

APRENDIZAJE –SERVICIO EN LA UNIVERSIDAD  
CATÓLICA PORTUGUESA VISEU–  
EXPERIENCIA PILOTO<sup>1</sup>

*Service Learning at Universidade Católica Viseu – a pilot study*

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RESUMEN

Algunos de los conceptos de la Aprendizaje-Servicio (ApS) son comunes con la enseñanza de muchas de las áreas de la salud. Sin embargo, hay muchos otros requisitos que están presentes en ApS como la toma de conciencia de ser un actor en la resolución de problemas sociales y la reflexión sobre las experiencias de ApS. En esa contribución se presenta la aplicación de la metodología ApS en el Centro Regional de Viseu de la Universidade Católica Portuguesa, onde alumnos del Máster en Odontología e del Master en Gestión se juntarán para ayudar un Residência de Mayores a mejorar la Salud Oral de sus mayores e la

<sup>1</sup> Este trabajo se ha realizado al amparo de una subvención Campus Bizia Lab otorgada por la UPV/EHU, cuya investigadora principal era Elena López de Arana. Las personas firmantes de este artículo formamos parte de la red RIADIS de aprendizaje-servicio en actividad física y deportiva con personas excluidas en pro de una justicia social, que recibe a su vez, subvención del Consejo Superior de Deportes.

gestión financiera la residencia de mayores. El proyecto está en la mitad, pero la satisfacción de los alumnos ya es evidente por el análisis reflexivo que hicieron en sus portafolios. Están involucrados 51 alumnos en ese proyecto, trabajando con la dirección y los auxiliares de esa institución que tiene casi 200 mayores en régimen de internamiento. Esa experiencia piloto es parte de un proyecto más largo que tiene como objetivo implementar la ApS en toda la Universidade Católica Portuguesa y crear un ejemplo de buenas prácticas en ApS en Portugal.

Palabras clave: *Aprendizaje Servicio, Universidade Católica Portuguesa, Odontología*

## ABSTRACT

Some of the concepts of Service Learning (SL) are common to the teaching of health-related areas. However, there are many other requisites for a project to be SL such as the developing of student's commitment to contribute to society and the importance of reflection on the learning experience. In this presentation the application of the SL methodology to Health in the Centro Regional de Viseu of the Universidade Católica Portuguesa, where students from the Integrated Master of Dental Medicine as well as the Bachelors in Management get together to help a senior nursing home to improve the oral health of the residents and the financial management of the home. The project is only half completed so far and there are still goals to accomplish. However, students' portfolios already show that the 51 students involved in treating about 200 elderly residents are happy to participate in the project. These students are working closely with the Home managers and employees to improve oral health and prevent oral diseases. This pilot intervention is part of a larger project which aims at implementing SL in the Universidade Católica Portuguesa as well as to identify good practices in SL in Portugal.

Keywords: *service learning, Universidade Católica Portuguesa, Dental Medicine*

## INTRODUCTION

### THE VISEU EXPERIENCE

The Universidade Católica Portuguesa (UCP) has, in its Viseu campus, an Integrated Master's in Dental Medicine (IMDM) as well as a Management Bachelors degree. Especially in the IMDM, students are used to practice with patients and part of the learning process involves doctor patient interaction. Most of student's practical training however occurs in the Clínica Dentária Universitária, the University Dental Clinic.

**F**REQUENTLY, WHEN SERVICE LEARNING (SL) is presented to the students and respective professors, we get the feedback that this is what they have been doing all along. This is common to other higher education environments (Hood,

