

Original Article

# Novice occupational therapists in critical care units: what rehabilitation and care educational strategies are implemented in their training?

*Terapeutas ocupacionais novatos em unidades de cuidados críticos: quais estratégias educativas de reabilitação e cuidados são implementadas em sua formação?*

*Terapeutas ocupacionales novatos en unidades de cuidados críticos: ¿qué estrategias educativas de rehabilitación y cuidados se implementan en su formación?*

Oscar Hernández Lanás<sup>a</sup> , Cristóbal Sepúlveda Carrasco<sup>b</sup> 

<sup>a</sup> University of Chile, Independencia, Santiago, Chile.

<sup>b</sup> University of Las Américas, Concepción, Chile.

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## Abstract

**Introduction:** Practical training for occupational therapists in critical care units is essential for professional performance in rehabilitation and clinical care areas. **Objective:** To analyze the use of educational strategies employed in critical care units and their integration into the professional development process for novice occupational therapists. **Methodology:** A qualitative research with a phenomenological approach and descriptive design was conducted. Intentional sampling was employed. Data was obtained through the application of semi-structured interviews, direct observation, and documentary review. Four occupational therapists working in a high-complexity hospital in Santiago, Chile, participated. The data was coded into themes, categories, and subcategories for analysis, considering the units of meaning present in the messages from a hermeneutic perspective. **Results:** The necessary theoretical-practical integration required for the development of high-quality professional competencies in critical care environments is emphasized. Effective educational strategies for novice occupational therapists are considered, including systematic mentoring, participation in

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interdisciplinary teams, and ongoing feedback from experiences in intensive medicine. **Conclusion:** The importance of achieving high-quality professional training for occupational therapists is emphasized through the implementation of interdisciplinary collaboration strategies, recognizing the significance of strengthening effective communication skills between occupational therapists and critical care patients. The need to establish a specific training field for educational strategies in the development of professional competencies for novice occupational therapists is identified.

**Keywords:** Professional Competence, Clinical Reasoning, Occupational Therapy, Critical Care, Education, Medical.

### **Resumo**

**Introdução:** A formação prática de terapeutas ocupacionais em unidades de cuidados críticos é essencial para o desempenho profissional em áreas de reabilitação e cuidados clínicos. **Objetivo:** Analisar o uso de estratégias educativas utilizadas em unidades de cuidados críticos e sua incorporação nos processos de formação profissional de terapeutas ocupacionais novatos. **Método:** Foi realizada uma pesquisa qualitativa, com abordagem fenomenológica e design descritivo. Foi utilizado uma amostragem intencional. Os dados foram obtidos por meio de entrevistas semiestruturadas, observação direta e revisão documental. Participaram quatro terapeutas ocupacionais que trabalham em um hospital de alta complexidade em Santiago, Chile. Os dados foram codificados em temas, categorias e subcategorias para análise, considerando as unidades de significado presentes nas mensagens a partir de uma perspectiva hermenêutica. **Resultados:** Destaca-se a necessária imbricação teórico-prática que deve existir no desenvolvimento de competências profissionais de qualidade nos ambientes de cuidados críticos. São consideradas estratégias educativas eficazes na formação de terapeutas ocupacionais novatos, como tutorias sistemáticas, participação em equipes interdisciplinares e feedback constante nas experiências em medicina intensiva. **Conclusão:** Enfatiza-se a importância de alcançar formação profissional de qualidade entre terapeutas ocupacionais, por meio da implementação de estratégias de colaboração interdisciplinar, reconhecendo a importância de fortalecer habilidades de comunicação efetiva entre terapeuta ocupacional e paciente crítico. Identifica-se a necessidade de consolidar um campo de formação específico em estratégias educativas para o desenvolvimento de competências profissionais em terapeutas ocupacionais novatos.

**Palavras-chave:** Competência Profissional, Raciocínio Clínico, Terapia Ocupacional, Cuidados Críticos, Educação Médica.

