Neonatal and pediatric intensive care units: accounts on the practice of occupational therapists

Unidades de cuidado intensivo neonatal e pediátrica: apontamentos sobre a prática dos terapeutas ocupacionais

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Objective: to characterize the practices of occupational therapists in neonatal and pediatric intensive care units. Methods: a quantitative-qualitative study, carried out in 2017, with data collection through an online questionnaire with occupational therapists who worked with intensive care. The interpretation was performed using simple descriptive statistics and thematic analysis. Results: 15 occupational therapists participated, with postgraduate degrees; female; aged 24 to 60 years; with a mean age of 28 years; the average working time in a hospital and intensive care environment exceeded four years. Four categories emerged: Actions by the Occupational Therapist in the ICU; Resources and techniques used by the Occupational Therapist in the ICU; Training of Occupational Therapists to work in an ICU; and Occupational Therapist Perceptions related to the ICU routine and team recognition. The actions focused on physical and cognitive interventions and guidance to family members and patients. Conclusion: It is necessary to expand and deepen the studies on the work developed by occupational therapists in intensive care units, aiming at the creation and establishment of indicators that favor professional qualification and consolidation.

Descriptors: Intensive care units; Intensive care units, Neonatal; Intensive care units, pediatric; Occupational therapy.

Objetivo: caracterizar as práticas dos terapeutas ocupacionais em unidades de terapia intensiva neonatal e pediátrica. Método: estudo quanti-qualitativo, realizado em 2017, com coleta de dados através de questionário online com terapeutas ocupacionais que atuavam em cuidados intensivos. A interpretação foi realizada por meio de estatística descritiva simples e análise temática. Resultados: participaram 15 terapeutas ocupacionais, com pós-graduação; do sexo feminino; com idades entre 24 a 60 anos; com média de 28 anos; a média de tempo de trabalho em ambiente hospitalar e de terapia intensiva ultrapassou a quatro anos. Emergiram quatro categorias: Ações do Terapeuta Ocupacional em UTI; Recursos e técnicas utilizados pelo Terapeuta Ocupacional em UTI; Capacitação dos Terapeutas Ocupacionais para atuar em uma UTI; e Percepções do Terapeuta Ocupacional relacionadas a rotina da UTI e reconhecimento da equipe. As ações concentraram-se em intervenções físicas e cognitivas e orientação aos familiares e pacientes. Conclusão: É necessário ampliar e aprofundar os estudos sobre o trabalho desenvolvido por terapeutas ocupacionais nas unidades de terapia intensiva, visando a criação e o estabelecimento de indicadores que favoreçam a qualificação e consolidação profissional.

Descritores: Unidades de terapia intensiva; Unidades de terapia intensiva neonatal; Unidades de terapia intensiva pediátrica; Terapia Ocupacional.

Objetivo: caracterizar las prácticas de los terapeutas ocupacionales en las unidades de cuidados intensivos neonatales y pediátricos. Método: estudio cuantitativo y cualitativo realizado en 2017, con recogida de datos a través de un cuestionario online con terapeutas ocupacionales que trabajaban en cuidados intensivos. La interpretación se realizó mediante estadística descriptiva simple y análisis temático. Resultados: Participaron 15 terapeutas ocupacionales, con título de postgrado; de sexo femenino; con edades comprendidas entre los 24 y los 60 años; edad media de 28 años; el tiempo medio de trabajo en el entorno hospitalario y de cuidados intensivos superó los cuatro años. Surgieron cuatro categorías: Acciones del Terapeuta Ocupacional en la UCI; Recursos y técnicas utilizadas por el Terapeuta Ocupacional en la UCI; Formación de los Terapeutas Ocupacionales para trabajar en una UCI; y Percepciones del Terapeuta Ocupacional relacionadas con la rutina de la UCI y el reconocimiento del equipo. Las acciones se centraron en las intervenciones físicas y cognitivas y en la orientación a los familiares y a los pacientes. Conclusión: Es necesario ampliar y profundizar los estudios sobre el trabajo desarrollado por los terapeutas ocupacionales en las unidades de cuidados intensivos, con el objetivo de crear y establecer indicadores que favorezcan la cualificación y consolidación profesional.