2009) where «most dental schools use some type of community-based rotations in their clinical curricula, although these experiences primarily focus on delivery of patient care without associated educational activities that engage the students with the community served by the clinic». This perspective clearly reveals the misunderstanding and oversimplification of SL, which, according to McIlrath *et al.* (2019), is still the norm. Indeed, SL has other components that go far beyond practical classes. The inclusion of SL in the dental curriculum has been discussed in at least two different contributions (Yoder, 2006 and Hood, 2009) and Yoder (2006) lists ten characteristics of «true» SL: The application of these components of SL to the dental curriculum should lead to the realization of the role that students can have in solving societal challenges, as well as, the reflection on the learning experience (Coe *et al.*, 2015). Several studies indicate that SL, as well as Community-Based Learning, have an impact on dental students' attitudes towards underserved communities (Coe *et al.*, 2015 and Sager and Blue, 2019). Most of the studies have been conducted in the United States of America and as far as we could find, only one study has been conducted in Europe (Phlypo *et al.*, 2017) and was specific for institutionalized patients with cognitive disabilities. At a time when health disparities are a concern for many governments, and equal access to healthcare is part of the Sustainable Development Goal number 3, it is important to explore ways to promote oral health for all.

Recently, the UCP has promoted the implementation of SL in the university's 4 campi (Lisboa, Porto, Braga and Viseu) with the objective of becoming a more engaged member of society. The institutional commitment to use SL as part of the pedagogical strategy aims to train graduates which are committed to actively contribute for the resolution of global problems, providing students with differentiating skills and preparing «Talents of the Future». In this respect Universidade Católica Portuguesa responds to the global demand from society at large, to promote an education which leads to citizens better prepared for the future by being involved and critical as well as conscious of their role in society (Meijs *et al.*, 2019) This prompted the Faculdade de Medicina Dentária of Católica Viseu to adopt SL strategies in the curricular unit of Gerodontology of the IMDM and the Instituto de Gestão e Organizações de Saúde to do the same with the Finances curricular unit of the Management Bachelors degree, in the 2019/2020 year.

The goal of this presentation is to describe the current status of the implementation of SL pedagogical approaches to the Gerodontology Curricular Unit of the IMDM.

## METHODS

Fifty-one students of the 4<sup>th</sup> year of the IMDM of UCP-Viseu were challenged to work with the social workers of the senior nursing home, in order to promote the oral health of their residents, as well as, to improve the employees training in oral healthcare.

The pilot project «Sorrisos Maiores» started with a presentation and visit of the students to the Senior Home. In the following class, students were divided into groups and prepared interventions for different audiences: caregivers and seniors. The following 16 hours of class, in the first semester, were dedicated to producing the materials, organizing the spaces for the interventions and diagnosing the treatment needs of the residents.

As part of their assessment, each student produced a portfolio describing their experience, reporting all the communication strategies and materials produced, documenting the oral observations and diagnoses made. Additionally, each student was asked to include in their portfolio a reflection on the experience. Student portfolios were analyzed and are presented in the results.

There will be another 60 hours of contact where students will: perform the dental treatments, provide the caregivers with specific training for oral health-care of the residents and their dentures and prepare a moment of celebration of the project completion with the senior residents, caregivers and management employees.

## RESULTS

During the «Sorrisos Maiores» project students had the opportunity to assess the oral health of around 200 residents of the Senior Home. Some of student's actions are illustrated in figures 1 through 4.

FIGURE 1. Student interventions for oral health promotion as well as the relationship between oral health and diabetes



As depicted in Figure 1, not only oral health was considered. Students evaluated blood glucose levels and blood pressure, alerting residents for the impact of oral health on systemic diseases such as diabetes and cardiovascular disease.

FIGURE 2. Poor oral hygiene was the most common condition found. The portable unit was used to provide simple treatments such as scaling



FIGURE 3. Suspect oral lesion which was referred for biopsy



During their visits, students were also able to identify several needs for treatment from simple cleaning and scaling procedures (Figure 2) to suspicious lesions requiring oral medicine referrals to perform biopsies (Figure 3).

FIGURE 4. Fractures and infected roots were observed in several patients.



The need for extractions was also frequently encountered with several residents presenting extensive tooth decay and infected roots (Figure 4). Students prepared treatment plans for these patients which are currently being applied.