### **Resumen**

**Introducción:** La formación práctica de terapeutas ocupacionales en unidades de cuidados críticos, es esencial para el desempeño profesional en áreas de rehabilitación y cuidados clínicos. **Objetivo:** Analizar el uso de estrategias educativas utilizadas en unidades de cuidados críticos y su incorporación en los procesos de formación profesional en terapeutas ocupacionales novatos.

**Metodología:** Se realizó una investigación cualitativa, con enfoque fenomenológico y diseño descriptivo. Se empleó un muestreo intencional. Los datos se obtuvieron a través de la aplicación de entrevistas semiestructuradas, observación directa y revisión documental. Participaron 4 terapeutas ocupacionales que se desempeñan en un hospital de alta complejidad de Santiago, Chile. Los datos fueron codificados en temas, categorías y subcategorías para su análisis, considerando las unidades de significado presentes en los mensajes desde una perspectiva hermenéutica. **Resultados:** Se destaca la necesaria imbricación teórica-práctica que debe existir en el desarrollo de competencias profesionales de calidad en los entornos de cuidados críticos. Se consideran estrategias educativas efectivas en la formación de terapeutas ocupacionales novatos, sistemáticas tutorías, participación en equipos interdisciplinarios y la retroalimentación constante en las experiencias en medicina intensiva. **Conclusión:** Se enfatiza la importancia de lograr formación profesional de calidad en terapeutas ocupacionales, mediante la implementación de estrategias de colaboración interdisciplinaria, reconociéndose la importancia de afianzar habilidades de comunicación efectiva entre terapeuta ocupacional y paciente crítico. Se identifica la necesidad de consolidar un campo de formación específica en estrategias educativas para el desarrollo de competencias profesionales en terapeutas ocupacionales novatos.

**Palabras clave:** Competencia Profesional, Razonamiento Clínico, Terapia Ocupacional, Cuidados Críticos, Educación Médica.

## Introduction

Critical care units play an essential role in caring for patients facing serious and life-threatening medical conditions. In these units, care is provided to critically ill patients who require specialized care, including continuous surveillance and monitoring, as well as the application of strategies to maintain their vital functions initially and sustainably, along with advanced medical interventions, preventing further deterioration and facilitating their recovery (Kayambankadzanja et al., 2022).

These units are considered a fundamental component of hospital care, as they have been shown to significantly improve medical outcomes, which include a reduction in mortality rates and shorter hospital stays (Larsson et al., 2021).

In this context, it is imperative to have a multidisciplinary team of qualified professionals to provide comprehensive and specialized care (Margetis et al., 2021). Among the professionals who work within critical care units are occupational therapists, who play a fundamental role in the rehabilitation and care of patients, as supported by various research (Álvarez et al., 2017; Bittencourt et al., 2021; Carmo et al., 2020; Costigan et al., 2019; Weinreich et al., 2017).

The role of the occupational therapist focuses on promoting functional independence and improving the quality of life of the patients through occupation-based interventions (Rapolthy-Beck et al., 2022). For this reason, occupational therapy

in critical care units demands a high level of competence due to the complexity and severity of the health conditions of the patients who are there.

The training of occupational therapy professionals has become an important topic, focusing on the learning of professional skills and clinical reasoning. The acquisition of these skills is a complex process that requires effective strategies and dynamics within critical care units.

Clinical practice is an essential part of professional training in the health field and it is considered a crucial strategy for the development of competencies in occupational therapists (American Occupational Therapy Association, 2021a). It is worth highlighting that occupational therapists must dedicate a significant part of their training in clinical areas, where direct learning with patients and guidance from tutors are recognized as the most effective method of acquiring clinical competence, which constitutes the core of the of clinical education system (Rassie, 2017).

A novice occupational therapist is considered a professional who is in the initial stages of his or her career and lacks clinical experience. Therefore, he/she is in the process of developing professional skills associated with the provision of therapeutic services; which can lead to difficulties in applying theoretical knowledge to practical situations (Robertson, 2012).

It is important to note that professional competence is a multifaceted concept that encompasses various skills, knowledge, and attitudes necessary for occupational therapists to provide high-quality care. This includes competencies in evidence-based practice (Aravena, 2015), personal and professional development (Jabri et al., 2021), teamwork and collaboration (Jarva et al., 2022), leadership and management (Hitch et al., 2020), and cultural competence (Agner, 2020).

