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Featured Article

Simulated Nursing Video Consultations: An Innovative Proposal During Covid-19 Confinement

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KEYWORDS

COVID-19;
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training;
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video conferencing;
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simulation;
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web-based simulation;
online simulation

Abstract

Background: In response to the closure of universities and the canceling of in-person classes due to the COVID-19 pandemic, this study was designed to focus on a solution for adapting simulation-based education to this situation.

Method: A mixed study was conducted to analyze nursing students' satisfaction and perceptions (n = 48) about simulated nursing video consultations.

Results: Nursing students expressed a high level of satisfaction and positive perceptions about this innovative proposal.

Conclusions: Simulated nursing video consultations could be considered as another choice of high-fidelity simulation not only in the current COVID-19 situation, but its use could be extended to other contexts.

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The current pandemic of novel coronavirus disease 2019 (COVID-19) is a global health problem. The symptomatology of this infection ranges from mild symptoms (typically observed as fever, tiredness, fatigue, and dry cough) to severe symptoms (dyspnea, diarrhea, pneumonia, and acute respiratory distress syndrome) (Huang et al.,

2020). The impact of this pandemic depends on the number of persons infected, its transmissibility, and severity (Lipsitch, Swerdlow, & Finelli, 2020). In this sense, nurses are central to COVID-19 prevention, and infected patients care. Currently, nurses are not only providing frontline care in severe COVID-19 cases that require hospitalization, but they are also monitoring outpatients in community settings, and providing education to patients and the general public about the outbreak (Choi & Logsdon, 2020).

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As all healthcare professionals are at risk of contagion, new modalities of care are emerging in order to avoid face-to-face contact between nurses and patients and to ensure that patients receive the care they need (Greenhalgh, Wherton, Shaw, & Morrison, 2020; Hollander & Carr, 2020).

Key Points

- An innovative proposal is suggested to adapt simulated-based education to the needs prompted by the COVID-19 pandemic, recreating simulated video consultations in the form of online video conferences for providing nursing care.
- Nursing students expressed a high level of satisfaction and positive perceptions about this innovative proposal, emphasizing that simulated nursing video consultations mainly improved their nontechnical skills.
- Simulated nursing video consultations could be considered as another choice for high-fidelity simulation not only in the current COVID-19 situation, but its use could also be extended to other contexts.

Consequently, national digital health strategies have focused their attention on video consultation in the form of online video conferences (Greenhalgh et al., 2020; Hollander & Carr, 2020). Video consultations have been mainly employed with patients who have common chronic conditions (Mallow et al., 2016) and primary care needs (Peters, Greenfield, Majeed, & Hayhoe, 2018); these types of consultations are even considered the future of healthcare (Spence, 2018). Specifically, nursing professionals have used video consultations in follow-up care for patients after surgery, chronic diseases, families of children with cancer, and premature infants (Nordtug, Rygg, & Brataas, 2018). Video consultations have been shown to be associated with satisfaction among patients and healthcare professionals, as well as lowers the costs as compared with standard consultation without differences in healthcare attention (Ignatowicz et al., 2019).

Furthermore, video consultations have historically been considered the last option for healthcare, and they are currently considered as the perfect solution during this worldwide pandemic (Hollander & Carr, 2020).

Since December 2019, the COVID-19 epidemic has expanded from Wuhan (China) (Zhu et al., 2020) to a growing number of countries worldwide, including Spain that has been highly affected (Legido-Quigley et al., 2020). Consequently, the Spanish government issued the Royal Decree 463/2020 (Spanish Government, 2020) to declare the state of national emergency, starting on March 15, 2020. This new decree included controversial measures to grant the central government with new powers and a range of social distancing measures to ensure the confinement of the

population, including the closure of schools and universities. This pandemic represents a challenge not only to health services but also to nursing education. Nevertheless, it is an opportunity for adapting simulation-based education to this exceptional situation through the use of digital technologies.

