# Preceptory practice in specialized public services as a learning scenario in dentistry training

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#### **ABSTRACT**

The preceptory practice is one of the pillars in the process of teaching-service integration, allowing the practice of various professional skills and proposing a new way of thinking about training. Sharing experiences, bringing together theory and practice in a dynamic and participative way, leading the student to perceive the integral approach of the patient and commitment to the health team, the SUS service (Brazilian Unified Health Service), are practices that provide gains in the learning process. This research aimed to outline the profile of skills and abilities of dentists who work in public secondary and tertiary health care services in the city of Campina Grande / PB in order to identify the characteristics and expectations about the preceptory practice. This is an observational, quantitative, descriptive, cross-sectional study developed through field research with data collection through questionnaire application. The majority of professionals aged up to 37 years (55.9%), males (52.9%), with graduation time of 13 years or less, who reported that teaching-service integration is extremely important (70.6%), or never participated in training for preceptors (67.6%). All professionals with shorter graduation time reported feeling prepared for the preceptory function and, in this aspect, the majority who wanted to act as preceptor (92.0%) reported that they felt prepared for the activity. Participants understand the teaching-service integration as a potential collaborative strategy of the process of changing practices in health education, demonstrating the desire to work as preceptors and participate in training programs in lifelong education.

**Descriptors:** Preceptorship. Public Health. Teaching. Dentistry.

#### 1 INTRODUCTION

According to the Federal Constitution, the Unified Health System (SUS) management is responsible for the training of human resources in the health area, as well as its area of action, scientific and technological development. Article 27 of Law 8080/90<sup>1</sup> states that the public services that integrate the SUS are environments for teaching and research, allowing the articulation of interests of Higher Education Institutions and SUS, in order to improve the quality of service to the population<sup>2</sup>.

Curricular Guidelines The National undergraduate (DCN) for health courses implemented since  $2002^3$ reaffirmed importance and the duty of training focused on the needs of SUS for health professionals in order to adapt professional performance to the reality of the Brazilian population and to allow students the application of theoretical knowledge, not only in a technical way, but also to develop humanized, critical and relational skills<sup>4,5</sup>.

The teaching-service integration is among important aspects present in this the restructuring, which is understood as the fundamental axis of the pedagogical process and responsible for the integration of the university to health services, providing benefits to students respect to obtaining knowledge, expectations and experiences related to the training process<sup>6</sup>. The differentiated health care and network system reflects in internship experiences, providing the experience of the reality in the levels of care, in addition to managing experiences, promoting understanding on the conformations of Health Care Networks<sup>7,8</sup>.

In such learning scenarios, the great characteristic of the health preceptor is to be the professional that works within the healthcare environment and also who makes it conducive to the teaching and professional practice. The intermediation of training, the development of clinical and routine skills, and the evaluation of the training professional are shown as primary functions<sup>9,10</sup>.

The ongoing challenge of training health professionals aware of the needs of the population and with skills for the development of their activities is present in the routine formation and life experience of both those who already work in SUS and those still in the university. There is still lack of studies in literature aimed at understanding the profile of professionals in the Dentistry area acting in the SUS in relation to the preceptory practice, thus demonstrating the relevance of these data for the teaching-service integration and management to be aware of the skills of professionals who integrate the care network.

In this sense, the aim of this study was to elaborate and apply an instrument to evaluate the skills and abilities of dentists as preceptors in the medium and high complexity levels of SUS in the municipality of Campina Grande/PB.

#### 2 METHODOLOGY

This is an exploratory, quantitative and analytical study with cross-sectional design. The research was developed in the municipality of Campina Grande/PB, in the Northeastern region of Brazil, with all dentists working in the medium and high complexity levels of SUS.

At medium complexity level, professionals working at Centers for Dental Specialties (CEOs) and at the "Alcides Carneiro" University Hospital (HUAC) were approached, totaling 21 dentists. In the tertiary health care, represented by the "Dom Luiz Gonzaga Fernandes" Hospital of Emergency and Trauma, there were 14 oral maxillofacial surgeons on duty. One professional who was not

in full exercise of the function during the research period was excluded.

The questionnaire used to evaluate the profile of preceptors and their respective fields of work was constructed based on DCN for the Dentistry courses, approved in 2002, with the intention of adapting the training in the area in a manner consistent with the needs of SUS, which provide the basis for the reorientation of the teaching model<sup>3</sup>.

