

# Impact of an extramural program in training dental students

## *Repercussões de um programa extramural na formação de estudantes de odontologia*

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### Abstract

*Introduction: Extramural programs allow dental students to be trained facing the reality of people's lives and their health needs. This study describes the experiences of an extramural program developed at the Federal University of Santa Maria, RS, Brazil. Methods: Professors and dentists participated in activities directed to a group of recyclable material collectors and their families, who are part of a singing group. The aim of the activities is to provide dental care, health promotion, health education and disease prevention. Results: Up until now, 80 people have been involved in the program. It was possible to observe that the collectors have gained confidence and self-esteem and positive changes in their behavior regarding health. The academic training was enriched by the educational, clinical and humanistic experience by interacting with the social context of the collectors. Conclusion: An endeavor to improve the health of these people has guaranteed an opportunity to train the health professional in a qualified teaching and learning environment in front of social reality.*

*Keywords: Community dentistry. Dental education. Problem-based learning.*

### Introduction

Institutions of higher education have sought to qualify the training for oral health professionals by offering students the opportunity to carry out activities in extramural programs or community-based education programs. The main purpose of these programs is to put dental students into contact with real-life situations of people and their health needs<sup>1-2</sup>.

During the 1980s, extension programs became consolidated in the Brazilian universities, understood as an "educational, cultural and scientific process, which connects education and research in an inseparable manner and enables to transform the relationship between the university and society"<sup>3</sup>.

In 2000, the National Education Council approved the National Curriculum Guidelines for the Undergraduate Courses in Dentistry. This document states that the dentist should have a "general, humanistic, critical, and reflective training to act at all levels of health care". The document also stresses that the dentist should be "accredited to exercise the activities related to oral health of the population, based on... the understanding of the social, cultural and economic life of their society..."<sup>4</sup>. This represented a shift from a teaching model that valorized primarily technical training to complete training model with the purpose of offering services to the majority of the population.

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Differences in the distribution of oral diseases, especially dental caries, show that the socially disadvantaged populations have more carious and lost teeth than the rest of the population and they often seek dental services for emergency treatments<sup>5</sup> or they have difficulty obtaining dental treatment due to economic<sup>6</sup>, racial or ethnic<sup>7</sup> matters.

Among the socially disadvantaged population group, there are the people involved in collecting recyclable and refuse material. This activity has provided a means of obtaining income for these people by collecting and selling recyclable material. In Brazil, people involved in this activity have organized associations and cooperatives, resulting in the recent inclusion of the occupation recyclable material collector in the Brazilian Classification of Occupations<sup>8</sup>.

A group organized with the purpose of promoting their citizenship by learning manual skills and crafts and the creation of a singing group (Collectors' Choir) has been assisted by an extramural program in Dentistry of the Federal University of Santa Maria (UFSM). The program, called "Collecting Citizenship with Oral Health", has provided access to health education and prevention of oral diseases with dental treatment. The aim of this study was to describe the experience of professors, students and collectors in the process of promoting citizenship as well as showing the impact of the training process of the dentist.

## Materials and method

The work team is composed of volunteer professors and students from the 2nd to the 10th semester of the Dentistry Course at UFSM. To achieve the objectives of promoting, protecting and restoring oral health of the people involved, the program develops activities of prevention, dental care and health and environment education.

Clinical attendance occurs in the facilities of the Dentistry Course at UFSM during a week shift. Care in general practice, dentistry, surgery and periodontics, as well as specialized procedures such as endodontics and prosthetics are performed. There is also the demonstration and development of oral hygiene skills, use of techniques and materials for the prevention of dental caries and the recovery of the masticatory function, speech and esthetics by means of prostheses, according to individual needs.

The purpose of the activities of health education is to stimulate reflexion and to build knowledge on health and disease matters. For this purpose, two workshops were organized: one for adults and one for children and adolescents in the collectors' workplace where they also rehearse for the choir. In the health workshop with the adults, clippings and newspaper and magazine pictures were provided so they could choose the images that best represented

health and illness. Once selected, the images were grouped and glued onto a poster fixed to the wall and discussions were conducted on the choices they had made and what they meant for them. At this moment, positive behavior for a healthy life were reinforced both in the oral and general aspect.

To encourage the practice of humanization of health care, a closer professor-student-patient relationship was sought through round-table discussions. This was achieved by participating in collective debates in which the participants could express themselves and listen to the others. The aim was to motivate the autonomy of the individuals by means of dialogue and exchange of experiences, conversations, discussions and dissemination of knowledge among all those involved. The groups were composed of approximately seven people in a similar age group and mediated by two students. The collectors were able to make questions, answer questions and make suggestions to improve the program in which they were participating.

To improve the activity of environmental education that the collectors conducted at the schools of the city, the dental students were involved in developing an educational material along with the collectors in the form of a booklet, entitled Planet Earth in Good Hands: Small Collectors for a Great Future, which contains information and games in a educational and fun manner, showing the work done by collectors and providing simple tips on how to preserve nature.

