Experience Report

Challenges and adaptations of an Academic League of Internal Medicine to the COVID-19 pandemic: an experience report

Desafios e adaptações de uma Liga Acadêmica de Clínica Médica à pandemia de COVID-19: um relato de experiência

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ABSTRACT | INTRODUCTION: The coronavirus pandemic brought socio-cultural, economic, political, and epidemiological impacts on a global scale, imposing changes in habits and routines. With the social isolation imposed by the authorities, there was a change in the offer of undergraduate courses, directly interfering in the academic routine. **OBJECTIVES:** To present the challenges and adaptations of an Academic League of Clinical Medicine (ALCM) to the Coronavirus pandemic period in Brazil. **MATERIALS AND METHODS:** This article is based on the analysis of an experience of extracurricular activity promoted by ALCM against the backdrop of social isolation imposed by the pandemic. **RESULTS:** With the impossibility of clinical practice, when participating in the case discussions proposed by ALCM, it is clear that the student maintains an active role in their learning process. In addition, the activities stimulated the maintenance of favorable habits for the student, such as integration with colleagues, the development of personal skills, and the maintenance of an academic routine, reducing idle time. **CONCLUSION:** By having technological tools, ALCM not only stimulated the development of the clinical reasoning necessary for general practitioners but also positively impacted the well-being of students during the Coronavirus pandemic period in Brazil.

KEYWORDS: Education medical. Students medical. Education distance. Coronavirus infections. Pandemic.

RESUMO | INTRODUÇÃO: A pandemia de coronavírus trouxe impactos socioculturais, econômicos, políticos e epidemiológicos em escala global, impondo mudanças nos hábitos e rotinas. Com o isolamento social imposto pelas autoridades, houve alteração na oferta dos cursos de graduação, interferindo diretamente na rotina acadêmica. **OBJETIVOS:** Apresentar os desafios e adaptações de uma Liga Acadêmica de Clínica Médica (LACM) ao período de pandemia de Coronavírus no Brasil. **MATERIAIS E MÉTODOS:** Esse artigo baseia-se na análise de uma experiência de atividade extracurricular promovida pela LACM frente ao cenário de isolamento social imposto pela pandemia. **RESULTADOS:** Com a inviabilização da prática clínica, ao participar das discussões de casos propostas pela LACM, percebe-se que o estudante mantém um papel ativo no seu processo de aprendizagem. Além disso, as atividades estimularam a manutenção de hábitos favoráveis para o estudante como a integração com colegas, o desenvolvimento de habilidades pessoais e a manutenção de uma rotina acadêmica, diminuindo o tempo ocioso. **CONCLUSÃO:** Ao dispor de ferramentas tecnológicas, a LACM não só estimulou o desenvolvimento do raciocínio clínico necessário para a atuação do médico generalista, como também impactou positivamente no bem-estar dos estudantes durante a período de pandemia de Coronavírus no Brasil.

PALAVRAS-CHAVE: Educação médica. Estudantes de medicina. Educação a distância. Infecções por coronavírus. Pandemia.

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Introduction

With the emergence of the new Coronavirus pandemic and without the prospect of a specific therapy, the authorities have adopted social distancing as one of the measures to confront the disease. Through this, the spread of the disease is prevented, and the chain of transmission is decelerated.[1]

In Brazil, limitations were imposed on the functioning of several activities, and people had their movements restricted to basic needs and work when this could not be done at home.[2] Among the restricted activities were higher education institutions (HEI), which had to replace their face-to-face practices with distance learning, imposing a change of habits on students.[3,4]

In this context, remote teaching has been the option found by HEIs to allow the continuity of academic activities during the pandemic period.[5] In this teaching modality, videoconference platforms are used that allow real-time classes (synchronous), enabling greater interaction between students and teachers, unlike distance learning (DL), which offers recorded classes (asynchronous) in the institution's virtual learning environment, followed by tutorials to solve doubts.

The HEIs offer a great diversity of courses, and, many times, the curricular structure used may leave gaps in the academic and professional education desired by the student. Aiming to meet this demand in learning and their experience, the Academic Leagues (AL) have arisen, non-profit student organizations collaborating with professionals in a particular area, providing a diverse scenario of experiences, including teaching, research, and immersion in the community.[6]

Specifically for medical courses, the relevance of the incentive promoted by AL in academic training has been described by several studies.[7,8] They point out that the motivation to seek complementary training often arises from the lack of theoretical-practical integration in the academic curriculum of the medical course.[7] Moreover, it has been demonstrated that care experience and better practical learning play an enriching role in forming the medical profession and the personal development of the medical student.

Despite the challenge of prolonged home confinement imposed by the pandemic[9], the participation in LA sessions can be considered an alternative to fill in curricular gaps and students' idle time, allowing the acquisition of knowledge through a dynamic methodology since the ligands themselves develop the activities. Thus, the objective of this study is to report the experience of adaptation of the Academic League of Clinical Medicine (ALCM) of a university center in the city of Salvador, Bahia, to the period of social distancing imposed by the COVID-19 pandemic in Brazil.