Data were submitted to descriptive statistical analysis aiming to characterize the sample, as well as analytical statistical analysis, in which Fisher's exact test was used to investigate associations among qualitative variables<sup>11</sup>. The significance level was set at 5% (p <0.05). All analyses were performed using the IBM SPSS Statistics version 20.0 software,

considering 95% confidence interval.

The study complied with norms of Resolution No. 466/2012 of the National Health Council that regulates research on human beings, and was approved by the Research Ethics Committee of the State University of Paraíba under CAAE number 63009916. 7.0000.5187, receiving consent from all institutions participating in the study.

#### **3 RESULTS AND DISCUSSION**

Table 1 shows the distribution of participants according to sociodemographic characteristics, training and professional profile. Most were males aged up to 37 years and reported to have graduation time of 13 years or less, and worked in the secondary health care.

Table 1. Distribution of participants according to sociodemographic characteristics, graduation time and professional performance

Variables	n	%
Age*		
$\leq$ 37 years	19	55.9
> 37 years	15	44.1
Sex		
Male	18	52.9
Female	16	47.1
Graduation time (years)*		
≤ 13 years	19	55.9
> 13 years	15	44.1
Health care level		
Secondary	20	58.8
Tertiary	14	41.2
Service time (years)*		
≤7 years	20	58.8
> 7 years	14	41.2
\$ X 7	<u> </u>	

<sup>\*</sup> Variables dichotomized by the median

As in the present study, other authors<sup>12-14</sup> emphasized the teaching-service as an extremely important factor in professional training (table 2), and the theoretical-practical correlation,

teamwork, reorganization of the care model and the coping with the true health needs of the population are among the differentials of such integration.

Table 2. Distribution of participants according to perceptions about teaching-service integration

Variables	n	%
How do you evaluate the teaching-service integration (trainees in the SUS		
network) in professional training?		
Unimportant	0	0.0
Little important	0	0.0
Important	6	17.6
Very important	4	11.8
Extremely important	24	70.6
Do you know the meaning of the preceptory activity in dentistry?		
Yes	33	97.1
No	1	2.9
Do you believe that the preceptory activity is really important in student		
training?		
Yes	34	100.0
No	0	0.0
Have you participated in any training program for preceptors?		
Yes	11	32.4
No	23	67.6

The initiatives promoted by such integration strengthen the co-responsibility of institutions involved in the process, the university in the provision and enhancement of care and services in the training and involvement of preceptors <sup>12,13,15</sup>. Internship provides an effective contact between student and community, extremely productive for the teaching-learning process, promoting the development of relationships, increasing the perception of individuals inserted in the social environment, and leading to a more humanized health training <sup>12,16-18</sup>.

The didactic-pedagogical training of preceptors is necessary for adequate interaction with students in public health services<sup>6</sup>. A key point of extreme relevance, the absence of training programs directed to professionals for the preceptory activity, is identified from results shown in table 2, and it was reported in literature that preceptors do not have continued formation as an item present in their work

schedule<sup>6,19</sup>.

Some authors<sup>20,21</sup> emphasize that the training of health professionals must be carried out in a permanent and continuous, nonfragmented way, being part of the daily routine, contributing to the performance of their function, promoting a consistent reflection on the health care model from partnerships established among educational institutions, services, the community, entities and the sectors of civil society that may be involved.

Table 3 shows the distribution of participants according to perceptions about the preceptory activity and the relationship with the trainee. The majority reported working or to have worked as preceptors and that there are difficulties in the process of preceptorship development, among them: lack of training program to work as preceptor, lack of financial incentive and lack of support from educational institutions.

Within this context, the lack of training

programs for preceptory performance was highlighted as one of the main difficulties faced for its exercise, a characteristic also present in the study carried out by Souza and Carcereri<sup>6</sup>.

The lack of financial incentive for the preceptory performance and lack of support from educational institutions were other aspects that were highlighted in the list of difficulties faced. These difficulties are also found in the study developed by Trajman et al.<sup>22</sup>, in which the majority of professionals do not find institutional support or opportunities for access to specialized training courses in family health, collective health or even for the exercise of general clinic, according to priorities established for the sector.

According to the study, there is need for improvement of the working conditions with respect to remuneration. Trajman et al.<sup>22</sup> emphasize that the best remuneration for their activities is more important than the salary supplement for the preceptory task. In this way, the professional understands the preceptory activity as part of their attributions, and can be

incorporated into the work environment as part of the permanent education strategy.

