







CONTRIBUTIONS AND CHALLENGES OF TEACHING-SERVICE-COMMUNITY INTEGRATION

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ABSTRACT

Objective: examine the contributions of teaching-service-community integration to health training and the Unified Health System, as well as the potential and challenges of this integration, from the viewpoint of professors.

Method: descriptive study with a qualitative and quantitative approach. The study population was composed of 103 professors from the nursing, medical and dentistry courses of the Federal University of Rio Grande do Norte. The data was collected from October 2016 to February 2017, through an interview form. Imaruteq software and Bardin's content analysis were used for the data analysis.

Results: according to the professors, teaching-service-community integration helps train students, since it provides multiprofessional and interdisciplinary experiences in real-life situations, in addition to promoting improved quality of care. However, various challenges need to be overcome, such as the hospital-centric model, which is still prevalent; fragmented curricula in disciplines; resistance of some professors to participate in integration; few interdisciplinary activities; emphasis on technical training with a predominance of traditional teaching methodologies; the infrastructure of the Unified Health System, among others.

Conclusion: there is a need to institutionalize teaching-service-community integration and emphasize initiatives that dynamize and provide flexibility to multiprofessional and interdisciplinary activities. Institutions involved in the modification of health training and the transformation of health care processes also need to make a commitment.

DESCRIPTORS: Professor-healthcare integration services; University education; Unified Health System; Teachers; Comprehensiveness in health.

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CONTRIBUIÇÕES E DESAFIOS DA INTEGRAÇÃO ENSINO-SERVIÇO-COMUNIDADE

RESUMO

Objetivo: analisar as contribuições da integração ensino-serviço-comunidade para a formação em saúde e para o Sistema Único de Saúde, bem como, as potencialidades e os desafios existentes nessa integração, na visão de docentes.

Método: estudo descritivo, com abordagem qualitativa e quantitativa. A população do estudo foi composta por 103 docentes dos cursos de Enfermagem, Medicina e Odontologia da Universidade Federal do Rio Grande do Norte. A coleta de dados foi realizada de outubro de 2016 a fevereiro de 2017, por meio de formulário de entrevista. Para a análise dos dados, foi utilizado o *software* Iramuteq e Análise de Conteúdo de Bardin.

Resultados: na visão dos docentes, a integração ensino-serviço-comunidade contribui para a formação dos discentes, visto que proporciona experiências multiprofissionais e interdisciplinares em cenários reais de prática, bem como contribui para a melhoria da qualidade dos serviços. No entanto, vários desafios precisam ser superados, como o modelo hospitalocêntrico, ainda predominante; currículos fragmentados em disciplinas; resistência de alguns docentes em participar da integração; poucas ações interdisciplinares; ênfase na formação técnica com predomínio de metodologias tradicionais de ensino; infraestrutura do Sistema Único de Saúde, entre outros.

Conclusão: fica evidente a necessidade de institucionalização da interação ensino-serviço-comunidade, e da valorização de iniciativas que dinamizem e flexibilizem o ensino em atividades multiprofissionais e interdisciplinares, assim como do compromisso das instituições envolvidas na modificação da formação em saúde e na transformação dos processos de atenção à saúde.

DESCRITORES: Serviços de integração docente-assistencial. Educação superior. Sistema Único de Saúde. Docentes. Integralidade em saúde.

CONTRIBUCIONES Y DESAFÍOS DE LA INTEGRACIÓN ENSEÑANZA-SERVICIO-COMUNIDAD

RESUMEN

Objetivo: analizar las contribuciones de la integración enseñanza-servicio-comunidad para la educación en salud y para el Sistema Único de Salud, así como las potencialidades y desafíos existentes en dicha integración, conforme la visión de los docentes.

Método: estudio descriptivo, con abordaje cualitativo y cuantitativo. Población del estudio integrada por 103 docentes de las carreras de Enfermería, Medicina y Odontología de la Universidade Federal do Rio Grande do Norte. Datos recolectados entre octubre de 2016 y febrero de 2017, utilizándose formularios de entrevista. Datos analizados mediante *software* Iramuteq y análisis de contenido de Bardin.

