

Convergence and discrepancies in guiding documents of the mandatory supervised practice in physiotherapy: an integrative review

Convergência e discrepância em documentos norteadores dos estágios supervisionados obrigatórios em fisioterapia: uma revisão integrativa

Cristiane Cavalcante Moreira¹ 

Sumaia Midlej Sá² 

Ana Sueli Teixeira de Pinho³ 

Helena Fraga-Maia⁴ 

^{1,3}Universidade do Estado da Bahia (Salvador). Bahia, Brazil. kikamoreira1006@gmail.com, anasuelipinho@yahoo.com.br

²Universidade do Estado da Bahia, Universidade Católica do Salvador (Salvador). Bahia, Brazil. sumaia.midlej@gmail.com

⁴Corresponding author. Universidade do Estado da Bahia (Salvador). Bahia, Brazil. helenafragamaia@gmail.com

ABSTRACT | INTRODUCTION: The mandatory supervised practice is a curricular component that integrates the training process of the undergraduate student in Physiotherapy, however, despite its relevance as a legal and normative construct, the official documents do not provide sufficient support for the unification of the criteria for its completion, which can cause irregular practices to occur. **OBJECTIVE:** Identify the discrepancies and points of convergence in existing official documents and research reports that guide the mandatory supervised internships in Physiotherapy. **METHODS:** Integrative literature review with a consultation to the databases PubMed, SciELO, Virtual Health Library, and Capes Periodicals, and to the official documents of the Federal Council of Physiotherapy, National Council of Health, Ministry of Education, and the Brazilian Association of Teaching in Physiotherapy. **RESULTS:** 15 articles published between 2002 and 2017 were analyzed, as well as seven official documents that address internships, pedagogical praxis, and legal norms in the context of Physiotherapy. **CONCLUSION:** There are discrepancies concerning the number of students per internship supervisor and practice shift, the professional identity, their presence during training, and the time interval between theory and the mandatory curricular internship. As points of convergence, the recognition of the internship as a mandatory and didactic-pedagogical curricular practice and the moment when the student should be encouraged to develop autonomy and professional responsibility, interaction with the multidisciplinary team, and ability to manage patients can be scored.

KEYWORDS: Nonmedical Internship. Physiotherapy Specialty. Laws. Resolutions.

RESUMO | INTRODUÇÃO: O estágio supervisionado obrigatório constitui-se em um componente curricular que integra o processo formativo do graduando em Fisioterapia. Todavia, a despeito de sua relevância como construto legal e normativo, os documentos oficiais não dão suporte suficiente à unificação dos critérios de sua realização, o que pode ocasionar a ocorrência de práticas irregulares. **OBJETIVO:** Identificar as discrepâncias e pontos de convergência existentes nos documentos oficiais e relatos de pesquisas que norteiam os estágios supervisionados obrigatórios em Fisioterapia. **MÉTODOS:** Revisão integrativa da literatura com consulta às bases de dados PubMed, SciELO, Biblioteca Virtual em Saúde e Periódicos Capes, e aos documentos oficiais do Conselho Federal de Fisioterapia, Conselho Nacional de Saúde, Ministério da Educação e Associação Brasileira de Ensino em Fisioterapia. **RESULTADOS:** Foram analisados 15 artigos publicados entre os anos de 2002 e 2017 e sete documentos oficiais que abordam os estágios, a prática pedagógica e as normas legais no contexto da Fisioterapia. **CONCLUSÃO:** Existem discrepâncias em relação ao número de estudantes por supervisor de estágio e por turno de prática, à identidade do profissional, sua presença durante o treinamento e intervalo temporal entre a teoria e o estágio curricular obrigatório. Já como pontos de convergência podem ser pontuados o reconhecimento do estágio enquanto uma prática curricular obrigatória e didático-pedagógica e o momento em que o estudante deverá ser estimulado a desenvolver autonomia e responsabilidade profissional, interação com a equipe multiprofissional e habilidade no manejo dos pacientes.

PALAVRAS-CHAVE: Estágios. Fisioterapia. Leis. Resoluções.

Introduction

The mandatory supervised internship is one of the main professional activities of the undergraduate with monitored educational practices provided for in the Pedagogical Course Project (PPC). Understood as a curricular component that integrates the training process, the internship is developed in the work environment aiming at the preparation for the productive profession of students who are attending regular education in higher education institutions¹. It is a fundamental curricular component to professional training in which students are continually challenged, as well as in other stages of the course, to articulate theory and practice²⁻⁷. It is a laboratory that contextualizes, through real situations, at different levels of care and complexity and with different therapeutic resources, a practice within the world of work^{2-4,7,8}, a practice that is subject to the regulatory frameworks of each profession.

In general, the documents that regulate the mandatory supervised internships in Physiotherapy, such as Law nº 11.788 / 2008, the Resolution of the National Health Council, on the National Curricular Guidelines of the Physiotherapy Graduation Course (DCN), and the Resolutions Federal Council of Physiotherapy and Occupational Therapy (COFFITO) are guidelines for the organization of internships in Undergraduate Physiotherapy Courses. However, when managers, here called Course Coordinators, try to follow the guidelines postulated by them, they face difficulties due to the lack of consensus between them.

Among the aspects that have been the subject of discussions in specific forums in the field of Physiotherapy, such as the Brazilian Association of Physiotherapy Education⁸, there are discrepancies about the number of students per internship class, the identity of the supervisor and their constant presence during supervised practice, in addition to the time interval between the specific curricular components and the mandatory supervised internship. All of these normative criteria, therefore, are debated between HEIs and health organizations where mandatory supervised internships are carried out. Thus, despite their relevance as legal and normative constructs,

official documents, as they do not present consensus, end up contributing to the occurrence of irregular practices. The emergence of the existing weaknesses between the referred documents justifies the deepening of the debate and the identification of the existing dissonances. Thus, the objective of this study was to identify the conflicts existing in official documents and research reports that guide the mandatory supervised internships in Physiotherapy, pointing out points of convergence and discrepancy between them.

Material and methods

This is an integrative literature review study carried out based on the analysis of scientific articles published in indexed journals and documents that provide for the supervised internship. The following steps were adopted for the constitution of the integrative literature review: definition of the research question, inclusion and exclusion criteria, selection of productions in the main databases according to the eligibility criteria, choice of relevant articles, organization and thematic classification, considering the characteristics in common, critical analysis of the findings, identifying differences and absence of consensus, interpretation and exposure of the results with pertinent reflections.