Descripciones: Unidades de cuidados intensivos; Unidades de cuidado intensivo neonatal; Unidades de cuidado intensivo pediátrico; Terapia Ocupacional.
INTRODUCTION

The Intensive Care Unit (ICU) is a place of high complexity care offering for the hospitalization of critical patients who need: monitoring, continuous specialized care and specific high technology. The intensive care patient presents a serious condition that requires permanent and specialized assistance, given the imminent risk of death and instability of vital functions. Therefore, it needs multidisciplinary and multiprofessional treatment to minimize the conditions caused by the severity of the diseases and the possible sequelae.

The Neonatal ICU, composed of a Neonatal Intensive Care Unit (NICU), Conventional Intermediate Neonatal Care Unit (UCINCo) and Kangaroo (UCINCa), is intended for the care of critically ill newborns or those at risk of death, including those with less than 30 weeks of gestational age (GA) or with birth weight less than 1,000 grams or requiring mechanical ventilation, major, medium or minor surgeries, immediate postoperative period or parenteral nutrition.

According to Resolution No. 7 (2010) of the Brazilian Ministry of Health, the Pediatric Intensive Care Unit is defined as a critical area intended for the hospitalization of critically ill patients aged between 29 days and 14 or 18 years, and this age limit is established by the routine of the institution. These patients require continuous specialized professional attention, specific materials and technologies necessary for diagnosis, monitoring and therapy.

In the field of neonatology, as in pediatrics, scientific and technological advances in diagnosis and therapeutic resources have contributed to the effectiveness of treatment and survival. However, both in the case of high-risk newborns and children with acute and chronic pathologies, clinical complications and the evolution of diseases still have an impact on morbidities.

Thus, as a result of the emotional and social repercussions on the family, associated with survival and the prolonged period of hospitalization, comprehensive care is indicated, so that the work performed by the occupational therapist is part of a set of actions carried out by the other members of the family team.

Due to the specificities of care performed in a Neonatal ICU, the practice of Occupational Therapy (OT) requires minimum knowledge and skills, such as: effective communication with the multidisciplinary team and family members, basic understanding of the functionality and purposes of the unit’s equipment and knowledge about the applicability of assessments (formal and informal), appropriate for the corrected Gestational Age (GA) and for the clinical
conditions, which make it possible to identify skills and vulnerabilities related to neuropsychomotor development (NPMD)4.

Furthermore, it is necessary to assess the effect of the environment, the practice of caregivers, positioning, neurobehavioral organization and the baby’s clinical condition, continuously observing and analyzing their responses. In addition, it is important to know how to record evaluations and interventions in an objective, interpretative, complete and concise manner, and to prepare a discharge and follow-up plan together with the multidisciplinary team, aiming to meet the needs of the baby and their family, covering, thus, the network of services and community resources4.

The knowledge that underlies these actions is also used by other professionals, with reference to their respective specificity. In the case of occupational therapists, their specificity is related to the notion of human occupation as a promoter of health4.

As for the pediatric ICU, in general, interventions can be performed directly with the child and caregivers, or indirectly, with the intervention in the physical environment. The main interventions of the occupational therapist, related to the environment, stand out: temporospatial orientation, privacy, individuality and reduction of adverse stimuli, such as noise and lighting; to caregivers: guidance, reception and empowerment; and to the patient: re-signification of daily life, minimization of the impacts of hospitalization in the ICU, prevention of eventual deformities, edema, pressure points and pain, and also maintenance of occupational performance and functional capacity and surveillance of the DNPM5.

In a review on the role of Occupational Therapy in ICUs, it was identified that there is more research on the introduction of Occupational Therapy in this service in developed countries, such as Germany and the United States. In addition, working in a hospital context is not yet a practice of great interest to professionals in Brazil, with little emphasized in undergraduate courses3.

Another study identified the work and training of occupational therapists in the field of neonatology, which began in 1994, and what are the specificities. There was a predominance of American articles. As for national production, most of it was identified in the period of the last 12 years, with a predominance of in the country’s Southeastern region6.

Despite the importance of the occupational therapist in the ICU and in the treatment of critically ill patients, there are still few studies on this topic in the Brazilian scenario and the lack of knowledge of management and staff7-8.

Another study on the production of knowledge of Occupational Therapy in the hospital environment found the effort to produce materials that make the field of practice viable.
However, few productions conceptualize or organize data that support the field of Occupational Therapy in this environment, and there is a need for studies that present the effectiveness of Occupational Therapy actions in Hospital Contexts. 