Resultados: según los docentes, la integración enseñanza-servicio-comunidad contribuye a la educación del alumnado, brindándole experiencias multiprofesionales e interdisciplinarias en escenarios reales de práctica; así como también coadyuva a mejorar la calidad de los servicios. Sin embargo, es necesario superar aún varios desafíos, como el modelo "hospitalocéntrico", aún predominante; programas de estudios fragmentados en materias; resistencia de algunos docentes a participar de la integración; escasas acciones interdisciplinarias; énfasis en la formación técnica con predomínio de metodologías tradicionales de enseñanza; infraestructura del Sistema Único de Salud, etcétera.

Conclusión: resulta evidente la necesidad de institucionalizar la interacción enseñanza-trabajo-comunidad y valorizar las iniciativas que dinamicen y flexibilicen la enseñanza en actividades multiprofesionales e interdisciplinarias, así como el compromiso de las instituciones involucradas para modificar la educación en salud y la transformación de los procesos de atención de salud.

DESCRITORES: Servicios de Integración Docente Asistencial; Educación Superior; Sistema Único de Salud; Docentes; Integralidad en Salud.

INTRODUCTION

In light of insufficient human resources equipped to meet the health needs of the Brazilian population, the academic training of health professionals has become the object of much thought.

Training in the field of health is still primarily centered around the fragmented, specialized biomedical model, which hinders understanding of the determinants and impedes interventions in relation to the health-disease process. The hegemonic pedagogical teaching model is content-based, organized in a compartmentalized and isolated way, fragmenting individuals into specialties and splitting off knowledge in basic areas from knowledge in the clinical domain.¹

It is necessary to think about changes to training in health by discussing the link between universities and health services. Such coordination would provide a better understanding of the health needs of the population, as well as direct training toward the Unified Health System (SUS), which will further benefit from the incorporation of these future professionals into the healthcare network.²

The integration between teaching and service will enhance the qualification of professors, students and health services professionals. This ensures that the population will receive quality services through the reorientation of primary care and the healthcare model in effect in the national system. This integration also helps strengthen and equip students to work in different healthcare contexts, adds to the training process of professionals working in health services and promotes multiprofessional work at all levels of the system.³

Given the importance of teaching-service-community coordination for improving the quality of professional training and health care, this study is relevant for its contribution to educational institutions and health services, in addition to providing theoretical support for possible restructuring of planning to coordinate university education and the health system.

The objective of this study is to examine the contributions of teaching-service-community integration to health training and the SUS, as well as the existing potential and challenges of this integration, from the perspective of professors.

METHOD

This is an exploratory descriptive study with a qualitative and quantitative approach.

Tutor-professors and/or supervisors from the Federal University of Rio Grande do Norte (UFRN) who accompanied students in practical classes participated in the study. The inclusion criteria were: be a professor from the initial to seventh semesters in the medicine, dentistry or nursing courses of UFRN, and be accompanying students in practical classes or in disciplines that interact with health services at the time the data was collected.

According to the information provided by the departments of the three courses, the total population was 124 professors, and all of them were invited to participate in the study. Excluded from the study were professors officially on leave from the university at the time of the data collection, as well as substitute professors. After losses (16.93%), the final population of the study was composed of 103 professors.

The data was collected from the departments of the three courses that participated in the study from October 2016 to February 2017, through an interview form prepared by the researchers, based on technical support in the literature in relation to training and teaching-service-community interaction, as well as on the objectives proposed by this study. The forms were completed by the professors.

The textual content of the forms underwent a lexicographic textual analysis, with the assistance of the software *Interface de R pour Analyses Multidimensionnelles de Textes et de Questionnaires* (Iramuteq) and analyzed according to Bardin's content analysis.

Iramuteq is free software that provides statistical accuracy and enables the use of different technical lexical analysis resources. Through the assistance of this computer program, lexical analyses can be used without losing the context in which the words appear, making it possible to integrate quantitative and qualitative levels into the analysis, resulting in greater objectivity and success in the interpretation of textual data.⁴

Descending hierarchical classification (DHC) was used as the data treatment method. In this analysis, text segments are classified according to their respective vocabularies, and classes are formed which have similar vocabulary between them, but which differ from the text segments of other classes.⁴ The significance of the words in each class is determined by chi-square (X^2), calculated by the software which expresses the strength of the link between the word and the class, such that the greater X^2 is, the greater the association of the word with the class.

