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Perception of clinical tutors belonging to family health centers in Chile about the barriers for clinical teaching in primary care.

Percepción de tutores clínicos pertenecientes a centros de salud familiar en Chile sobre las barreras para la docencia clínica en atención primaria.

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Abstract: Introduction: Clinical practice with real patients is essential in the training of healthcare professionals, allowing for the consolidation of competencies through the practice of procedures, skills, and processes. However, clinical teaching faces several barriers to its proper development. The objective of this study was to describe the perceptions of clinical professionals. of health that they play work of teaching clinic in six centers of health familiar in a commune of the Region Metropolitan of Chili about the barriers for he exercise of the teaching clinic in attention Primary Education (PHC). Materials and Methods: A descriptive, cross-sectional quantitative study was conducted. The sample included 166 participants who met specific criteria, such as experience of further of a year in attention primary and experience previous in teaching clinic. HE A survey validated through expert judgment was applied. Results: Participants surveyed considered that lack of time, incentives, adequate physical space, and teaching skills were the main barriers to clinical teaching. Other factors, such as student attitudes, and lack of interest for carry out teaching were also mentioned. Conclusions: The results of This study reveal that the teaching clinic faces several significant barriers. These limitations indicate the need to review the conditions under which it is currently developed. the teaching clinic for ensure processes of teaching suitable for the students.

Words clue: practices clinics, attention primary, education medical.

Abstract. Introduction: Clinical practice with real patients is essential in the training of healthcare professionals, allowing the consolidation of competencies through the practice of procedures, skills, and processes. However, clinical teaching faces various barriers that hinder its proper development. The objective of this study was to describe the perception of healthcare professionals who perform clinical teaching in six family health centers in a community of the Metropolitan Region of Chile regarding the barriers to clinical teaching in primary health care (PHC). Materials and Methods: A cross-sectional descriptive quantitative study was conducted. The sample included 166 participants who met specific criteria, such as more than one year of experience in primary care and previous clinical teaching experience. A validated survey, based on expert judgment, was applied. Results: The surveyed participants considered that the lack of time, incentives, appropriate physical space, and insufficient teaching competencies were the main barriers to clinical teaching. Other factors such as students' attitudes and lack of interest in teaching were also mentioned. Conclusions: The results of this study reveal that clinical teaching faces several significant barriers. These limitations highlight the need for to review of the current conditions in which clinical teaching takes place, to ensure adequate teaching processes for students.

Keywords: clinical practice, primary health care, medical education.

1. Introduction

Clinical practice, and especially clinical internship, are a fundamental part of the training process for all health professionals, allowing for a real approach to the future work environment, where their competencies are strengthened based on the practice of procedures and skills (1). Because of this, learning in clinical environments is related to self-directed processes, dependent on personal motivations, collaborative and immersive aspects with the health professional, where the student is able to contrast ideas and build new learning, based on experience and the clinical context. Therefore, clinical practices are essential to achieve the development of professional competencies (2).

Clinical teaching requires the organization and planning of various aspects in order to fulfill the aforementioned purposes. We can mention, for example, that clinical teachers must have clinical attributes, personal qualities and teaching skills to fulfill an effective role promoting learning and professionalism in students (3) and their competencies are constantly being reviewed either by them (4) or by students from different disciplines (5-6). In addition, teaching should be planned aligning the learning objectives and the content that can be presented. Finally, it requires promoting clinical reasoning and providing effective feedback, which has a greater impact when it is delivered on specific situations and is delivered immediately (7).

However, maintaining all of the aforementioned characteristics is not easy. According to some studies, there are barriers that can arise in different clinical practice contexts from the perspective of clinical instructors and students, where elements such as lack of time, space, money, feedback, increased workloads, stress, low student motivation, lack of teaching experience, lack of teaching planning, limited teaching infrastructure, lack of interest, and lack of incentives and recognition for teaching, among many others, are pointed out (8-9).

Reports on these barriers to clinical teaching are scarce, heterogeneous in their research methodologies, and focused primarily on the in-hospital setting, resulting in limited experience in primary care. The objective of this study was to describe the perceptions of clinical health professionals who perform clinical teaching duties in six family health centers in a municipality in the Metropolitan Region of Chile regarding the barriers to clinical teaching in primary care (PHC).

