Practices of teaching-service-community integration and training in Dentistry: possible connections and flows in health education

Larissa Campos Rodrigues Pinheiro*; Reyjanne Barros de Carvalho**; Patrícia Ferreira de Sousa Viana***

* Multiprofessional Residence in Health Family and Community, State University of Piauí
** Master in Science and Health, Federal University of Piauí
*** Master in Science and Health, Professor of the Dentistry program, Federal University of Piauí

Received February 02, 2018. Approved December 08, 2018.

ABSTRACT
The research aims to understand, from the point of view of the preceptor, the practices of integration teaching-service-community experienced during the training in the Dentistry program. It is a qualitative, descriptive and exploratory study using the focal group technique. From the analysis of the data emerged four thematic categories: the construction of the identity of the preceptor of the Dentistry program; the preceptorship and its polysemy; the Family Health Strategy as a field of practice; and potentialities and weaknesses in teaching-service-community integration. The preceptors acknowledge the contributions of the teaching-service-community integration for the training in the Dentistry program. The role of the preceptor was pointed out as the facilitator of learning, who in exercising his function also experiences a constant theoretical update. The construction of the identity of the preceptors is realized as an unfinished process and strategies are pointed out so that the desired changes in the formation in Dentistry can be realized. The Family Health Strategy was realized as a field of practices that allows students to realize in reality how the system works. Potentialities were cited in the integration of the academics with Primary Health Care, such as the contact with the teaching staff and the occurrence of formative moments. However, greater efforts are needed throughout the academic environment, and greater involvement of management in stimulating pedagogical experiences consistent with the health needs of the country. The theme addressed in the present research opens the possibility for other studies in different institutions of higher education in the country that contribute to the understanding of the contributions of the teaching-service-community integration for the training in Dentistry.

1 INTRODUCTION

The training in dentistry has historically been marked by the focus on the technique and the disease, on individual performance with an emphasis on healing and, increasingly, on a clinically compartmentalized approach. Despite the socioeconomic changes and the legal framework governing the Brazilian healthcare model, this context is still present, with a pattern of professional training that limits the understanding of the macro-social context of health care, the responsibility for the health of people and the collectivities\textsuperscript{1,2} and their social role in the consolidation of Brazil’s Unified Health System (SUS).

In 2002, a general reorganization of Brazil’s National Curricular Guidelines (DNC) for undergraduate programs in Dentistry\textsuperscript{1} was proposed in the search for changes in this scenario for dental education in Brazil\textsuperscript{1}. The purpose of the recommendations is to promote the construction of a generalist, humanistic, critical professional profile, active in dental practice at all levels of health care; and comprehensive, through a link between education, research and the health system in force in the country\textsuperscript{3}. Thus, contemporary approaches to training that converge to an academic and professional profile with technical skills and competences consistent of the epidemiological, social, and political realities of the Brazilian context\textsuperscript{4}.

Committed to such competences, there has been an increasing emphasis on the approximation between training and service settings, as well as the epidemiological and health scenario in the territories. Represented by the teaching-service-community integration, this approach can be understood as a new way of thinking about training through the coordinated and collective work of educational institutions and health services, seeking to expand and qualify health learning; the network of individual and collective care; and the satisfaction of the service workers\textsuperscript{4-7}.

In line with this proposal for changes, the Federal University of Piauí (UFPI) proposes, through the Pedagogical Project of the Bachelor's Degree in Dentistry, the integration of students, health services and the community through internships outside the academic environment (UHS), together with the Oral Health teams (eSB) of the Family Health Strategy (ESF) in Teresina, Piauí. This curricular proposal seeks to provide the student with the contact with different social, life and health contexts, general and oral, as well as promote the action in collective health, having the SUS as a real practice scenario\textsuperscript{8}.

The experience of clinical practice outside the walls of the training institution allows, in the perspective of self-learning, of the environments and professional roles, to add knowledge, skills and values to the teaching-learning process in health. It should be emphasized that the performance of public health services is essential for the desired changes in the teaching-learning process of future professionals, since "in order to learn health, it is necessary to participate in the spaces where health is done"\textsuperscript{4}.