The search took place from February to December 2019 at the Scientific Electronic Electronic Library Online (SciELO) portals / databases, Virtual Health Library (VHL), Online Medical Literature Analysis and Retrieval System (MEDLINE / PUBMED), portal Capes Periodicals (Coordination for the Improvement of Higher Education Personnel), at the electronic addresses of the Federal Council of Physiotherapy (COFFITO), the National Health Council (CNS), as well as the websites of the Ministry of Education (e-MEC) and the Association Brazilian Teaching of Physiotherapy (ABENFISIO). Additional searches were carried out on the reference lists of the studies analyzed. The following descriptors were used: Internship, Physiotherapy, Laws and Resolution, contained in the Health Sciences (DeCS) and Medical

Subject Headings (MeSH) databases in Portuguese and English, using the Boolean operators "AND" (E) and "OR" (OR). Observational articles, dissertations or theses that addressed the mandatory supervised internships in Physiotherapy, that were available in full in Portuguese, English or Spanish and published between 2002 and 2017, were adopted as inclusion criteria; official documents from federal institutions were not delimited. Annals, editorials, reviews and comments were excluded.

The search resulted in 189 documents and, among these, seven official documents from COFFITO, CNE, e-MEC and ABENFISIO. After reading the titles and abstracts, a complete reading of the documents was carried out by two independent authors and in the event of disagreement between them, a third researcher was accessed to issue a decision. Subsequently, 33 articles were read in full and 18 were excluded because they were reports of opinion or case(s).

Result

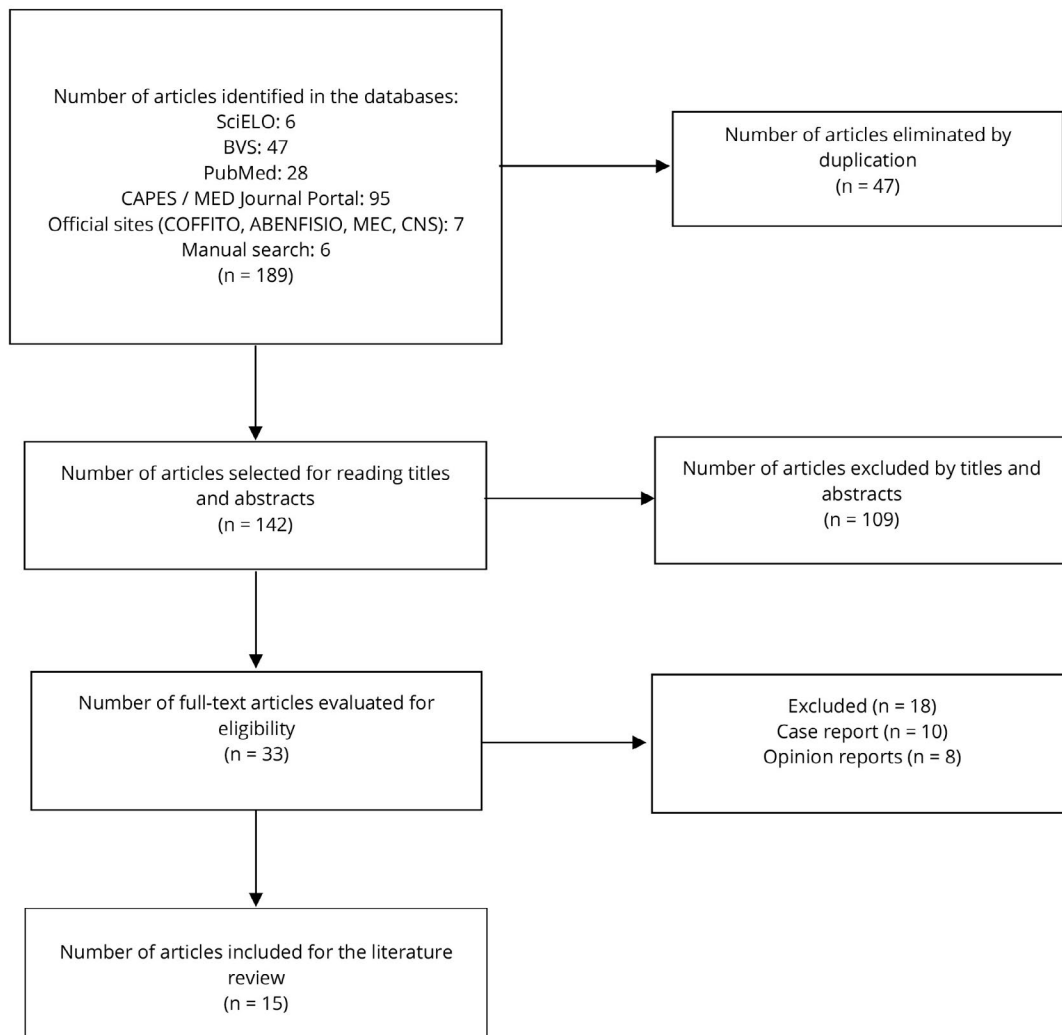
Six articles were found in the SciELO database, 47 in the Virtual Health Library (VHL), 28 in the MEDLINE / PUBMED database, 95 in the Capes Periodicals and four documents on the official websites of COFFITO, one from CNS, one from ABENFISIO and one from

MEC. After excluding repeated papers and applying the eligibility criteria, 15 scientific articles and seven laws and resolutions were selected. Figure 1 represents the selection process for research reports.

Among the fifteen selected articles, seven were published in English and the others in Portuguese. After the analysis, it was found that six (06) addressed the number of students per supervisor, five (05) the identity of the supervisor, four (04) the presence of the supervisor in supervised practice and seven (07) the interval between the components theoretical and practical curricula in the academic curriculum.

Among the official documents, the following were included: a) the Internship Law 11,788 / 08¹, b) Law No. 4 of the CNE / CES⁹, c) the CNS Resolution, No. 559¹⁰, which institutes the DCN of the Physiotherapy Undergraduate Course, d) COFFITO Resolution, No. 431¹¹, which provides for the academic exercise of mandatory internship in Physiotherapy, of September 2013; e) Resolution COFFITO, No. 444¹², which provides for Physiotherapeutic Assistance Parameters in the various modalities provided by the physiotherapist, f) COFFITO Resolution, No. 139¹³, which provides for the attributions of the Exercise of Technical Responsibility in the fields of Physiotherapy, finally, g) COFFITO Resolution No. 153¹⁴, which changes the ratio of 1 tutor to a maximum contingent of 6 students, different from what was contained in Resolution COFFITO 139/92.