There is no doubt that clinical simulation is an essential component of nursing education (Ricketts, 2011; Shin, Park, & Kim, 2015). A typical simulation session comprises face-to-face interactive learning experiences with a simulator, a mannequin, a standardized patient, and learners. When a face-to-face simulation is not possible, technological developments and digital technologies can provide students with near-reality, interactive virtual simulation learning experiences on virtual platforms or specific software or mobile devices (Bogossian et al., 2018; Cant, Cooper, Sussex, & Bogossian, 2017). According to the Healthcare Simulation Dictionary (Lioce et al., 2020), there are different modalities of virtual simulation: immersive simulation, screen-based simulation, serious games, virtual reality, virtual simulation/virtual patients, virtual reality simulation and web-based simulation. Although all virtual simulation modalities are defined as an interactive education process, the interaction between learners and a standardized patient or/and an instructor is different from face-to-face simulation experiences in terms of fidelity (Cant et al., 2017). In this sense, Cant et al. (2017) recommended the refining of the terminologies of virtual simulation modalities, including the level of fidelity.

In response to the needs of simulation-based education prompted by the COVID-19 pandemic, we suggest an innovative proposal for the simulation that re-creates high-fidelity scenarios through simulated video consultations in the form of online video conferences for providing nursing care. All of these nursing video consultations have been adapted to the current healthcare reality caused by this pandemic around the world.

This study was designed to focus on a solution to adapt simulation-based education to the COVID-19 situation. The purpose of this research is to describe this innovative experience and to determine the satisfaction of nursing students, as well as their perceptions when they participate in simulations using this innovative strategy.

Methods

Research Context and Design

A descriptive cross-sectional study was carried out. A mixed-method (quantitative and qualitative methodology) was employed to analyze participants' satisfaction and perceptions of simulated nursing video consultations.

Setting and Sample

The sample included third-year undergraduate students enrolled in the Nursing Degree at a public university in

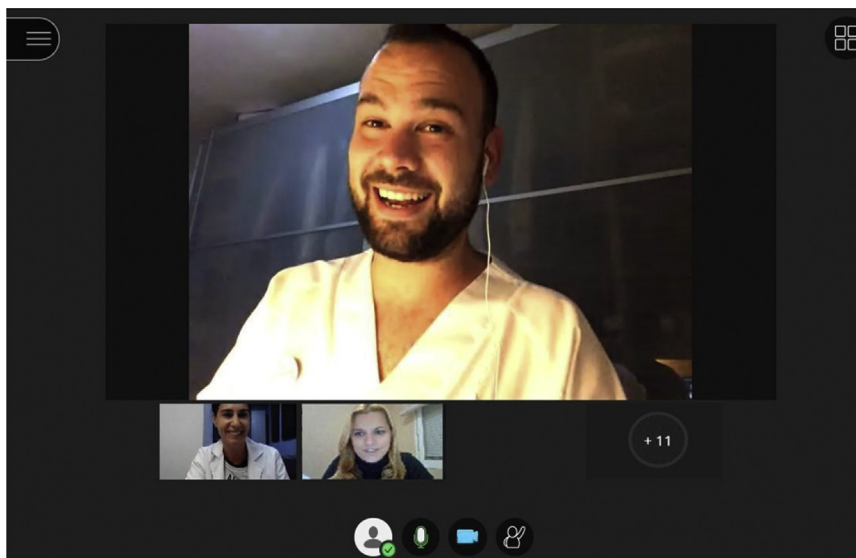


Figure 1 Screenshot of the platform while simulation experience is carried out.

Spain. All of the students participated in high-fidelity simulation sessions within the subjects “Practicum II” and “Practicum III.” Fifty-nine students participated in simulated video consultations between March 16 and April 2, 2020. A total of 48 students consented to participate in the study (81.3% response rate).

All participants were divided into four simulated sessions composed of 12 to 15 students. Each of these

student groups formed six operational work teams (two to three students) to perform each video consultation scenario.