The activities carried out in the program are used as instruments for incorporating teaching, research and extension. Patients with general health problems are advised and referred for treatment at the University Hospital of UFSM or Basic Health Units in the city.

The work team, professors and students, regularly evaluate their interventions through a set of values, knowledge, attitudes and skills with regard to the training of the student and the professional future of oral health as well as the impact of the actions scheduled in the daily life of the collectors, also using the methodology of round-table discussions.

## Results

Since the program "Collecting Citizenship with Oral Health" began in 2005, 99 students from different semesters of the course, two permanent professors, four volunteer professors and four dentists have participated.

The diversity in the level of training of the students who participate in the activities allows an effective exchange of knowledge and skills among them, enabling cooperation and teamwork, where all work within their possibilities, teaching and learning from each other.

Up to now, 80 people among children, adolescents and adults have been involved in the activities of the program. In this group, 81% were women, most were in the age group between 21 to 30 years, 93% presented treatment needs, 7% wore dentures and 54% needed some type of dental prosthesis. The clinical work environment consisted of a privileged facility for the consolidation of the proposal of an Integrated Clinic, with the effective interaction between professors and students to solve the health problems of the people involved in the program.

The reports of the teaching staff and students indicate a clear change of behavior of many collectors and family members who, at first, showed to be shy, aloof from the activities, suspicious and somewhat incredulous about the intentions of the oral health team. However, over the course of time, the relationship became closer and friendlier. This is evidenced by the growing number of people seeking to join the Collectors' Choir and receive dental care attendance. The team has been acknowledgment several times for their work shown on the Dentist's Day, at the end of each school year and the collectors have given the team handmade crafts.

In the round-table discussions, the subjects were more varied, including personal and daily life issues enabling the students to understand the life conditions of these people better. These were moments of reflection that helped the students in the process of understanding the reality of the population groups, which would not have occurred during a formal course, and to evaluate their approaches seeking ways to humanize and qualify their practice.

The activities showed to be adequate in order to consolidate them as an instrument for incorporating education, research and extension.

By the following statements, the extent that the program has brought to those involved may be perceived:

In the presentations of Collectors' Choir, the participants wanted to stay behind to hide their missing teeth. Nowadays, they all want to be in the front row.

C. A. K. F. - 56 years old – Collaborator in the program Collecting Citizenship

If I did not have this opportunity, my family and I would not have been able to get our teeth fixed. The professionals attend us with care and patience.

C. M. F. - 55 years old – Collector

I never imagined that I needed to take so much care of my teeth. I really admire the patience the dentists had to teach us.

A. G. R. - 18 years old – Collector

I really enjoyed the treatment of my teeth. Besides having nicer teeth, they take good care of us.

J. R. - 46 years old – Collector

I have been participating in the program Collecting Citizenship for 3 years and it has been a significant experience in my life. I am part of people's life, stories and feelings. This program has allowed me to practice the profession I chose and clarify some issues on oral health, contributing even if just a little to the well-being of the individual. Furthermore, I learn by taking care of the patients; each one teaches something to us. It is much more than simply dental attendance, the program Collecting Citizenship allows us to exchange knowledge, experiences and feelings with the people. We all deserve attention and we always have something to offer and to learn.

B. C. S. B. – Student of the Dentistry Course – 9<sup>th</sup> semester

[The collectors] are learning with us... [but] we are also learning about life with them!

M. M. R. – Student of the Dentistry Course – 9<sup>th</sup> semester

I know that our help goes beyond dental care, that is, during the conversations, advice, and embraces... It is very nice to see a patient from the program with their treatment concluded, but the friendship that we have made is even better. I keep each little note that I received from the collectors' children at the clinic with love and care, every token that our group received, each presentation of the choir and I am proud to have been part of this story, proud to have seen a dream come true...

M. F. – Student of the Dentistry Course – 6<sup>th</sup> semester

In addition to being a School of Dentistry, it has also become a School of Life.

C. L. – Student of the Dentistry Course – 9<sup>th</sup> semester

I am sure that the program "Collecting Citizenship with Oral Health" has achieved all the goals proposed; it has provided the students globalized training, the practice of humanization of health care and an interdisciplinary experience, as well as promoting oral health for a group of recyclable material collectors. However, for me, it has had a larger extension due to the excellent experience with the singing group Collecting Citizenship and the people committed to social issues. It has not only shown us the need to exercise citizenship, but also the responsibility that we, professors of educational institutions, have with the training of health professionals committed to the society. Therefore, in the future, through the work of these professionals, it may be possible to change the reality of the world to a juster and more solidary place.

K. O. B. – Professor and member of the work team.

## Discussion

The process of training dental students should include the integration of experience with reflection and theory with practice<sup>9</sup>. The experience of students and professors involved in activities outside the formal context of the course allowed them to reflect on their work and add experience and knowledge. The pursuit of health transcends the practice of the intervention processes in disease because the field of health is broader than disease<sup>10</sup>. Maintenance and the recovery of health state cannot ignore the socio-economic and psychological aspects invol-

ved in the daily lives of people. These people require care that goes beyond a simple task of restoring a tooth or placing a dental prosthesis.