The following criteria were established for the inclusion of the words in their respective classes: 1. Frequency in the class is higher than the cutoff point, which was obtained by dividing the number of occurrences by the number of forms; 2. Chi-square value (X^2) greater than or equal to 3.83 (the greater the chi-square value, the greater the association with the class); and 3. p-value <0.05 (confidence level associated with X^2). Each text ($n=103$) was characterized by variables of interest: course, age, length of time teaching, semester and location where the students are accompanied (intra or extramural).

Content analysis, according to Bardin, consists of a set of techniques and an analysis of communications which seek, through systematic procedures and message content description objectives, to obtain indicators that enable inference of knowledge related to the conditions and production/reception of these messages. The content analysis was organized around three chronological periods: pre-analysis; exploration of the material; and treatment of the results, inference and interpretation.⁵

It was decided to categorize by semester because, in the first two semesters of the courses examined, UFRN students are inserted into health services accompanied by a tutoring group formed by professors and health services professionals, corresponding to the disciplines: Integrated Education, Health and Citizenship Activity (Saci) and Integrated Tutorial Guidance Program (Poti). These disciplines are innovative proposals within the health courses of UFRN since they are the first initiatives to make curricula flexible, with interdisciplinary practices carried out in primary care units of the SUS network.⁶

The present study was conducted in accordance with the ethical standards stipulated by Resolution No.466, of December 12, 2012, of the National Health Council. This study is part of a larger project entitled "Teaching-Service-Community integration from the viewpoint of professors in medicine, nursing and dentistry courses".

In order to protect anonymity, the participants were identified by letters, according to the course (N: Nursing; M: Medicine; D: Dentistry), followed by numbers randomly assigned by the researchers.

RESULTS

A total of 103 professors participated in the study: 21 from the nursing course (20.4%), 55 from the medicine course (53.4%) and 27 from the dentistry course (26.2%). The mean age of the professors was 45.79 ± 10.65 years (minimum of 28 and maximum of 69 years) and mean length of time teaching was 15.22 ± 11.14 (minimum of 1 and maximum of 40 years).

The analysis of the corpus, resulting from the transcription of the 103 interviews, yielded 22,445 occurrences of words, distributed into 2,841 forms. Through the DHC, 635 text segments were analyzed, with retention of 81.26% of the corpus for construction of the five classes resulting from the content partitions, as can be seen in Figure 1.

