

An exploratory study of the academic leagues in southern Brazil: doing multiple activities

Um estudo exploratório das ligas acadêmicas no sul do Brasil: realizando múltiplas atividades

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ABSTRACT

Introduction: Academic leagues are Brazilian student-led initiatives aimed at doing multiple extracurricular activities in a medical school. The leagues exist in almost all the universities of the country.

Purpose: To characterize the activity profile of the academic leagues of a medical school.

Method: Quali-quantitative cross-sectional descriptive study that collected data on academic leagues such as: year of foundation, number of members, number of teachers, types of selection and admission and activities performed.

Results: Of the 52 active leagues, 27 provided data. The average number of students was 21.6 ± 10.4 , ranging from 07 to a maximum of 48. Most respondents (77.8%) had only one teacher. The performed activities were mainly theoretical classes, discussion of clinical cases, practical activities, production of scientific articles, publications in social networks, solidarity activities and organization of their own events.

Conclusions: Academic leagues are student-led initiatives with great potential to expand medical school actions using the existing structure. With their activities mapped and guided by management, academic leagues can be great catalysts for complementary activities and can contribute greatly to the training of new doctors.

Keywords: Education, Medical; Curriculum; Students, Medical; Schools, Medical; Education.

RESUMO

Introdução: Ligas acadêmicas são iniciativas de estudantes brasileiros criadas para realizar múltiplas atividades extracurriculares em uma escola médica. As ligas existem em quase todas as universidades do país.

Objetivo: Caracterizar o perfil de atividades das ligas acadêmicas de uma escola médica.

Método: Estudo descritivo transversal qualiquantitativo que coletou dados das ligas acadêmicas, como: ano de fundação, número de membros, número de professores, formas de seleção e ingresso e atividades realizadas.

Resultados: Das 52 ligas ativas, 27 forneceram dados. O número médio de estudantes foi de $21,6 \pm 10,4$, variando entre 07 e 48. A maior parte das respondentes (77,8%) possui apenas um professor. As atividades realizadas são, majoritariamente, aulas teóricas, discussão de casos clínicos, atividades práticas, produção de artigos científicos, publicação em redes sociais, atividades de voluntariado e organização de eventos próprios.

Conclusões: Ligas acadêmicas são iniciativas lideradas por estudantes com grande potencial de amplificar as ações da escola médica usando a estrutura já existente. Com suas atividades mapeadas e orientadas pela gestão da escola, as ligas acadêmicas podem ser grandes catalisadoras das atividades complementares e contribuir para a formação de novos médicos.

Palavras-chave: Educação médica; Currículo; Estudantes de medicina; Escolas médicas; Educação.

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INTRODUCTION

The pedagogical project of medical schools follows the National Curriculum Guidelines for the Undergraduate Course in Medicine, which establishes a generalist, humanist, critical, reflective training and, among other characteristics, one that includes complementary activities¹. This set of activities has several names, such as “parallel curriculum”, “parallel education”, “informal curriculum”, “underground curriculum” or “hidden curriculum”^{2,3}.

Lampert⁴, when discussing the medical school curriculum in the early 2000s, defined the parallel curriculum as the set of activities carried out by students without a pedagogical program or formal supervision, stimulated by teachers or by the school itself. In addition to it, the hidden curriculum would be the indirect learning of attitudes, values and behaviors, through contact with the various entities of the medical school and professional performance, such as colleagues, teachers, patients and other members of the health teams. Both the parallel and the hidden curriculum are characterized by non-compliance with the formalities of the curriculum planned by the school, based on the guidelines.

When noticing a deficiency in the curriculum, students mobilize themselves, creating initiatives to remedy it. These initiatives known as “student-led initiatives” can be beneficial for both students and schools⁵. One of these initiatives, which has gained space in Brazil, are the academic leagues (ALs). These are groups of undergraduate students attending a regular program, under teacher supervision, with intellectual and practical support, both from the university and the service network, aimed to learn a specific topic⁶. The activities are diverse: periodic meetings, theoretical classes, participation in scientific events and extension activities⁷. However, teaching activities are the preponderant ones, because although included in the statutes of the AL, research and extension activities are rarely mentioned by students⁸.

Understanding the academic leagues as Brazilian student-led initiatives with a large presence in medical schools, yet submitted to little analysis, the objective of the present article is to trace the profile and activities of the group of leagues of a southern Brazilian medical school and to discuss how to compare them with other student-led initiatives around the world.

METHOD

This is a descriptive, cross-sectional, qualitative-quantitative study carried out in one of the Brazilian

medical schools. The list of ALs made available by the school was obtained, which included ways of contacting their representatives (students or teachers). With the support of the direction of the School of Medicine/University, the contact was made via email with the coordination of the AL. For the ALs that did not respond, contact was sought through the teachers’ institutional e-mail or, when there was still no response, an attempt was made to communicate through social networks (Facebook® or Instagram®).

