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## Research article

# Experiences of first year undergraduate nursing students using Instagram in their clinical practicum during COVID-19 pandemic: A qualitative study

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## ABSTRACT

**Background:** Social media provides us with easy access to information. For students, it is an additional learning resource used in different types of theoretical and practical teaching methodologies.

**Objectives:** The aim of this paper was to describe the perspective of undergraduate nursing students on the use of Instagram during their clinical practicums in the midst of the COVID-19 pandemic.

**Design:** A qualitative descriptive and exploratory study based on an interpretative framework.

**Settings and Participants:** First-year undergraduate nursing students at the Universidad Europea de Madrid were included.

**Methods:** In-depth interviews and researchers' field notes were used to collect the data. Purposive sampling and inductive thematic analysis were applied. During the interviews, themes such as accompaniment during practicums or training opportunities were identified.

**Results:** The use of Instagram helped students to feel closer to professors, identifying it as an opportunity to remedy the possible lack of connection between theory and practice. Moreover, Instagram helped them build an image of nursing in clinical practicum environments. By using Instagram, undergraduate nursing students were able to better integrate and apply the knowledge acquired at university during their clinical practicums in hospitals.

**Conclusions:** Our results can be applied to future studies on the use of social media platforms as teaching tools in clinical practicum settings and to observe the evolution of the image and role of nursing and its relationship with social media.

## 1. Introduction

Social media has three billion monthly active users worldwide, of which 1.48 billion are Instagram users (Farsi, 2021). All social media platforms are characterized by accessibility to information, global interconnection and their use in daily activities (Vences et al., 2020). The use of social media has become widespread as a complementary means of communication in universities and among healthcare professions (Dorfman et al., 2019; Shafer et al., 2018; Wong et al., 2019), to the extent that its use increased during the COVID-19 pandemic (Albaqawi et al., 2020; Kochuvilayil et al., 2021). The way information is

conveyed, reinforcement of practical aspects by means of images or videos, and smooth interaction has enabled greater commitment and involvement of students in their education, favoring collaborative learning (Carpenter et al., 2020; Hernán-García et al., 2021).

In the case of Instagram, its use increases levels of attention and emotion through its images, texts, and stories (Vences et al., 2020). In addition, together with the age profile of its consumers, it represents an opportunity for use as an educational tool in higher education (Vanzetta et al., 2016).

In the field of nursing university teaching and other health sciences, Booth and O'Connor (2017), Coman et al. (2021) and Katz and Nandi

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(2021) have highlighted the use of social media, and platforms such as Twitter, Facebook, and Instagram. Specifically, regarding the use of Instagram as a teaching tool in health sciences, but not in nursing field, during the COVID-19 pandemic, a number of studies (Ganjoo et al., 2021; Gulati et al., 2020; Koenig et al., 2021; Plack et al., 2021) have reported that this social media platform was used as a support tool for subjects, facilitating access to new materials, infographics and content related to clinical practicums (Koenig et al., 2021). Also, Instagram was found to increase student engagement and served as a potential recruitment tool using the “stories” option (Plack et al., 2021; Ganjoo et al., 2021). Furthermore, it can be used in combination with other paired teaching methods (Gulati et al., 2020). On the other hand, O’Connor and Andrews (2018), McNally et al. (2017), and Strandell-Laine et al. (2015) reported the use of smartphones, tablets, and mobile apps to support nursing student learning in clinical environments and clinical practicum. However, these studies did not mention the use of Instagram in clinical practicum (O’Connor and Andrews, 2018; McNally et al., 2017; Strandell-Laine et al., 2015). Currently, the qualitative literature regarding the Instagram’s use such as nursing education tool on clinical practicum is still scarce.

It would be of interest to investigate the role of applications such as Instagram as an educational tool for nurse students during their clinical practicum related to real clinical context helping them to remember theoretical aspects, guiding nursing students as to what to do and what to observe (Kalyani et al., 2019), maintaining continuous interaction with clinical practice together with the tutor’s accompaniment, (Geraghty et al., 2021; Ross and Cross, 2019; Zhu et al., 2021), and reinforce the reflexive process during clinical practicums (Campbell et al., 2018; Jenkins et al., 2021). The guiding questions of this study were: what is the nursing students’ perspective of the use of Instagram as a learning tool? Is its application useful during their clinical practices in the midst of the COVID-19 pandemic? Therefore, the aim of the current study was to describe the impact of Instagram as a teaching tool during clinical practicums in the midst of the COVID-19 pandemic, from the perspective of undergraduate nursing students.