The academy's dialogue with practice scenarios seems to create a continuous and reciprocal movement of cognitive, scientific, and subjective resource transfers. On the one hand, the students are presented with the opportunity to experience new clinical, structural and relational conditions, expanding their perceptions about the performance in their category and multiprofessional, functioning of the service network and subjective skills of health care. On the other hand, service professionals who, when acting as preceptors, are invited to establish a teacher-learner relationship in the light of ongoing (re) -building health training. Finally,
for the community, the possibility of expanding and improving the quality of health care offered is envisaged.

Given the above, the present research aims to understand, from the teacher's point of view, the teaching-service-community integration practices experienced during dental education at the Federal University of Piauí (UFPI).

2 METHODOLOGY

A qualitative, descriptive and exploratory research was conducted, using the focal group as the data-producing device and the content analysis described by Bardin (2011) for empirical content analysis. The technique is based on three stages: the pre-analysis, with the "floating reading" of the data obtained and the choice of the documents to be analyzed, the exploration of the material, and the choice of coding units with their classification and categorization and the treatment of results with inference and interpretation, in which gross results become meaningful and valid.

In addition to data production, after the focus group, the study provided the participants a mini-course on updating teaching-service-community integration, with the presence of a professor from the UFPI Dentistry program. All the twenty-six dental surgeons who worked in the ESF eSB in Teresina city were invited to participate in the study, who, at the time of the data production of the research, were in the service of dental students at UFPI. The preceptors were invited personally in their workplaces, with the opportunity that they were also present in the planned mini-course. The moment of production of data was performed on a weekend, on a day that did not interfere in the working hours of the preceptors, since it was not obtained release by the management. Nine preceptors confirmed presence and five attended the focus group.

The professionals participating in the study signed the Free and Informed Consent Term and, in order not to be identified, served as pseudonyms the words that the preceptors used to synthesize their teaching-service-community approach: interaction, personal fulfillment, satisfaction, pleasure and support.

The research was approved by the Research Ethics Committee of the State University of Piauí under the opinion n°. 2,132,199, after authorization from the Municipal Health Foundation of Teresina.

3 RESULTS AND DISCUSSION

From the analysis of the data obtained during the focus group emerged four thematic categories: The construction of the identity of the preceptor of the undergraduate program in Dentistry; The preceptorship and its polysemy; The Family Health Strategy as a field of practice; and Potentials and weaknesses in teaching-service-community integration.

The construction of the identity of the preceptor of the undergraduate program in Dentistry

The origin of the term preceptor comes from the Latin praecipio, "to send with empire those who are inferior to him". In the medical literature, where the first health publications on the subject are observed, different functions are pointed out for the preceptor, which includes guiding, supporting, teaching and sharing experiences that help the student to adapt to the exercise of an ever-changing profession.

The identity as a preceptor was built during the group's discussion:

"...it is there to provide support for this student to have the vision of action and to internalize that moment so that in the future, when he arrives at the service, he has already experienced this kind of..."
situation [...] it is important to form a professional that acts at the SUS and meets the needs of the population. (Interaction Preceptor)

The contribution of a preceptor was related to his willingness to provide support when requested, giving his place of work as a field of practice to a dentist surgeon in training who can apply what he learns in theory at the university. He is identified as a professional who does not directly integrate the undergraduate teaching staff, but who runs important roles such as guiding, stimulating reasoning and the active posture, observing and evaluating the student during the activities, and being able to establish a teaching from the sharing their experiences.

The oral health teams, which are part of the health professionals surveyed, adapt to the presence of the trainees and make changes in their schedules, so that the day of receiving the students would pass through all groups of patients, including home visits and health education activities. A similar situation was observed by Pereira et al., who in the practice routine as a preceptor, the health professional does not stop performing his daily work process, and in addition performs other actions to attend and expand the project of teaching.