Figure 1. Flowchart of article selection



Source: Own elaboration.

Regarding the number of students per supervisor, official documents were found that present discrepancies between them. Resolution 431 of COFFITO¹¹, in its third article, defines that, for the mandatory curricular internship, the relation of one (01) supervising physiotherapist professor hired by IES for up to six (06) interns must be respected, in order to guide them and supervise them simultaneously in all performance scenarios, and of a maximum of three (03) trainees per supervising physical therapist teacher in the community (home), Intensive Care Units, Semi-Intensive Care and Burns Treatment Center. Such recommendations are contrary to what is determined by Law 11,788/08¹, which recommends up to 10 trainees per supervisor. It is noteworthy that the presence of trainees in Physiotherapy services, at any level of health care, does not change the assistance parameters of professionals working in the referred services, following COFFITO Resolution 431¹¹, article 8, chapter II, which defines the number of patients by a physiotherapist, which should not be changed due to the presence of interns in the services. Such aspects are corroborated by Resolution COFFITO n° 444¹², which states that, in the different sectors of services, the number of patients per physiotherapist will depend on the place where he is allocated.

Table 1. Descriptive analysis of the selected research reports (to be continued)

Author / year	Citation	Language / country	Objective	Main results
Number of students per supervisor				
Gustafsson et al., 2016	22	English / Australia	To explore practical education from the perspective of university programs for occupational therapists	Traditional learning and co-supervision with 2 (two) or more supervisors per student, experiences with model groups with one (1) supervisor for two (2) or more students and supervision of one (1) student for 2 (two) more students' young people on the course
Gribble et al., 2016	17	English / Australia	Investigate changes in the emotional intelligence scores of therapy students in the final stages of their curricular internship programs	Students were supervised with a variety of models, including a professional supervising a student, several students with a supervisor, a student being supervised by several professionals, and self-directed channels with minimal direct supervision
Larin et al., 2005	19	English / Canada and United Arab Emirates	Describe the reflections of Physiotherapy students from a Middle Eastern culture during their clinical internships and compare them to the reflections of Physiotherapy students from a Western culture	Small groups of tutorial teaching based on problem solving and male and female students are grouped in different classes working in different areas of the campus. One of the aspects that affected self-development was how the supervisor gave feedback
Domingues et al., 2009	6	Portuguese/Brazil	Compare the evaluations of teachers / supervisors of different specialties for students in clinical internship	Different teachers evaluating the same student, with very different criteria, can have negative consequences, both for the teacher and for the student
Robson e Kitchen, 2007	26	English/London	To evaluate the perception of Physiotherapy students on the skills and approaches used in the environments of interprofessional interactions	Active listening, negotiation and discussion in formal spaces were seen as positive by students and are influenced by the number of students per supervisor
Hilton e Morris, 2001	18	English/London	Assess students' perception of the skills and approaches used and the factors that affect interprofessional interactions in the clinical setting	Students accompanied by only one specific professional and without a multidisciplinary view reported missing the interdisciplinary discussions and the points of view of different professionals
Supervisor's identity				
Araújo et al., 2010	8	Portuguese/Brazil	Conceptualize and define, according to ABENFISIO, the mandatory and non-mandatory internships in Physiotherapy	The internship supervisor must be a physiotherapist, have a job at the HEI as a teacher, according to his situation and career plan, be one hundred percent face-to-face
Gribble et al. 2016	17	English / Australia	Investigate changes in the emotional intelligence scores of therapy students in the final stages of their curricular internship programs	An interprofessional facilitator is hired by the HEI on a full-time basis to supervise cohorts of interprofessional students
Gaiad & Sant'Ana, 2005	20	Portuguese/Brazil	Analyze the efficiency of the Supervised Internship in Physiotherapy Graduation in the training of the professional Physiotherapist from the perspective of the graduate	Physiotherapist teachers have the responsibility to facilitate the clinical reasoning of their students through the autonomy they have during the internship period, seeking to train more reflective physiotherapists
Boucaut et al., 2008	21	English / Australia	Understand the industry's vision of receiving Physiotherapy interns	HEI coordinators who want vacancies for supervised internships in Physiotherapy in industries will find it difficult to hire professional physiotherapists
Batiston et al., 2017	29	Portuguese/Brazil	Report the experience of implementing a new pedagogical proposal for the Supervised Internship in Physiotherapy in primary care	Physiotherapist teachers carry out the direct supervision of students together with the physiotherapists of the course, who also develop shared supervision in the territory

Table 1. Descriptive analysis of the selected research reports (conclusion)