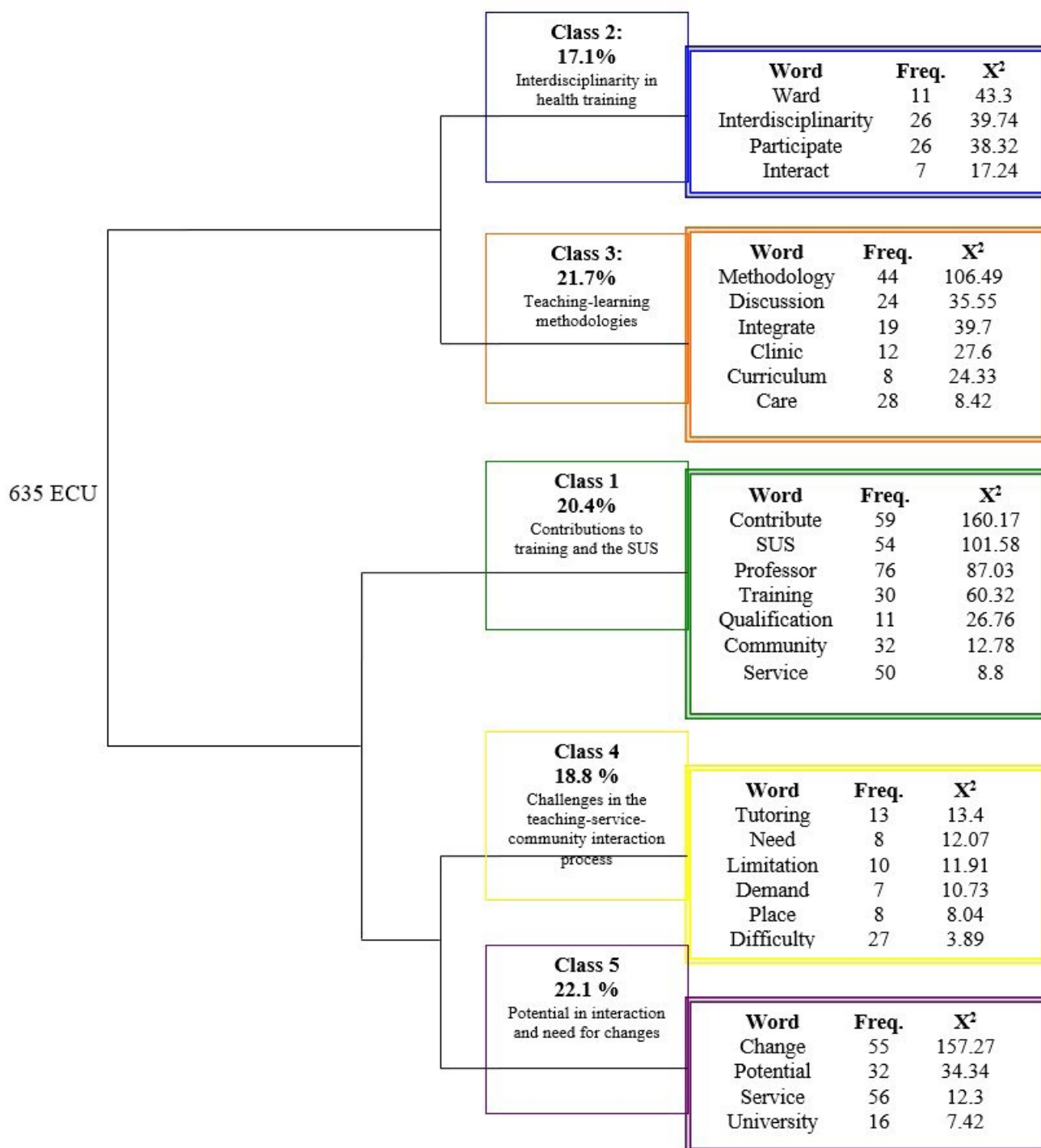


Figure 1 – Dendrogram of the teaching-service-community integration corpus in the Nursing, Medicine and Dentistry courses at UFRN. Natal, RN, Brazil, 2017.

The five classes, which will be presented and commented on further down, were assigned denominations according to their vocabularies, exemplified by themes corresponding to each one. Chart 1 shows the different classes, as well as the codes attributed to the interviewees which emerged in each of the five classes.

Chart 1 – Classes resulting from the teaching-service-community interaction corpus of the interviewees that emerged in the classes. Natal, RN, Brazil, 2017.

Classes	Interviewees
1. Contributions to training and the SUS	E1, M68, E4, E2, O48, M100
2. Interdisciplinarity in health training	M77, E13, E14
3. Teaching-learning methodologies	O40, M77, E11
4. Challenges in the teaching-service-community interaction process	E21, M58, E10, E15, E11, M80, E21, O32
5. Potential of interaction and need for changes	E16, M99, E21, M58

Contributions to training and the SUS

Class 1, entitled “Contribution of professors to training and the SUS”, grouped 20.4% of the text segments analyzed, and was more significant in the nursing course.

The most significant words were: contribute, SUS, professor, training, qualification, community and service. The X^2 values ranged from 160.17 for the word contribute, which was the strongest word associated with the class, to 8.8 for the word service, as shown in Figure 1. The p-values for all the selected words were lower than 0.0001.

This class addresses how the integration of academia with health services, as well as professors who participate in this integration, can contribute to the training of students in undergraduate courses and to the SUS. In the professors’ statements, there is a recognition that teaching-service-community integration has benefits for both academia and the health services in the SUS network.

Professors can contribute through critical reflection on the reality of the population and the health services work process, development of intervention projects or with technological innovations [...] (E1).