After the contact with AL representatives, the following data were collected: year of foundation, number of members, types of selection/entry and the performed activities. The information was tabulated in a Microsoft Excel® spreadsheet. Quantitative data were expressed as mean \pm standard deviation, median (interquartile range), absolute and relative frequency and mode.

The activities were described in texts written by the students, in response of the question (in Portuguese): “What activities are carried out by your league?”. All the responses were tabulated and then a content analysis was performed according to Bardin, with floating reading, aiming to explore the answers and highlighting the most frequently identified topics, resulting in the creation of the following categories of activities: Theoretical classes and clinical case discussions; Production of scientific papers; Practical learning, performance of procedures and clinical care; Organization of their own events; Informative posts on social networks; Solidarity and voluntary activities. After the categories were established, all the responses were re-read and quantified.

The present work is part of a master’s degree project at the School of Medicine of Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), and it was approved by the Research Ethics Committee of PUCRS under CAAE number 48815421.7.0000.5336.

RESULTS

In November 2021, the School of Medicine/PUCRS website listed 54 ALs⁹. Two of them were reported to be inactive. Of the 52 active ALs, 27 (51.9%) responded to our inquiry.

Regarding the number of students, the average was 21.6 ± 10.4 , with a median of 20 (13.5 to 29.5), ranging from 07 to 48 students. The mode was 30 students, found in 5 ALs. The other variables are listed in Table 1.

An open question was asked about the AL activities, whose main categories listed in the content analysis are found in Table 2.

Table 1. Academic leagues' characteristics

Variables		N (% of 27 ALs)
<i>Advisor teachers</i>	One	21 (77.8)
	Two	04 (14.8)
	Three	02 (7.4)
<i>Time since foundation</i>	Not informed	04 (14.8)
	Before 2005	01 (3.7)
	2006-2010	02 (7.4)
	2011-2015	02 (7.4)
	2016-2020	13 (48.2)
	2021	05 (18.5)
<i>Only medical students</i>		22 (81.5)
<i>Presence of statute</i>		17 (63.0)
<i>Selection process</i>	None	07 (25.9)
	Interview only	14 (51.9)
	Interview plus other	06 (22.2)
<i>With pre-requisites to participate</i>		09 (33.3)

Source: created by the authors

Table 2. Activities of the academic leagues

Activities	N (% of 27 AL)
Theoretical classes and clinical case discussions	26 (96.3)
Production of scientific papers	15 (55.6)
Practical learning, performance of procedures and clinical care	14 (51.8)
Organization of their own events	9 (33.3)
Informative posts on social networks	8 (29.6)
Solidarity and voluntary activities	6 (22.2)

Source: created by the authors

DISCUSSION

ALs are present in 97.8% of Brazilian medical schools¹⁰. Student interest in participating in ALs is high, reaching almost 95% of undergraduate students, with about a third of them having participated in three or more ALs during undergraduate school¹¹. Numbers vary between universities and over time, with some schools having few ALs and others having more than 50, most of them created after the year 2000¹²⁻¹⁴. At PUCRS School of Medicine, in 2013 there were 5 active ALs, with this number increasing to 47 in 2019¹⁵, and reaching 54 at the end of 2021.

With the increase in the number of ALs and the criticism directed at them, some schools created regulatory mechanisms to reduce their proliferation and make students prepare their projects and discuss the problems before proposing their creation^{14,16}. The first step, however, should be the assessment

of the current AL situation in the school, and based on the analysis, decide on the actual need for the initiative.

The published articles are, in general, based on experience reports, and it is important to remember that this article model focuses on unique and specific situations, generally successful, and does not necessarily reflect the situation of all ALs⁷. In addition, analyzing only case reports makes more in-depth analysis of ALs difficult as a joint phenomenon¹⁷.

The reported experiences describe Teaching, Research and Extension activities. Special focus was given to Teaching, with only one of the leagues not describing theoretical classes or other forms of teaching. The aforementioned league only reported the following, as the performed activities: "Scientific production (posters for congresses and articles)." In the rest of the country, the vast majority of the leagues also reported teaching activities¹⁷.

It is possible that ALs are sometimes used to address curricular deficiencies^{18,19}. The oldest of the ALs of the school was created in 1997, the "Trauma League" (*Liga do Trauma*). At that time, the students noticed that the curriculum did not include a more in-depth training in Urgency and Emergency teaching. So, after getting in contact with a trauma surgeon professor they decided to create the league. After a few years, with the growing interest of students in the aforementioned AL, the course management, made aware of the fact, carried out a curricular reform in 2005, introducing the Trauma and Emergency discipline, inviting the trauma surgeon professor to teach it (personal communication, unreferenced). Although the responsibility for identifying and correcting curricular deficiencies lies with the school itself, this example shows the strength of student-led initiatives to change the medical school learning environment.

Some of the volunteer activities include, but are not limited to, recreational activities in the pediatric ward, participating as a pseudo-patient in Trauma courses and donations to vulnerable populations. Half of the ALs have practical activities and in-service training, such as outpatient care and surgical procedures. These activities can be classified as student-led in-service-learning initiatives, which allow medical students to bring on a new perspective of care to improve the patients' health and the health system²⁰.