For this reason, novice occupational therapists face a series of challenges when beginning their professional career, including discrepancies between organizational expectations and their own values, the responsibility to make autonomous decisions, questions about their professional identity, the application of research evidence to practice, lack of experience, perceived insufficiency in intervention skills, lack of adequate support, and increased exposure to work stress and burnout (Turpin et al., 2021).

It is therefore crucial that the institutions responsible for training occupational therapists ensure that new graduates are able to adequately perform their roles while developing experience and building their professional competencies. This involves the adoption of strategies such as personalized supervision, reflective practice (Moore & Fitzgerald, 2017), the implementation of preceptorship programs (Morley, 2006), the use of guiding questions (Turpin et al., 2021), support formal and informal collaboration with experienced colleagues, collaboration with multi-professional teams (Moir et al., 2022), and fostering mutual support among colleagues, including the figure of the mentor and the emotional support that he or she can provide (Jackson et al., 2023).

Additionally, the novice occupational therapist must commit to continuing education to effectively fulfill his responsibilities throughout his professional career, adapting to the changing demands of the profession. This process involves constant self-assessment and the development of competencies in areas such as knowledge, clinical reasoning, interpersonal skills, performance skills, and ethical practice necessary to carry

out current and future roles and responsibilities within the profession (American Occupational Therapy Association, 2021b).

Given this context, the present research aims to analyze the educational strategies used in critical care units and their incorporation into the professional training processes of novice occupational therapists. It seeks to provide a more complete and specific view of how professional competence develops in this critical environment and how training strategies for new occupational therapy professionals can be improved.

## **Method**

This research was carried out in a critical care unit located in a high-complexity hospital belonging to the healthcare network of the metropolitan health service in Santiago, Chile. This hospital is recognized both for its healthcare work and for its teaching approach, seeking to be at the forefront of medical, therapeutic and surgical processes.

A qualitative study was carried out, with a phenomenological approach and descriptive design (Webb & Welsh, 2019). Four participants were recruited, using non-probabilistic sampling of a theoretical or intentional type, since they were selected based on their specific characteristics and not by statistical probability (Hernández Sampieri & Mendoza Torres, 2023).

The established inclusion criteria were the following: (1) have the professional title of occupational therapist, (2) work in an intervention context focused on the care of critically ill patients, (3) have at least one year of experience working in this context, whether full or part-time and (4) participate in training processes for occupational therapists in undergraduate and graduate programs.

Information collection was carried out through semi-structured interviews (Kallio et al., 2016), direct observation and documentary review (Hernández Sampieri & Mendoza Torres, 2023).

The interpretation of the data was carried out from a hermeneutical perspective, considering the units of meaning present in the collected messages and texts. To do this, the historical, cultural, linguistic and social contexts in which these messages were produced were taken into account (Huamán Rojas et al., 2022). This approach allowed for a deeper understanding of the experiences and practices related to the training of occupational therapists in critical care units.

The study obtained approval from the human research ethics committee of the Faculty of Medicine of the University of Chile (Project No. 89-2018; Minutes No. 97). All participants provided informed consent, which respects the bioethical principle of autonomy in voluntary participation. The confidentiality of personal data was also protected, in accordance with the bioethical principle of non-maleficence.

## **Results**

The study included the participation of four occupational therapists who perform their duties in the critical care unit of a high-complexity hospital in Santiago, Chile, part of the Metropolitan Health Service care network. The characterization of the participants is presented below in Table 1.