The preceptors who receive dental students from UFPI act through a partnership between the municipal public health management body and the university. For the exercise of the preceptorship there is no monetary incentive. Some are alumni and claim to play the role of preceptor by recognition of the teachers and the formation institution and, mainly, by the desire to provide the students with a suitable training according to the real needs of the population:

[...] I try to [...] offer better situations for them to experience [...] I try to give them an opportunity to see a little of everything, we have a very important role, and a great responsibility [...]. (Interaction Preceptor)

Another aspect is the permanent theoretical update that the preceptor claims to have when experiencing contact with the trainees:

[...] it is an exchange process... it is very good our interaction with them, when they come and bring new knowledge, when they collaborate with us. (Satisfaction Preceptor)

I see that there are teachings that they are receiving and that I am already out of date and I learn from them too and this is very important, it is a two way path. (Support Preceptor)

Research with students, teachers and preceptors linked to the curricular internship of the Dentistry program of the Federal University of Rio Grande do Sul in the APS, evidences, through the narratives of the preceptors, that the experience with the trainee contributed to the exchange of information and search for new knowledge. Students are faced with new situations and doubts, while bringing with them the theory learned in the classroom. In this way, preceptors are continually questioned, which generates more worker interest in updating and seeking scientific evidences.

And what does it take to build the identity of the preceptor of Dentistry at UFPI? Identity can be defined as "a set of characteristics that distinguish a person or a thing and through which it is possible to individualize him or her". In view of the above, it is possible to visualize that the construction of the identity of the preceptor in Dentistry of the UFPI is still an unfinished process. There is a need for more theoretical moments and discussion about the theme, greater insertion of preceptors in pedagogical planning and at the evaluative moments of the extramural stages, greater political engagement of the
academic community and implication of health services management, so that the desired changes in the training in dentistry are made.

Preceptorship and its polysemy

Preceptorship can be recognized as a practice that articulates the theoretical approaches with the practical scenario of the service, with a focus on health training. It is perceived as a fundamental pedagogical element whereas it presents its work as a source of knowledge and experience.7,14

The first sense that emerges about the role of preceptorship in the process of integration between teaching and service-community makes reference to preceptorship as facilitator of learning, which complements the training given by the academy:

[...] we understand the role of preceptorship as a way to make things easier [...] it is a way of encouraging, because the undergraduate student [...] leaves university afraid of doing everything. (Personal Satisfaction Preceptor)

By entering into a reality distinct from the university's integrated clinics, students are faced with different social, organizational, and relational contexts. In addition to the application of the theoretical knowledge obtained in the classroom, the new experience offers a complementation through living with the determinants of health imbricated in the territory.

Studies point to the complementarity of extramural internship activities in academic training and mention that they are related to advances in the understanding of interdisciplinarity, by providing opportunity to the performance in a multiprofessional team, of the operation of the health services network, through reference and against reference. Besides, there is the possibility of problematization and broad understanding of the health / disease process16,17.

The second view approached brings preceptorship as a channel for training in the reality of the public service, a scenario of professional practice that most students find after graduation:

[...] preceptorship is an exchange of experiences with the students [...] we bring this student into a reality that he will be dealing with after college [...] the reality of the community [...] and really seek to train this student [...] for a vision of acting in the ESF. (Pleasure Preceptor)

[...] he contributes in the attempt to induce in the head of this student that he does not have an exclusive formation of clinic and that vision exclusively lucrative, but that he has a vision of humanized care, of reception. (Preceptor Pleasure)

In the preceptorship, there are exchanges between professionals, students, in which actors establish their social roles at the confluence of their knowledge, ways of being and seeing the world5. These exchanges stimulate the relational actions based on interdisciplinary action, expanded clinical practice and the acceptance and bonding with users, with the maintenance of health as the ultimate goal of a work in defense of individual and collective life18.

The third view addresses the importance of sharing the weaknesses in the public service during the preceptorship. It is a strategy for the students to realize themselves as members of the reality of the territory:

[...] the role of the preceptorship is the formation of a professional focused on the SUS [...] to see that there are problems in the system, of physical structure, related to minor features, but that does not destroy it [...] there is
pottentiality. (Interaction Preceptor) [...] the preceptorship, when he goes to UBS he sees another reality [...] to see that even if this reality works as well as ideal, you can get close to the ideal situation with what you have in hand[ ...]. (Pleasure Preceptor)

In developing their actions to deal with weaknesses, service professionals should not confine themselves to the deliberation of ends. Instead, they should seek ways to make a decision without separating thinking from doing. Therefore, it is essential during the accompaniment of students to introduce the students to the problems that will challenge them, leading them to find ways to solve these problems. Studies show that positive preceptory experiences, together with a professional considered 'competent', result in a model of worker for the students. Besides acting as an incentive for a reflexive practice.