## 2. Methods

### 2.1. Design

A qualitative descriptive and exploratory study based on an interpretative framework was conducted (Carpenter and Suto, 2008; Colorafi and Evans, 2016; Moser and Korstjens, 2018). The goal of an explorative descriptive qualitative study is to identify a situation, or an event. These designs are used to show ‘what is happening’ and ‘how it is happening’ (Sandelowski and Barroso, 2003; Sandelowski, 2010, 2000), and to present a comprehensive summary of events in everyday terms (Sandelowski and Barroso, 2003). Thus, qualitative exploratory studies are considered the method of choice when straight descriptions of phenomena are desired (Sandelowski, 2000, 2010). Moreover, the goal of interpretive perspective inquiry is understanding how people respond and understand the meaning of social phenomena (Carpenter and Suto, 2008). This study followed the Consolidated Criteria for Reporting Qualitative Research-COREQ (Tong et al., 2007) and the Standards for Reporting Qualitative Research-SRQR (O’Brien et al., 2014) recommendations for conducting qualitative studies.

### 2.2. Ethics

This study was conducted in accordance with the Ethical Principles of the World Medical Association (Declaration of Helsinki). The study was approved by the Ethics Committee of the Universidad Europea de Madrid (code: CIPI/20/029). All the participants gave their written consent prior to their inclusion in the study.

### 2.3. Context

At the Nursing Department of the Universidad Europea de Madrid, the nursing degree belongs to the European Higher Education Area (European Commission, 2021). In Spain, the nursing degree has a four-year duration, including 90 credits of external clinical practicums with at least 2025 h of training in healthcare centers.

During their first academic year, students perform a total of 150 h in hospital units. Practicums in hospitals consist of rotating through the hospital units of internal medicine and surgery, where students have their first contact with a hospital environment and basic care of hospitalized patients. Clinical practicums are coordinated by the university, and there are practicum tutors in hospitals who monitor and accompany students during the clinical practicums and help them to acquire clinical competence. They also organize and deliver seminars and sessions with theoretical and practical contents in clinical practicums. During clinical practicums, students must apply the theoretical contents acquired at university.

During the COVID-19 pandemic, the use of online tools such as online platforms (teams, zoom, etc.) was integrated and implemented to aid and maintain nursing students’ training. Some of these tools are still currently used as tools for educational support and teaching innovation, even though the lockdown and restrictive measures due to the pandemic have been withdrawn and face-to-face activity at the University has returned in Spain. Nonetheless the learning and use of social media and applications such as social networking (Instagram, face-book) has not yet been included in the curriculum of nursing studies.

First-year nursing degree students began to use Instagram as an educational tool during their clinical practicums. Professors uploaded key information related to their training activity in clinical practicums by posting on “feed” and “stories.” The aim was to encourage student engagement using internal Instagram tools such as surveys, questions, videos, and images. These posts covered topics such as patient safety, individual protection measures, integration into a multidisciplinary care team, communication and interaction with patients and their families, interviews and nursing assessment, and the professional image of nursing.

### 2.4. Sampling strategies and participants

The inclusion criteria were students enrolled in the first year of the nursing degree studying at the Universidad Europea de Madrid, in the subject Clinical Practicums during the 2020/2021 academic year.

Purposive sampling was used (Moser and Korstjens, 2018). The sampling and data collection continued until information redundancy was achieved (Carpenter and Suto, 2008; Creswell and Poth, 2018; Moser and Korstjens, 2018). A total of 15 participants were included in our study. There were no dropouts.

### 2.5. Data collection

In-depth semi-structured interviews were conducted with open questions to obtain information related to specific topics of interest (Moser and Korstjens, 2018). After collecting personal data from each participant, a question guide was used (Table 1 Question guide).

During the interviews, the researchers listened attentively, noted the key words in the students’ narratives and used their responses to ask about and clarify the content (Carpenter and Suto, 2008). This allowed them to gather relevant information from the students’ perspective. The interviews were conducted in a private video chat room using the Microsoft Teams® video conference platform (Archibald et al., 2019; Hernán-García et al., 2021). Before the interview, each participant received a private/personalized email with an invitation to the interview using the Microsoft Teams® platform.

After obtaining the participants’ verbal consent, all the interviews were audio- and video-recorded in order to access non-verbal data, such

**Table 1**

Question guide.