**Table 1.** Description of the participants.

Occupational Therapist	Age (Years)	Gender	Academic degree	Working regime	Area	Experience in CPU (Years)	Teaching Experience (Years)
OT1	58	M	Graduation course and specific courses	Full-time	Intensive Care Unit	11	8
OT2	24	M	Specific courses.	Part-time	Medical Intermediate and Medical Surgical Intermediate Unit.	2	1
OT3	35	M	Master's degree, graduation course and specific courses.	Part-time	Intensive Care Unit, Intermediate Treatment Unit, Hospitalized in other services.	6	3
OT4	34	F	Graduation course and specific courses	Part-time	Intermediate Medical and Intermediate Medical Surgical Unit, Hospitalized in other services.	10	7

In relation to the analysis categories and subcategories obtained after the coding process, the following categories have been defined:

1) Educational strategies in the training of occupational therapists within critical care units

This category refers to the various educational strategies used to promote the development of professional competencies and clinical reasoning in novice occupational therapists who perform their duties in critical care settings.

The participants emphasized the relevance of having a solid theoretical basis in occupational therapy and the integration of intensive care knowledge in their clinical practice. Additionally, they highlighted the importance of clinical rotations to apply their knowledge in real critical care settings, highlighting the need for supervision and feedback during these experiences.

This idea is reflected in the speech of occupational therapist 2, which points out:

*In addition to theoretical training, it is essential that occupational therapists have practical experience in critical care. Here at the hospital, we provide clinical rotations to colleagues and students so that they work directly with critically ill*

*patients, under supervision [...], this allows them to apply the knowledge acquired and develop practical skills necessary for this specialized area.*

Regarding specific educational strategies used in this context, occupational therapist 1 points out:

*In our unit, we use the resolution of case studies and presentations of common topics in intensive medicine [...] this is key as a training mechanism. We organize hypothetical cases or based on real cases where occupational therapists must propose evaluation strategies, an intervention plan and considerations in CPU<sup>1</sup> [...] they can practice specific skills and face challenging situations, they also train their soft and communication skills. This gives them the opportunity to gain confidence and improve their decision-making in critical future environments.*

From the participant's perspective, it can be inferred that the resolution of case studies and thematic presentations plays a fundamental role in the training of occupational therapists, prior to the start of their clinical rotations. These activities allow students to practice professional skills, such as searching for information, making decisions, and approaching challenging situations in a safe and controlled manner. Along with this, it is important to provide feedback and encourage reflection after these presentations to facilitate learning and professional growth.

In line with what was mentioned above, occupational therapist #4 complements:

*The training of new occupational therapists also occurs through the education of an intervention protocol in Critical Patient Units, which systematizes the actions undertaken by the occupational therapist under a logic of scientific evidence, which requires predetermined actions to be carried out during the intervention. [...] This logic gives greater theoretical support to the interventions, leaves no room for improvisation and increases security levels.*

It can be seen that mentoring and supervision of cases within the critical care unit are valuable strategies for the development of skills in occupational therapy. More experienced occupational therapists play a crucial role in providing support and guidance, improving assessment, diagnosis and treatment planning skills. Mentoring also promotes clinical reasoning and the application of evidence in rehabilitation through protocols.

Novice occupational therapists gradually join critical care units with the support of a tutor due to the high mental and emotional load. This allows them to develop emotional coping skills and understand fundamental concepts, such as safety in interventions, management of critically ill patients, common complications, the use of life support equipment and assessment techniques.

As pointed by occupational therapist #1, who highlights that:

*The training of Occupational Therapists or interns in professional practice begins in an observational manner, initially trying to look, to lose the fear of the ICU, to*

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<sup>1</sup> CPU: Critical Patients Unit

*relax, not to get stressed with the ICU<sup>2</sup>, to take it lightly, otherwise this kills you, it dents you, it makes you feel tired, maybe this issue makes you feel tired and exhausted [...] to evolve to supervised care and subsequently to independent performance within these units [...] you must understand basic concepts, understand light things, but you still have to learn it carefully, so that it doesn't get complicated [...] that they always manage safety criteria, in any case the physiological parameters, look at the railings, always leave the patient restrained if the condition requires it, evaluate SAS<sup>3</sup>, management of invasive devices such as the ventilator, foley catheters, drains, lines, taking care of them when you move the patient, that has to be clear.*

Participants highlighted the importance of collaboration in interdisciplinary teams in critical care units. This cooperation allows occupational therapists to understand various professional roles and perspectives, as well as improve their communication and teamwork skills. Participation in multidisciplinary meetings and collaboration in planning and executing treatment plans were considered effective educational strategies.