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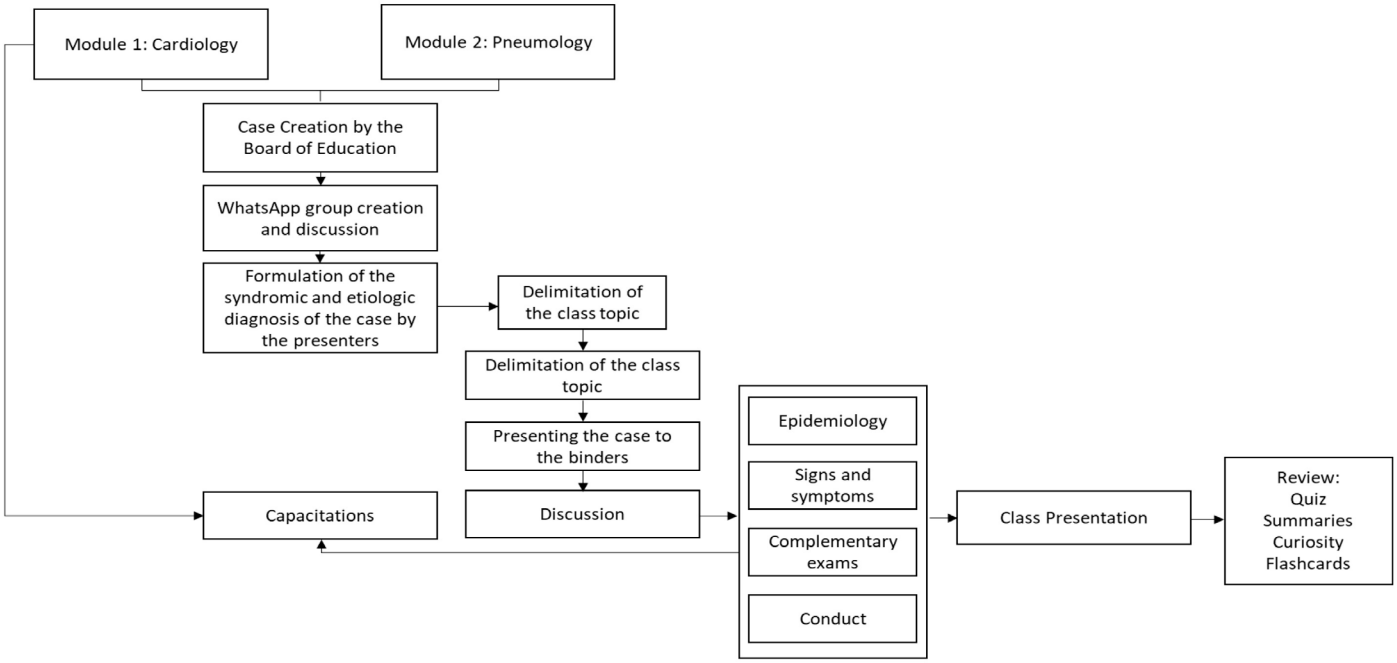
ALCM is a non-profit, multidisciplinary entity, founded on April 10, 2010, organized, and coordinated by academics and professors of the Medicine course of a university center in the city of Salvador, Bahia. Its primary purpose is to promote Internal Medicine as a specialty; to rescue the doctor-patient relationship; to stimulate scientific activities, promote academic integration with the community; to conduct assistance, extension, and research activities.

Before the pandemic, ALCM was restricted to face-to-face activities, where the lecturers gave theoretical classes on predetermined themes, using the traditional teaching model. With the social isolation imposed by the pandemic of COVID-19, there was more stimulus to the use of active learning methodologies and social media as a means of interaction among the leaguers. Thus, to adapt the academic activities of ALCM to this new scenario, two thematic modules were created: one of cardiology and another of pulmonology. It was decided to use weekly clinical cases, built by members of ALCM's teaching directorate, approaching topics related to one of these modules. Beforehand, a trio of students was defined to mediate the clinical case discussion and present an expository dialogued class. Based on the information provided by the clinical case, diagnostic hypotheses were formulated, and then a final diagnosis was reached, which was confirmed by the linker responsible for the activity.

It is important to point out that the other AL members had no prior knowledge about the topic discussed in class. The clinical case was released only a few minutes before the beginning of the session, which happened regularly on the same day of the week and at the same time through the Skype® platform,

software that allows communication over the internet through voice and video connections. The syndromic diagnosis, etiology, and differential diagnoses were discussed. After establishing which pathology was addressed in the case, its definition, epidemiology, pathophysiology, clinical manifestation, diagnosis, and treatment were presented. Finally, the session was closed with applying questions from residency tests, aiming to consolidate the knowledge acquired in the class (figure 1).

Figure 1. Flowchart of the process of academic league operation during the COVID-19 Pandemic



Source: The authors (2021).