2. Methods

A quantitative, descriptive, cross-sectional study was conducted. The sample consisted of primary care professionals who perform care functions in family health centers (CESFAM), who are currently or previously engaged in clinical teaching, and who are located in a commune in the metropolitan region of Chile. The selection criteria included having previously or currently engaged in clinical teaching and having more than one year of experience working in primary health care. The participants were also required to complete a survey after signing an informed consent form. The variables included aspects related to their experience in clinical teaching, their experience working in primary care, and their perceptions of factors considered barriers to clinical teaching.

To obtain the information, a single, in-person survey was administered during field meetings at six family health centers. The survey was administered approximately seven months after approval by the ethics committee. The survey was validated through expert judgment by three university professors with master's degrees in health sciences education. The comments and responses were analyzed and incorporated into the final version of the instrument. The survey questions were Likert-scale responses to gauge respondents' preferences.

The data were tabulated and stored in an Excel spreadsheet (Microsoft) and subsequently analyzed using descriptive statistics in terms of frequency and measures of central tendency. Finally, the study was approved by the Ethics Committee of the Metropolitan Health Service of the Metropolitan Region of Chile on August 8, 2023. The confidentiality of the results and the identity of the respondents was maintained.

3. Results

The details of the responses provided by the participants are shown in Table 1. A total of 166 surveys were conducted, of which 62.63% (119) corresponded to female participants. The distribution of the respondents by professional status was: medicine 22.89%, nursing 16.86%, obstetrics 16.26%, dentistry 11.44%, kinesiology 10.84%, nutrition 8.43%, psychology and social work both with 4.21%, occupational therapy 3.01% and early childhood education pedagogy with 1.85%. The average age for this group of professionals was 38.44 years, with a minimum age of 25 years and a maximum of 64 years. The average work experience in primary care was 11.02 years, with a range that varied between 1 and 40 years. The number of professionals who had performed clinical teaching, separated by their years of experience in PHC, grouped into 5-year intervals, corresponded to: 34.33% for those between 1 and 5 years, 27.71% between 6 and 10 years, 14.45% between 11 and 15 years, 7.22% between 16 and 20 years, 7.83% between 21 and 25 years, and 8.43% of those 26 years or older. Professionals with the least clinical experience were the most frequent group that performed clinical teaching.

At the time of the survey, 46.8% reported currently teaching clinical training. However, of those not currently teaching, 46.7% had done so less than a year ago, 33.3% between 1 and 3 years, 12.2% between 4 and 6 years, and 7.2% more than 6 years ago. Of the professionals who had taught clinical training, 68.07% had never taught in the classroom, and 31.92% had taught at least once. Furthermore, 95.2% reported having taught clinical training to students in their own field, and 4.8% in other fields.

Finally, before consulting them about the barriers associated with the practice of clinical teaching, they were asked how difficult they considered it to be able to correctly develop their role as clinical teachers, to which they responded that it was “very difficult” by 8.4%, “difficult” by 41.6%, “neither easy nor difficult” by 36.7%, “easy” by 10.2% and finally “very easy” by a lower percentage of 3%.

Regarding the elements considered barriers to the proper development of clinical teaching, respondents initially agreed, in a high proportion, that "lack of time" is a limitation associated with balancing teaching with clinical duties or other responsibilities, with this trend occurring in over 90% of all respondents.

The second factor observed, with a high proportion of responses considering it a barrier, is the "lack of incentives" for faculty members who teach clinical courses. The type of incentive is not specified. The total number of respondents considering this a barrier is close to 90%.

Table 1. Distribution of responses chosen by respondents according to the degree of agreement on their behavior as a barrier to clinical teaching (TA: totally agree; DA: agree; NAD: neither agree nor disagree; ED: disagree; TD: totally disagree).