This is pointed by occupational therapist 3:

*Our approach focuses on interdisciplinary teamwork [...]. We organize regular meetings where we discuss clinical cases and collaborate in the planning and execution of treatment plans [...], this encourages effective communication between professionals from different disciplines and improves comprehensive patient care [...] we work so that the patient can leave the CPU, the aim is to coordinate the therapies and meet the proposed rehabilitation goals, together with the doctors, nurses, kinesiologists, speech therapists and nutritionists.*

Which is complemented by occupational therapist #4:

*There is a way of working that seeks to integrate improvement into the process, so that the actions of occupational therapy and the rest of the team are as efficient as possible and therapeutic resources are not wasted [...]; When we work as a team, the interns have to participate just like us, they must communicate what they will do and ask what they don't know.*

Participants also emphasized the need to stay current in the field of occupational therapy and critical care practices. They highlighted strategies such as attending conferences, courses and workshops, reviewing scientific literature and participating in scientific societies. These refresher activities allow occupational therapists to stay abreast of advances and best practices in their field, thereby ensuring quality care for patients in critical care units.

This idea becomes evident by occupational therapist 1, who mentions:

*We are encouraged to attend conferences, courses and workshops related to the intervention of critically ill patients. To later be able to teach occupational therapy*

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<sup>2</sup> ICU: Intensive Care Unit.

<sup>3</sup> SAS: Sedation-Agitation Scale is a medical scale to measure sedation and agitation in patients. Helps dose appropriate medication to keep patients at a desired level of sedation.



*interns [...] this gives them the opportunity to learn new techniques and approaches that they can apply in their daily practice, which is why it is important to participate in the congresses of the Scientific Society of Intensive Care Medicine and in the courses provided by the hospital.*

Ultimately, it is observed that the training of occupational therapists specialized in the care of critically ill patients has not been developed through formal undergraduate education, but has emerged as a result of the work experience of occupational therapists who have worked in these units. They have carried out interventions in this context and have managed to systematize and investigate their practices, providing theoretical support and scientific validation to occupational therapy in this field. It is highlighted that practice in this field is diverse and has not yet established classic lines of intervention.

This idea is pointed out by occupational therapist #3, who mentions that:

*I don't have formal training as such in this area in this sense... there wasn't any in undergraduate, that is, before leaving the university, when I went out to work I started working at the CPU, there is no subject that covers or goes into depth, subjects or interventions or work with critical patients, I have gained experience from work, from a professional point of view, not as formal training but rather as informal training, taking courses, attending conferences, learning from my colleagues and my teammates.*

## 2) Development of professional competencies of novice occupational therapists in critical care units

This category focuses on the training of essential professional competencies of occupational therapists who will work in critical care units. It includes the acquisition of clinical knowledge in intensive care medicine, the ability to manage support and monitoring systems, as well as the ability to design intervention plans and adapt the environment.

To strengthen professional skills, it is essential that they acquire a deep knowledge of normal physiological parameters and those that indicate instability in critically ill patients, with the aim of guaranteeing safety during occupational therapy interventions.

This idea is pointed out by occupational therapist #3, during his training processes for Occupational Therapists during the intervention evaluation within a critical care unit:

*In the evaluation, first of all, know all the physiological parameters that are... normal.... and management of external elements, such as basic management, for example, in mechanical ventilation, that at least knows when the person needs support in mechanical ventilation, when we can work with the person, when they are becoming hypotensive [...] know the characteristics and basic clinical symptoms that show us that something is happening and that we cannot continue working with it, heart rate, blood pressure, respiratory rate, oxygenation or saturation must be monitored, synchrony with the ventilator, respiratory rate observed, that there is no dyspnea, evaluate the patient's level of alertness, sedation, or agitation.*

The training of occupational therapists should include content related to factors that can affect interventions in critical care units, such as the management of equipment and technologies used in these units. This encompasses understanding and competency in the use of devices such as mechanical ventilators (invasive and non-invasive), renal replacement therapies, use of vasoactive drugs, as well as monitoring systems and therapeutic tools such as tubes, drains and catheters.

