

Interprofessional discipline in health: assessment of Dentistry students

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ABSTRACT

Interprofessional education is a pedagogical strategy in which two or more professions work and learn together, prioritizing integration in order to change the professional profile of health, and improve the quality of care and resolution in primary care. The Health Care discipline is an interprofessional proposal, developed in seven courses at the State University of Maringá, giving students from the Unified Health System (UHS), the opportunity to learn how to use the problematization of team situations. The aim was to present the perception of Dentistry students of the Attention in Health discipline, through analysis of the narratives in the evaluation portfolio. This was an exploratory and descriptive study using document analysis as a research technique, in which sampling continued until data saturation was reached. Analysis of the portfolios allowed the authors to show that academic students emphasized the importance of interprofessional work, its benefit to workers and patients, and the relevance of including dentists in the health teams. The students' knowledge about Unified Health System was able to highlight flaws and qualities, and recognize the effectiveness of the active learning model in enabling them to face adversities positively. It was concluded that the academic students pointed out that interprofessional collaborative practices and the use of active learning methodologies were positive strategies for a qualified education and training, and were in agreement with the curricular guidelines of the Dentistry course for professional education in and understanding of team work within the context of the real health needs of the population.

Descriptors: Dentistry. Education, Higher. Health. Problem-Based Learning. Evaluation.

1 INTRODUCTION

Nowadays, the time has now come when the paradigm of work organization, based on the extreme segmentation of Flexner's proposal is inadequate. This model favors an uncritical and restricted training of professionals, and does not try to be resolute, nor does it enable professionals to deal with the real health problems of the population¹. Thus, change in the professional education and training of both students and teachers in the field of health has not only become increasingly necessary, but studies have emphasized that this continues to be a challenge².

The importance of teamwork in health services should be emphasized, particularly from the aspect of complete and resolute health care². The integral approach to patients is facilitated by the sum of the points of view of the different professionals who comprise the interdisciplinary teams. This makes it possible to have a greater impact on the different factors that interfere in the health-disease process² and achieve greater efficiency and effectiveness in the health service³.

Interprofessional education is a pedagogical strategy in which two or more professions work and learn together, prioritizing teamwork, integration, and exchange of knowledge⁴. This occurs when students from two or more professions learn about each other's professions, with others and each other to enable effective cooperation and improve health outcomes⁵. Interprofessionality continues to be a challenging concept. Interprofessional practice helps improve the quality of care and resolution in primary care, and this experience has shown important changes in the profile of trained professionals^{6,7}.

Participative activity among several professions promotes the experience necessary for the formation of a collaborative health

workforce prepared for this practice^{8,9}. Thus, these professionals improve their skills and share case management among the team members in favor of better quality care and according to the real needs of the population.

The search for an understanding of the health-disease process in a non-fragmented way is essential, with emphasis on taking the users' needs into account¹⁰. This concern about educating professionals that fully meet the health needs of the population has been the quest of the Dentistry course of the State University of Maringá (SUM). Since 1992, consistent changes began with the purpose of adhering to the proposal of an integrated curriculum that would be in agreement with the National Curricular Guidelines (NCG) for undergraduate courses in dentistry, which was approved ten years later^{11,12}. In 2005, the course joined the National Program for Reorientation of Vocational Training in Health (*"Pró-Saúde"*). In 2009, the integrative and tutorial approach began with participation in the Work-to-Health Education Program (*"Pet-Saúde"*), which consisted of active learning, with a critical analysis of social needs and the principles and guidelines of the Unified Health System (UHS). Small groups of students gained experience in the practice of inter- and multiprofessionality, interdisciplinarity and integrality in health care^{13,14}.

The experiences of integration between health courses since the Pro-health project and the subsequent calls for reorientation of vocational training at SUM enabled development of the Health Care discipline. This contemplates interprofessional work during the first year in seven courses (Medicine, Pharmacy, Biomedicine, Physical Education, Psychology, Nursing and Dentistry), and courses began in the first semester of 2015¹⁵.