Although Occupational Therapy assistance is regulated by the Ministry of Health, as an intervention for the integral and interdisciplinary care of the patient in the ICU, there is a low insertion of this professional in these units; which has repercussions on the scarcity of clinical practice and, consequently, results in a low production of scientific knowledge. This vicious cycle makes it difficult to expand the work of OT in the ICU, also fueled by the fact that their participation as essential in the hospital’s health team is not consolidated, and there are still gaps in relation to the dialogue between occupational therapy and hospital care.

With a view to presenting evidence and better understanding the actions performed in this scenario, this study aims to characterize practices of occupational therapists in neonatal and pediatric intensive care units.

**METHODS**

This is a cross-sectional study with a quantitative-qualitative approach. Mixed studies, such as this one, require a triangulation of perspectives, as the quantitative method has the role of describing, while the qualitative method provides means of explaining eventual data, which identify the intention of individuals in relation to the analyzed practice, seeking to express the reality from the description, understanding and explanation of the practices studied.

The research participants were occupational therapists working in neonatal ICU (care for admitted patients aged between 0 and 28 days), pediatric (care for patients aged between 29 days and 14 or 18 years) and mixed pediatric (care for newborn patients and pediatric patients in the same room, but with physical separation between the Pediatric ICU and Neonatal ICU environments), whose selection criterion was to have a minimum of six months experience in practice in intensive care units.

The instrument used was a questionnaire, based on a literature review on the subject, structured in a virtual platform, having been previously tested to assess its accuracy and functionality.

The questions, open-ended and multiple choice, contained themes focused on the characterization and practices of occupational therapy in the scenario of intensive care units. Thus, in its initial part, issues related to the professional profile, such as: age; sex; working time in hospital; working time in intensive care units; workload; among others. The second part dealt with issues more directly related to the performance, such as: What is the profile of patients you
Describe the main emerging demands for your performance; Specify, in as detailed a way as possible, the actions you carry out; Describe your routine in the ICU, among others.

Data collection took place between October and December 2017, and the invitation to participants was carried out through social networks, in specific groups of Hospital Occupational Therapy. In the invitation message, the link that gave access to the questionnaire was made available.

The analysis was carried out using simple descriptive statistics and thematic analysis. Quantitative data are presented descriptively in univariate tables, with a view to identifying the incidence of the variables studied\(^\text{11}\). For qualitative data, emerging from the open questions, thematic content analysis was performed, in order to obtain knowledge about the whole after coding each of the answers.

Participants needed to express acceptance of the Free and Informed Consent Term and the study approved by the Ethics Committee in Research on Human Beings of the Universidade Federal de São Carlos, according to opinion No. 2,442,335 and developed considering the norms established by Resolution 466/12.

RESULTS

Characterization of the research’s participants

Study participants were 15 Occupational Therapists; with a graduate degree; female; aged 24 to 60 years; with an average age of 28 years. 7 participants are trained in public education institutions; with completion of the course between 1975 and 2013.

The average working time in a hospital environment comprised approximately 4 years and 6 months, and 4 years and 2 months in the ICU.

The mentioned workplaces: tertiary-level teaching hospital; university hospitals with a contract with public organs; general hospital-type establishments and specialized hospital-type establishments. The hospitals offered 100% care through the Unified Health System (SUS) by 10 professionals; 100% private in the case of two respondents, and part public assistance, part private in three interviewees. The types of ICU listed were: Neonatal (6), Pediatric (10) and Mixed (2); however, some worked in more than one unit, such as an adult ICU.

As for the working hours, 12 had a workload of 30 hours per week, one of 60 hours per week, one of 12 hours per week and another of 6 hours per week. Specifically, about the estimated hours of stay in the ICU, there was a signal by three participants of working the 30 hours in the ICU, and one reported working 60 hours, being that it was a residency in this theme,
seven reported working from 10 to 20 hours and four reported working less than 10 hours per week in the ICU; and four participants expressed working on shift at weekends.