This is mentioned by occupational therapist #3 in the intervention process education:

*[...] mechanical ventilation, dialysis... are not an impediment to carrying out the intervention, it prevents the characteristics that can be implemented in the intervention, but it does not mean that you will not have occupational therapy intervention because you are on mechanical ventilation, that is why it is essential to know about mechanical ventilation, know about dialysis, know about all the fundamental elements that the person has, the handling of probes, the use of catheters, knowing when and how to manipulate each of these instruments, when mobilizing these patients one must have the minimum security parameters to carry out this task, therefore not to have any doubts that if I don't know something, I can ask for help from someone who has knowledge of the device.*

Furthermore, the presence of these elements requires that the occupational therapist in these units be trained to operate them safely during therapeutic sessions, thus guaranteeing compliance with the rehabilitation objectives established in the evaluation.

In the design and implementation of occupational therapy plans in critical care units, the focus is directed toward the recovery of functionality and occupational performance. This involves considering significant aspects for patients and applying specific therapeutic strategies. To achieve this in this demanding environment, it is essential that the occupational therapist fully masters the appropriate intervention techniques and procedures and is able to implement them effectively despite the challenging contextual conditions.

Faced with this, occupational therapist #1 points out:

*Putting together a treatment plan for critically ill patients requires creativity and flexibility. Occupational therapy intervention should not be in the way; if the person is invaded, such as if they are on mechanical ventilation, on hemodialysis, or with airways [...]. To intervene, we must adapt our interventions to the patient's medical condition, especially if it is changing, also to elements of the environment, such as if they are isolated from contact, if there is support from other professionals, and also consider the individual goals of each patient.*

Among the actions validated in critical care units are the evaluation of the level of consciousness and functional cognition of patients, the non-pharmacological management of disruptive behavior of those experiencing delirium, the consideration of the need to use physical restraints, the integration of activities of daily living independently or with assistance, the facilitation of the inclusion of personal or significant objects in the unit environment to carry out occupations with emotional

value, and the provision of education to family members of hospitalized patients about the impact of a prolonged stay in a critical care unit.

According to the words of occupational therapist #2, he highlights:

*[...] within the techniques [that we must manage this] evaluate, the evaluations, manage certain evaluations, and in the intervention, mainly techniques in the functional vertical, cognitive can also be and positioning techniques too... and within the basic techniques that could also be neurodevelopment techniques, it should be, not that they could, you must know neurodevelopment techniques, polysensory and neurodevelopment [...], emphasizing that the most important thing I believe is, to handle certain basic techniques such as orthotic positioning, motor and cognitive stimulation, training in activities of daily living and work with families.*

An essential professional competence in this context is creativity. Occupational therapists must be able to find practical solutions to facilitate rehabilitation and patient participation in the therapeutic process. Sometimes, the shortage of specific materials may force them to improvise with clinical elements to carry out therapeutic activities.

As occupational therapist #4 expressed, this reflects that:

*In critical patient units, environments are challenging and changing, so spaces must be adopted and modified to facilitate rehabilitation and patient participation. You have to be creative and find practical solutions, given the lack of materials to carry out therapy, you have to be creative and transform clinical materials as elements to carry out activities, and an example of this is using gloves such as elastic bands or therapeutic hammers, IV poles as partial suspension systems for upper limbs, among other inventions [...].*

Occupational therapists recognize the importance of considering the critical care unit as the patient's daily environment. This is because this context directly influences his occupational performance and the construction of his identity. By incorporating elements that are related to the patient's previous life, the creation of stories that contribute to their recovery and the adaptation of a rehabilitation plan to the different stages of the process is encouraged.

In the words of occupational therapist #3, he mentions:

*Music, photographs, videos, are elements that help a lot in interventions. In other words, take them quite out of this context, that is, in a CPU, which is what you hear the most, there are people using strange terms, which the person does not catch<sup>4</sup>, or does not know, machine sounds every couple of seconds the alarm is ringing, your machine or that of your partner, telephones, screams or inappropriate words by health personnel, therefore, elements that allow you to bring your life or your reality closer to this context; The patient always appreciates and values it very much.*

In relation to this, occupational therapist #2 indicates:

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<sup>4</sup> Cacha: Chilean expression that refers to the understanding of something by a person.