A recent topic in the current discussions on curricular reformulations is the curricularization of extension activities, foreseen in the National Education Plan for 2014-2024. It is about including Extension activities into curricular ones (at least 10% of total hours of the undergraduate course), making the student take on a leading role in their own training, bringing the product of learning to the community and allowing a humanistic and citizen training²¹. The performance in extension projects can yield several academic and personal benefits such as: the acquisition of organizational, communication, responsibility and autonomy skills through the development of different activities.

The concept of extension activity may differ depending on the group and the historical moment in which it is discussed. Therefore, its curricularization suffers from a theoretical debate about its application and at what moments it will be applied. In particular, the concept of extension activity can be seen as the institution's social responsibility, as service provision, as a fundraiser and, at other times, as an academic function. Thus, the debate on the curricularization of extension activities can still be permeated by this multiple concepts²². In general, although ALs cannot be simply included in the pedagogical projects (to be "curricularized"), their extension role deserves to be highlighted within the school, provided that the actions of the AL are effectively done as extension activities.

Regarding research activities, there are several ways in which students can participate in the academic environment, such as *Student research societies, Student journals, Student research conferences and Student journal clubs*⁵. Also, there are several ways that have been previously described to introduce research skills into the curriculum²³, with ALs being one of them. In the present article, the ALs also mentioned participation in congresses and conferences, and one-third of them also mentioned holding their own events. Perhaps the teachers' perception of knowledge gaps leads them to create extracurricular activities to meet the demand^{17,24}. The quality of these events and their importance for training could be further studied.

An interesting point to be studied is in the field of management and leadership. For example, 63% of the ALs in our medical school have a statute, similar to small-sized enterprises. The creation of a structured group of students with a directive structure and constituent documents, with regular administration meetings, implies the use of interpersonal and people management skills that are very important for the formation of leaders. The teaching of management and leadership techniques, although considered important, is still very scarcely taught in undergraduate and residency curricula^{25,26}, and ALs can be a way of introducing such techniques into the curriculum.

Some ALs have been using social networks such as Facebook or Instagram for their own teaching activities or for health education aimed at the general population. Students can benefit from their use, regarding some aspects such as: mobilization for the acquisition of knowledge, formation of one's professional identity, expression of their vulnerabilities and support for learning²⁷. However, the quality of evidence on the influence of social networks on medical education is scarce, but the use of social networks to provide reliable information to the general population is likely to be beneficial²⁸.

The literature mentions possible negative effects of ALs, such as early specialization. Although several interest groups can influence the choice of the medical specialty²⁹, more than 80% of the students believe that participation in a league helped in their choice or the exclusion of the specialty¹¹. There may be a correlation between the league and the specialty due to a pre-existing interest, and not necessarily a cause-and-effect situation, but there is a suggestion⁸. The specialty societies, perceiving this vocation, started activities aimed at the ALs, creating a whole system of influence on the students, putting the specialist in the center of the formation³⁰.

ALs are formed by a small group of students, having a selection process in almost 80% of them. Almost a third of them also have some prerequisites. They can, at times, generate a certain "competition" for the institution's resources,

benefiting only this small group of students³¹. Comparisons with undergraduate teaching are inevitable, often favoring the AL practical lessons in those small and selected groups⁸. Paradoxically, in some institutions with a more generalist profile, students feel a lack of specialty-directed classes, making the leagues, in a way, become the place where students who are dissatisfied with the curriculum take refuge³⁰.

Among the limitations of the present study, is the fact that the analyzed information refers to only one university, cannot necessarily be extrapolated to larger samples or other schools. Another aspect derives from the voluntary inclusion of participants, promoting a possible bias, in which only the most active ALs provided their information. Thus, this is an important survey to understand the operation of different ALs within the same medical school.

CONCLUSIONS

After the analysis, we found that at the PUCRS School of Medicine, an AL usually has between 12 and 30 students, almost exclusively from the School of Medicine, has a statute defining its rules and an advisor professor. The activities are varied, including mainly theoretical classes, discussion of clinical cases, practical activities, production of scientific articles, publications in social networks, solidarity activities and organization of their own events.

We understand that the AL, as a student-led initiative, has great potential to amplify the actions of the medical school using the existing structure. With their activities mapped and guided by management, they can be great catalysts for complementary activities and contribute greatly to the training of new doctors.

As a warning, there is an urgent need for better control by the University over the activities of these groups so that they are not lost over time, as well as the will of the students does not weaken. Thus, attention should be paid to the renewal of students, thinking of ways to democratize the access to ALs and monitor the selection processes, which can generate barriers to the revitalization of the AL.

AUTHORS' CONTRIBUTION

Diego Inácio Goergen: study conceptualization, methodology, data collection, formal analysis, original manuscript drafting, review and editing. Ivan Carlos Ferreira Antonello and Bartira Ercília Pinheiro da Costa: study conceptualization, methodology, formal analysis, manuscript review and editing.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

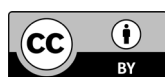
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