Barriers	TA	DA	NAD	ED	TD
Lack of time for teaching by work clinics or other responsibilities.	82.5%	13.3%	1.8%	1.2%	1.2%
Few incentives for development of the clinical teaching.	75.9%	13.9%	7.8%	1.2%	1.2%
Lack of clinical teaching skills of the professionals of health.	27.1%	34.3%	19.9%	11.4%	3%
A bad attitude of the students with teaching activity .	13.9%	13.3%	33.9%	33.9%	4.8%
Lack of space suitable for clinical teaching.	38.6%	31.3%	15.7%	11.4%	3%
Possible negative impact in care and/or relationship with the patient.	2.4%	24.1%	31.9%	33.7%	7.8%
Lack of interest by some of the health professionals.	12.7%	38.9%	25.9%	13.9%	7.8%
Lack of clinical competencies of the health professionals.	10.8%	28.3%	21.7%	31.3%	7.8%

Thirdly, the “lack of adequate physical space” for clinical teaching is considered a significant barrier, with 70% of respondents expressing “strongly agree” and “agree.”

The “lack of clinical teaching skills among health professionals” is the fourth most common factor cited by respondents as a barrier to clinical teaching, with 34.3% “in agreement” and 27.1% “strongly agree.”

While the following factors can be considered barriers, the trend in the alternatives chosen by respondents does not focus on one or two alternatives, marking a clear trend compared to the four aspects previously reviewed. For example, "students' poor attitude toward teaching" primarily accounts for the preferences of "neither agree nor disagree" and "strongly disagree," with 33.9% of both options. A neutral or negative stance on this factor is equivalent. Another similar example, where assessments do not lean solely toward one trend, relates to the factor related to a "possible negative impact on care and/or the relationship with the patient," where the main preferences are "disagree" with 33.7% and then "neither agree nor disagree" with 31.9%, taking this neutral stance. The "lack of interest on the part of healthcare professionals" in teaching activity shows 39.8% of respondents "agree" and 25.9% "neither agree nor disagree," these being the two most common responses. Finally, the "lack of clinical skills" among the main responses is quite opposite on the scale of participants' appreciation. On the one hand, we have 31.3% "disagree" options and on the other, 28.3% "agree."

The responses between the two genders did not show major differences. However, the trend in the results was not the same. For example, the "lack of clinical teaching skills among health professionals" was the most frequently cited option among females, representing 31.1% of responses under the "strongly agree" option, while males only "agreed" with this option. The "poor attitude of students" was the most frequently cited option among males, showing a predominance of "disagreement," standing out as a barrier to clinical education, being the most voted option (37%). However, women indicated that they "neither agreed nor disagreed" with this element, representing a magnitude of 37.8%. Finally, regarding the "possible negative impact on care and/or the relationship with the patient," men indicated that they disagreed with 42.6% of their preferences, and women indicated that they "neither agreed nor disagreed" with 33.6% of their preferences, both options being their highest preferences.

4. Discussion

The results of this research highlight that professionals with fewer years of clinical experience (1 to 5 years) are those who perform the greatest proportion of clinical teaching. This suggests that new professionals must assume these teaching duties while they are still developing professional experience. This could reflect a PHC structure that requires new staff to contribute immediately to clinical training, possibly without comprehensive support for the development of teaching skills. This is relevant considering that participants consider clinical teaching training a barrier to developing this activity.

Lack of time and incentives

Lack of time to balance clinical and teaching responsibilities was identified as the main barrier by over 90% of respondents. This finding is consistent with other studies that indicate how increased healthcare demand and workload limit professionals' ability to dedicate time to teaching (8-10). A lack of incentives, identified by a similar percentage of respondents, suggests that healthcare professionals perceive their teaching role as insufficiently recognized or rewarded, and is also reflected in other studies (8, 11). This lack of incentives could be limiting the development of clinical teaching, as a lack of incentives can lead to lower motivation and commitment to these tasks, even leading to non-cooperation with students (11). Incentives may not be exclusively financial, but may include professional development opportunities, such as clinical teaching training, greater access to educational resources, and formal recognition of teaching duties. This aspect raises the need to review incentive policies in PHC in Chile to foster an environment that values and supports clinical training, particularly in a context where qualified faculty are needed to train future health professionals.