*[...] If you are in a critical condition, your daily environment changes completely, your routine and everything, your habits and routines are altered and this will be subject to what you can do and not what you want to do.*

Incorporating everyday elements into the hospital environment, often challenging for the critically ill patient, decreases the disconnection between the hospital and home. This creates a more welcoming environment by providing personal elements that promote the construction of narratives and a greater sense of control of the environment. This skill is essential for novice occupational therapists immersed in a critical care unit.

### 3) Communication aspects in the development of professional skills for the rehabilitation and care of critically ill patients

This category focuses on the analysis of how the context influences the development of professional competencies in rehabilitation and care of critically ill patients. The importance of communication for occupational therapists is highlighted, as effective communication is essential to providing high-quality care.

Communication between the occupational therapist and the critically ill patient plays a fundamental role in the development of clinical reasoning in professional practice. However, in a critical care unit, communication can be challenging due to factors such as the patient's lack of communication skills or the presence of invasive medical devices, such as endotracheal tubes, tracheostomies, and mechanical ventilation systems, whether invasive or non-invasive. Given these challenges, it is essential to explore strategies that allow establishing an alternative-augmentative communication system.

As mentioned by occupational therapist #4, it is important to indicate that:

*Verbal communication in rehabilitation of critically ill patients is vital. When patients cannot communicate, it is a great challenge [...]. There we must look for creative ways to establish a communication system; many times together with the speech therapist, we implement technical aids such as communication boards that are feasible for people to operate. Basically, we see what possibilities the person has with this non-verbal element, and rehearsing a lot so that this element is used [...] this allows us to understand their needs and provide interventions according to the circumstances.*

The creation of an effective communication system is established as a fundamental tool in the development of professional skills in occupational therapy for the rehabilitation and care of critically ill patients. This system not only optimizes evaluation and therapeutic intervention, but also encourages personalized care, adjusts to individual occupational needs and allows the compilation of the patient's experiences and experiences in this situation.

In the opinion of occupational therapist #3:

*A key competence at CPU, which I always teach, is achieving communication with patients. The use of communication boards and dichotomous questions are essential. You can ask the patient Yes or No questions or dichotomous ones, so that only he can decide yes/no, we start asking questions, and I think that is a good*

*strategy. We also work with other professionals and family members to establish effective communication with the patient regardless. Another thing I do is read lips, the good thing is that I consider myself very expert in reading lips and I can understand many things.*

Common strategies for developing communication skills in occupational therapists who treat critically ill patients include the use of communication boards, the formulation of dichotomous questions, and collaboration with communication mediators, such as family members and other professionals who maintain frequent contact with the patient.

From the perspective of occupational therapist #2:

*Communication with the health team, who are more in contact with the patient and her family, provides us with valuable information to understand our patients. With this, we can understand more or less which situations they dislike, to gradually modify those behaviors and gradually understand what suits the person or not, or at least what they dislike [...]. I believe that seeing it from a human perspective develops our professional skills and contributes to person-centered care.*

Interdisciplinary collaboration and communication with the health team are essential to collect relevant information about the preferences, needs and tastes of the critically ill patient. In addition, they facilitate effective communication with the family to obtain information about the patient's occupational history.

## **Discussion**

In this research based on the results, the importance of practice in a real clinical environment for the development of competencies in occupational therapists is emphasized. As highlighted by Bethea et al. (2014), these settings involve the occupational therapist in training interacting directly with patients and providing therapy under the supervision of experienced professionals, allowing them to use their knowledge and skills with various clinical cases.

Training experiences in real medical environments, despite advances in clinical simulation, cannot yet fully reproduce the complexity and unpredictability of traditional hospital practice. This is because students may not face the same emotional and psychological challenges that arise when working with real patients. Additionally, the utilization of simulation may be restricted by resource limitations and costs associated with implementing and maintaining simulation programs. However, regardless of the strengths that practice in a real clinical setting provides, it presents challenges. Students may experience feelings of overwhelm or feel insufficiently prepared to address complex cases. Additionally, opportunities to practice specific skills and receive immediate feedback may be limited (Bethea et al., 2014; Imms et al., 2018).