The philosophy of the program is in agreement with the findings of Strauss (2003), which has noted the importance of dental students having contact with the community to reflect on the dental service and perceive how significant, rewarding and interesting the exchange of experiences with a community is<sup>2</sup>. For this author, learning how to be a good professional is the major challenge, and learning how to think and analyze one's own behavior by facilitating knowledge transmission to the patient.

Training of a dental student is traditionally conducted in a school environment, far from the reality of clinical practice. The learning opportunities in other environments place the student before patients with different needs from those of patients selected for attendance in the formal course and far from social reality. The education of dental students must contemplate learning in an extramural environment as an essential and permanent component of the dental curriculum<sup>11</sup>.

Accustomed to seeing patients of a higher socio-economic level, with limited human interaction, in addition to the application of dental techniques, the group of students began to attend the program and live with people whose daily life is characterized by different levels of exclusion, but are able to sing, be joyful, offer gifts and make the future professionals, who are only used to looking at and treating mouths, aware of life itself. These activities help to educate a professional focused on dealing with problems that transcend the everyday academic and technical institutions of higher education, requiring adaptation, flexibility, humility and sensitivity to work with human beings in unfavorable conditions. It is an endeavor to overcome the academic mechanistic model that "stiffens" professional training, placing unprepared professionals into the work market to cope with situations in which the population is socially disadvantaged<sup>12</sup>.

The aim of the activities developed in this program was to enable the group of collectors to promote, prevent, recover and control health, by providing comprehensive health care and contributing to the social inclusion of these people. Academic training was enriched by the integration with the social context in which the collectors and their families are included, providing interdisciplinary learning and humanization of care. Without this contact, it would not have been possible to evaluate clearly the value of human beings, their role in society and their ability to overcome the difficulties of life.

The population attended at the program represents a small number of the total of Brazilian collectors. However, it has been possible to achieve significant progress in transforming the social reality of this small group. The activities developed in the dental clinic promote gradual achievements

that contribute to the access to knowledge in health, social inclusion and recovering self-esteem.

One of the challenges of the program involved the difficulty of oral self-care of collectors, considering their social status, and the notion that by going to the dental office, by itself, would provide them with health protection. It is known that access to attendance is extremely poor in the Brazilian public service. However, an endeavor was made to overcome these challenges by getting the individuals involved in the process of maintenance and recovery of health during the work developed with them.

The program Collecting Citizenship with Oral Health includes the principles of humanization of the pedagogical practices in accordance with the norms of the National Curriculum Guidelines of the Undergraduate Course in Dentistry. In this context, the integration of professional training with social reality humanizes training in Dentistry and meets the social and educational policies that characterize the context of professional practice in society<sup>13</sup>.

Although the program has altruistic proposals with regard to attending the needs of this small group of citizens, it should be remembered that constitutional precept of the country states that health is a right and duty of the State.

## Conclusion

The extramural program Collecting Citizenship with Oral Health has become a vital learning space for the training of a health professional directed to social reality, while it provides actions of social inclusion and the recovery of citizenship of a group of collectors.

The humanistic aspects of health care are consolidated through the interaction between the individuals involved, allowing the experience in a different scenario from the traditional teaching system in the Dentistry course. In clinical practice, the real interdisciplinary approach between professors and professionals, along with students, provides a field to develop knowledge, skills and attitudes necessary for the training of oral health professionals.

However, it must be pointed out that general and oral health is not achieved solely with clinical and specific interventions. It is necessary to strengthen mechanisms for health promotion and disease prevention and this is possible through consistent social, economic, educational and cultural policies that provide the inclusion of all citizens to a life with dignity.

## Resumo

*Introdução: a inserção de estudantes de odontologia em programas extramurais possibilita sua formação voltada para a realidade de vida das pessoas e suas necessidades de saúde. Este trabalho descreve as experiências de um programa extramural desenvolvido na Universidade Federal de Santa Maria, RS, Brasil. Métodos: participam docentes, acadêmicos e cirurgiões-dentistas em atividades dirigidas a um grupo de catadores de material reciclável e seus familiares, que constituem um grupo de canto. São realizadas atividades no âmbito da assistência odontológica, da promoção e educação em saúde e da prevenção de doenças. Resultados: até o momento, oitenta pessoas foram envolvidas pelo programa. Foi possível observar que os catadores adquiriram confiança e autoestima e mostraram mudanças positivas de comportamento em saúde. A formação acadêmica foi enriquecida pela experiência educativa, humanística e clínica, interagindo com o contexto social dos catadores. Conclusão: a busca por melhorias na saúde dessas pessoas tem garantido um espaço de ensino-aprendizagem qualificado para a formação de um profissional de saúde voltado para a realidade social.*

*Palavras-chave: Aprendizagem baseada em problemas. Educação em odontologia. Odontologia comunitária.*

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