Author / year	Citation	Language / country	Objective	Main results
Supervisor's presence in supervised practice				
Gustafsson et al., 2016	22	English / Australia	To explore practical education from the perspective of university programs for occupational therapists	Most programs offer supervision experiences in the field, but supervision is also observed from a distance or close to the location of the internship
Gaida et al., 2015	15	English / Australia	Identify and analyze the characteristics of reports of incidents involving Physiotherapy students during the clinical internship	Injuries occurred more frequently when the supervisor was not close to the student (approximately 50% versus 20%). Preparing students to work independently can conflict with the university's duty of care in protecting students and patients
Gaiad & Sant'Ana, 2005	20	Portuguese/Brazil	Analyze the efficiency of the Supervised Internship of the Undergraduate Physiotherapy Course in the training of the professional Physiotherapist from the perspective of the graduate	They reiterate that the presence of the supervisor is necessary for the student's learning process and decision making
Batiston et al., 2017	29	Portuguese/Brazil	Report the experience of implementing a new pedagogical proposal for the Supervised Internship in Physiotherapy in primary care	Physiotherapist teachers perform direct supervision together with course physiotherapists, who also develop supervision
Time interval between specific disciplines and supervised internships				
Boucaut et al., 2008	21	English / Australia	Understand the industry's vision of receiving Physiotherapy interns	Internships are carried out only in the last year of graduation. There is great acceptance on the part of the industry that gains with services of almost professional students reducing costs and the students obtain with professional formation and experience in real work environments
Viana et al., 2012	25	Portuguese/Brazil	To investigate the opinion of Physiotherapy students in relation to the extracurricular internship and the influence of this practice on their professional training	Concentration of internships in the final period of the course, motivating the search for non-mandatory internships during the training with the justification that this practice would provide better qualification for the market and greater preparation for the phase of mandatory internships
Silva & Da Ros, 2007	2	Portuguese/Brazil	Analyze the academic training of the Physiotherapy professional in relation to the PSF from the perspective of the actors involved in this training	Only in the internship phase (last year of graduation) did they come into contact with the reality related to the field of public health, but in an insufficient way
Gaiad & Sant'Ana, 2005	20	Portuguese/Brazil	Analyze the efficiency of the Supervised Internship of the Undergraduate Physiotherapy Course in the training of the professional Physiotherapist from the perspective of the graduate	Students consider the workload insufficient, making them unsafe in some situations. Just as they do not give due importance to curriculum content when viewed in college. They only realize their importance after [starting] their professional practice
Teixeira & Oliveira, 2007	4	Portuguese/Brazil	Review the legal basis for internships in Physiotherapy and explore the contradictions that exist between different documents today	Internships start in the 4th semester in only 10% of courses; most start in the 6th or 7th semester (70%). There are courses that start their mandatory internships only at the end of the course, that is, in the 8th phase (10%) or in the 9th phase (10%)
Seriano et al., 2013	5	Portuguese/Brazil	To verify the perception of students of the Physiotherapy Course of a public HEI, in the city of Teresina (PI), about their training to provide services in the area of primary care in SUS	The supervised internships take place in the last year of the course, being divided into outpatient and public health in the 9th period, and hospital in the 10th period
Batiston et al., 2017	29	Portuguese/Brazil	Report the experience of implementing a new pedagogical proposal for the Supervised Internship in Physiotherapy in primary care	Direct supervision of students from the 9th and 10th semesters of Physiotherapy in two Basic Family Health Units

Regarding the supervisor's identity, there is a wide agreement between the documents regarding the requirement that the practices be performed by physical therapists^{8,10,11,29}, regardless of the student's training stage and whether the internship is mandatory or not, but there is no consensus regarding their connection with the HEIs that offer internships since Law 11.788¹ allows the professional hired by the health institution, not necessarily the professor at the HEI, to act as an internship supervisor. In contrast, Resolution COFITTO 431, reiterated by the recommendations of ABENFISIO, defines that the mandatory curricular internship must have direct supervision by a physical therapist professor linked to the course and duly hired by the HEI.

Supervision during internship activities is mandatory^{8,10,11,29}, but the distance from the supervisor also has a didactic role in granting independence and autonomy to students about to start their professional activities. However, the teacher will need to continually assess which students will be able to act with more distant supervision and which will need closer monitoring to avoid iatrogenesis, since HEIs must protect both patients and students¹⁵. Other forms of supervision have emerged and options for distance training supervised by professionals with different backgrounds or by more advanced students in the Physiotherapy course are already a reality in Australia.

As for the time interval between the offer of specific subjects and the offer of the mandatory supervised internship, it was observed that there is a gap between the offer of basic, specific, and mandatory subjects, respecting the student's maturity, as suggested by the DCN of Physiotherapy art. 13, items I and II, and also the ABENFISIO resolutions of 2012, although, for students, the distance is greater than it should be or what they want for their training.

Research documents and reports on supervised mandatory internships allow the identification of different concepts that are used in accordance with the interests of HEI managers, and which may be more or less compromised with the laws of the market or education. In some aspects, the references favor dubious interpretations, facilitating the adoption of more simplified models, that is, those that involve a larger number of students per supervisor, remote supervision or eventual supervision. Pereira and Alves¹⁶ highlighted that there are several theoretical concepts attributed to the internship, which is also a discipline full of bureaucracy, and that does not always bring students closer to their clinical practice. This reality is accentuated in distance learning (EAD), and due to the lack of transparency of its organization, this curricular component may have little relevance, that is, be little valued by HEIs.

The internship should provide future professionals with an understanding of the complexity of institutional practices, overcoming the separation between theory and practice. In other words, the only possibility of practice during the course cannot be placed in the mandatory supervised internship. It is necessary that, from the beginning of the training, there is a correlation between theory and practice in the different stages of maturity of the student, in addition to his gradual approximation with the reality in which he will act¹⁴. It is expected that academic disciplines will enable students to develop skills and abilities, such as the construction of meaning in their own vocabulary, the use of analysis resources that involve the kinetic-functional diagnosis, basic knowledge of the processes related to physical therapy intervention, the technological resources employed, as well as the interpersonal relationships with the multi-professional team. Such skills and abilities will allow the student to better understand what happens to patients, whether they are in companies or health institutions.

The DCN², when addressing issues related to permanent education, advise that health professionals should be able to learn continuously, both in their training and in their practice. Thus, they must continually learn and have responsibility and commitment to their education and the training of future generations of professionals, providing the conditions for mutual benefit, including stimulating and developing academic and professional mobility, training and cooperation by through national and international networks.

Number of students per supervisor

Despite what is in Resolutions of COFFITO 431¹¹, 139¹³, 153¹⁴ and the recommendations of ABENFISIO³, which recommend three to six students per supervisor, depending on the place where the internship occurs, Law 11.788/08¹ suggests the possibility of up to 10 interns per teacher simultaneously. These discrepancies have practical implications related to the costs of teaching and others, of a didactic nature, with many repercussions in the teaching-learning process.

The accomplishment of hospital internships is, in general, reported as generating anxiety, fear, or fear by the students who are finishing their graduation. Besides the anxiety generated by the unknown, there may be a negative influence on the emotional competence of Physiotherapy students, because of poor clinical supervision, the conflict between student and supervisor, or, also, due to failure in the clinical stage¹⁷. According to Gribble et al.¹⁷, when students in emotionally vulnerable situations find themselves in new and challenging environments, where they are expected to promote, under pressure, assistance to patients, in addition to adequate contact with the health team, the level of stress is elevated. On the other hand, a supervisor who needs to accompany numerous students may also feel more stressed, reacting to many simultaneous stimuli, not only offer less attention but also show impatience, generating conflicts with their students. Such behaviors, for some students, can lead to a significant reduction in assertiveness, problem-solving capacity, impulse control, self-actualization, and stress tolerance.