The Health Care discipline uses active

teaching and learning methodologies, in line with the NCG of the courses in the health area, and includes the student in the public health service right from the first year of the undergraduate degree. Learning and seeking knowledge are the responsibilities of the students; the teacher is a facilitator, who aims to give students autonomy in the decision-making of their daily work. This pedagogical approach is important for changing the process by which health care is produced in the country¹.

This proposal is pioneering and innovative. Few universities^{1,16} have used the interprofessional approach as a curricular discipline^{4,17}, however, its inclusion in undergraduate courses in the health area is not compulsory. Therefore, it is important to constantly evaluate the perceptions and teaching of future health professionals. Thus, this study aimed to present the evaluation of Dentistry students' perceptions of the Health Care discipline, through the analysis of the narratives in the evaluation portfolios.

2 METHODOLOGY

This was an exploratory and descriptive study, with a qualitative approach, using documentary analysis as a research technique, based on individual portfolios constructed by Dentistry undergraduate students of the SUM course in the Health Care discipline, during the academic semester.

Interprofessional education

The Health Care discipline is a discipline that occurs in the first year of the undergraduate degree in seven health courses, with a total of 68 hours, held in the city of Maringá, State of Paraná. This discipline is based on the knowledge and analysis of the field of health services, through the experience of interprofessional and interdisciplinary work in

several UHS scenarios. The aim of the discipline is to gain knowledge of how the organization and dynamics of the services work in the UHS, through understanding the actions carried out in education, promotion and recovery of health; prevention of diseases and improvement in the quality of life and health knowledge of the population. This is developed through cycles of problematization, based on the Arch of Maguerez, which starts from the observation of reality; identification of key points of the problem; theorization; hypothesis of the solution; preparation of proposals for intervention and discussion of solutions to the themes and problems encountered¹⁸. The practice occurs in the Basic Health Units (BHU) and the students are distributed in multiprofessional groups of 10 to 11 students, guided by a tutor (teacher) and assisted by a preceptor (health service professional). Assessment of the undergraduates is centered on measurement of competences of the cognitive axis, demonstrated in the construction of a portfolio, in addition to daily evaluations made by the tutors, based on the competences developed in the psychomotor and affective axes. Peer evaluation is also made by the students themselves, and a self-assessment centered on some of the central axes of the discipline.

The construction of portfolios allows students to learn in a better and more integral way, because this requires reflection, which in turn requires the students to pay more attention and be committed to the activities¹⁹. The construction of portfolios sought to obtain sufficient information to enable analysis of the students' evolution in the discipline, and involved questions about the new teaching methodology used²⁰ and the students' contact with UHS, thus stimulating autonomy and critical-reflexive thinking²¹. These documents

contained the students' narratives about their weekly activities, researches carried out during the course, and some questions with the purpose of identifying the students' opinions, perceptions and apprehensions in relation to the discipline and the methodology used in it.

Sampling

The depth and understanding of the subject were considered of greater importance, because the study was of a qualitative nature. Sampling was intentional and data collection was interrupted when no new elements were found to support theorization, totaling seven analyzed portfolios.

Data collection and analysis

The entire texts of the portfolios were transcribed and analyzed by the qualitative technique of Content Analysis, as advocated by Bardin²². The responses were categorized and in-depth analysis was made the contents manifested by the social actors involved. In this research, four main themes were found: the experience of interprofessional education; use of active methodologies; contact with UHS; and the student's attitude towards the subject considering the NCG in the health area.

3 RESULTS AND DISCUSSION

The Health Care discipline of SUM obtained positive results in the evaluation carried out by the students. Through the students own opinions, it was possible to emphasize how enriching the students found this to be. The central themes resulting from the documentary analysis were then pointed out and discussed.

Interprofessional education experience

Many health systems in the world are fragmented and have difficulty managing the

unmet health needs of the population. Interprofessional education has appeared to fill this gap in health services, but in Brazil it is possible to note that there are still few experiences related to interprofessional proposals, something that is also noticeable from the scarcity of research in the scientific literature¹⁶. Few courses have used interprofessional education in their curricular grids⁴. Some institutions make use of optional interprofessional disciplines, so that a large number of students do not have this opportunity¹⁹. There is still greater scarcity of studies addressing integrative and interprofessional experiences in an ineligible manner, when the focus is the Dentistry course¹⁵.

