: Web-based conversation study. *Journal of Medical Internet Research*, 24(5), e28063. [\[CrossRef\]](#) [\[PubMed\]](#)
- García-Méndez, C., García-Padilla, F. M., Romero-Martín, M., Sosa-Cordobés, E., Domínguez-Pérez, M. D. M., & Robles-Romero, J. M. (2022). Social networks: A quality tool for health dissemination? *Journal of Education and Health Promotion*, 11(1), 355. [\[CrossRef\]](#) [\[PubMed\]](#)
- Ghahramani, A., de Courten, M., & Prokofieva, M. (2022). The potential of social media in health promotion beyond creating awareness: An integrative review. *BMC Public Health*, 22, 2402. [\[CrossRef\]](#) [\[PubMed\]](#)
- Guerra, F., Linz, D., Garcia, R., Kommata, V., Kosiuk, J., Chun, J., Boveda, S., & Duncker, D. (2022). The use of social media for professional purposes by healthcare professionals: The #intEHRAct survey. *EP Europace*, 24(4), 691–696. [\[CrossRef\]](#)

- Harris, J., Atkinson, A., Mink, M., & Porcellato, L. (2020). Young people's experiences and perceptions of YouTube-produced health content: Implications for health promotion. *Health Education & Behavior*, 48(2), 199–207. [CrossRef]
- Henderson, M. L. (2018). Social media in the identification of living kidney donors: Platforms, tools, and strategies. *Current Transplantation Reports*, 5(1), 19–26. [CrossRef] [PubMed]
- Henderson, M. L., Adler, J. T., Van Pilsum Rasmussen, S. E., Thomas, A. G., Herron, P. D., Waldram, M. M., Ruck, J. M., Purnell, T. S., DiBrito, S. R., Holscher, C. M., Haugen, C. E., Alimi, Y., Konel, J. M., Eno, A. K., Garonzik Wang, J. M., Gordon, E. J., Lentine, K. L., Schaffer, R. L., Cameron, A. M., & Segev, D. L. (2019). How Should social media be used in transplantation? A survey of the American society of transplant surgeons. *Transplantation*, 103(3), 573–580. [CrossRef] [PubMed]
- Henderson, M. L., Clayville, K. A., Fisher, J. S., Kuntz, K. K., Mysel, H., Purnell, T. S., Schaffer, R. L., Sherman, L. A., Willock, E. P., & Gordon, E. J. (2017). Social media and organ donation: Ethically navigating the next frontier. *American Journal of Transplantation*, 17(11), 2803–2809. [CrossRef] [PubMed]
- Henderson, M. L., Herbst, L., & Love, A. D. (2020). Social media and kidney transplant donation in the united states: Clinical and ethical considerations when seeking a living donor. *American Journal of Kidney Diseases*, 76(4), 583–585. [CrossRef] [PubMed]
- IAB Spain. (2023). *Estudio anual redes sociales 2023*. Available online: <https://iabspain.es/estudio/estudio-de-redes-sociales-2023/> (accessed on 20 February 2025).
- Instituto Nacional de Estadística (INE). (2024). *Survey on equipment and use of Information and Communication Technologies (ICT) in households. Year 2024* [Comunicado de prensa]. Available online: <https://www.ine.es/dyngs/Premsa/en/TICH2024.htm> (accessed on 20 February 2025).
- Jenkins, H. (2006). *Convergence culture: Where old and new media collide*. New York University Press.
- Kazley, A., Hamidi, B., Balliet, W., & Baliga, P. (2016). Social media use among living kidney donors and recipients: Survey on current practice and potential. *Journal of Medical Internet Research*, 18(12), e328. [CrossRef] [PubMed]
- Lovari, A. (2017). *Social media e comunicazione della salute. Profili istituzionali e pratiche digitali*. Guerini Scientifica.
- Luo, T., Li, M. S., Williams, D., Phillippi, S., Yu, Q., Kantrow, S., Kao, Y. H., Celestin, M., Lin, W. T., & Tseng, T. S. (2021). Using social media for smoking cessation interventions: A systematic review. *Perspectives in Public Health*, 141(1), 50–63. [CrossRef] [PubMed]
- Madden, S., Collett, D., Walton, P., Empson, K., Forsythe, J., Ingham, A., Morgan, K., Murphy, P., Neuberger, J., & Gardiner, D. (2020). The effect on consent rates for deceased organ donation in Wales after the introduction of an opt-out system. *Anaesthesia*, 75(9), 1146–1152. [CrossRef] [PubMed]