Therefore, it is recommended that the supervisors are sensitive to perceive the students' emotional difficulties so they can identify and monitor the most susceptible in a welcoming way; for this, one should consider the possibility of having classes with a smaller number of students.

Another factor that can emotionally affect students in the phase of mandatory curricular internships is the possible lack of unity in the way they are evaluated by different supervisors and, the larger the internship groups, the more easily these events can occur. The definition of which areas of competence students should reach may also not be clearly defined or understood by supervisors. Domingues et al.⁶ pointed out that the fact that different teachers evaluate the same student, with very different criteria, can generate negative consequences, both for the teacher and the student. For many supervisors, it is easier to assess technical skills than emotional ones. However, it is not clear or unified the criterion on how much a student must know to pass. Often, in the evaluation forms, only one or two points address non-technical aspects, such as professional ethics, frequency, or how to approach the patient¹⁸. Besides the lack of unity in the assessments carried out by the supervisors, also the expectations they place on students can influence the assessment. Students with higher prior skills may be charged more than students considered having a weak background. In the study by Larin et al.¹⁷, the students reported how three aspects affected their self-development: the behavior of other students, how feedback was given by the supervisor, and the clinical response of their patients. They also showed that they gained more confidence as the internship progressed, but that poorly directed feedback from the supervisor had a major direct negative impact on their self-confidence.

Clinical internships can be of fundamental importance, as they can provide opportunities for continued interprofessional learning and in a manner appropriate to the clinical environment. Active listening, negotiation, and discussion in formal spaces were seen as positive by the students interviewed by Robson & Kitchen¹³. Likewise, according to these authors, students may think that the result is positive

when the collaboration of the supervisor is regular, planned, and formal, which is characteristic of hospital environments. It must be considered, in turn, that the supervisor's collaboration is also influenced by the number of students under his command.

In less formal environments, such as community internships, in which the number of students per supervisor should be three to one, usually, in practice, this number is increased by the lack of supervision. Hilton and Morris¹⁸ reported that the students, accompanied only by a specific professional and without the multidisciplinary view characteristic of the teams found in hospital environments, reported missing the interdisciplinary discussions and the different points of view of the professionals involved in the team. In an intensive care environment, insufficient contact between team members is also characterized as a barrier, since the supervisor must mediate new, often critical situations in which the student needs to be proactive¹⁹.

Supervisor's identity

According to Resolution 559/201710 and Resolution No. 431 of COFFITO¹¹, they can act as supervisors of professional curricular internships that are physiotherapists duly hired by HEIs, while, by Law 11.788¹, professionals appointed by granting institutions to exercise such practices may be supervisors. The different conceptions of the aforementioned documents allow many HEIs to use these expedients to avoid hiring internship supervisors, allowing the service professionals to act as supervisors. Such practice becomes incoherent if a teaching work plan is required for the internship, which constitutes a didactic-pedagogical document, in addition to asking questions about the degree of the supervisor's commitment to the formation of the future professional²⁰.

Student training is one priority of the HEI and when the physical therapist supervisor is an employee of the institution, he is expected to know the PPC of the course in which he is inserted, participate in the course meetings and collaborate with the students' feedbacks in collegiate meetings and of teachers. In contrast, service supervisors may not be affiliated with HEI, with student education and, mainly, with social changes and the student's professional profile, diverging from the recommendations of ABENFISIO and Resolution 431.

So, the big question is the identity of the internship supervisor. Most times, he is a professional unrelated to academic discussions and with remuneration below, and distinct from that of the faculty. The hours paid by the HEIs are for the individual to be within the practice locations, not offering any type of remuneration for their qualification and approximation of academic processes. When the internship supervisor is in the category of teacher, the earnings are high, which allows him to contribute to the HEI, since he is paid to work in academic training. So, here is a reflection on whom to hire. The required skills need to be clearly defined in the evaluation processes and the selection boards of supervisors, and made explicit at the time of hiring, respecting important characteristics of these professionals. In this way, this will facilitate your commitment to quality higher education.

Regarding these aspects related to the characteristics of the supervisor, the recommendations of ABENFISIO are clear and establish that the internship supervisor must be a physiotherapist, have a job at the HEI, as a teacher, and have his career plan. He must also be regularly enrolled in the Regional Physiotherapy Council (CREFITO) of his constituency, being present throughout the internship period and allocating part of the workload to research and scientific production, in addition to being subordinate to a coordinator internship, hired by the respective HEI.

With changes in the world of work, new configurations can now be detected more easily, which does not necessarily mean achieving advances in the teaching-learning process. In Australia, for example, even though the physiotherapist has a well-established role in occupational health and academic training is valued as important in preparing for it, many supervisors of supervised internships in companies are not physical therapists²¹. Boucaut²¹, in a qualitative study conducted with internship supervisors, reported that HEI coordinators who want vacancies for supervised Physiotherapy internships in industries will face difficulties in hiring physiotherapists. In this study, of the nine interviewees, only two were physical therapists. As a result, three themes were emphasized after the analysis of the data, the mutual benefit, both by students and to the places of practice by gaining experience in real situations, the transfer, and acquisition of resources, knowledge, and skills provided by the students, and finally, that the investment of time in training was compensated by saving time for the host organization.

Supervisor's presence in mandatory supervised practice

In art. 1 of Resolution 431¹⁰, it appears that the mandatory curricular internship must have direct supervision by a physiotherapist in the course, duly hired by the IES, with specific hours for this activity, duly registered in the COFFITO / CREFITOS System. This article places the supervisor at the location of the curricular internship as essential. Gaiad and Sant'Anna²⁰ also reiterated that the supervisor's presence is necessary for the student's learning process and decision making. It is worth mentioning that face-to-face supervision can also mean protection for students and patients¹⁵.