From the descriptions of those surveyed, four categories were constructed: *Actions by the Occupational Therapist in the ICU; Resources and techniques used by the Occupational Therapist in the ICU; Training of Occupational Therapists to work in an ICU; and Occupational Therapist Perceptions related to the ICU routine and team recognition.*

*Actions by the Occupational Therapist in the ICU*

It was possible to identify interventions that consist of facilitating early mobility out of bed; carrying out significant activities in bed, according to the child’s demand; provide stimuli from the sensorimotor aspects; alleviation of external stimuli to reduce the child's agitated behavior; positioning in bed; and, if necessary, making cushions to prevent deformities during the period of immobility (Chart 1).

It was also described: prescription of splints and the performance of interventions based on activities of daily living (ADL); expressive activities for the child's cognitive development; family reception; support for passive and active exercises; prescription of assistive technologies (orthotics, adaptations for play and supplementary and alternative communication (SAC)); functional training in food and clothing; early mobilization; functional training with energy consumption reduction technique; adaptation of communication resources and objects for ADL (pen, fork, spoon and knife) (Chart 1).
**Chart 1.** Interventions of Occupational Therapists in Neonatal and Pediatric ICUs. Online questionnaire. Brazil, 2017.

<table>
<thead>
<tr>
<th>Guidance for patients and families</th>
<th>Physical interventions</th>
<th>Cognitive Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Encouragement and guidance regarding the Kangaroo Method;</td>
<td>• Neuropsychomotor stimulation;</td>
<td>• Cognitive and mental health assessment and rehabilitation;</td>
</tr>
<tr>
<td>• Group of activities with family members;</td>
<td>• Early stimulation;</td>
<td>• Perceptual-cognitive activities;</td>
</tr>
<tr>
<td>• Reception;</td>
<td>• Pain management;</td>
<td>• Playful activities;</td>
</tr>
<tr>
<td>• Therapeutic listening;</td>
<td>• Sensory stimulation;</td>
<td>• Storytelling;</td>
</tr>
<tr>
<td>• Guidelines relevant to monitoring;</td>
<td>• Motor assessment and rehabilitation;</td>
<td>• Training of food and hygiene activities;</td>
</tr>
<tr>
<td>• Mediation between companions and staff (in the case of the pediatric ICU);</td>
<td>• Comfort measures;</td>
<td></td>
</tr>
<tr>
<td>• Guidance on possible changes manifested in the child's occupational performance;</td>
<td>• Prevention of deformities;</td>
<td></td>
</tr>
<tr>
<td>• Family guidelines on ADL return and training;</td>
<td>• Proper positioning in bed when changing positions;</td>
<td></td>
</tr>
<tr>
<td>• Guidelines regarding the impact of hospitalization;</td>
<td>• Positioning bulkheads;</td>
<td></td>
</tr>
<tr>
<td>• Guidance regarding the difficulties of the mother-baby binomial in the performance of their occupations and co-occupations;</td>
<td>• Passive movement;</td>
<td></td>
</tr>
<tr>
<td>• Encouraging meaningful activities.</td>
<td>• Drainage of edema;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Stimulation of sitting, orthostatism and functional gait;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Terminal/palliative care;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Prevention of musculoskeletal deformities;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Functional mobility training.</td>
<td></td>
</tr>
</tbody>
</table>

**Resources and techniques used by the Occupational Therapist in the ICU**

Participants reported the importance of academic training to work in an ICU and cited the main resources (child development scales, playful resources, among others) and methods/techniques (kangaroo, sensory integration and others) presented in Table 2.

**Chart 2.** Methods/techniques and resources used by Occupational Therapists in ICU. Online questionnaire. Brazil, 2017.