With interprofessional experience, it is clear that students learn the skills needed to become part of a health team workforce. Thus, when students accept the presuppositions of interprofessional education, in which collaborative practice improves health outcomes²³, they are able to enter the workplace and learn about other professions and each other to enable effective collaboration and improve results in health, thereby changing practice and patient care²⁴. In addition, interprofessional education prioritizes the integration and flexibility of the workforce, recognizing and respecting the specificities of each profession⁴, and this practice becomes essential for the integrality of health care¹⁷. Evidence of this collaborative teamwork was shown in this study, since most of the students believed that interprofessional work was enriching because of the possibility of learning from other areas. Some speeches analyzed were related to the benefits of this experience:

(A2) *"prepared for interprofessional practice ... seeking integration through actions to promote, protect and prevent health*

problems."

(A4) *"when working as a team the service is performed more effectively" in which there is a larger (A5) "collaborative health workforce" prepared for the practice.*

In addition, it was mentioned that inter-professional education can produce better trained professionals:

(A1) *"great professional and personal development."*

The interprofessional work is present in this discipline and appears in the analysis of the students, i.e.. the need for the most humanistic and ethical profile, as follows:

(A1) *"mainly that he knows how to respect differences, and respect all professionals and each of their specialties, to jointly achieve a beneficial result for all."*

The use of active methodologies

For a long time, health professionals have received training based on the traditional teaching-learning methodology, in which teachers are the active subjects in the process. They pass on their knowledge to the students through theoretical lectures²⁵, subject to strong influence of the mechanics of fragmented Cartesian inspiration. This methodology can restrict the teaching process to the reproduction of knowledge, in which the educator holds the monopoly of power, assuming the role of content transmitter and formulator of questions, while the learner has to answer, retain and repeat content, without the necessary criticism and reflection essential to meaningful learning²⁶.

In health area, active pedagogies are also not a novelty, because since 1950 Preventive Medicine has defended re-adaptation of the curriculum and incorporation of active methodologies into professional training. The use of these teaching-learning methods seems to

be efficient for the education of a more critical health professional, capable of facing the challenges posed by the social reality¹.

The use of active teaching-learning methodologies, in which the students are the protagonists of their own training process, has shown high success rates. These have teaching strategies based on the critical-reflexive pedagogical concept that allows reading of and intervention in the reality with interaction among the different actors and valorization of the collective construction of knowledge in its different knowledge and learning scenarios. They methodologies are capable of integrating subjectivity into the educational process, stimulating reflection on the reality in which students are inserted²⁷. They are also practices that stimulate creativity in the construction of solutions to problems and that promote freedom in the process of thinking and acting, thus stimulating the process of student autonomy²⁶.

The proposal of problematization of learning, using the Arch of Magueres, is based on the principles of Active Pedagogy, in which teachers should be facilitators with the function of organizing the group to seek information and knowledge considered necessary to solve a problem¹.

The analysis allowed the researchers to verify the importance the students placed on the benefits of this experience. All the students agreed that active teaching methodologies educated/trained a professional better prepared for the practice, postulating greater humanization, and an expanded vision of the professional and multiprofessional environment. The benefits to the professional future pointed out by the students were:

(A1) *"is prepared to deal with possible problems you will encounter and so you will have more experience in this."*

(A2) *with the aim being the common*

good" and emphasizes the question of gaining experience, saying that (A6) "when we have experience, the learning gain is much greater than that gained simply by the transmission of information."

The aims of the change in focus of the education process are the autonomy, creativity and responsibility of students, enabling them to learn to seek solutions and solve professional problems by themselves²⁶.