Gaida et al.¹⁵ emphasized that the challenge is to balance academic supervision daily to provide progressive student autonomy, since preceptors are training future professionals. In this sense, the proximity of the supervisor implies greater or lesser preparation of the student to experience adverse clinical situations. Being more attentive to the services provided can enable prompt interference to reduce incidents or iatrogenic procedures for both the student and the client in the services scenarios of teaching practices. In short, the proximity of the supervisor may be related to the lower occurrence of incidents. In the investigation conducted by Gaida et al.¹⁵, about 50% of incidents in clinical stages, which resulted in injuries, occurred when the supervisor was absent, while approximately 20% occurred when they were present. Although the difference estimated by these authors was not statistically significant, it is known that the supervisor, being closer, can correct and conduct specific situations necessary for the trainee's growth, especially in more serious situations requiring faster resolution, as in cases of ICU care and hospital emergencies. Therefore, it is necessary to identify the most vulnerable and insecure students and offer closer and more careful supervision until they develop a good capacity to carry out more accurate diagnoses and more effective therapeutic planning.

New health challenges, markedly linked to market norms and training funding, are putting direct supervision in the background and the supervisor to guide the distance or even senior students supervising the youngest in training. Other forms of substituting supervised practice have been reported

in Australia by Gustafsson et al.²² with simulations of the proper environment, educational sessions, and access to the library. A possible justification for such conduct would be that mandatory practices could render the course without financial sustainability. Objectively, organizations/companies that accept to host internships have their own interests. If they do not achieve these interests, there is no reason to maintain them. The company's understanding, which justifies the incorporation of students into the work environment, is that they communicate well, demonstrate good research and observation skills, act professionally and ethically, respecting the confidentiality of patient data, and being able to work independently and as part of the team. These are the business skills for closing partnerships, turning companies into centers for organizing university curriculum activities.

It is also observed that the HEIs have been changing their PPC, in an attempt to adapt the training of future health professionals to the reality that currently presents itself. There is a need to have a university more committed to new ways of thinking and to form its future elites²³. For these authors, overcoming the challenge posed, whatever the university's social function in the training of future professionals is, on the one hand, to make them competent and committed to reality and on the other, to recognize communities as learning spaces to be they transformed²³. It is worth noting, therefore, that HEIs must make constant efforts to be sure of the professional profile of future graduates of Physiotherapy courses, if this was established in line with the philosophical, pedagogical, and epidemiological premises of the different internship fields, and if the practices training professionals are contextualized to the location in which the HEI is inserted². In this sense, Pedra et al.²⁸ emphasized that the physiotherapist's training must be aligned with the principles and guidelines of the SUS made possible through activities that promote the integration of teaching and service and practical experiences at the three levels of health care.

Time interval between specific disciplines and supervised internships

In the research documents and reports consulted, the curricular matrices of the Physiotherapy Courses

pointed out that the internships are scheduled to be offered at the end of the training. There is a predominance of basic disciplines at the beginning and specific disciplines of specialties in the course of training, which often raises, by the students, the search for experiences in non-mandatory curricular internships, with the claim that there is a great distance between theory and practice²⁴. This time interval can be observed in two ways. The first would be the one that students refer to most, which is the need for early internships; the other refers to the conceptual definition that admits the mandated supervised internship linked to the student's maturity, which justifies their inclusion at the end of the training. According to the recommendations of ABENFISIO⁸, the internship should occur after the student experiences practices and theoretical foundations capable of gradually qualifying him to the professional practice since the practice of the supervised internship integrates the final training trajectory. No more recent national data were found, but in 2017, Teixeira and Oliveira⁴ reported that in Santa Catarina only 10% of courses started internships in the fourth semester, but the majority (70%) in the sixth or seventh, and 10% at the end of the course.

Despite the countless discussions about supervised internships, the available scientific evidence suggests discontent among students^{2,20,25}. In a study carried out by Viana et al.²⁵ the main complaints of students were related to the concentration of practical activities in the final period of the course, which motivated the search for non-mandatory internships during the training with the justification that this practice would provide a better qualification for the market and greater preparation for the mandatory internship phase. Additional data from this research also shows that 90.2% of the students sought non-mandatory curricular activities motivated by the need to gain experience, 6.6% due to remuneration, 1.6% due to curiosity, and 1.6% due to the influence of family and friends²⁵. The feasibility of earlier practical opportunities, resulting from partnerships that promote teaching-service-community integration, can allow the Physiotherapy student to be trained to, in the future, expand their intervention capacity, experiencing under multidisciplinary supervision, health promotion actions, disease prevention,

rehabilitation, and recovery of health status, concerning patient rights²⁹. Purely theoretical activities on collective health do not provide learning, as Seriano et al.⁵ pointed out when reporting that, according to the students' perception, knowledge about SUS was only possible at the end of graduation with supervised internships. However, it warns of the need for an inspection by CREFITO and the Ministry of Education (MEC), and questioning the responsibility of companies or clinics that offer mandatory or non-mandatory internships, since irregularities, from the legal point of view, can be observed.

Silva & Da Ros², in the study whose aim was to analyze the academic training of the physiotherapists about the Family Health Program (PSF) from the perspective of the actors involved in this training, reported dissatisfaction of the students who were taking the mandatory supervised internship in the last year of the course in public health. According to the students, they had contact with the discipline related to this area only in the initial phase of the course with only a theoretical approach and, therefore, there was a large gap between theory and practice, generating insecurity and ignorance revealed only with the beginning of activities of that stage.

The training model in which the practice of the supervised internship happens only at the end of graduation, strengthens the disciplinary, fragmented, and technical training, with consequent non-commitment to the SUS and the needs of the population. For these authors, the university must contribute not only through professional training but also in the composition of scenarios and situations that promote interdisciplinary, multi-professional work, the appropriation of the health system in force in the country, and the interaction between the university and the society².

The practice of internships, when well directed, contributes to the construction of a professional profile focused not only on rehabilitation. It allows students to experience the process of integrality in health care and the direction of activities, considering the patient and his peculiarities, performing activities aimed at a globalized view of the subject, even if these stages are hospital. As an example of the aspects mentioned, in another study, students

from the last period of the Physiotherapy course performed activities, such as education and health promotion, discussion of clinical cases, care and evaluation of patients in the wards of a hospital that serves the Unified Health System. (SUS), and involved patients, their companions, and the health team of the hospital²⁴. Experiences of this type can expand the intervention capacity of professionals, in the sense of extending the integrality of care²⁷. However, at the beginning of the course, other actions can be taken in terms of primary prevention, which can make it possible to close the gap between theory and practice.