FIGURE 5. An important part of the intervention, is the social interaction with the residents



Although this project is still halfway completed, some of the goals were already accomplished, namely having the diagnosis of the resident's oral health status, providing simple forms of treatments and identifying situations which require referral to other health professionals (such as oncologic lesions).

The self-reflexional exercise each student had to do produced a portfolio that also revealed interesting results. Students reflect positively on the experience, recognizing that the skills trained and developed go beyond what could be learned in a traditional setting i.e. the University Dental Clinic. Students refer in their reflections, that the human aspects of dealing with older patients outside the clinical setting is a rewarding experience and better prepares them for their future practice in health. The social contact with the residents was appreciated by the majority of students and patients (Figure 5). However, there were reports of non-cooperating seniors which poses an additional challenge for the training dentist. It will be interesting to explore the strategies proposed by students to motivate these patients to cooperate.

The remainder of the project will include the training sessions for the caregivers which have participated in some of the actions, but which need more specific interventions. Training sessions on effective denture cleaning were identified as necessary since oral hygiene of the prosthesis was unsatisfactory in the majority of cases. Furthermore, since March the Management students have started their participation in the project and will work closely with the institutional person in charge for the optimization of the financial procedures, namely in securing financial conditions for proper oral healthcare.

The major drawbacks identified in student reports were the lack of cooperation from some of the residents and activity scheduling since visits were done in class time which sometimes interfered with the routine for lunch or other programmed activities in the home.

## DISCUSSION AND CONCLUSIONS

The SL approach to health-related curricular units seems to be linear, due to the service component, in which the profession aims at solving a patient problem. However, it is important that both students and professors understand that the learning aspect is also crucial. In this project, so far, students have expressed such awareness in their reflexive portfolios. Nevertheless, it is also important to fully accomplish the goals of the project by preparing and empowering the Senior Home community (residents and caregivers) for the effective management of oral health and prevention of oral conditions and diseases. During the second semester, treatments will be done during the classes of Gerodontology II curricular unit using a dental portable unit at the Senior Nursing Home and referring senior to the University Dental Clinic whenever necessary. These treatments will be done by 4<sup>th</sup> year IMDM students supervised by the professors and are an opportunity for training outside of the clinical classroom, as well as, a way of providing treatment for a population which would otherwise not have access to proper oral healthcare.

The SL pedagogical approach used in Gerodontology I curricular unit already fulfills the following aspects proposed by Yoder (2006). It is integrated in a curricular unit, so there is an academic link. The partnership established with this particular Senior Home is long term and activities in this senior home have been happening for a few years now, additionally students have been involved in the Gerodontology curricular units I and II for over 60 contact hours which can be considered a sustained community partnership which will be ongoing even if not with the same students. The SL Objective were clearly defined in the curricular unit program and a previous broad preparation was performed with the help from the Home institutional representatives. The opportunity for social interaction between the students and residents during the 7 months of the action allowed students to feel that they have also learned from the seniors give them a different perspective on this social group. One of the aspects to improve for this project in the second semester (Gerodontology II) is to guide student's reflections with some questions in order to facilitate the qualitative analysis of the portfolios. As far as the engagement of the community students had the excellent proposal of having have the seniors themselves participate as actors in the preparation of a short video demonstrating good oral hygiene practices. This strategy to involve the residents in the promotion

of oral health is expected to be more effective for both the participants and for other seniors (even from other institutions) which have not participate in this project, but which can have access to the materials produced.

One of the differences between the approach we have applied in the Viseu Dental School and the reports in the literature, is that for our students, having the SL approach was mandatory and not an option. Since it was the first application in our school, this strategy guaranteed that we have a significant number of students following the SL approach. In the next editions of the project a similar approach will be taken.

This pilot project will be evaluated in June 2020 and improvements will be added for the 2020/2021 academic year in which other institutions will be serviced.

The analysis of the student's portfolios allows us to realize students that are especially motivated for this kind of activities and can have, in the near future, an important role in oral community health improvement. We foresee that more curricular units will adopt this strategy and that students will have a proactive role in requesting the application of SL approaches, which has already happened.

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