

## Clinical Simulation: The Challenges it Presents

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Clinical simulation (CS) poses a challenge in teaching, both in health personnel training institutions and institutions providing these services, which have incorporated this didactic technique in the formation of new resources for care and its improvement through continuous training.

CS emerges as the primary response to the recognition of the ethical and moral value of the patient in society, as a person endowed with equal rights in clinical practice and not only as a subject of learning and study. Thus, it justifies the use of CS beyond practical reasons.

Simulation is defined as an "educational technique that replaces or expands real experiences with guided experiences that evoke or replicate substantial aspects of the real world in a fully interactive way".<sup>(1)</sup> It allows training in various clinical, technical, and non-technical skills in a safe environment for the student, without exposing the patient to harm.<sup>(2)</sup>

Simulated experiences allow learning in a protected environment where it is possible to learn from mistakes, maintain good performances, and improve those still to be developed. In the case of the students, they prepare for clinical experience in the different areas of health care.

Throughout history, educators have tried to provide their apprentices with different didactics that bring them closer to clinical practice, including CS. There is evidence of the use of different resources for simulation training, from partial phantoms in which students are trained in psychomotor skills to current and sophisticated phantoms that simulate anatomy and some physiological functions.<sup>(3)</sup>

Another resource on the rise is the human simulator or simulated participant (SP), in the representation of a role, evaluator, and as feedback from a particular perspective, the perspective of the person they represent, the voice of the patients, most of the time.<sup>(4)</sup> This way, they became a collaborator in teaching and contributed to humanized training in health.

Among the practical reasons to justify the use of CS is what has been pointed out by the World Health Organization (WHO),<sup>(5)</sup> which, considering patient safety as a primary and fundamental element for the strengthening of health systems, has declared a Global Action Plan for Patient Safety for the decade 2021-2030: "Towards the Elimination of Avoidable Harms in Health Care." It has declared for 2023 the slogan "Involving patients in patient safety" and 2024: "Better diagnosis for patient safety".<sup>(6)</sup>

As noted above, the WHO invites us to a new challenge: an emerging paradigm, moving from a relationship of power in the interaction – health personnel with the patient – in which knowledge and decisions were mainly deposited in the former; to a horizontal relationship where patients, their families, and the community have a voice.

In general, all events in health practice that contribute to a better quality and safety of care are possible to simulate, from the development of procedural skills from basic techniques to complex ones such as the installation of a venous line to a surgical intervention; the development of cognitive skills, ethical skills, development of cultural competence, communication skills for teamwork and leadership, for health education, as well as supporting the person and family in the delivery of bad news, procurement of organs, among other topics.

On the other hand, during the pandemic, it was possible to simulate personal remote devices and simulators for self-learning. This allowed us to continue health training and prepare personnel for the contingency. To date, sophisticated virtual stage systems have been incorporated, although they are still experimental.

Related to CS's challenges, it can be stated that, just as teachers orient learning towards self-knowledge, reflection, and self-learning, those who work with simulation must also be trained in these aspects, with special concern for experiential training in planning, execution, and feedback.

Regarding simulation research, most of them have focused on aspects of the opinion of the learners, on immediate learning, on the evaluation of the quality of technique that is, on the basis of Kirkpatrick's model. <sup>(7)</sup> So there is still a research challenge in aspects of transfer to clinical behavior and impact on patients. <sup>(8)</sup>

For all the above, there are ethical and practical reasons to make the most significant effort in health care, which should be founded on the right of people to receive safe and respectful treatment. Furthermore, CS stands as one of the didactic techniques of choice due to its experiential and reflective nature, oriented towards humanized care. <sup>(9)</sup>

All these challenges posed by the CS necessarily require a retrospective look at educators and knowledge that allow the development of competencies in students for an increasingly changing and complex world, where the voice of the new generations also fits to promote a fairer world in terms of the distribution of wealth, care for the environment, and equity for quality health centered on the person and the social and natural environment of everyone living in it.

### **Bibliographical references**

1. Agency for Healthcare Research and Quality. Diccionario de simulación en Salud [Internet]. Fund Garrahan; 2016 [cited 2024 Sep 2]. Available from: [https://www.ssih.org/Portals/48/Spanish%20v1\\_0.pdf](https://www.ssih.org/Portals/48/Spanish%20v1_0.pdf)
2. Broch Porcar M, Castellanos-Ortega A. Seguridad del paciente, ¿qué aportan la simulación clínica y la innovación docente?. Med Inten [Internet]; 2024 [cited 2024 Sep 3]. doi: 10.1016/j.medin.2024.03.017
3. Navarro O, Ibáñez V, Bofill I. Enfermeras invisibles. 2nd Ed. Barcelona, España: Ediciones B; 2021.
4. Matte Larraín F, Álamo Calvanese C, Opazo-Morales, E. Modalidades de retroalimentación del participante simulado: su aporte a la formación humanizada en salud. Rev Chil Enferm [Internet]; 2024[cited 2024 Sep 3]; 6:74355. doi: 10.5354/2452-5839.2024.74355
5. Organización Mundial de la Salud [Internet]. Seguridad del Paciente; 2023 [cited 2024 Sep 2]. Available from: <https://www.who.int/es/news-room/fact-sheets/detail/patient-safety>
6. Organización Mundial de la Salud [Internet]. Día Mundial de la Seguridad del Paciente[cited 2024 Sep 2]. Available from: <https://www.who.int/es/campaigns/world-patient-safety-day>

7. Coro G, Bartolomé B, García F, Sánchez J, Torres L, Méndez M, et al. Indicadores para medir fidelidad en escenarios simulados. *FEM [Internet]*. 2020 [cited 2024 Sep 2]; 23(3):141-149. doi: 10.33588/fem.233.1058
8. Uribe-Muñoz K, Hidalgo-Mancilla D. Transferencia del aprendizaje desde la educación basada en simulación a la práctica clínica: revisión sistemática. *Rev Latinoam Simul Clin [Internet]*. 2024 [cited 2024 Sep 2];6(1):40-49. doi: 10.35366/115805
9. Cruz Riveros C. La naturaleza del cuidado humanizado. *Enfermería: Cuidados Humanizados*. 2020 [cited 2024 Sep 06];9(1):21-32. 9(1), 21–32. doi: 10.22235/ech.v9i1.2146