Infrastructure and spaces for teaching

The lack of adequate physical spaces, identified by 70% of respondents as a barrier, highlights a structural limitation in PHC that could be affecting both the quality of clinical teaching and the learning experience of students. In many health centers, the infrastructure is primarily designed for patient care, and the need for areas dedicated to clinical training is not considered. This limits the possibility of creating optimal learning environments, such as simulation rooms or discussion areas. The experiences of other countries share these factors, being pointed out by students (12) and professionals (9), especially when there are problems of overstaffing exceeding the capacity of the physical space, human resources, and available materials (11). The inclusion of specific spaces for clinical teaching in PHC could improve learning and facilitate an environment that favors instruction without interfering with direct patient care.

Competencies in clinical teaching

The perception of a lack of clinical teaching skills among healthcare professionals (61.4% in agreement and 6% in strong agreement) stands out as a significant barrier. This finding suggests that many PHC professionals, although willing to teach clinically, feel they lack the necessary pedagogical training to perform this role effectively. Other studies have addressed this perception among healthcare professionals in Chile and share it (4). Furthermore, it has frequently been considered a limitation for teaching internationally from the perspective of students and faculty alike (8-10, 12-15). In a systematic review, the lack of teacher training was a recurring theme in the included articles, considering the need to provide effective feedback to students (16). Clinical teaching requires competencies that go beyond merely clinical ones. While not minimizing their relevance, these competencies require the development of transversal skills, such as effective communication and teaching and evaluation strategies, which are not traditionally part of the training of healthcare professionals. This result reinforces the need for clinical teaching training programs for professionals who perform these tasks.

Factors least agreed upon by respondents

Some factors, such as student attitude and impact on patient relationships, were less consistent among respondents. For example, one-third of professionals expressed neutral or disagreement regarding student attitude and its potential impact on patient relationships. This could suggest that the perception of these barriers is influenced by individual factors, such as each professional's personal experiences with students or the specific context of the health center. The aforementioned factors appear in the literature as barriers to clinical teaching. A poor attitude (8), low motivation and lack of interest (10, 14), personality traits (15), lack of preparation, fear during care, and a lack of professional attitude (10) on the part of students are recurring themes. Even so, the variability in participants' responses could indicate that these factors are not considered generalized barriers, but rather contextual aspects that affect clinical educators in various ways.

Also, although less frequent, the possible negative impact on user care has been reported as a barrier, where users become dissatisfied or uncomfortable when treated by students (11). This is especially relevant in the field of care in Chile, considering that the Law of Rights and Duties of the Patient empowers the user to refuse participation, whether procedural or observational, of a student if required. Other reports indicate that users refuse to receive care from students (10) or that they are not given enough information (16). This situation can limit students' access to significant clinical learning experiences, decreasing the possibility of the student developing generic competencies, such as communication skills, clinical reasoning, and the ability to practice different procedures in real situations.

Other factors not addressed by this study.

In light of this discussion, we cannot fail to mention other elements considered barriers that were not addressed by this research and are part of its limitation. For example, there were barriers associated with the behavior of teachers who had a lack of communication skills with their students (11-12, 16), had uneven treatment among their students (12) or a low or unwillingness to carry out clinical teaching (11, 16). There are barriers associated with problems in the organization, design and implementation of teaching activities where these are not aligned with the objectives of the practice, with theoretical activities not being concordant with practical classes (12-13, 16), which is reported by both students and clinical teachers, with planning being a relevant aspect to consider (17).

Finally, training as a clinical teacher requires a body of skills and knowledge that is essential to develop in health professionals, therefore, studying the barriers to teaching, in different contexts and from different methodological approaches, would allow the creation of new strategies to ensure teacher training, promote a good educational environment and favor a correct role model for students (18).

5. Conclusions

- The results of this study reveal that clinical teaching in Primary Health Care faces several significant barriers, the most important of which are a lack of time, incentives, and adequate physical space.

- These barriers indicate the need to review the conditions under which clinical teaching is currently conducted to ensure adequate teaching processes for students. The perceived lack of clinical teaching competencies among professionals suggests that training in pedagogical skills is an area for improvement. The implementation of teacher training programs in primary care, along with the creation of mentorships, could strengthen the preparation of professionals and improve the quality of clinical teaching.

- Future studies could expand this analysis to other health contexts, as well as further investigate the impact of each of these barriers on the teaching experience and the training of health professionals.

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