Introducing practical experiences in the initial disciplines of the course, whether through computer resources, discussion of clinical cases, anatomical models that represent patients in more or less complex clinical situations, and through the reading of slides and analysis scientific articles, from the beginning of the course, can motivate students and make them more active in their training. Such procedures can better prepare them for entry into supervised and mandatory internships and avoid early insertion in institutions not committed to professional training.

The important thing is that the internships can contribute significantly, making changes in the students, patients, teams, and family's reality. The student, when inserted in the mandatory supervised internship, presents himself as a subject with a larger and more mature theoretical framework and can offer an important contribution to society. It is worth mentioning that part of the mandatory supervised internships takes place in school clinics that, even if not linked to SUS, serve poor populations with profiles similar to those found in low and medium-complexity units. As these clinics adhere to an academic calendar, in some periods of the year, the practice can be discontinued and the patient's treatment is interrupted whenever the academic vacation occurs. It should be noted that these interruptions in care compromise the subjects undergoing treatment, the students' learning, as well as the ongoing research.

The results allow us to conclude that there are discrepancies and convergences between research reports and official documents that govern the mandatory internships in Physiotherapy. The main disagreements occur concerning the number of students per internship supervisor in the undergraduate course in Physiotherapy, the identity of the supervisor and their presence or absence during practical activities, the time interval between the theory and the mandatory curricular internship, and regarding the students per supervised practice shift. The recognition that the internship, as a mandatory and didactic-pedagogical, curricular practice, is when the student should be encouraged to develop autonomy and professional responsibility, interaction with the multi-professional team, and skill in handling patients are the converging points. These questions impose a reflection on the current training in Physiotherapy and the national and international tendencies to make the rules more flexible and to approach market issues. In other countries, the presence of non-physical therapist supervisors and remote supervision can already be evidenced. Such practices may be adopted in the national territory, if there is not a wide political discussion and a strong position in defense of class interests, such as bodies such as COFFITO, ABENFISIO, and others. The health framework of the Covid-19 pandemic may provide new insights into how mandatory supervised internships can occur from then on, but the need for them to be governed by unified national regulatory frameworks and focused on meeting SUS principles. New studies may walk in this perspective to strengthen the profession and get to know more closely the parameters used in Physiotherapy Courses throughout the national territory. Discussing internship activities in a more informed way, besides how it is done and why comparing the micro and macro-regions of a continental country can contribute to minimizing the asymmetries between the regions considering the socio-cultural aspects of each one.

Author contributions

Moreira C participated in the conception and design of the research; obtaining, analyzing, and interpreting the data, writing and critical review of the manuscript. Fraga-Maia H participated in the conception and design of the research, analysis, and interpretation of data, writing, and critical review of the manuscript. Sá SMP and Pinho AST participated in the analysis and interpretation of data, writing, and critical review of the manuscript.

Competing interests

No financial, legal, or political conflicts involving third parties (government, companies and private foundations, etc.) have been declared for any aspect of the submitted work (including, but not limited to, grants and funding, participation in advisory council, study design, preparation of the manuscript, statistical analysis, etc.).

References

1. Lei nº 11.788, de 25 de setembro de 2008 (Brazil). Dispõe sobre o estágio de estudantes; altera a redação do art. 428 da Consolidação das Leis do Trabalho – CLT, aprovada pelo Decreto-Lei no 5.452, de 1º de maio de 1943, e a Lei no 9.394, de 20 de dezembro de 1996; revoga as Leis nos 6.494, de 7 de dezembro de 1977, e 8.859, de 23 de março de 1994, o parágrafo único do art. 82 da Lei no 9.394, de 20 de dezembro de 1996, e o art. 6º da Medida Provisória no 2.164-41, de 24 de agosto de 2001; e dá outras providências. [Internet]. Diário Oficial da União. Available from: http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2008/lei/l11788.htm
2. Silva DJ, Ros MAD. Adding physiotherapy practitioners to family health teams and Brazil's National Health System (SUS): challenges in training. *Cien saúde coletiva*. 2007;12(6):1673-81. <https://doi.org/10.1590/S1413-81232007000600028>
3. Resolução nº 559, de 15 de setembro de 2017 (Brazil). Recomendações do CNS à proposta de DCN para o Curso de Fisioterapia. [Internet]. Diário Oficial da União. Available from: <https://conselho.saude.gov.br/resolucoes/2017/Reso559.pdf>
4. Santana TC, Pimenta MAA. Avaliação no Estágio em Fisioterapia sob a Ótica de Professores e Estudantes. *Meta: Avaliação* [Internet]. 2013;5(15):272-97. Available from: <https://revistas.cesgranrio.org.br/index.php/metaavaliacao/article/view/166>
5. Teixeira LJ, Oliveira MAC. Curricular traineeship in physical therapy. *Fisioterapia Brasil*. 2007;8(1):57-63. <https://doi.org/10.33233/fb.v8i1.1746>
6. Seriano KN, Muniz VRC, Carvalho MEIM. Perception of Physical Therapy students about their training to work for the Brazilian Unified Health System. *Fisioter. Pesqui.* 2013;20(3):250-5. <https://doi.org/10.1590/S1809-29502013000300009>
7. Domigues RCL, Amaral E, Zeferino AMB. The different perspectives in the assessment of learners during supervised clinical clerkship. *Rev. Assoc. Med. Bras.* 2009;55(4):458-62. <https://doi.org/10.1590/S0104-42302009000400023>
8. Colliselli L, Tombini LHT, Leba ME, Reibnitz KS. Supervised curricular clinical clerkship: diversifying settings and strengthening teaching-service interaction. *Rev. bras. enferm.* 2009;62(6):932-7. <https://doi.org/10.1590/S0034-71672009000600023>
9. Araújo FRO, Caldas MAJ, Batiston AP, Nashala Neto E, Ribeiro KSQS, Rocha VM, et al. Estágio curricular para os cursos de Graduação em Fisioterapia: recomendação da ABENFISIO. *Fisioterapia Brasil* [Internet]. 2010;11(4):12-5. Available from: <https://www.portalatlanticaeditora.com.br/index.php/fisioterapiabrasil/article/download/1595/2743>
10. Lei nº 4, de 19 de fevereiro de 2002 (Brazil). Institui Diretrizes Curriculares Nacionais do Curso de Graduação em Fisioterapia. [Internet]. Diário Oficial da União. Available from: <http://portal.mec.gov.br/cne/arquivos/pdf/CES042002.pdf>
11. Resolução 559, de 18 de setembro de 2017 (Brazil). Dispõe sobre as recomendações do Conselho Nacional de Saúde à proposta de Diretrizes Curriculares Nacionais do Curso de Graduação em Fisioterapia. [Internet]. Available from: <https://conselho.saude.gov.br/resolucoes/2017/Reso559.pdf>
12. Resolução nº 431, de 27 de setembro de 2013 (Brazil). Dispõe sobre o exercício acadêmico de estágio obrigatório em Fisioterapia. [Internet]. Diário Oficial da União. Available from: <https://www.coffito.gov.br/nsite/?p=3193>
13. Resolução nº 444, de 26 de abril de 2014 (Brazil). Altera a Resolução COFFITO nº 387/2011, que fixa e estabelece os Parâmetros Assistenciais Fisioterapêuticos nas diversas modalidades prestadas pelo fisioterapeuta. [Internet]. Diário Oficial da União. Available from: <https://www.coffito.gov.br/nsite/?p=3208>
14. Resolução nº 139, de 28 de novembro de 1992 (Brazil). Dispõe sobre as atribuições do Exercício da Responsabilidade Técnica nos campos assistenciais da Fisioterapia e da Terapia Ocupacional e dá outras providências. [Internet]. Diário Oficial da União. Available from: <https://www.coffito.gov.br/nsite/?p=2897>
15. Resolução nº 153, de 30 de novembro de 1993 (Brazil). Inclui Inciso V, no art. 7º. da Resolução Coffito 139, de 18.11.1992 (D.O.U. de 26.11.92), fixando a relação máxima de preceptor/acadêmico, quando o estágio curricular for promovido diretamente por Instituição de Ensino Superiores. [Internet]. Diário Oficial da União. Available from: <https://www.coffito.gov.br/nsite/?p=2911>
16. Gaida JE, Maloney S, Morgan P. Clinical incidents involving students on placements: an analysis of incidents reports to identify potential risk factors. *Physiotherapy*. 2015;101(2):219-25. <https://doi.org/10.1016/j.physio.2014.06.006>