[...] professors can contribute to the SUS by training students with a generalist profile. Teaching-service interaction helps to get to know and strengthen principles of the SUS (M68).

[...] professors play a role in making students and the community active agents in this interaction, in order to contribute to the quality of health services, participate in the problems of the community and intervene in problems, among others (E4).

It can be noted in the narratives that the interaction of the university with health services enables critical-reflective training in real-life situations and helps train generalists, in addition to being beneficial to health services and the community.

However, the study shows that teaching-service-community integration at UFRN often depends on isolated initiatives by professors. There is also concern about the fragility of this integration in the medicine and dentistry courses, whose practices are primarily concentrated in teaching clinics/hospitals of the university.

[...] it is professors who take the initiative to integrate projects that insert students into the practical reality of the profession (E2).

[...] professors can contribute to the development and qualification of the SUS via training, through seeking teaching-service-community integration, since training, in the current reality, occurs outside the confines of this integration (O48).

[...] professors can undoubtedly contribute to the SUS. It is a challenge for professors to set aside their role as teachers and try to contribute to the SUS [...] (M100).

The findings of the study show that professors who accompany students in health units from the SUS network value and recognize the benefits and potential of interaction with health services more than professors who only carry out activities within the university.

Interdisciplinarity in health training

The typical vocabulary of Class 2 enabled contextualization of “Interdisciplinarity in health training” and was responsible for 17.05% of the text segments analyzed in the corpus.

The most significant words were: ward, interdisciplinarity, participate and interact. The X^2 values ranged from 43.3 for the word ward, the term most strongly associated with the class, to 8.42 for the word care, as can be noted in Figure 1. The p-values for all the selected words were lower than 0.0001.

This class shows how interdisciplinarity occurs in health courses at UFRN, as well as the difficulties and contributions to undergraduate training.

In terms of interdisciplinary activities, the professors’ statements reveal different realities in relation to the course and site where the practical classes take place. In the medicine and dentistry courses, when students are accompanied in teaching clinics/hospitals within the university, interdisciplinary activities were either absent or more difficult to implement. The narratives indicate that wards are a place where it is possible to carry out these activities in hospitals.

[...] interdisciplinary activities are limited and occur in isolated situations, perhaps due to curricular issues (M77).

[...] students participate in interdisciplinary actions in some activities, such as discussion of cases, training and educational activities. The difficulties are in relation to not very appropriate physical areas, too many students from various courses and low participation of other courses (E13).

[...] in nursing, there are two times interdisciplinary activities par excellence are carried out: in Saci and Poti. In the other components, it is up to the professor and the potential of the field of practice (E14).

The narratives indicate that interdisciplinary activities are carried out on an ongoing basis in the Saci and Poti disciplines, which at UFRN are done in partnership and integration with health services from the SUS network.

The results show that the dentistry and medicine courses face more difficulties in carrying out interdisciplinary activities, since the training in these courses occurs predominantly inside hospitals and clinics of the university, without interaction between courses. There is also a need to seek an integrated curriculum, since the curricula continue to be organized by disciplines, and this division of knowledge is incapable of dealing with the social issue.

Teaching-learning methodologies

Class 3, entitled “Teaching-learning methodologies”, addresses the methodologies being used by professors from UFRN in practical classes and in the interaction with health services. It accounted for 21.71% of the text segments analyzed. It was more significant for the dentistry course, among professors teaching in the fourth to seventh semesters, who accompany students in intramural units.

The most significant words were: methodology, discussion, integrate, clinic and curriculum. The X^2 values ranged from 106.49 for the word methodology to 17.24 for the word interact, as can be observed in Figure 1. The p-values for all the selected words were lower than 0.0001.

As for the use of the methodologies, a differentiation in the methodologies used was noted in the narratives, depending on the site where professors accompanied students in practical classes.

[...] unfortunately, since time is limited and the number of students is high, we do not have the means to implement different methodologies. I provide theoretical guidance and, when necessary, practical demonstrations, in order for the student to continue the procedure (O40).

[...] in reality, we have still not achieved, in the current curriculum of the medicine course, the desired model of an integrated curriculum. The methodologies used are still rather weak and incomplete and, therefore, do not enable significant transformation in the professional training process (M77).