<table>
<thead>
<tr>
<th>Method/technique</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Kangaroo Method;</td>
<td>• Child development scales;</td>
</tr>
<tr>
<td>• Sensory integration</td>
<td>• Development of recreational, graphic, artistic and electronic resources;</td>
</tr>
<tr>
<td>• Active Synchronous Theory.</td>
<td>• Talaflux;</td>
</tr>
<tr>
<td>• Bobath;</td>
<td>• Use of pen-drive and clipboard;</td>
</tr>
<tr>
<td>• Kinesiotaping;</td>
<td>• Basic ICU clothing;</td>
</tr>
<tr>
<td>• Confection and prescription of orthotics and assistive technologies;</td>
<td>• Games;</td>
</tr>
<tr>
<td>• Positioning in bed;</td>
<td>• Books;</td>
</tr>
<tr>
<td>• Neurological facilitation techniques;</td>
<td>• Tablet;</td>
</tr>
<tr>
<td>• Activities for time orientation.</td>
<td>• Use of toys appropriate to each stage of child development;</td>
</tr>
<tr>
<td></td>
<td>• Use of cotton, gauze, swaddling clothes, pads for sensory stimulation and positioning;</td>
</tr>
<tr>
<td></td>
<td>• Textures (baby brush, low intensity rattle) for sensory stimulation;</td>
</tr>
<tr>
<td></td>
<td>• Music;</td>
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<tr>
<td></td>
<td>• Use of contrast and vibrant colors for visual stimulation;</td>
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<tr>
<td></td>
<td>• Human touch (positive touch, massage and vibration);</td>
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<tr>
<td></td>
<td>• Stationery materials (for group activities);</td>
</tr>
<tr>
<td></td>
<td>• Rubberized materials;</td>
</tr>
<tr>
<td></td>
<td>• Thermo-moldable material and neoprene (for making orthoses).</td>
</tr>
</tbody>
</table>
Some participants pointed out particularities in the choice of techniques and resources to be used by the professional, considering the population that will receive the interventions:

*It depends on each Intensive Care Center [ICU]. In Pediatrics, I use Bobath a lot.*

When making positioning orthoses and offering recreational activities for temporarily hospitalized children, one of the participants reports the care when using materials and objects in an ICU:

*In the case of ICU, due to the imminent risk of contamination, resources are usually disposable or washable. Positioning orthotics, play activities when a child is temporarily indoors, games, books, pencils, paper, drawings, scissors, glue, clipboard, portable DVD player, movies, toys, comics, ranch scale, toys in the age group of 1-3 years, as long as it is discarded at the end of the service. The use of resources ends up being restricted by the Hospital Infection Control Commission [CCIH].*

### Training of Occupational Therapists to work in an ICU

The participants identified the knowledge and skills considered essential for the work of the Occupational Therapist in an ICU:

*Humanization, listening, clinical knowledge, neurological disorders and development.*

*Proactivity; sensitivity; patience; tolerance; knowledge of child development and willingness to learn from others.*

*Knowledge of the detailed clinical picture to prevent interventions from causing harm to patients; knowledge about the support equipment, what the warning signs and noises mean; vital signs, to identify if your intervention is making the patient uncomfortable or agitated, among others; multidisciplinary teamwork; involvement and empathy with patients and families; attentive look at current needs and intervene according to clinical possibilities.*

* [...] knowledge of protocols, knowledge about clinical aspects of critically ill patients and knowledge about mechanical ventilation.*

*Knowledge about the environment (equipment, resources, materials); main pathologies or problems that affect babies hospitalized in the unit; main risk factors for development; sensory stimulation techniques, handling, positioning and containment, pain management, breastfeeding management, making orthoses and adaptations, among others.*

* [...] basic knowledge about the dynamics of a hospital and an ICU, knowing the language and standard procedures adopted. In addition, it is necessary to constantly update yourself professionally and your knowledge of the process experienced by patients and their families in an ICU, such as dealing with a prognosis that can be reserved or not and being able to, in addition to providing patient care, to welcome them and their family in the face of situations inherent to this environment.*

One of the participants reported the need for professionals to have knowledge about low-cost resources for making adaptations:

*In-depth knowledge of low-cost resources, as the SUS does not offer the necessary resources [...].*

Techniques, disciplines and contents that Occupational Therapists must focus on to work in an ICU were also listed:
Orthotics, Kinesiotaping, Bobath, Sensory Integration and Positioning.
Hospital context; Palliative care; Physical rehabilitation; Mental health.

In the disciplines and specialties important for clinical knowledge, the following stood out:

Physiology, pathophysiology, anatomy, pharmacology, clinical emergency, ability to know how to aspirate a patient in an emergency, know how to act in an emergency (cardiac arrest, rolling, syncope, for example), remaining calm and, if necessary, lead a cardiopulmonary arrest - CRA.

OT in hospital, OT in neurology, OT in Palliative Care, breaking bad news.
Neurology, trauma-orthopedics.
Physiology, pathophysiology, anatomy, pharmacology, emergency, cardiology, neurology, hepatology, nephrology, among others.