17. Pereira AMA, Alves TP. A autonomia na disciplina estágio curricular supervisionado [Internet]. XI Congresso Brasileiro de Ensino Superior à Distância; 2014; Florianópolis, SC. Available from: <http://esud2014.nute.ufsc.br/anais-esud2014/files/pdf/127938.pdf>
18. Gribble N, Ladyshefsky RK, Parsons R. Fluctuations in the emotional intelligence of therapy students during clinical placements: implications for educators, supervisors, and students. *J Interprof Care*. 2017;31(1):8-17. <https://doi.org/10.1080/13561820.2016.1244175>
19. Hilton R, Morris J. Student placements—is there evidence supporting team skill development in clinical practice settings?. *J Interprof Care*. 2001;15(2):171-83. <https://doi.org/10.1080/13561820120039892>
20. Larin H, Wessel J, Al-Shamlan A. Reflections of physiotherapy in the United Arab Emirates during their clinical placements: A qualitative study. *BMC Med Educ*. 2005;5(1):3. <https://doi.org/10.1186/1472-6920-5-3>
21. Gaiad TP, Sant'Ana DMG. Análise da eficácia do estágio supervisionado em fisioterapia na formação profissional: uma visão do egresso. *Arq Ciênc Saúde UNIPAR* [Internet]. 2005;9(3):65-70. Available from: <https://www.revistas.unipar.br/index.php/saude/article/view/200>
22. Boucaut R. OHS students: Reaching a decision about hosting placements. *Physiother Theory Pract*. 2008;24(1):43-53. <https://doi.org/10.1080/09593980701686658>
23. Gustafsson L, Brown T, McKinsty C, Caine AM. Practice education: A snapshot from Australian university programmes. *Aust Occup Ther J*. 2017;64(2):159-69. <https://doi.org/10.1111/1440-1630.12337>
24. Mello AF, Almeida Filho N, Ribeiro RJ. Por uma universidade socialmente relevante. *Atos de Pesquisa em Educação* [Internet]. 2009;4(3):292-302. Available from: <https://proxy.furb.br/ojs/index.php/atosdepesquisa/article/view/1718>
25. Barbosa CR, Mourão ARC, Piatti NCTP, Torres RM, Silva MF, Dantas LCS. Atenção integral e integração ensino-serviço no estágio hospitalar de Fisioterapia: relato de experiência. *Cad. Edu, Saúde e Fis* [Internet]. 2017;4(8):89. Available from: <http://revista.redeunida.org.br/ojs/index.php/cadernos-educacao-saude-fisioter/article/view/1501>
26. Viana RT, Moreira GM, Melo LTM, Sousa NP, Brasil ACO, Abdon APV. The academic training for the professional education: the opinion of the Physiotherapy students. *Fisioter Pesq*. 2012;19(4):339-44. <https://doi.org/10.1590/S1809-29502012000400008>
27. Robson M, Kitchen SS. Exploring physiotherapy students' experiences of interprofessional collaboration in the clinical setting: A critical incident study. *J Interprof Care*. 2007;21(1):95-109. <https://doi.org/10.1080/13561820601076560>
28. Pedra AO, Blandino RSP, Ferrari M, Reisen H, Freitas GKFF. Aproximação da formação do fisioterapeuta na atenção básica em saúde. *Cad. Edu Saúde e Fis* [Internet]. 2017;4(8):57. Available from: <http://revista.redeunida.org.br/ojs/index.php/cadernos-educacao-saude-fisioter/article/view/1449>
29. Maciel RV, Silva PTG, Sampaio RF, Drummond AF. Teoria, prática e realidade social: uma perspectiva integrada para o ensino de Fisioterapia. *Fisioterapia em Movimento* [Internet]. 2005;18(1):11-7. Available from: <https://periodicos.pucpr.br/index.php/fisio/article/download/18522/17956>
30. Batiston AP, Bonilha LAS, Ferrari FP, Medeiros AA, Duenha C, Grosseman S, et al. Implantation of a new pedagogical proposal for the supervised internship in physical therapy in primary care: experience report. *Cad. Edu Saúde e Fis* [Internet]. 2017;4(8):48-55. Available from: http://revista.redeunida.org.br/ojs/index.php/cadernos-educacao-saude-fisioter/article/view/960/pdf_65