

PHARMACOLOGY STUDENT CONGRESSES AND THE IMPORTANCE OF MULTIDISCIPLINARY PARTICIPATION

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Abstract: This year the XXVIII Student Congress of Pharmacology was held, an event organized by the National School of Medicine and Homeopathy of the National Polytechnic Institute; The venue for this edition was the Faculty of Medicine of `` Universidad Nacional Autónoma de México``. In this work we focus on the participation of the students, specifically in the exposition of pharmacological topics in poster mode. The objective was to identify the topics of interest of the participants, as well as the type of approach. Methodology: a compilation of the papers presented on the poster was made and they were categorized according to their content. Results: 61.24% of the students chose bibliographic research, 17.98% presented preclinical work, followed by clinical work with 11.23%, emerging technologies 5.62%, cell line 1.69%, educational activities 1.12%, pharmacovigilance 0.56%, and product development 0.56%. The call was for students of various degrees in the health field, convinced of the need to establish multidisciplinary work from the professional training process.

Keywords: health sciences students, training process, multidisciplinary work

INTRODUCTION

Previously, we shared the importance of Pharmacology Student Congresses as ideal scenarios to Socialize Knowledge and put into practice knowledge as valuable as Living with others, in addition to strengthening skills and competencies acquired in the classroom that will be useful in the professional field despite of emerging challenges (Fernández, et al., 2023; Núñez-Cortés, J. M., 2020). On this occasion, we reviewed the pharmacological topics of interest to the students who participated and the type of approach. Students from various degrees who naturally converge in the labor field were convened, in order to promote multidisciplinary collaboration.

The XXVIII Student Congress of Pharmacology had the massive participation of students, as well as professors and researchers from various fields related to Pharmacology. During the celebration of the event, 100 posters made by students of various levels and degrees were exhibited, since students of medicine, nursing, psychology, biomedical, social work, etc. participated, it must be noted that the 100 posters to which reference is made were selected, because the shipments were higher. Although this congress was organized from the National School of Medicine and Homeopathy, this time the venue was the Faculty of Medicine of `` Universidad Nacional Autónoma de México`` (UNAM), and the invitation was extended to various schools and faculties, because Medical care is provided in multidisciplinary centers and it is prudent for school graduates to learn to collaborate with other professionals required in the various workplaces.

LOOKING AT REALITY

Although we can identify successes in health, such as the reduction in maternal mortality (Secretary of Health, 2019), the decrease in infant mortality and the increase in life expectancy, which are associated with concrete actions such as the Universal vaccination program (Ministry of Health, 2015), the increase in the minimum wage starting in 2018 (Government of Mexico, 2022), and initiatives such as Zero maternal deaths from hemorrhages (Ministry of Health, 2016), we are also experiencing emerging challenges such as the Transition of risks, the increase in degenerative and mental illnesses, (Soto-Estrada, G., Moreno-Altamirano, L., & Pahua Díaz, D., 2016), the prevailing incorporation of the social functions that must be assumed the training schools for health professionals, (Abreu-Hernández, L. F., Valdez-García, J. E., Esperón-Hernández, R.

I., & Olivares-Olivares, S. L., 2020), and the fact that one must not lower one's guard in the successes already mentioned, because they are not finished events, but work of continuity.

Given this panorama, we ask ourselves what are the interests of the students who in the near future will practice their profession in various public and private health centers, we ask ourselves: What interests the new generations?, specifically those who have chosen some profession in the health field, this includes doctors, nurses, social workers, psychologists, dentists, administrators, etc.

In this work we make a first approach, analyzing the theme of the posters made by the students participating in the Student Congress of Pharmacology, the approach they take and if multidisciplinary interaction can be promoted in these events.

METHODOLOGY

All the titles and summaries of the student presentations were collected, the memories of this edition (Carrasco, O. F., 2023) were also consulted and the contents were categorized into research: bibliographic, clinical, preclinical and experimental. Subsequently, a database was created to account for the different topics and then they were graphed. In addition to the graphic representation, the percentages were calculated, being 100% all the works and their respective percentage according to the category.

The Call indicated the following categories, since they invite students to participate in a contest that is not mandatory, but that stimulates participation, collaboration and learning:

a) Bibliographic research: it is the selection of a topic and its consultation is basically in books and magazines in order to present a reflection, a finding, a trend reported by others in indexed sources, being able to present monographic works, compilations,

etc.

b) Clinical Research: all the works that compile events, prescription results, approach to clinical cases addressed with various tools and therapeutic aspects.

c) Preclinical Research is that which was carried out on animals, organ sections, and organs from various laboratory species.