**Occupational Therapist Perceptions related to the ICU routine and team recognition**

The reading of the medical record or prescription, conversation with the team, preparation of resources, care and recording of actions are pointed out, as described below:

Active search, reading of medical records, identification of legible cases, attendance and recording in medical records.
I see patients by appointment, I do not see them if the patient is sleeping or eating. Start by tactile and proprioceptive stimulation, then midline and alignment.
Verificiation of medical records, active search, evaluation, admission to the Occupational Therapy service, individualized and group care in the case of wards.
I check prescriptions and medical records of prescribed patients. I talk to the Nurse or Doctor on duty at the unit, to find out if there are any patients with restrictions.
I do asepsis of the hands to enter the bed with the necessary personal protective equipment (PPE’s), I perform the service, at the end of all the consultations, I discard the PPE’s used, I do the asepsis of the hands and close by documenting the service in an electronic document. And so on.

Assessment of the general clinical picture, care for the patient and companion (in the case of the pediatric ICU), orientation and positioning in the bed, prescription and performance evolution.

There are also professionals who do not have a fixed sequence in their work routine, identifying new possibilities for care:

I work in neonatology, which includes the ICU, UCINCo, UCINCa and follow up. In addition to neonatology, I also assist some women and babies in the maternity ward - rooming-in. I don’t have just one sector or room, I don’t have a fixed routine. At the moment I pay more attention to UCINCo and UCINCa. There is also much greater demand from the multidisciplinary team for OT in these spaces, as they are more stable babies and better accept handling and stimulation; for greater incentive to the kangaroo; to work on hospital discharge. These are sectors of greater permanence and participation of mothers, enabling work with the binomial, improving their bonding and performance in co-occupations.

One participant highlights the difference in the routine of each unit, and, in general, lists the activities she performs in an ICU:
Each ICU that I work has different routines from each other, but in general, I arrive, do the bureaucratic part, then I see who was hospitalized at dawn, and then I start the consultations in the morning, and then I evolve the patients. In the afternoon, there is the "round" and then there is the conversation with the family members along with the doctors and then other consultations, evolution and meeting.

In the ICU scenario, the need for involvement with team members was described, which values the role of the professional:

[...] they understand it as an essential part of the child’s health restoration process.

[...] they report that I get the patient out of bed, I make them move.

Each team has different understandings, but the physical therapy and speech therapy team always support everything I do. Depending on the ICU, doctors cannot understand, but they know that it is important.

On the other hand, speeches were identified that reveal OT perceptions in relation to the little understanding on the part of some team members in relation to the work performed. Thus, among the main challenges mentioned for working in the area, the lack of knowledge of the profession by other professionals and, consequently, a feeling of devaluation stands out:

Nursing staff have difficulty understanding and accepting the role.

[...] most are unaware of the profession and the professional’s need in the service.

I don’t feel a real appreciation.

Some professionals understand, others still think that we just play with children to pass the time.

Despite this, the recognition of the profession in the area has been intensifying:

The insertion of the OT in this Unit is still very recent (I have been in this NICU for approximately 8 months, and the entry of the OT in the neonatal was very delicate and even slow), but the team seems to understand better the contribution of this professional in the team every day. Demands have grown, partnerships have been established with professionals from the multidisciplinary team, space has been conquered. I realize that most of those who demand the performance of the OT or express themselves about this professional "link" it to the quality of life and the protection and stimulation of development.

DISCUSSION

It is noticed that there is a limitation in the literature that describes the role of the Occupational Therapist in ICU who contribute to the effectiveness of Occupational Therapy and explicitly discuss interventions in the area. In this sense, considering that there is little scientific evidence on the subject\(^3\), the present study aimed to contribute to elucidate the occupational therapeutic interventions carried out in the Intensive Care Units (ICU) and clarify the role of the Occupational Therapist from the results found, which show some of the practices performed by this professional.
The results show that the Occupational Therapist can assist in the care provided to Intensive Care Units, since, among the therapeutic proposals described, motor, cognitive, sensorial, emotional and social stimulation are highlighted, with specific skills and knowledge that can favor the provision of neonatal and pediatric care to the patient and family. It is noted that Occupational Therapy has to contribute with regard to the Neonatal and Pediatric ICU; and, from the perspective of integrality, it is demanded the incorporation of practices that contemplate, in addition to biological, emotional and social aspects.