Even with satisfactory opinions on the use of active learning methodologies, it is possible to find criticisms of this method in the literature. Students may feel lost in the search for knowledge; there is a type of gap in the ideal knowledge. The presence of reports demanded as being complementary, which are often lengthy and tiring²⁸, in addition to generating a certain insecurity in the students and requiring a great deal of effort in the process, often require abrupt changes in behavior, maturity and organization²⁹. This dissatisfaction was demonstrated by one of the students: (A3) "somewhat tiring to do weekly reports and surveys when taking a full course." This demanded a longer study period than the method offered, so it is important for facilitators to give evaluation feedback as soon they notice that some students have difficulties or dissatisfaction with the discipline, by making daily assessments and constantly stimulating their teaching-learning process.

Contact with UHS

The integration between teaching-service-community and the use of active teaching-learning methodologies are shown to be strategies for training professionals focused on the labor market and the real needs of the population⁵. This requires students to be prepared to work in the public health service, and consequently, to be better trained and

prepared for the reality of the population.

Some students reported this insertion in the UHS as something innovative, in which the contact with the UHS was translated as (A3) "encouraging", mainly from the professional point of view. In addition, it was defined as (A4) "A different experience and interesting idea" this deepening into a system with which some had never had any previous contact.

A more critical view of the factors that impede the ideal functionality of the public health system was made difficult, due to the economic thinking of minimum expenditures on this social issue, so that the predicted ideal of the Brazilian Sanitary Reform could be implemented; that is to say, a single, comprehensive, free, fair and resolute health system for the entire population³⁰, which configured in the student perspectives as:

(A3) *"the disregard for health by government agencies"*

(A5) *"lacking resources and structure for full service."*

Another important factor described, were the highlights attributed to UHS as a public health system capable of acting permanently, and how close it was to people with human values, solidarity and, above all, being resolute³¹. The aim of this last point was to dismantle prevailing concept with regard to the public service, which the State mostly blames for the problems³², to exemplify the student's phrase was transcribed as follows:

(A5) *"this knowledge also made me reconsider some theories, such as that the public system employees did not care about the patients they attended."*

Dentistry students also pointed out positive points, especially in the field of public sector workers. In recent years there has been a new assignment to health professionals who have come to be considered as agents of change

in the context of family care as well as facilitators in the process of health education³³. They were pointed out by students as:

(A3) *"professionals working at the BHU I visited were extremely skilled, ethical in their way of working, in spite of the difficulties; they are examples of dedicated professionals."*

(A7) *"All the staff were always kind and willing to answer questions."*

After these experiences the students imagined themselves as future professionals in this context.

(A3) *"we will get to know about many problems and many difficulties that need to be overcome by health professionals daily."*

The student's attitude towards the discipline, considering the NCG in the area of health

The NCG of the undergraduate course in Dentistry advocates that the profile of the dentist should be based on a generalist, humanistic, critical and reflexive training, to act at all levels of health care, based on technical and scientific strictness⁵. They also advise that student assessments should be formative and based on competencies, skills, attitudes and curricular content, by using methodologies and criteria for monitoring and evaluating the teaching-learning process of the course itself²⁶. Through the analysis of the students' evaluation in the portfolios, they suggested that the students' posture occurred as a result of the active method used and the interprofessional action, thus they experienced contact with reality to become a better, humanized, ethical professionals with humility, learning to (A2) *"to appreciate the value all professionals and users of health in a unified way."*

The students' reports classified this discipline as follows:

(A4) *"of extreme importance for their professional life as a whole" and that (A1) "the*

discipline must be approached with seriousness and respect, for the best use of an opportunity that is not offered in all courses."

The collaborative premise in interprofessional education is an important aspect in professional training, since it prepares professionals to better respond to local health needs. Teaching-service integration provides meaningful learning experiences that have resulted in improvements in health services and vocational training. Thus, the use of this methodology is perceived as providing a greater degree of autonomy in the decision making of daily work.

Among the important points of the discipline, also mentioned was the opportunity to exchange knowledge by bringing together several students from different courses in the health area.