Research areas	Questions
Use of Instagram in clinical practicums	What was your perspective on the use of Instagram in clinical practicums in hospitals? What expectations did you have concerning the use of Instagram for clinical practicums? What did you consider to be the most relevant aspect of its use in practicums?
Motivation/reasons for using Instagram	What were your motivations for using Instagram? What did you expect from the use of Instagram in the practicums? What needs did you identify that could be met by Instagram? How did the use of Instagram improve your learning process in the clinical practicums? How was your experience using Instagram in the practicums?
Preparation and training	What do you consider to be the most relevant aspect of participating in clinical practicums for nursing? Did you feel sufficiently prepared to perform the clinical practicums? Why? How did your participation in the clinical practicums influence your theoretical learning as a student?
Professional commitment	How was your experience using Instagram as a learning tool as a nursing student? To what extent did you feel the need to use Instagram to learn to be a nurse? How do you perceive the image of nursing professionals on Instagram?

as visual contact, facial expressions or body movements, which are considered as data for qualitative studies. All the interviews were transcribed verbatim.

A total of 697 min of interviews were recorded (with an average duration of  $46.45 \pm 9.44$  min per interview). Additionally, the researchers took field notes. Field notes provide a wealth of information to describe participants' behavior during data collection and allow researchers to take note of their reflections during data collection (Creswell and Poth, 2018).

## 2.6. Analysis

Inductive thematic analysis was carried out (Braun and Clarke, 2006). The analysis was carried out by researchers JMCP and EGG. The analysis began by identifying the most descriptive relevant contents to identify codes and/or units of meaning to subsequently group together the codes into groups with common meanings (categories). These groups were organized based on common contents that made it possible to describe the participants' experience and resulted in the themes that describe and explore the participants' experience (Braun and Clarke, 2006). The thematic analysis was carried out separately in the researchers' interviews and notes. Subsequently, the result of each analysis was integrated in an analysis matrix in order to identify and define the final topics through analysis meetings between the members of the research team (Braun and Clarke, 2006). No qualitative analysis software was used.

## 2.7. Rigor considerations

The Lincoln and Guba criteria were used, which include the control of credibility, transferability, dependability, and confirmability of the data (Korstjens and Moser, 2018). The following techniques were used: (a) researcher triangulation during analysis (credibility); (b) validation of participants (credibility); (c) comprehensive description of the study (transferability); (d) records of the reflexivity process during the study (confirmability); (e) coding based on participants' narratives (credibility and confirmability); and (f) external audit (dependability) (Korstjens and Moser, 2018).

## 3. Results

A total of 15 students participated (14 women), with a mean age of

22.9 years. Six students were placed in six surgery units and the rest were placed in internal medicine units during their first-year clinical practicums. The following themes were identified.

### 3.1. Theme 1. Feeling accompanied in the hospital

Concerning this topic, the participants said they felt accompanied during the clinical practicums through the use of Instagram and the support of the academic tutors. The participants described that Instagram helped them to stay in contact and established an important connection between the hospitals where they performed the practicums and the university.

P4 *"The night before starting the practicums I was going over the Instagram post that explained all the material I needed at the hospital; it helped me to stay calm and feel closer to the center where I would be doing the practicums."*

The participants described how Instagram acted as a link between the clinical practicums and their university professors, highlighting how the posts published on Instagram helped them to recall essential aspects of their training in clinical practicums that took place in hospitals.

P2 *"The whole topic on bio-accidents was very well explained in the different Instagram posts".*

Furthermore, the participants indicated improvements in relation to interactions with other professors and students through the application, since the contents were prepared by the professors for the students.

P2 *"I would have liked our participation on Instagram to have been more flexible; we could only see the information, there was no discussion in the tool."*

Moreover, they acknowledged that the posts published on Instagram helped to supplement the information they received during the advisory sessions held in the hospital before starting the clinical practicums.

P6 *"The tutors reminded us of many necessary aspects for the practicums such as, for example, everything related to interviewing patients."*

### 3.2. Theme 2. Connection between theory and practice

During their clinical practicums, the nursing students encountered differences and similarities between the theoretical contents taught at university and their application in the practicums at the hospital.

The students pointed out the existence of differences between the theoretical contents taught at the university and their application in the clinical practicums in a "real" healthcare environment. The use of Instagram helped to narrow the gap between theory and practice. Thus, the participants used Instagram to resolve the differences between theory and practice; it helped them adapt to the practicums and gave them quick and easy access to the theoretical concepts with which they work.

P7 *"It's like carrying all the information you may need at some point during the practicums in your pocket."*

The participants also used Instagram as a resource to search for information and updates on theoretical contents or aspects of the practicums, such as communication with patients and their families.