[...] the methodologies used are problematization of the reality; Bordenave's arc theory [Maguerez]; problematization of meaningful learning, based on constructivism; concepts of popular education in health, based on Paulo Freire, Eduardo Stortz, Victor Valla [...] (E11).

The study found that active methodologies were used more by professors from the nursing course, by professors that carry out activities in the health services network (extramural) and by professors from the Saci and Poti disciplines, when these are compared with the other disciplines that interact with health services.

Challenges in the teaching-service-community interaction process

Class 4, "Challenges in the teaching-service-community interaction process, accounted for 18.8% of the textual data analyzed and addressed the difficulties/limitations in teaching-service-community interaction which need to be overcome in order to provide quality training with insertion of students in real-life situations. This class was more significant for the dentistry course with professors who accompany students in intramural units and in the age group of over 51 years old.

The most significant words were: tutoring, need, limitation, demand, place and difficulty. The X^2 values ranged from 13.4 for the word tutoring to 3.89 for the word difficulty, as shown in Figure 1. The p-values for all the selected words were lower than 0.0001.

The study reveals that there are still numerous challenges to be overcome in the interaction of the university with health services, such as those inherent to the training process, health services and the structure of the university, as well as challenges related to the players involved in the training process, whether professors, students, preceptors and/or the community.

[...] the main difficulty is lack of dialogue and interaction among the departments. Everyone is more restricted to their department [...] (E21).

[...] the vision of many professors that is still hospital-centric, disease-centered and market-based is a difficulty (M58).

[...] the difficulties are insufficient material resources and inadequate physical infrastructure of the units, which hinders theoretical and practical interaction (E10).

[...] incompatibility of schedules, overlapping with other tasks; the need for ongoing training; compensation incompatible with the activities performed; and overtime work [...] (E15).

[...] the need to rethink the training entity, given the dynamics of the work process in health services, from the point of view of the professionals working there; how they were trained or received further knowledge (E11).

In the narratives of some professors, a resistance to carrying out practices in health services was noted, as well as difficulties in the interaction among professors from the same course/university, which weakens care comprehensiveness. The importance given to primarily technical training, centered around teaching clinics/hospitals, was found in the narrative of some professors.

[...] the ones committed to teaching are professors. There is no advantage at all to teaching in the community. Students need to be in the emergency room or ICU to learn techniques and how to interpret tests... The SUS is not the place for learning medicine. (M80)

The main difficulty is lack of dialogue and interaction among departments. Everyone is more restricted to their department (E21).

[...] *the difficulties continue to be integrating professors in this sense. The human aspect is still the big issue in relation to comprehensiveness because many professors were not trained that way and, today, are specialists* (O32).

Potential of interaction and need for changes

Finally, Class 5, entitled “Potential of interaction and need for changes”, corresponded to 22.1% of the text segments, and was more strongly associated with the medicine course.

This class stands out for the words: change, potential, service and university. The X^2 values ranged from 157.27 for the word change, the term most strongly associated with the class, to 7.42 for the word university, as seen in Figure 1. The p-values for all the selected words were lower than 0.0001.

With respect to potential, the professors from all the courses recognized the benefits of teaching-service-community integration for training, health services and the population, reaffirming the results found earlier in the present study.

[...] *the potential aspects are bringing knowledge to health services and taking knowledge from health services. Through this, students, tutors and preceptors grow* (E16).

[...] *interaction enhances the quality of the service, improves the critical-reflective ability of students and increases the experience of professors and students* (M99).

There should be more dialogue among departments, more disciplines with an interdisciplinary proposal, greater use of epistemological and theoretical references [...] (E21).

[...] *a proposal would be more effective interdisciplinarity, addressing sociological and philosophical issues* (M58).

The need for improvements in the infrastructure of the SUS, as well as institutionalization of the partnership between the university and management of the services and joint planning, were also perceived by the interviewees as another proposal for change that could enable the necessary conditions for quality training within health services.

The change proposals express the need to expand and consolidate teaching-service interaction as a permanent practice in health training, with interdisciplinary actions and greater dialogue among departments, in addition to the need to move toward an integrated curriculum.