- Martínez-López, M. V., McLaughlin, L., Molina-Pérez, A., Pabisiak, K., Primc, N., Randhawa, G., Rodríguez-Arias, D., Suárez, J., Wöhlke, S., & Delgado, J. (2023). Mapping trust relationships in organ donation and transplantation: A conceptual model. *BMC Medical Ethics*, 24(1), 93. [CrossRef] [PubMed]
- Matesanz, R. (2003). Organ donation, transplantation, and mass media. *Transplantation Proceedings*, 35(3), 987–989. [CrossRef] [PubMed]
- Mayol, J., & Dziakova, J. (2017). Value of social media in advancing surgical research. *British Journal of Surgery*, 104(13), 1753–1755. [CrossRef] [PubMed]
- Moorhead, S. A., Hazlett, D. E., Harrison, L., Carroll, J. K., Irwin, A., & Hoving, C. (2013). A new dimension of health care: Systematic review of the uses, benefits, and limitations of social media for health communication. *Journal of Medical Internet Research*, 15(4), e85. [CrossRef] [PubMed]
- Morcillo, J., Czurda, K., & Robertson von Trotha, C. Y. (2018). Typologies of the popular science web video. *Journal of Science Communication*, 15(4), A02. [CrossRef]
- Mouelhi, Y., Alessandrini, M., Pauly, V., Dussol, B., & Gentile, S. (2017). Internet and social network users' profiles in renal transplant recipients in France. *BMC Nephrology*, 18(1), 259. [CrossRef] [PubMed]
- Pellizzoni, L. (2021). Pseudoscienza, post-verità, governo del disordine. L'esitazione vaccinale nel XXI secolo. In L. Pellizzoni, & R. Biancheri (Eds.), *Scienza in discussione? Dalla controversia sui vaccini all'emergenza COVID-19* (pp. 31–52). FrancoAngeli.
- Rubinelli, S., Camerini, L., & Shulz, P. J. (2010). *Comunicazione e salute*. Apogeo Editore.
- Ruck, J. M., Henderson, M. L., Eno, A. K., Van Pilsum Rasmussen, S. E., DiBrito, S. R., Thomas, A. G., Li, R., Singer, L., Massie, I., Waldram, M. M., Konel, J. M., Helfer, D. R., Garonzik Wang, J. M., Purnell, T. S., Mogul, D. B., Lentine, K. L., Waterman, A. D., & Segev, D. L. (2019). Use of Twitter in communicating living solid organ donation information to the public: An exploratory study of living donors and transplant professionals. *Clinical Transplantation*, 33(1), e13447. [CrossRef] [PubMed]
- Shaw, D., Georgieva, D., Haase, B., Gardiner, D., Lewis, P., Jansen, N., Wind, T., Samuel, U., McDonald, M., & Ploeg, R. (2017). Family over rules? An ethical analysis of allowing families to overrule donation intentions. *Transplantation*, 101(3), 482–487. [CrossRef] [PubMed]
- Sunstein, C. R. (2017). *#Republic: Divided democracy in the age of social media*. Princeton University Press.
- Swire-Thompson, B., & Lazer, D. (2020). Public health and online misinformation: Challenges and recommendations. *Annual Review of Public Health*, 41, 433–451. [CrossRef] [PubMed]
- Tipaldo, G., Crabu, S., & Moiso, V. (2022). «What is truth?». Knowledge, expertise and political decision-making in the age of epistemic instability. *Rassegna Italiana di Sociologia*, 2, 533–538. [CrossRef]

- Van de Belt, T. H., Engelen, L. J., Berben, S. A., & Schoonhoven, L. (2010). Definition of Health 2.0 and Medicine 2.0: A systematic review. *Journal of Medical Internet Research*, 12(2), e18. [CrossRef] [PubMed]
- van Dijck, J., Poell, T., & de Waal, M. (2018). *The platform society: Public values in a connective world*. Oxford University Press.
- Ventola, C. L. (2014). Social media and health care professionals: Benefits, risks, and best practices. *P&T Journal*, 39(7), 491–520.
- Welbourne, D. J., & Grant, W. J. (2015). Science communication on YouTube: Factors that affect channel and video popularity. *Public Understanding of Science*, 25(6), 706–718. [CrossRef] [PubMed]
- World Health Organization (WHO). (n.d.). *Infodemic*. In *Health topics*. Available online: https://www.who.int/health-topics/infodemic#tab=tab_1 (accessed on 20 February 2025).

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.