Missaka and Ribeiro<sup>20</sup> reported that without adequate training and participation of the preceptor regarding the planning and execution internship of activities. objectives, effectiveness and results will probably not be reached. It should be emphasized that the training of preceptors should be supported and understood as priority role in Higher Education Institutions, focused both on professional updating and on teaching functions. Among the functions attributed to universities, this is one of their great vocations, and should be the main counterpart in with Municipal agreements Health Secretariats<sup>22</sup>.

The skills and abilities based on the study instrument are closely linked to the knowledge required for the training of dentists in accordance with Article 4 of DCN that are Health Care, Decision Making, Communication, Leadership, Administration and Management, Continued Education<sup>3</sup>.

Table 3. Distribution of participants according to perceptions about the preceptory activity

Variables	n	%
Do you work or have you worked as a preceptor?		
Yes	24	70.6
No	10	29.4
Are there difficulties in the process of preceptorship development?		
Yes	23	67.6
No	11	32.4
Which of the following alternatives do you consider to be a difficulty for the		
preceptory practice? *		
Lack of training program to work as preceptor	24	70.6
Lack of commitment of students	12	35.3
Waste of clinical time with student guidance	1	2.9
High student demand	1	2.9
Increase in workload	6	17.6
Lack of financial incentive	20	58.8
Lack of support from educational institutions	18	52.9
Lack of inputs (instruments, PPEs, educational materials, etc.)	14	41.2

<sup>\*</sup> Participant could indicate more than one alternative.

According to table 4, the respect for the principles of bioethics and professional ethics, constant updating, understanding the importance of new knowledge and internships for future generations of professionals, as well as the ability for effective decision making were the competencies best evaluated regarding their level of importance by the study participants. Rocha and Ribeiro<sup>10</sup> reported that among the most important characteristics of a good preceptor are the commitment to student learning, knowledge of the preceptor's role as a trainer and the ability to encourage student learning.

In the association of questions regarding the professional's graduation time and in terms of feeling prepared for the preceptory function (table 5), statistical significance was observed. All professionals graduated for thirteen years or less have reported feeling prepared for the preceptory function, while a significant number of professionals with longer graduation time reported not feeling prepared for such a function. In this way, the DCN plays an important role in curricular restructuring since its publication and the reflection on changes in practices that contribute to the teaching-service integration through integrated actions, providing benefits for both.

Based on the above, it could be concluded that the implantation of DCN has impacted the formation of new professionals that are faced with a new reality where a broad professional practice is defended, contextualized, with extramural activities that allow for an approximation of real work situations and the development of competences for such<sup>8, 21</sup>.

In this way, it could be concluded that the professionals' feeling about being prepared for the preceptory activity reflects in the desire of these professionals in acting or not in this function. It was identified that most professionals who demonstrated the desire to act as preceptor,

stated that they feel prepared for the preceptory activity (table 6).

It is necessary to create training programs that contribute to the training and continued education of these professionals who are faced with the need for constant updating and resolving measures regarding challenging circumstances through the understanding of active pedagogical practices in favor of the training of students who will be inserted in the service in the future.

In this way, it seems that preceptors master professional training knowledge and seem to be prepared to reproduce it. However, there is no mastery of pedagogical knowledge, which is necessary for the organization of training actions, such as the various teaching-learning processes and the different evaluation modes, generating an intuitive performance, and there may be confusion between information transmission and teaching<sup>20</sup>.

#### **4 CONCLUDING REMARKS**

According to data collected, the study pointed out that in the medium and high complexity levels, among the 34 professionals, teaching-service integration the considered extremely important; however, a significant number of professionals did not participate in training for preceptors, even reporting that they act or have already acted as claiming difficulties preceptors, in preceptory process. There was a significant association between feeling prepared for the preceptory activity and graduation time, as well as with the desire to act as a preceptor.