Simulated Nursing Video Consultations

This innovative proposal during times of confinement was developed using a virtual platform of online video conferences provided by the university, namely Blackboard

Table 1 Simulated Clinical Scenarios and Appropriate NIC (Nursing Interventions Classification) Interventions (Butcher et al., 2018) for Their Resolution

Simulated Clinical Scenario	NIC Interventions
6-year-old child with febrile syndrome. His mother calls the nurse.	<ul style="list-style-type: none"> ● [5510] Health education ● [3740] Fever treatment ● [7140] Family support
54-year-old patient discharged from hospital after laparoscopic cholecystectomy. He presents with postsurgical pain and abdominal drainage.	<ul style="list-style-type: none"> ● [5510] Health education ● [2210] Analgesic administration ● [3660] Wound care
75-year-old bed-ridden patient diagnosed with dementia. Her caregiver calls the nurse.	<ul style="list-style-type: none"> ● [5510] Health education ● [7040] Caregiver support ● [3520] Pressure ulcer prevention
70-year-old patient diagnosed with arterial hypertension. Her husband died two months ago.	<ul style="list-style-type: none"> ● [5510] Health education ● [4360] Learning facilitation ● [5290] Grief work facilitation
6-year-old child diagnosed with attention deficit hyperactivity disorder (ADHD). He should be vaccinated during the COVID-19 confinement. His nurse calls her mother to cancel the appointment for the vaccination.	<ul style="list-style-type: none"> ● [5510] Health education ● [6530] Immunization/Vaccination management ● [4352] Behavior management: overactivity/inattention
28-year-old patient diagnosed with an anxiety disorder. She lived with her partner. A potential case of gender-based violence.	<ul style="list-style-type: none"> ● [5510] Health education ● [5820] Anxiety reduction ● [5270] Emotional support

Collaborate Launcher™. A snapshot of the platform is shown in Figure 1.

Simulation Design Process

When university face-to-face classes were suspended, all simulated scenarios originally planned were reformulated and adapted to the new confinement situation. In this way, a total of six video consultation scenarios were carried out, simulating patients with different clinical situations. All nursing students had to perform the nursing activities related to the appropriate NIC (Nursing Interventions Classification) interventions (Butcher, Bulechek, Dochterman, & Wagner, 2018) for the resolution of each simulated scenario (Table 1). Since all scenarios were based on the reality experienced during these days, all the simulated clinical situations were performed by simulated patients at home during the COVID-19 confinement. Consequently, the NIC intervention [5510] Health education (Butcher et al., 2018) was addressed in all simulated nursing video consultations, including issues related to the COVID-19 pandemic: an explanation of protective measures, proposed activities for people who reported anxiety about home confinement, approach to risk situations

derived from confinement (special vulnerability in psychological violence against women), resolution of doubts or concerns related to the fear of contagion, and other patient-centered concerns.

All simulated nursing video consultations followed the INACSL Standards of Best Practice: SimulationSM (INACSL Standards Committee, 2016a, 2016b, 2016c, 2016d). It should be noted that all standardized patients were selected and trained for role portrayal to ensure a standardized process and a high level of fidelity experience (Lewis et al., 2017).

Pre-briefing

An online conference was conducted for establishing a safe psychological learning environment. For accomplishing this, several activities were implemented (Table 2) based on practices proposed by Rudolph, Raemer, and Simon (2014) and the INACSL Standards Committee (2016a, 2016c) for establishing a psychologically-safe context. In addition, these activities were carried out to fulfill the three attributes of the safe psychological learning environment proposed by Turner and Harder (2018): (1) Ability to make mistakes without consequences, (2) The qualities of the facilitator, and (3) Foundational activities such as orientation, preparation, objectives, and expectations.

Briefing

The information on the proposed scenario was presented.

Simulated Scenario

The students who participated in the simulated scenario and the standardized patient at home (professors of the university subjects and/or a nursing professional collaborator) had an operating microphone and camera during the development of the clinical case. Consequently, all of them were the only ones present on the computer screen. Simultaneously, the rest of the students were observing and listening to what was occurring (as in a typical simulation session).

Debriefing

Once the simulated scenario was completed, it was discussed (INACSL Standards Committee, 2016d) using the Gather, Analyze and Summarize (GAS) debriefing tool (Phrampus & O'Donnell, 2013). In this phase, the students discussed the evidence-based best practices related to each scenario.