Another view recognizes the preceptor's ability to expand the student's visions on the performance of the Surgeon-Dentist from SUS, overlapping possible images of inferiority and disorganization of public health services:

 [...] they get very rewarded, they like it [...] they often come to us and they say that they had a vision, and once they had the preceptor, they already have another idea of how it works. (Pleasure Preceptor)

According to the above, it can be seen the multiplicity of views linked to the preceptorship that goes from the support to the learning; strategy for vocational training based on the reality of the territory; channel for the observation and confrontation of barriers; and mechanism for broadening the view about the performance in the FHS. Thus, the complexity of this pedagogical proposal through which changes in the health training scenarios are drawn can be perceived.

The Family Health Strategy as a field of practices

The subjects of the supervised internships outside the UFPI Dentistry program propose the students' experience in the SUS focused on the performance of the CD in the FHS. The territorial approach of the strategy conceives the reflection on the real daily life of the population and the determinants of health. The care of families and individuals inserted in a dynamic reality brings new meanings to health actions and allows a living and transforming learning:

 [...] when they come to the UBS and they have direct contact with this population [...] and they see in reality how the system works. (Pleasure Preceptor)

It is emphasized that the experience of the stage in which the student adapts to the dynamics of an eSB operation is decisive for the insertion of the students of Dentistry in the labor market, because it simulates the reality that a great part of the future professionals will find after the end of the program. This diversification of learning scenarios allows the transformation of students' practice, which starts to act on real problems, take on increasing responsibilities and reflect on their professional and social roles:

 [...] then, they see a reality, I think it's a vision that they do not always see in the university and there they have the opportunity to see different things. (Satisfaction Preceptor)

There in our unit, some are questioners, others do what we say to do [...] we are giving the other options to them for that problem and they begin to have another view, it is another way that I think in college they do not see. (Pleasure Preceptor)

The work in the ESF, with the linkage of

---

individuals and families in affiliated territories, also allows a closer contact with the local reality of a population\textsuperscript{13}, stimulating the students' perception about the health-disease process in the territory, social engagement, humanization and longitudinality of care.

The extramural stages are perceived as places of improvement for the training of the students, having as main focus the quality of the services provided to the users:

*The ESF* it is not a field of experiences where they will try to do what they do not have the courage to do in the university [...] do what they already know how to do and gain agility, speed of work and safety to do without the looks of the professor. (Personal Achievement Preceptor)

[...] in the public sector [ESF], everything is very difficult, but everything is much more beautiful too, because when you can overcome these difficulties your degree of satisfaction is much higher, you can be sure that your certainty fulfilled is spectacular. (Personal Achievement Preceptor)

The integration teaching-service community generates a movement in which everyone benefits. The counterpart of student learning for the service happens through the stimulus to reorientation of care practices, which potentiates the actions in the family health strategy, and adds new theoretical information to health care\textsuperscript{7,14,22}.

Thus, the stages in health services need to be looked at by managers and health professionals as concrete spaces in which changes can happen to each other, resignifying their practices\textsuperscript{5,23}.

It is in these spaces that the construction of knowledge diffuses through all the subjects that pass through\textsuperscript{5} and occurs in daily life, in the relations between subjects, and in the communication-interaction of their projects\textsuperscript{24} with a focus on integral, human and resolutive health care.