According to the findings of the study, it is suggested that in order to obtain better effectiveness in the evolution of learning processes from the needs and expectations of professionals, similar studies with other professional health categories should be carried out, covering localities polarized by municipalities

Table 4. Distribution of participants according to perceptions about competences that characterize a good preceptor's profile

Variables	n	%
Evaluate the following competencies according to the degree of relevance to a		<del></del> -
good preceptor's profile:		
- Ability to develop attributions in their level of health, both individually and		
collectively		
Unimportant	0	0.0
Little important	1	4.2
Important	5	20.8
Very important	9	37.5
Extremely important	9	37.5
- Practice in an integrated, resolutive and continuous manner with other health		
levels		
Unimportant	0	0.0
Little important	2	8.3
Important	8	33.3
Very important	8	33.3
Extremely important	6	25.0
- Ability to make decisions effectively and wisely		
Unimportant	0	0.0
Little important	1	4.2
Important	3	12.5
Very important	6	25.0
Extremely important	14	58.3
- Respect for the principles of bioethics and professional ethics		
Unimportant	0	0.0
Little important	1	4.2
Important	1	4.2
Very important	4	16.7
Extremely important	18	75.0
- Accessibility, ensuring interaction with other professionals and the general		
public		
Unimportant	0	0.0
Little important	1	4.2
Important	6	25.0
Very important	5	20.8
Extremely important	12	50.0
- Ability to lead and manage human, material and information resources		
Unimportant	0	0.0
Little important	1	4.2
Important	4	16.7
Very important	7	29.2
Extremely important	12	50.0
- Constant updating, understanding the importance of new knowledge and		
internship for future generations of professionals		
Unimportant	0	0.0
Little important	1	4.2
Important	2	8.3
Very important	3	12.5
Extremely important	18	75.0

Table 5. Association between professional training time and feeling prepared for the preceptory

activity

Graduation time				
Variables	≤ 13 years	> 13 years	Total	p-value
	n (%)	n (%)	n (%)	
Do you feel prepared for the preceptory activity?				0.004*
Yes	19 (100.0)	9 (60.0)	28 (82.4)	
No	0(0.0)	6 (40.0)	6 (17.6)	

Fisher exact test. \* p < 0.05.

Table 6. Association between the desire to act as a preceptor and feeling prepared for the preceptory

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Variable	Do you have the desire to act as a preceptor?			
	Yes	No	Total	p-value
	n (%)	n (%)	n (%)	
Do you feel prepared for the prece	0.031*			
Yes	23 (92.0)	5 (55.6)	28 (82.4)	
No	2 (8.0)	4 (44.4)	6 (17.6)	

Fisher exact test. \* p < 0.05.

that offer higher education courses in the health area, evaluating the contingents and profiles of preceptors, considering the recommendations of official bodies that govern higher education in the country.

According to the findings of the study, it is suggested that in order to obtain better effectiveness in the evolution of learning processes from the needs and expectations of professionals, similar studies with other professional health categories should be carried covering localities polarized municipalities that offer higher education courses in the health area, evaluating the contingents and profiles of preceptors, considering recommendations of official bodies that govern higher education in the country.

### **RESUMO**

## Preceptoria nos serviços públicos especializados como cenário de aprendizagem na formação em Odontologia

A preceptoria é um dos pilares no processo da integração ensino-serviço, oportunizando a prática de diversas competências profissionais e propondo uma nova forma de pensar a formação. Partilhar experiências, articular teoria e prática de forma dinâmica e participativa, incentivar o estudante induzindo-o a uma abordagem integral do paciente e comprometimento com a equipe de saúde, o serviço e o SUS, são práticas que proporcionam ganhos no processo aprendizagem. Esta pesquisa objetivou traçar o perfil de competências e habilidades dos cirurgiões-dentistas que atuam nos serviços públicos de atenção secundária e terciária à saúde na cidade de Campina Grande/PB a fim de identificar as características e expectativas acerca do exercício da preceptoria. Tratou-se de uma pesquisa observacional, quantitativa, descritiva, do tipo transversal, desenvolvida por meio de pesquisa de campo, com levantamento de dados por meio de aplicação de questionário. A maioria dos profissionais tinha até 37 anos de idade (55,9%), sexo masculino (52,9%), com tempo de formação igual ou inferior há 13 anos, assinalando que a integração ensino-serviço é extremamente importante (70,6%),participou de formação para preceptores (67,6%). Todos os profissionais com menor tempo de formação relataram sentir-se preparados para a função de preceptoria e, nesse aspecto, a maioria que desejou atuar como preceptor (92,0%) afirmou sentir-se preparado para a função. Os participantes compreendem a integração ensino-serviço como potencial estratégia colaboradora do processo de mudança de práticas na formação em saúde, demonstrando desejo de atuar na preceptoria e participar de programas de capacitação em educação permanente.

**Descritores:** Preceptoria. Saúde Pública. Ensino. Odontologia.

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