Data Collection Instrument

For determining the satisfaction with the nursing video consultations as perceived by students, the Satisfaction

Table 2 Activities Implemented for Establishing a Psychologically Safe Context

LIST of Activities

1. Detailed explanation of development phases of simulated video consultations.
2. Clarifying expectations and resolving the concerns that had been raised with regard to the procedure of online simulation sessions.
3. Attending to logistic details: check of computer equipment (microphone and camera). For this purpose, a demonstration test was performed.
4. The premise agreed upon: error is a learning opportunity (mistakes are free of risk or consequences).
5. Clarifying the role of the facilitator: honest, flexible, and adaptable. He/she provides constructive feedback and maintains professional integrity.
- 6 Establishing a "fictional contract" with participants.
7. Confidentiality agreement and commitment to respect students.
8. Creation of operational work teams (2-3 students).
9. Presentation of simulated scenarios: all students received essential information about each simulated scenario prior to its performance. However, the appropriate NIC interventions for its resolution were not provided.
10. A simulated scenario was assigned to each group (2-3 students). Each student group had to submit the scientific evidence required for its resolution in a common platform (group drive) within one week. The students who performed each simulated scenario were different from those who collected the scientific evidence required for its resolution.

Scale Questionnaire with High-Fidelity Clinical Simulation (Alconero-Camarero, Gualdrón-Romero, Sarabia-Cobo, & Martínez-Arce, 2016) was used. This questionnaire consists of 33 items with a 5-point Likert scale ranging from “strongly disagree” to “totally agree.” After applying it, a satisfactory internal consistency was obtained (Cronbach’s value = 0.924), a value quite similar to the obtained by its creators (Cronbach’s value = 0.920). The student’s health care perceptions about simulation in the shape of on-line video conferences were investigated as well, by asking them two open-ended questions: positive and negative points of this simulation strategy.

Statistical Analysis

A descriptive analysis was performed to interpret the results obtained for the demographic data and satisfaction questionnaire items. In all of them, descriptive statistics were calculated (percentages, mean, and standard deviation). These data were analyzed using IBM SPSS Statistics version 24.0 software for Windows (IBM Corp., Armonk, NY, USA). With regard to the qualitative data obtained in the open-ended questions, these were independently analysed by three researchers using an open coding strategy (Coffey & Atkinson, 1996). They established a consensus in the final categories using thematic analysis. Qualitative results were integrated within the quantitative results in order to emphasize them and provide them with context.

Ethical Considerations

The researchers received approval from the Research and Ethics Board of the Department of Nursing, Physiotherapy, and Medicine at the university (no EFM-26/19). This research project is aimed at the implementation and evaluation of teaching innovation methodologies related to clinical simulation in nursing and physiotherapy students. The objectives of the study were previously explained to participants, and all of the students provided written informed consent to participate in the research. The satisfaction questionnaire and the two open-ended questions were completed online through a link provided to the participating students. This web link was kept open for four days after the simulation activities. This research study was carried out following the standards and recommendations of the international Declaration of Helsinki.

Results

A total of 48 nursing students participated in the study. The age of students ranged from 20 to 55 years (mean = 24.40; SD = 8.819). Most students were women (n = 36; 75%).

Descriptive data and frequency analysis for each item of the satisfaction questionnaire are shown in Table 3. As the

frequencies in the response scales were very similar, the scales were condensed into one scale to facilitate their analysis. In most cases, the scores obtained in the “in agreement”/“totally agree” scale were higher than 90%. Among the highest frequencies obtained in this scale, the item “practical utility” (100%), the three items related to debriefing phase (97.9%), and the items “I have learned from the mistakes I made during the simulation” (97.9%), “simulation is beneficial to relate theory to practice” (95.8%), and “overall satisfaction of sessions” (95.8%) are highlighted. However, the lowest frequencies in this scale were obtained in items “I lost my calm during some of the cases” (14.6%), “facilities and equipment were real” (58.3%), “simulation has made me more aware/worried about clinical practice” (60.3%), and “I have improved my technical skills” (62.5%).