Faced with the challenges that clinical practice entails in real, highly complex environments, in this study the findings highlight the importance of interdisciplinary teamwork in critical care units. Occupational therapists collaborate closely with other health professionals, allowing for comprehensive and coordinated care for patients.

According to Goldman et al. (2018), promoting collaboration between health professionals in these units results in a significant improvement in the quality of care and patient safety. To achieve this, it is imperative that organizations establish the necessary structures that allow health professionals to acquire the skills necessary to work effectively in interdisciplinary teams.

Effective communication and active collaboration are essential to ensure appropriate care and compliance with rehabilitation goals. This implies open, extensive and coordinated communication, as well as the existence of shared goals in the team. According to Alsabri et al. (2022), the perception of open communication between team members is related to the level of understanding of patient care goals.

This collaborative approach highlights the relevance of considering the perspectives and skills of diverse professionals in patient care. Thus, the principles of collaborative work coincide with the importance of mentors playing an active role in the development of emotion management competence in novice occupational therapists in critical care units. According to Jackson et al. (2023), tutors not only act as clinical mentors, but also as emotional guides, providing tools to understand and control emotions, especially in stressful and uncertain situations common in this environment.

Another fundamental aspect of the practice of occupational therapy is the management of emotions, as occupational therapists often perform their duties in high-stress environments and must deal with emotionally challenging situations. Scanlan & Still (2013) demonstrated that occupational therapy professionals, particularly those working in mental health settings, experience high levels of burnout, including emotional exhaustion and depersonalization. The relationship between tutors and students is revealed a fundamental factor for the success and well-being of occupational therapists in training (Moores & Fitzgerald, 2017; Jackson et al., 2023).

Furthermore, in critical care units, patient safety is paramount, and the present research supports the importance of occupational therapists acquiring a deep understanding of medical procedures, monitoring systems, and safety protocols before intervening. This prior preparation guarantees safe and effective care, reducing the risk of errors and protecting the integrity of the patient (Hodgson et al., 2014).

In this research, one of the limitations noted is that the study was conducted in a critical care unit, which may have affected the generalization of the results to other healthcare settings. As a projection that emerges from the study developed, the insufficient specific undergraduate training for occupational therapists in critical care units stands out. This highlights the need for educational institutions to consider incorporating content related to this area in their study programs.

Besides, the lack of a consolidated tradition in this field highlights the importance of sharing knowledge and experiences among occupational therapists to advance best practices and research in the field of critical care rehabilitation.

Ultimately, the importance of a comprehensive approach in the rehabilitation of critically ill patients is highlighted, considering both biomedical and emotional and contextual aspects. Adapting the environment and including personal elements can improve the patient's well-being, positively influencing his recovery. This emphasizes the relevance of thoroughly understanding the patient's environment for the development of competencies in occupational therapists in critical care units.

## Conclusion

This research analyzed the use of clinical strategies in critical care units and their incorporation into the professional training processes of novice occupational therapists. The importance of incorporating systematic interdisciplinary work into training is highlighted, since this educational strategy allows the transfer of theoretical knowledge, exposition of practical knowledge, and verification of its understanding and effective application in highly complex clinical interventions.

It is emphasized to continue advancing with the commitments to ensure the quality of the academic training of occupational therapists in intensive medicine, accompanied by practical experiences, expert-guided tutorials and clinical rotations in critical care environments.

In this study, it is observed that emotion management and effective communication between patient and occupational therapist are fundamental educational strategies for the development of professional competencies in critical care units.

Finally, this research identifies the need to consolidate a specific training field in clinical intervention strategies in novice occupational therapists.

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### **Corresponding author**

Oscar Hernández Lanas  
e-mail: oscarhernandez@uchile.cl

### **Section editor**

Prof. Dr. Rodolfo Morrison Jara