To complement the sessions, Instagram® was used, an online social network for sharing photos and videos among users, where summaries, test questions, and trivia about the theme discussed were made available in a profile open to all social network users. These materials were produced by the linkers responsible for the week's case and addressed the points considered most relevant to the theme.

Linked to this approach, ALCM members were encouraged to discuss topics that complemented the modules, such as electrocardiogram, arrhythmias, trauma, shock, sepsis, among others. These activities were performed by the most experienced leagues (seniors), belonging to the last year of medical school, and aimed to provide subsidies for the development of clinical reasoning. Moreover, the discussions favored reflection about laboratory changes and imaging signs that corroborated the diagnostic suspicion raised.

In addition, live sessions were held on Instagram®, where issues relevant to the current context, especially those related to Covid-19, were discussed in the presence of experts. Thus, it provided a greater interaction with the academic community and a constant updating of students about the themes in focus, besides allowing the diversification of the activities offered by ALCM, to minimize the effects of social distance imposed by the pandemic COVID-19 in Brazil.

Additionally, in this same period, the development of activities related to scientific research was stimulated since the students had more time available for the development of such activities once they were in social isolation. At first, there was training on the basics of scientific abstracts production and how to obtain secondary data from

the Department of Informatic do Unified Health System (DATASUS), providing new skills and interest in medical research. Thus, it was encouraged to elaborate several papers submitted to national and international congresses. The approved abstracts were presented both in oral and poster presentations, from virtual platforms such as YouTube® or through the official websites of the events.

It is important to note that their supervising professors supervised all the activities proposed and developed by ALCM.

Discussion

Social isolation was one of the strategies used as a coping measure against the pandemic by COVID-19.[2,10] However, despite its benefit in controlling the spread of the virus, this provision imposes challenges in the routine of medical students since modern technologies have been incorporated into their daily lives to preserve teaching and learning.[11]

Notably, the student maintains his active role in the learning process by participating in a small group to discuss clinical cases, following the Small-Group Active Learning (SMAL)[12] proposal. By stimulating active methodologies for the development of clinical reasoning and inserting it in scientific discussions, SLs allow the student to play a more active role in acquiring knowledge that, until then, only the presentation of an expository lecture would not allow.[13]

In the pandemic context, students were adapted to distance learning (DL) classes offered by HEIs. However, the excessive time spent in digital media and the exposure to virtual classes has negatively influenced academic performance, with lower student participation during these activities.[14] Thus, clinical case discussions and gamification were chosen as alternative ways to motivate student interaction during ALCM sessions, making the learning process more fun.

These strategies adopted by ALCM are described in other studies and reinforce the positive association between active methodologies and improved academic performance[15], besides being associated with greater satisfaction of medical students and development of interest in clinical practice.[16]

Thus, despite the restrictions imposed by COVID-19, the AL developed didactic and scientific activities, providing learning and development to its members[13], especially when there was the integration of clinical cases with the training sessions held throughout the semester. This approach allowed a greater association between medical knowledge, enabling the understanding of the disease and the changes found in the main complementary exams. In this way, the student reconciled information among the several areas of Medicine necessary for their future performance, supplementing the course.[8]

Moreover, there was an improvement in favorable habits, such as getting closer to classmates, developing personal skills (like speaking), and maintaining an academic routine, with a reduction in idle time[13,17], and the possibility of minimizing risk factors for psychological distress.[18]

This interaction among the students took place from the discussions of the clinical cases to the presentations, stimulating knowledge and spreading previous experiences. This strategy was configured as another measure to facilitate learning, being used by several groups, especially in the face of this adverse scenario resulting from the pandemic.[19]

Conclusion

Facing the academic transformations imposed by the social distance experienced during the COVID-19 pandemic in Brazil, the virtual environment emerged as an alternative, offering tools such as videoconference platforms and social networks, which enabled the construction of scientific knowledge. By having these technological tools, ALCM stimulated the development of clinical reasoning necessary for a

general practitioner and had a positive impact on the students' well-being.

The experience lived by ALCM points to the need to encourage these extracurricular activities as an instrument to promote and welcome the heterogeneity present within the medical course. In addition, this has proven to be an excellent way to integrate the future physician into his professional environment early on, allowing better instruction during his learning process.

Authors' contributions

Nascimento MCS participated in the conception and design of the study, data collection, analysis and interpretation, article writing, critical revision of the text, and final approval of the article. Passos MY and França NMA participated in the collection, analysis, and interpretation of data, writing the article, critical revision of the text, and final approval of the article. Avena KM participated in the study design, data collection, analysis and interpretation, article writing, critical revision of the text, and final article approval.

Competing interests

The authors of this manuscript declare a potential conflict of interest of academic nature (link to the Academic League described in the experience report) on the part of Nascimento MCS, Passos MC, França NMA. However, none of the authors received financial and/or material support from the latter to develop the present research that resulted in the preparation of the article.

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