Regarding the two open-ended questions about the simulated strategy used, all participating students provided their opinions in the form of short comments. Within the positive aspects, five were identified (ordered by frequency of mention): satisfaction with the simulated experience, nontechnical skills development, creation of a safe psychological learning environment, the reality of the simulation, and transfer to clinical practice. However, two negative categories were identified (ordered by frequency of mention): technical issues and technical skills development. Table 4 shows extracts from significant quotes as examples of all of these categories identified.

Discussion

We present a new experience in clinical simulation, the simulated video consultation, to respond to the inability to give face-to-face classes at university due to the confinement by the COVID-19 pandemic. Although there are different options of virtual simulation in evidence: immersive simulation, screen-based simulation, serious games, virtual reality, virtual simulation/virtual patients, virtual reality simulation and web-based simulation (Cant et al., 2017; Lioce et al., 2020), the simulation proposed in our research is not found among these options.

Our approach was to perform a high-fidelity simulation that complies with the requirements proposed by the International Nursing Association for Clinical Simulation and Learning (INACSL Standards Committee, 2016a) during its performance, except that the scenario does not take place in a laboratory room adapted to simulate a primary care consulting room or a hospital room, but instead, this innovative experience relies on simulation in the shape of a video consultation. This is coherent with and adapted to the clinical practice reality in healthcare services (Mallow et al., 2016; Nordtug et al., 2018), especially during the COVID-19 pandemic (Greenhalgh et al., 2020; Hollander & Carr, 2020). In fact, simulated clinical scenarios were

Table 3 Descriptive Data and Frequency Analysis for Each Item of Clinical Simulation Satisfaction Questionnaire (n = 48)

Item	Mean (SD)	Strongly disagree/In Disagreement	Indifferent	In agreement/Totally Agree
1. Facilities and equipment were real	3.65 (1.021)	16.7%	25%	58.3%
2. Objectives were clear cases	4.58 (0.539)	0%	2.1%	97.9%
3. Cases recreated real situations	4.77 (0.515)	0%	4.2%	95.8%
4. Timing for each simulation case has been adequate	3.90 (0.951)	12,5%	12.5%	75%
5. The degree of cases difficulty was appropriate to my knowledge.	4.19 (0.816)	4.2%	6.3%	89.5%
6. I felt comfortable and respected during the sessions	4.54 (0.713)	2.1%	6.3%	91.6%
7. Clinical simulation is useful to assess a patient's clinical simulation	4.25 (0.729)	2.1%	10.4%	87.5%
8. Simulation practices help you learn to avoid mistakes	4.48 (0.652)	2.1%	2.1%	95.8%
9. Simulation has helped me to set priorities for action	4.29 (0.683)	2.1%	6.3%	91.6%
10. Simulation has improved my ability to provide care to my patients	4.10 (0.660)	2.1%	10.4%	87.5%
11. Simulation has made me think about my next clinical practice	4.60 (0.574)	0%	4.2%	95.8%
12. Simulation improves communication and teamwork	4.40 (0.707)	2.1%	6.3%	91.6%
13. Simulation has made me more aware/worried about clinical practice	3.50 (1.011)	20.9%	18.8%	60.3%
14. Simulation is beneficial to relate theory to practice	4.42 (0.577)	0%	4.2%	95.8%
15. Simulation allows us to plan the patient care effectively	4.23 (0.692)	2.1%	8.3%	89.6%
16. I have improved my technical skills	3.65 (0.911)	10.4%	27.1%	62.5%
17. I have reinforced my critical thinking and decision-making	4.33 (0.519)	0%	2.1%	97.9%
18. Simulation helped me assess patient's condition	4.33 (0.519)	0%	2.1%	97.9%
19. This experience has helped me prioritize care	4.27 (0.644)	2.1%	4.2%	93.7%
20. Simulation promotes self-confidence	4.25 (0.668)	2.1%	6.3%	91.6%
21. I have improved communication with the team	4.27 (0.707)	2.1%	8.3%	89.6%
22. I have improved communication with the family	3.88 (0.890)	4.2%	20.8%	75%
23. I have improved communication with the patient	4.42 (0.539)	0%	2.1%	97.9%
24. This type of practice has increased my assertiveness	4.13 (0.761)	2.1%	16.7%	81.2%
25. I lost calm during any of the cases	2.23 (1.115)	72.9%	12.5%	14.6%
26. Interaction with simulation has improved my clinical competence	4.15 (0.545)	0%	8.3%	91.7%
27. The teacher gave constructive feedback after each session	4.75 (0.565)	2.1%	0%	97.9%
28. Debriefing has helped me reflect on the cases	4.73 (0.574)	2.1%	0%	97.9%
29. Debriefing at the end of the session has helped me correct mistakes	4.69 (0.512)	0%	2.1%	97.9%
30. I knew the cases theoretical side	4.58 (0.577)	0%	4.2%	95.8%
31. I have learned from the mistakes I made during the simulation	4.65 (0.526)	0%	2.1%	97.9%
32. Practical utility	4.58 (0.498)	0%	0%	100%
33. Overall satisfaction of sessions	4.52 (0.743)	2.1%	2.1%	95.8%