P15 *"All the points to be addressed in the interview with patients and families were clearly stated on the university's Instagram."*

During the clinical practicums, Instagram was used as a bridge for other social media (Twitter, WhatsApp, Tik-Tok) with the aim of searching for and sharing information related to clinical practicums with their classmates.

P1 *"You can find a lot of very interesting information on clinical practicums for nursing students on social media."*

### 3.3. Theme 3. Opportunity for training and professional development

The introduction of Instagram in a healthcare setting surprised them since it was integrated in their clinical training in a less formal manner. Instagram has allowed students to experience nursing from a different perspective: that of care use and management using social media.

P11 *“On social media there are many healthcare professionals who post very reliable information for us as students.”*

The participants described how having contact with patients, families and other healthcare professionals in a “real” environment generated deep reflections related to their life and maturation process, in which Instagram participated as an additional element of the learning process. This helped them to consolidate their image of the nursing profession and their first contact with the profession in the first year of the degree. The whole experience was described as a “life experience.”

P14 *“Using Instagram has helped to enhance our capabilities as students; it is an opportunity for training and building our image as future nursing professionals.”*

Our participants explained how their image of being nurses is influenced by the presence of nurses on social media. The posts currently published by nurses on social media are a guide for future generations of nurses.

P3 *“When you see other nurses on social media, you realize how important their posts are; they help you to understand many things.”*

However, when participants shared certain materials (images, comments, videos) on social media, and were warned of their inappropriateness by teachers and/or classmates, they felt questioned. Consequently, before sharing or participating, they began to consult their peers before sharing any thoughts.

P12 *“When I was warned that there was content that was unrelated to my studies or that was considered inappropriate content, I began to be careful. When I participate or post any content, I ask beforehand...”*

## 4. Discussion

Our results show that the use of Instagram in the clinical practicums of undergraduate nursing students facilitates the adaptation of students to the clinical environment while allowing them to share information and develop new collaborative ways of learning. Also, it enables students to integrate the theoretical contents acquired at university and apply them in healthcare environments, giving them the opportunity to build their professional image of the nurses they will become in the future.

### 4.1. Theme 1. Feeling accompanied in the hospital

In relation to the fact that Instagram makes practicum students feel accompanied, Guraya recommend using social media as a tool for improving communication with nursing students and professionals (Guraya et al., 2021).

The use of Instagram was varied (sharing contents, stories, documentation, etc.). In the same vein, other studies highlight the use of social media to discuss the content used in the academic sphere (Shafer et al., 2018) and to conduct tutorials and sessions with professionals, allowing students to improve their clinical training experience (Carpenter et al., 2020; Saifan et al., 2021). Social media has gained special importance as an educational tool in the training of nurses. In fact, new teacher evaluation tools are being developed to assess and quantify the impact of these new tools within the new nursing teaching methodologies (Jiménez-Rodríguez et al., 2021).

Furthermore, there are recommendations for maintaining and promoting the use of social media as an educational tool among students

(Ganjoo et al., 2021), such as: a) planning the contents to be frequently posted to maintain interest and update contents; b) seeking new ways of displaying the information so that students relate and connect to the content; c) checking the feed regularly and responding encouragingly; d) reminding students of new content so they can respond to posts published by the instructor and by classmates to spark more debates; and e) ensuring that questionnaires and tasks, if used, are not complex, and do not require a lot of time (figures, short questions).

### 4.2. Theme 2. Connection between theory and practice

Our results show that Instagram is used as a tool for integrating the theoretical knowledge acquired at university with “real” clinical practicums in hospitals. Saifan et al. (2021) describe the existence of a gap between the knowledge acquired at university and clinical practicums and the appearance of another reality outside of the simulation laboratory. These authors highlight the difficulty of developing unfamiliar practical competencies (such as applying techniques) and communication with real patients. Furthermore, Jiménez-Rodríguez et al. (2021) describe how the use of social media by nursing students during their clinical practicums improved non-technical aspects of their training such as communication, accompaniment and the perception of acquisition of life experiences. In addition, these authors highlight the ease with which nursing students use social media platforms and apply them to practicums (Jiménez-Rodríguez et al., 2021). Prior studies (Booth and O’Connor, 2017; Hay et al., 2017; Ross and Myers, 2017) have shown that mobile technology and social media can improve the learning process of undergraduate nursing students and should be considered a viable educational instrument to help and aid the digital development of the nursing profession.

In contrast, Vukušić Rukavina et al. (2021) point out the existence of benefits, but also dangers, of using social media as a teaching element for healthcare professionals. The dangers include the relaxation of professional responsibility, less commitment to confidentiality, blurring of professional limits in relation to information management, presence of unprofessional behavior and the presence of legal problems and disciplinary consequences (Vukušić Rukavina et al., 2021).

