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# Virtual role play as a learning strategy communication tools in family intervention

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#### **Abstract**

Introduction The COVID-19 pandemic rethought educational practices at different levels, one of them was higher education. Simulation became an alternative for many institutions. Aim. demonstrate that the application of virtual role play in teaching communication skills in a simulated family intervention in family medicine residents Methodology The virtual role play tool was implemented through monthly virtual sessions, with the stages of planning, development and evaluation or debriefing, to improve the communication skills of residents of the specialty in family medicine, I also verify learning through checklists. Results: compliance was observed between 80 and 90% of the included items. Likewise, in relation to the use of virtual role play, residents expressed satisfaction, usefulness in learning and advantageous to apply in the specialty. Conclusions The application of this tool managed to practice communication sessions in family intervention with the application of checklists and comments on residents' satisfaction with the learning process.

KEYWORDS: MEDICAL EDUCATION, SIMULATION, FAMILY MEDICINE

#### Introduction

During the pandemic, outpatient consultations in health facilities were affected, which limited in-person medical consultations. This change reduced the available clinical scenarios, decreasing the opportunity to learn communication strategies through residents' interaction with patients and families in the real context.

Other educational strategies are then sought using technological tools that facilitate digital interaction, including programs such as virtual reality, augmented reality, artificial intelligence, holograms and adaptive learning. The university also sought to continue the academic training of residents in the context of the pandemic.

The objective was to demonstrate that the application of virtual role play in teaching communication skills in a simulated family intervention in family medicine residents.

# Theoretical framework

The COVID-19 pandemic has affected education. The International Association of Universities survey (Marinoni et al, 2020) provides information on trends in global higher education in the context of the pandemic.

University teachers also had to adapt teaching in the field of health. Creativity and flexibility were needed to allow students to develop new abilities and skills, as well asintegrate new knowledge and learning, coming from the courses to a virtual or online environment and contribute to the teaching-learning process with the construction of a different reality, that allows another type of education (Chanto et al, 2021).

Role play is an educational strategy that consists of the representation of a real situation in order to teach practical situations and be able to correct them previously, that is, before a student faces real situations (Alba García-Barrera (2015). In In the field of the teaching-learning process, advantages of the application of role play were found, such as motivation, empathy and social perspective; they also arouse interest, activate the spontaneous participation of the spectators, maintain the expectation of the group; to learn to learn, to learn by doing, encourages creativity and discovery learning, invites reflection and group interaction, promotes problem solving, enables the formulation of ideas and the expression of feelings, etc. (Alba García Barrera, 2015)

Likewise, the need to continue with training in communication skills allowed us to develop this virtual role play methodology, as suggested in other educational areas to use individualized training techniques incorporated into the resident's individual training itinerary, supervised by tutors, through direct observation and reflection after it, such as a video recording portfolio, critical incidents or problem-based learning (Vivas et al., 2022).

## Method

The approach was qualitative, based on the experience of applying virtual role play through the Zoom platform. The participants were 5 residents of the family medicine specialty. The course was developed during the months of January to June 2021 during the family chapter. The topics were: Levels of family intervention, Family intervention in depression, Individual intervention in alcoholism, Family intervention in alcoholism, Headache in the family.

The virtual role play sessions were carried out in three phases: Preparation, development and evaluation or debriefing.

Preparation phase: A script was prepared with the following information: Title that includes the topic of the role play, those responsible for each role, description of the dramatization, type of family intervention.

Development phase: Through a Zoom session, the role play session was carried out with the participation of the residents assigned in the role they will play according to the script.

Evaluation or debriefing phase: Each resident self-assessed their performance in the role represented. Likewise, the individual performace of each of the actors and the achievement of the session's objectives were analyzed, using checklists in accordance with the objetcives of the topic developed in the sesion.

Figure N°1. Source: File from the UPCH family medicine speciality virtual sesión.



## Results

In the 5 virtual sessions a checklist wasapplied of which compliance was observed between 80 and 90% of the included ítems.

Table N°1: Compliance with checklists

Topic	Percentage of compliance
Family intervention levels	88%
Family intervention in depression	90%
Individual intervention in alcoholism	80%
Family intervention in alcoholism	80%
Headache in the family	90%

Evidience of achievements through resident comments:

In addition, residents 'appreciation of their experience in the learning process was requested through virtual role play. It was evaluated using the criteria of general satisfaction. Usefulness for teaching and applicarion in the specialty.

#### Overall satisfaction:

- Rewarding and enriching experience for my training... (KMFG)
- Interesting to apply family medicine topics in role play...
- The virtual role play helped a lot as a learning strategy... (MECS)

## Usefulness in learning

- It allows you to develop some skills, such as commmunication, the type of interview, the medical relationship... (KRS)
- Apply intervention techniques virtually... (KRS)
- Improve the doctor-patient relationship, empathy, allows you to practice learned skills, evaluate what you have learned, recognize weaknesses and strengths to work on them to improve day by day... (EAPS)
- Very important to prepare ourselves in a controlled environment, simulating different situations in different stages of life and a way to improve through feedback... (EAPS)
- It helped a lot as a learning strategy... (MACS)
- It provides us with a (Simulation) environment, feedback is offered which helps learning and continuous improvement, as well as adopting specific roles... (MACS)

Application in the specialty

- I learned to focus on the patient and his proximal and distal context... (KMFG)
- It helped me understand the patient from the biopsychosocial approach... (KMFG)
- I was able to understand many areas by applying different instruments from the point of view of the patient's family member... (KRS)
- A tool that allows the resident to be directed to strengthen tools to develop the consultation... (EAPS)
- It allows us to apply the tools and instruments in family medicine... (KRS)
- We develop communication skills, have more emphasis on medical history and a correct diagnosis... (MACS)

## Discussion

Dr. Hernán Augusto Seoane indicates that activities have been carried out under the Zoom platform, prior to the COVID-19 pandemic, with great acceptance from the teaching and student community. The possibility of dividing participants into small groups with a teacher/tutor in charge offers a new range of pedagogical possibilities (Millán et al., 2023). Likewise, the group of participating residents expressed satisfaction with the methodology through the use of technology through the Zoom platform.

A study in Portugal describes evaluation methods with multiple choice questions (MCO) and the virtual interactive patient (VIP) indicated for the development of clinical reasoning for medical students. The satisfaction questionnaire showed that both methodologies are adequate and satisfactory, but the VIP method improves knowledge (Abreua et al., 2022). In our experience, residents report strengthening their communication skills with the patient in simulated environments, as well as the practice of using tools specific to the specialty.

## **Conclusions**

The virtual role play methodology helped family medicine residents simulate contexts similar to real situations to carry out family intervention. The methodology facilitated the learning of communication tools and allowed debriefing to correct deficiencies.

## Limitations

The internet connection that caused the session to be interrupted was limited. In addition to this, body postures and gestures of the participants could not be fully appreciated.

The number of residents participating in the experience was small, due to the practical nature of the sessions. In the following academic years, the same modality was continued and it was planned to expand to all teaching locations.

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