DISCUSSION

The present study indicated that the professors believe that interaction of the university with health services enables critical-reflective training in real-life situations, contributing to the training of generalists, with the profile required by the current National Curriculum Guidelines for Brazil in terms of understanding the reality lived by the population and being beneficial for health services and the community.

Similar results were found in studies which showed that contact with the community, besides permitting a closer view of the country's sanitary and social reality, through which the root of many health problems can be identified, is also conducive to the perception of cultural richness and immeasurable knowledge.⁷

The presence of students in health services is also beneficial in that it favors the ongoing education of professionals in the health network and keeps them up-to-date.⁸ The literature also shows that professionals in health services are often not supported or encouraged to upgrade their skills, such that their participation in training processes is not always prioritized by the managers of these services.⁹

The interaction of universities with health services, in addition to strengthening the critical training of individuals from the community and health services, also helps rise above the traditional and fragmented vision of health care and broadens the vision of students, demystifying scientific knowledge within a context focused on life and not just disease and healing.¹⁰

The literature shows that the integration of universities with health services is also beneficial to SUS users, since activities performed in health clinics with students strengthens the link with the community, in addition to diversifying and bolstering the actions carried out in the unit.¹¹ This integration enables complementing the activities carried out in the community, which is reflected in the quality of health care.¹²

The narratives also highlight the difficulty of implementing interdisciplinary activities and integration among professors. Recruiting students for inter-professional education activities and academic achievement centered on productivity in research are also important challenges and lead to reflection on the rationale of Brazilian university education in terms of its structures, processes and academic achievements.¹³

Discipline-based curricular structuring causes professors to work in isolation, often only transmitting content related to their specialty, without taking into account the comprehensive training of students.

The present study found that, in relation to the curricula of undergraduate courses at UFRN, paradigms related to training need to be broken in order to satisfactorily reorient it.

A new role must be played by professors in integrated curricula - which dynamically coordinate the basic and clinical cycle - with integration of content and addressing of cross-sectional themes. A study with professors shows that an integrated curriculum enables collaborative, shared and problematized knowledge production in real-life situations.¹⁴

The testimonies indicate professors who accompany students outside the university walls have more opportunities to engage in interdisciplinary activities. Studies have also shown that the teaching and learning process, based on professional practices carried out in the daily routine of health services, provides a multiprofessional and interdisciplinary experience.¹⁵ The interaction between health professionals and students from different areas promotes reflection on professional roles and reduces prejudices and differences, thereby preparing students to work on interprofessional teams.¹³

In relation to methodologies, the findings indicate a higher frequency of use of traditional methodologies by professors who do not accompany students in health services. Other studies have expressed concern to prepare professors to use active methodologies, which coincides with the results in the present study. Methodologies need to be used that problematize and permit reflection on professional practices in order to transform them.^{13,16}

The volume of new knowledge and technologies does not justify the prevalence of traditional knowledge transmission methods. However, establishments that train students are often guided by old models, without critically considering processes of change inherent to a world in movement.¹⁷

The use of active methodologies in the Saci and Poti disciplines is cited in the narratives as a constant practice. The use of problematizing methodologies in primary care enables students to reflect and theorize in relation to the reality observed and, at the end of such experiences, present a new healthcare vision that is closer to the needs of the population and initiates the adoption of critical and reflective attitudes.¹⁸

A nursing education evaluation study involving professors found that they feel challenged when embracing new pedagogical approaches and that they themselves assume responsibility for the pedagogical act and the search for training to competently carry it out.¹⁹

To achieve a transformational education that goes beyond the paradigms introjected by limited Cartesian training, it is necessary to rise above traditional teaching practices. Professors must

appropriate active methodologies as well as modify traditional practices that have been replicated in university education.²⁰

The testimonies also reveal that many challenges exist, ranging from inadequate infrastructure in health services for receiving students to those related to the university and the actors involved in the interaction, including resistance on the part of professors to engage in activities outside the university. Similar results have been found in other studies indicating resistance from some professors, in relation to modifying their teaching practices and doing activities outside the academic environment.⁷