### 4.3. Theme 3. Opportunity for training and professional development

Our results show that Instagram has given nursing students the opportunity to build a new image of nurses by using social media technology to provide care. Prior studies show that integration with social media such as Twitter is positively perceived by nursing students (Price et al., 2018). Giroux and Moreau (2021) described how nursing students used social media to combat isolation, consolidate course contents, share resources, and better anticipate the transition to practice as a new nurse.

Furthermore, there is a risk that nursing students may adopt unprofessional attitudes upon integrating their knowledge about the nursing profession through social media, offering a distorted image of what it is like to be a nurse (Jiménez-Rodríguez et al., 2021; Ross and Cross, 2019; Griffin et al., 2021). Guraya et al. (2021) warn that the uncontrolled use of social media and digital contents may affect the image, values and meaning of healthcare professions. Moreover, the use of confidential and highly sensitive information, such as information related to health and disease, on Instagram may give rise to ethical and legal considerations when applied in education in a healthcare setting. Storing and/or sharing that information in the form of posts, stories or images may give rise to conflicts between the healthcare institution and the university and between patients and students. In their paper on professional behavior and values in digital professionalism through social media, Guraya et al. (2021) identified a high rate of violation of patient privacy and cyberbullying and a decline in professional integrity. Also, their results (Guraya et al., 2021) revealed a deficiency in existing guidelines and policies regarding digital professionalism for

safeguarding healthcare professionals, students and patients. We believe that in order to use Instagram as an educational tool, it is essential to determine: a) the educational content that will be addressed using Instagram, b) which teachers (or those responsible) will evaluate the suitability of that content, and c) the procedure for evaluating that content while ensuring the privacy of all the people involved. Ganjoo et al. (2021) describe several strategies for promoting the safe use of Instagram as an educational tool, including, among others: a) developing institutional guidelines on the use of social media; b) professors should ensure that the posts are relevant and related to the content of the subject; and c) evaluating the use of hashtags, Instagram Stories or Instagram Live, due to the fact that subjects are taught in a closed and private educational environment. Including these options could increase the audience, enable connection with students in real time and create more opportunities for discovery of the Instagram account.

In the current study no results were obtained on aspects such as privacy or cyberbullying. This could be explained by the fact that these topics were not specifically asked about because the objectives were to know the students' perspective on the use of Instagram as a teaching tool, however, during the interview open-ended questions were asked that could have provided information from the participants if they had considered it relevant (e.g. What was your perspective on the use of Instagram in clinical practicums in hospitals? What did you consider to be the most relevant aspect of its use in practicums?).

Another key aspect in the inclusion of social media as an educational tool in health sciences is the user's profile and the selection of some social media over others. This is the case since the acceptance and normal use of one over others could influence its use as a teaching tool within the nursing students' curriculum. Coman et al. (2021) describe the existence of different preferences and the use of social media in accordance with the student's profile, thus master's and PhD students use Facebook more than Instagram.

#### 4.4. Limitations

Our results cannot be extrapolated to all nursing students due to the nature of the chosen design. Furthermore, qualitative studies tend to discuss their limitation in generalizing the results in terms of nomothetic statistical terms. Nonetheless, there is an analytical or idiographic generalization that justifies the value of the results of qualitative studies, and where generalization can be made from and about cases (Vasileiou et al., 2018). In addition, the qualitative design makes it possible to explore and describe the participants' perspectives in depth and helps us to understand a new phenomenon such as the inclusion of Instagram as an educational tool in the learning process of undergraduate nursing students. Furthermore, our study did not delve into aspects such as privacy and cyberbullying, related to the use of social networks. It would be necessary to contemplate and develop legal and ethical aspects for their use at the educational level.

## 5. Conclusions

Instagram serves as an instrument for mentoring clinical practicums for nursing students. The use of Instagram brings students and professors closer through a social media platform with which they are familiar and which they use in their personal relationships. Furthermore, it has the potential to strengthen the connection between the theoretical contents taught at university and clinical practicums in hospitals. Additionally, Instagram helps students to identify with the image of the nursing professional.

Our results can be applied to future studies on the use of social media platforms as teaching tools in clinical practicum settings and to observe the evolution of the image and role of nursing and its relationship with social media. In the university sector, it is necessary to carry out studies on the need to include novel teaching tools (social media, applications, etc.) in the curriculum of future nurses, in addition to exploring the

appropriate use of social media as a structural element of nursing knowledge.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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