Table 4 Examples of Categories Identified After Thematic Analysis

Students' Perceptions About Simulation in the Form of Video Conferences	Category Identified	Significant Quotes
Positive aspects	Satisfaction with a simulated experience	<ul style="list-style-type: none"> ● "... it is a situation where skills are learned and experienced in a practical way" (S7). ● "It has been a VERY satisfactory experience that I think has made us learn many things" (S9). ● "It was a novelty that I am grateful to have been able to enjoy since we had never been told it was possible" (S39).
	Nontechnical skills development	<ul style="list-style-type: none"> ● Communication skills and active listening" (S27). ● "It promotes teamwork" (S46). ● "It prepares you with emotional techniques for the future" (S48).
	Creation of a safe psychological learning environment	<ul style="list-style-type: none"> ● "A good group atmosphere and confidence was generated" (S9). ● "I have learned from seeing my own mistakes and the mistakes of my colleagues" (S10). ● "Environment of total tranquility" (S42).
	Reality of the simulation	<ul style="list-style-type: none"> ● "These are everyday cases that we could experience daily when we work in the future and they help us to know how to act and deal with" (S28). ● "The situation was developed just like a real-world case" (S39). ● "Being in contact with cases that could occur in the real world and they are not found in theory" (S44).
	Transfer to clinical practice	<ul style="list-style-type: none"> ● "We have been taught that there are other means for caring for patients in situations that require it, such as this pandemic" (S9). ● "Telecare is being carrying out a lot in health centers and I think it is important to know how to create a good environment with the patient in the distance" (S14). ● "Due to this health emergency situation, teleconferencing with a patient now serves as an experience for the future" (S45).
	Negative aspects	Technical issues
	Technical skills development	<ul style="list-style-type: none"> ● "Manual techniques cannot be performed" (S3). ● "Practical skills could not be demonstrated" (S7). ● "There is no management of techniques, it is more focused on communication" (S13).

adapted to the reality of the confinement, with the teaching of health education matters specific to the COVID-19 pandemic, such as prevention of contagion measures and general recommendations (as e.g., anxiety management). Simultaneously, we considered that all of these were relevant to nursing students, as they are healthcare agents for their families, relatives, and friends.

In our study, the high level of satisfaction and the positive perceptions expressed by nursing students about simulated nursing video consultations were also congruent with different studies that employed face-to-face clinical simulation methodologies (Alconero-Camarero et al., 2016; Franklin, Burns, & Lee, 2014; Levett-Jones et al., 2011; Zapko, Ferranto, Blasiman, & Shelestak, 2018), confirming that our innovative proposal is a useful tool for students' learning process. The main advantages of the simulation experience identified by students in our study were also

consistent with other research studies, such as its practicality and its capacity to link theory to practice and to learn from errors (King, Holder, & Ahmed, 2013; Lisko & O'Dell, 2010; Ricketts, 2011; Shin et al., 2015). It should be noted that simulated nursing video consultations could recreate not only clinical situations during confinement times but also any clinical situation as they are found in real clinical practice (Ignatowicz et al., 2019; Mallow et al., 2016; Nortug et al., 2018; Peters et al., 2018). Therefore, these simulations could be considered the future of healthcare (i.e. Telehealth) (Spence, 2018).