Also, the reduction in hospitalization and recovery time of the individual is pointed out, as well as the intervention in the sequelae acquired during this period or due to the pathology. It was defended that neonatal and pediatric care should be carried out early, aiming at adequate attention to the presented disorders.

Of those surveyed, part works in Neonatal, Pediatric ICU concomitantly with the Adult ICU, which compromises the development of a specialist profile, in addition to limiting the performance due to different demands. The practical action in different life cycles requires knowledge and skills that are also different.

The absence of specific evaluative instruments becomes a factor that hinders the process of recognition of the Occupational Therapist's specificity, which was reported in relation to the team, as well as indicators that favor the production of evidence about the effectiveness of the profession.

This context makes it difficult to defend the professional as a mandatory member of the intensive care teams, as well as the scientific productions in the area that support the professional's performance in these sectors. Studies show that the actions of Occupational Therapists have been shown to be not very specific, which implies a reductionist understanding of their work by other health professionals and the population. Work indicates that knowledge and awareness of the occupational therapist's actions are essential for the provision of quality care to patients and the satisfaction of this professional category.

Participants working in neonatal and pediatric ICUs use techniques and resources that can be used with different populations and contexts, with no significant differentiation between babies, children and adults. Specific actions such as the Kangaroo Method and developmental scales were highlighted, but the use of systematized scales aimed at this stage of life (neonatal and pediatric) was not mentioned. In other words, the data shown were generalist, a factor that demands new investigations with other methodologies to better reach and evaluate the specificities.
Sensory Integration was mentioned as a specialized practice used by the participants. This technique is considered essential and is aimed at high-risk preterm babies who often present future sensory processing problems, as well as focusing on the child’s ability to process the sensory impulse, aiming to improve performance skills through the sensory experiences offered in the environment in which he finds himself\(^17\).

The Theory of Synchronous-Active Development, proposed by Heidelise Als, in 1986, is pointed out, which emphasizes a more humanized reception for newborns and outlines ways to observe the baby’s brain functioning, through observation of its behavior\(^18\).

The records in medical records referring to occupational therapeutic interventions were incipiently mentioned. The medical record constitutes a documental value that allows access to the practices and knowledge used by the professional category, and the absence of these records can lead to a lack of clarity for the professional about their own performance, as well as hindering communication with the professional team\(^19\). Thus, it is important to record in medical records, which may favor communication between the team, provided that such notes are concise and show the results obtained; fact that new research is suggested that focus on the content of the records, in order to explain the actions carried out, not only from the professional’s oral report, but from their written record.

Also, little was mentioned about the conditions of terminality or irreversibility of the disease, about methods or resources are consistent with the ability of understanding and assimilation by children belonging to their childhood universe.

In the practice scenario, Occupational Therapists face barriers to start the available treatment, highlighting the lack of knowledge of this professional’s performance by other team members, possibilities of insertion in hospital management, as well as in the little or no mobilization of the councils and supervisory bodies responsible for complying with established norms and resolutions\(^8\). A study identified that the work of Occupational Therapists\(^20\) is essential to guarantee the provision of comprehensive, holistic and quality care.

Occupational Therapy actions involve the application and use of hard technologies, common to the environment of an intensive care unit, but also the use of light, relational technologies, very typical of the profession. This fact can be difficult to translate into the professional’s actions, when it is based on the attention to the individual as an indivisible being.
CONCLUSION

The study showed the need for professionals to reaffirm the importance of their role. On the other hand, there was the perception that Occupational Therapy has been introduced in the ICU and there is, on the part of other professionals, the recognition of the contribution in the intensive care teams.

There is a need for greater involvement of OTs in class associations, with a view to strengthening the recognition of the area by managers and other team members, in addition to expanding the area in ministerial ordinances related to the population served, which can change the circle vicious of the scarcity of practical spaces that affects the limitation of scientific production and vice versa.

The sample size does not allow generalizations, which suggests future studies that may expand the understanding of the practice of OT in the ICU, in this case pediatric and neonatal.

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CONTRIBUTIONS
Danusa Menegat and Tatiana Barbieri Bombarda contributed to the design, data collection and analysis, writing and review. Regina Helena Vitale Torkomian Joaquim participated in data collection and analysis, writing and review.

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