**Potentials and weaknesses in teaching-service-community integration**

The teaching-service-community integration is one of the fundamental pillars in the processes of teaching change and the primary strategy in the consolidation of the SUS\textsuperscript{5,7}. They are the dialogues between work and teaching in health that allow the creation of a privileged locus for the student's perception of the other in the daily care. The dialogue with the professors of UFPI is recognized as an essential potential in the transformation of teaching in Dentistry:

*I think it is important for us to put our experiences from the previous semester and what can be improved for the next semester.* (Interaction Preceptor)

*It is also important because we know that policies change very fast, so it is important to know how it will be, what form will be given to the training and whether it will continue to be the way it is being done.* (Interaction Preceptor)

It is important to emphasize the importance of approaching university settings and those of extramural practice, such as a 'marriage of own knowledges', in which decisions are made through dialogues and agreements between the preceptor-teacher-student\textsuperscript{14,22}. Agreements should be considered whereas there are several actors involved in the integration between teaching and work, who have different realities of life and different philosophies of formation, including their own conception of health\textsuperscript{18}.

The dialogue between professors and preceptors is an important requirement for the effectiveness of teaching-service-community integration activities:

*In a way, with this contact with professors*
they know what is happening to the students in the unit and we know what they are studying inside the college, that is, it is an exchange, they are in college and we in preceptorship show a different perspective. Having this preceptor-professor contact it is possible to standardize information for them. (Pleasure Preceptor)

Meetings of the preceptors are held with professors of the extramural internship subjects in which discussions about the activity of the preceptorship and clinical topics are offered. Despite these moments, it is suggested that they may be more frequent and with more active participation in the planning of the activities of the stages.

Albuquerque et al., 5 (2008) point out the importance of the participation of service professionals in pedagogical discussions on health education. As well as in moments of evaluation and follow-up, in which spaces of dialogue in which professors and preceptors should be able to exercise their roles as protagonists in the training 14. The suitable knowledge of Curriculum Guidelines, objectives of the program and alumni profile also needs to be discussed with practitioners so that they can understand their role in student training 20.

It is also in the locus of teaching-service-community integration that conflicts, and barriers are explained, are related to structural 20 and / or relational factors in the care spaces, or through obstacles that come from academic planning:

I see a barrier that comes from within the university, there should be a greater integration between the disciplines, because all, without exception, the doubles I receive complain that the professor of the morning class takes a lot of time and even runs late, which makes it difficult for them to reach my post. There has to be a conversation, let's interact, everyone has to make things work. (Personal Achievement Preceptor)

The work of Viana et al., 25 (2015) with students of the Dentistry program at the Federal University of Piauí, presents students' perceptions about the extramural activities carried out. They point out barriers such as the disregard of the professors responsible for the clinical subjects in relation to activities in collective health and that makes it difficult to consolidate the integration teaching service community in the program.

The critical perceptions of students reveal a reality in which a hierarchy can be perceived by students within the academy: the subjects considered as clinics that are the most important in relation to the subjects and stages related to collective health, with a visible separation between the formation for SUS and training for the private market 25.

Despite all the possibilities that exist in the spaces of teaching-service integration, it is a fact to realize that changes in health education cannot be generated without an interdisciplinary connection. It is necessary that the entire academic environment converges to the training of professionals who respond adequately to the needs of the country's health system 19 , recognizing the social relevance of the university's role.

Structural barriers such as reduced physical space and poor infrastructure conditions of health facilities are identified as difficulties for internship practices 20. The preceptors perceive the importance of experiencing these difficulties together with the students to contextualize them in the reality of the service:

[...] the barrier I think is this conformation, a situation that the student goes to UBS and sees what is defective.
We need to stop a bit with this posture of seeking only what is defective. What could we take from there as learning to work in the future those professionals that up there can be a manager? We have a great responsibility in this as a preceptor to be showing him how to overcome these difficulties and try to increase this system more and more to exist the resolution of our actions. (Interaction Preceptor)

The possibility of experiencing the reality of health services should not stimulate negative judgments about how services work. It should be proposed a reflexive learning which take into consideration the organization of work, focusing on the training of a professional who transforms his/her reality5,19.

Another barrier that was not mentioned by the preceptors could be perceived during the development of the research. The proposal of the study, beyond the understanding of the teaching-service-community integration was to provide a pedagogical moment to the PHC professionals. However, the "research-training" was not recognized by the management and the preceptors did not obtain release for their participation. Thus, it was necessary to carry out the study in a weekend.