By considering the results, this novel simulation experience has the ability to create a safe psychological learning environment providing an environment of trust and mutual support among students. In addition, they did not lose their calm during any of the cases, and they perceived the errors as part of their training. All of these characteristics of a safe

environment are similar to the characteristics defined in the literature (INACSL Standards Committee, 2016a; Rudolph et al., 2014; Turner & Harder, 2018). This result is relevant, as the psychological safety of these environments has an effect on learning (Turner & Harder, 2018). Historically, and in contrast, learners have expressed increased anxiety with face-to-face simulation (Cantrell, Meyer, & Mosack, 2017; Nielsen & Harder, 2013), although this was not the case with this virtual format.

Educational strategies should align with expected learner outcomes (Biggs, 2003). As expected, our students stated that simulated video consultation mainly promotes the development of nontechnical skills (such as communication, active listening, and teamwork). Logically, the teaching or training of technical skills through a video consultation is difficult. We proposed its learning by providing health education to the patient (e.g., the students visualized an image of a wound when the standardized patient required healing, and they had to teach the patient how to care for it). With that being said, our students expressed that the simulations did not improve communication with the family. This may be because not all simulated scenarios required this type of communication. Although clinical simulation usually helps with practicing clinical skills (Ricketts, 2011; Shin et al., 2015), more research is recommended for evaluating nontechnical skills development through virtual simulation modalities (Bracq, Michinov, & Jannin, 2019).

Regarding the simulated scenarios' characteristics, students also stated that the simulation experience was realistic and promoted the transfer to clinical practice, such as other relevant and satisfying aspects (Ricketts, 2011; Shin et al., 2015). In this sense, these results are supported by the INACSL Standards of Best Practice, since we followed their recommendations for scenario design (INACSL Standards Committee, 2016a). Furthermore, the fact that the simulated scenarios were contextualized to the real confinement situation may have contributed to the increase of the student's satisfaction (health education for COVID-19 was the topic they trained on in all the clinical cases). However, students perceived that facilities and equipment were not real, although real situations of a video consultation with a patient at home were presented (a typical video conference through a camera and a microphone). We deduced that our settings and prop elements were not the best, owing to the constraints imposed by COVID-19 confinement.

In addition, our students expressed having received constructive feedback after each session, and the debriefing phase helped them to reflect on the cases and correct their mistakes. This significance of debriefing recognized by our students was also consistent with most of the evidence found (Dufrene & Young, 2014; Levett-Jones & Lapkin, 2014; Neill & Wotton, 2010). In this sense, the debriefing process employed complied with standards recommended for a typical high-fidelity simulation in the

face-to-face format (INACSL Standards Committee, 2016d).

This study is not exempt from limitations. One methodological limitation was the small size of the sample. Nonetheless, 59 students participated in this innovative proposal (the simulation) with a high response rate (48 students), so social desirability bias was less likely. Another limitation was technical problems during video conferences. However, these problems are common in real video consultations, which are more effective when technology works properly and network access is good (Mallow et al., 2016; Nordtug et al., 2018). In this particular case, the network was sometimes overloaded in Spain during the COVID-19 confinement in place, as teleworking was widespread. Last, more studies are needed in this new research field in simulation, in order to confirm the students' satisfaction with simulated nursing video consultations, to analyze the instructors' satisfaction with them, to implement this innovative proposal into other settings and education centers, and to evaluate nursing competences acquisition using this proposal.

Conclusions

This innovative proposal in simulation, recreating high-fidelity scenarios through simulated video consultations, is a response to the needs of simulation-based education prompted by the COVID-19 pandemic. Simulated nursing video consultations could be considered as another choice of high-fidelity simulation not only in the current COVID-19 situation but could also be extended to other contexts. Since video consultations have recently gained popularity as a way to provide healthcare, it could be interesting to include this simulation modality as another option.

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