Other difficulties pointed out by professors for quality student training within health services are the poor infrastructure of some health units and the quality of the activities performed by the health services professionals who accompany the students (preceptors). Another study with similar results mentioned problems related to inadequate infrastructure, lack of materials and equipment for providing care, problems involving municipal and health unit management, and professionals without the necessary qualifications.²¹

Other challenges related to the work of preceptors are resistance and/or unavailability of certain professionals in the health services network²² and lack of preparation of professionals in terms of pedagogical practices and, in some cases, professional practices.⁷

The testimonies also cited difficulties related to high patient demand and an excessive number of students per professor, as well as incompatibility between the university and health services schedules. In addition, they indicated that the integration of universities with health services must be framed within a policy that is adopted by universities and does not depend solely on isolated initiatives by professors.

An actual inter-institutional commitment between the fields of health and education, with effective coordination of objectives, as well as real integration between the demands and expectations of education and health institutions, is likewise a challenge.²³ A tighter link between teaching and health services requires complex mediation, due to the inequalities and contradictions existing in this relationship, which means the construction of joint projects, shared responsibility, times for mutually supportive dialogue and, above all, negotiation.²⁴

University training must extend beyond the walls of the institution itself and requires instituting an educational model which, apart from developing technical competencies, enables the implementation of social skills and critical and reflective actions that encourage contextualization with issues aimed at the exercise of citizenship, in order to train professionals with a generalist profile which caters to social needs.²⁵

Universities must promote and place greater value on interdisciplinary and multi-professional activities, to overcome fragmentation of care and the emphasis on specializations, which would enable training with a generalist profile geared toward social demands.

It is clear, therefore, that consensus and contradictions exist in student training with teaching-service-community interaction. There must be greater coordination between universities and health services, so that the challenges within this interaction may be overcome, to enable quality training. The presence of students in health services is also beneficial to the population through the provision of better quality service and helps break the current hegemonic model which primarily focuses on users.

A limitation of the present study is that teaching-service interaction was only examined in one educational institution, by just one of the actors involved in the teaching-service-community process: professors. It is suggested, therefore, to conduct further studies that would include the viewpoints of other actors, whether students, health services professionals, users or managers, in order to delve deeper into the discussion of this theme.

CONCLUSION

Teaching-service-community integration is an important strategy for making changes to the training process of health professionals, thereby enabling modifications in professional practices and the care model. It also helps improve the quality and offer of actions in health services, by directly benefiting the community.

The professors recognize that integration contributes to the training of health professionals who serve social needs and provides multi-professional and interdisciplinary experiences in real-life situations. However, various challenges need to be overcome to ensure quality training with insertion of students in health services, such as the poor infrastructure of the SUS, the still predominant hospital-centric model, fragmented curricula in disciplines, little value and incentive given to extramural practices and the resistance of some professors to participate in integration, etc.

There is clearly a need to institutionalize teaching-service-community interaction, as well as emphasize initiatives that dynamize and provide flexibility to multi-professional and interdisciplinary activities, so that all the actors – professors, students, health professionals, users and managers – are involved. There must also be a commitment on the part of all the institutions involved to modify health training and transform healthcare practices.

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NOTES

ORIGIN OF THE ARTICLE

This article was taken from the dissertation - Teaching-services-community integration from the perspective of professors in nursing, medicine and dentistry courses, submitted to the Graduate Studies Program in Collective Health of the *Univerisidade Federal do Rio Grande do Norte*, in 2017.

AUTHORS' CONTRIBUTIONS

Study design: Mendes TMC, Andrade FB.

Data collection: Mendes TMC, Carvalho YM, Silva LG, Souza CMCL.

Data analysis and interpretation: Mendes TMC, Ferreira TLSF, Carvalho YM, Silva LG, Souza CMCL, Andrade FB.

Discussion of the results: Mendes TMC, Andrade FB.

Writing and/or critical review of the content: Mendes TMC, Ferreira TLSF, Carvalho YM, Silva LG, Souza CMCL, Andrade FB.

Review and final approval of the final version: Mendes TMC, Ferreira TLSF, Carvalho YM, Silva LG, Souza CMCL, Andrade FB.

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CONFLICTS OF INTEREST

There are no conflicts of interest.

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