(A4) *"by making them interact with other students, they gained knowledge to which they had no access until then."*

A similar experience occurred in the discipline "Integrated Practices in Health I" (IPH I) of the Federal University of Rio Grande do Sul (UFRGS), implemented in 2012, integrating 13 undergraduate courses¹⁷. Differently from the discipline described in this article, the experience carried out by UFRGS was elective for 10 of its courses, including Dentistry, and additional for Medicine, Nursing and Public Health courses. That is there were limits to the number of places available for the selection of students in each course per semester¹⁷. There were two differences between them: The first was that at SUM the discipline was developed in all integrated courses; and the second was in the final evaluation form, in which IPH I was required to present a seminar at the end of the course, in addition to delivery of the portfolio¹⁷.

The curricular design of the new courses

of the Baixada Santista Campus of the Federal University of São Paulo is also included within the context of interprofessional education, in which students of all the years of the course experience times of shared learning (80% in the first year, 40 % in the second year, 20% in the third year and weekly meetings in the fourth year)¹⁷.

As regards analysis of the records, it was verified that the portfolios had a predominantly narrative profile from the activities carried out. It could be inferred that for the next classes it would be necessary to give more attention to the development of a more critical and reflexive view on the activities carried out by the undergraduate students, resulting in portfolios capable of substantiating the evaluation process, and improving the construction of an integrated and collaborative view of health²¹.

The limitations of this study should be emphasized: the first being that it was a qualitative analysis. Longitudinal quantitative studies with more significant samples should be conducted to supplement the information and increase the level of evidence of the study. Further research is needed to verify the performance of this discipline using other study designs, such as the transverse or longitudinal types, with representative samples.

4 CONCLUSIONS

The evaluations of the students showed the importance of working in an interprofessional environment, generating benefits to the workers and patients, as well as the importance of the Dentistry professional in the health team. The students' enriched knowledge about UHS was verified, with both flaws and outstanding qualities. The students also recognized the effectiveness of the active learning model, which was capable of leading to better trained professionals who were prepared

to face adversities in a positive way in the work environment. The difficulties pointed out by the undergraduates were related to the lack of material, financial and human resources in the public health services.

The results also pointed out that the objectives of the discipline (promoting interprofessional education, promotion of collaborative practices in health) were achieved, with the exchange of knowledge among students of several courses of health being essential for the growth of the individual and the group.

RESUMO

Disciplina interprofissional em saúde: avaliação de discentes de Odontologia

A educação interprofissional é uma estratégia pedagógica na qual duas ou mais profissões trabalham e aprendem juntas, priorizando a integração, com a finalidade de mudar o perfil profissional na área da saúde e melhorar a qualidade do cuidado e resolutividade na atenção primária. A disciplina Atenção em Saúde é uma proposta interprofissional, desenvolvida em sete cursos da área da saúde na Universidade Estadual de Maringá, oportunizando ao aluno vivência no Sistema Único de Saúde (SUS), utilizando a problematização de situações em equipe. Objetivou-se apresentar a avaliação dos estudantes de Odontologia sobre a disciplina Atenção em Saúde, por meio da análise das narrativas de seus portfólios avaliativos. Trata-se de um estudo exploratório e descritivo, com análise documental como técnica de investigação, com amostragem até saturação dos dados. A análise dos documentos permitiu mostrar que os acadêmicos ressaltam a importância do trabalho interprofissional, beneficiando trabalhadores e pacientes e a relevância do cirurgião-dentista na equipe de saúde. Constatou-se o conhecimento experienciado do aluno sobre o SUS, capaz de destacar falhas e qualidades, bem como o reconhecimento sobre a eficácia do modelo

ativo de aprendizagem, para capacitá-los a enfrentar positivamente as adversidades. Conclui-se que os acadêmicos apontaram as práticas colaborativas interprofissionais e a utilização de metodologias ativas de ensino-aprendizagem como estratégias positivas para formação qualificada, estando em consonância com as Diretrizes Curriculares Nacionais de Odontologia quanto à formação profissional para o trabalho em equipe e compreensão das reais necessidades de saúde da população.

Descritores: Odontologia. Educação Superior. Saúde. Aprendizagem Baseada em Problemas. Avaliação.

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