Is the low adherence of the preceptors justified? In fact, it is not something that can be inferred. However, this shows that the weaknesses of the "service" component do not only exist in the territory, but are also present in management. The non-commitment to the teaching-service-community integration also presupposes the non-commitment to the consolidation of the Brazilian health policy reform.

The Dentistry program at UFPI considers important the interaction between the academy and the practice scenarios, although greater efforts are needed from the academic environment in favor of consolidating the pedagogical project of the program. Structural and management barriers display the weaknesses still existing in the scenario discussed here. However, the understanding of the teaching-service-community integration practices in the UFPI Dentistry program has implications that contribute to the implementation of the desired changes in dental education in Brazil.

4 FINAL CONSIDERATIONS

The preceptors recognize the contributions of the teaching-service-community integration for the training in Dentistry. The role of the preceptor was pointed out as that of a facilitator of learning, who in performing his function also experiences a constant theoretical update. The construction of the identity of the preceptors of UFPI is perceived as an unfinished process and strategies are pointed out so that the desired changes in the training in Dentistry can be carried out.

The ESF was perceived as a field of practice that allows students to perceive in reality how the system works. Potentialities were mentioned in the integration of the academics with the APS in Teresina city, as the contact with the teaching staff of the internship subjects. However, greater efforts are required in the entire academic environment, and greater involvement of management in stimulating meaningful pedagogical experiences that are consistent with the country's health needs.

The theme addressed in the present research opens up the opportunity for other studies in different Higher Education Institutions in the country that contribute to the understanding of the contributions of the teaching-service-community integration to the
Practices of teaching-service-community integration and training in Dentistry.

ACKNOWLEDGMENTS
To the preceptors who cordially expressed interest and took part in the research.

RESUMO
Práticas de integração ensino-serviço-comunidade e a formação em Odontologia: possíveis conexões e fluxos no ensino na saúde
A pesquisa objetiva compreender, a partir do ponto de vista do preceptor, as práticas de integração ensino-serviço-comunidade vivenciadas durante a formação em Odontologia. Trata-se de um estudo qualitativo, descritivo e exploratório utilizando a técnica de grupo focal. Emergiram da análise dos dados quatro categorias temáticas: a construção da identidade do preceptor da graduação em Odontologia; a preceptoria e sua polissemia; a Estratégia Saúde da Família como campo de práticas; e potencialidades e fragilidades na integração ensino-serviço-comunidade. Os preceptores reconhecem as contribuições da integração ensino-serviço-comunidade para a formação em Odontologia. O papel do preceptor foi apontado como o de facilitador do aprendizado, que ao exercer sua função também vivencia uma constante atualização teórica. A construção da identidade dos preceptores é percebida como um processo inacabado e são pontuadas estratégias para que sejam concretizadas as mudanças almejadas na formação em Odontologia. A Estratégia Saúde da Família foi percebida como campo de práticas que permite aos discentes perceber na realidade como o sistema funciona. Potencialidades foram citadas na integração dos acadêmicos com a Atenção Primária à Saúde, como o contato com o corpo docente e ocorrência de momentos de formativos. Contudo, são necessários maiores esforços de todo o ambiente acadêmico, e maior implicação da gestão para o estímulo a experiências pedagógicas condizentes com as necessidades em saúde do país. A temática abordada na presente pesquisa abre oportunidade para a realização de outros estudos em diferentes instituições de ensino superior no país que contribuam com a compreensão das contribuições da integração ensino-serviço-comunidade para a formação em Odontologia.


REFERÊNCIAS
15(39):1053-70.
25. Viana PFS, Adad SJHC, Pedrosa JIS. Reverberações das experiências extramurais no
ensino da Odontologia. ABCS Health Sciences. 2015;40(3).

Correspondence to:
Larissa Campos Rodrigues Pinheiro.
e-mail: larissacamposrpinheiro@gmail.com
Universidade Estadual do Piauí - Centro de Ciências da Saúde
Coordenação da Residência Multiprofissional em Saúde da Família e Comunidade
Rua Olavo Bilac, 2335 Centro (Sul)
64001-280 Teresina/PI Brazil