Given the diversity and richness of the papers, it was necessary to create additional categories for this document:

d) Pharmacovigilance

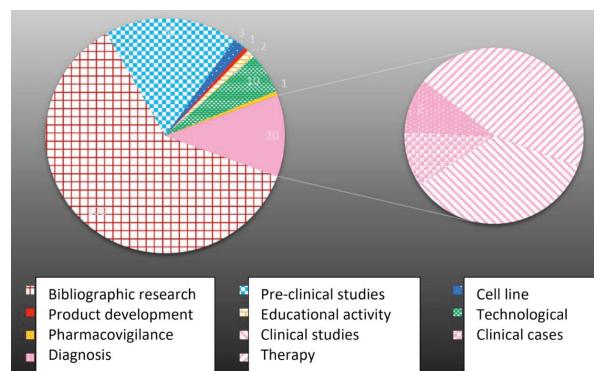
e) Product developments

f) Cell lines

g) Educational research

RESULTS

In Graph 1. Thematic contents of the posters prepared by the students, we have an overview of the participation of the poster exhibitors, as can be seen most of the students presented bibliographic research (61.24%), the other posters (38.76 %) show clinical and preclinical research, diagnostic tools and molecule designers, among others.



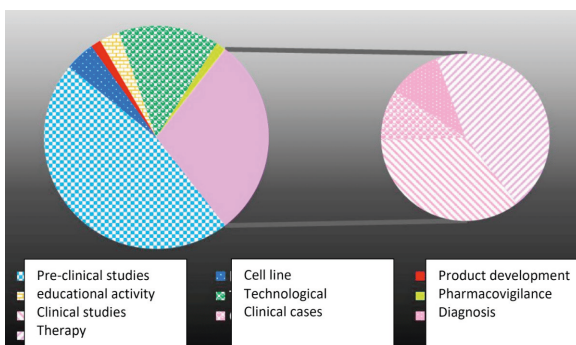
Graph 1. Thematic contents of the posters made by the students

As previously shown, the bibliographical works are the most abundant, it must be noted that most of them have a monographic format since they represent the individual effort or in small groups of students who are studying the Pharmacology subject for the first time, which

is a decisive step in the process to get involved in an activity that represents a challenge for the youngest.

If we temporarily withdraw the bibliographic works, we are left with just under 40% of the participations, its composition can be seen in Graph 2. Research posters with protocols, in which Preclinical Research predominates with 17.98%, followed by Clinical Research which groups aspects such as diagnosis, clinical cases, clinical studies and therapeutic recommendations adding up to 11.23%, following in this order the works that involve the use of emerging technologies, representing 5.62%, then the studies that used cell lines 1.69%, Activities Educational 1.12%, Pharmacovigilance 0.56% and Product Development 0.56%.

In Graph 2. Research posters with protocols, there are the works of students who share their advances in social service, undergraduate and postgraduate thesis, or from a research program either in hospitals and/or educational centers, which implies the presence of a Professor, Researcher or Specialist who assumes the role of Advisor.



Graph 2. Research posters with protocols

DISCUSSION

The Pharmacology Student Congresses promote the Socialization of knowledge among peers. As evidenced in this work, most of the students participated with bibliographical research, it is a form of participation that stimulates creativity and collaboration with

peers in a short period of time; The foregoing contrasts with the student population that is finishing a bachelor's and/or postgraduate degree and share their advances in those that denote handling of tools, and that are part of robust lines of research. One category that stands out is Technological, which will continue to grow given the continuous incorporation in various educational fields and directed research.

Most of the participating students come from Medical Schools, however, the call is aimed at all those who are involved in life sciences, since in the future they will be sharing spaces and tasks.

The experience of bringing together various disciplines and listening to students communicate with their peers is particularly enriching. The contrast in participation stands out, from those that are technically very specific and others that start from the vision of the social, which leads to reflection on what is being investigated and the social responsibility of educational institutions towards the Society that finances them. In the process of sharing knowledge, a process begins to find the relationship that the Social has with Science, and little by little to establish logical links from social needs as an object of research in various centers, that is, that all research initiatives address the real needs of the society that is financing them.

The approach is diverse, even so 3 levels are detected, the students of initial years who participate with a bibliographic work and during the socialization with their peers and experts, recognize that they are unaware of complex aspects, a second level is that of more advanced students who are technically experts, but who do not glimpse important aspects such as the future of this line of research or its real importance in terms of their future work, and a third group of students who, being very advanced, can

detect real risks of the research of relevance or not, of how they approached their jobs, that is, they have reached the maturity that allows them to be self-critical, and propose improvements, in addition to looking with more certainty towards where they will direct their professional activities, towards where they will seek their incorporation into the labor market.

Finally, one last aspect that has to be dealt with in this document is the importance of summoning students from different degrees, in many educational instances they have worked to establish strategies that strengthen multidisciplinary collaboration, as a necessary strategy during early training that induces students from various disciplines to collaborate (Barrientos-Cabezas, Á., Arriagada-Pérez, L., Navarro-Vera, G., & Troncoso-Pantoja, C. A., 2020), this effort to promote multidisciplinary exchange and collaboration has been repeated. For several editions of this congress, through activities in courses and workshops, these are not always taught due to aspects such as spaces, time and qualified personnel to facilitate the activities, although the pandemic ended up canceling absolutely everything, all efforts are resumed convinced of its utility.

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CONCLUSIONS

The topics of interest of the students participating in the Student Congress of Pharmacology were diverse and it is due to the level of studies in which they are at the time of participating and the professional maturity that is acquired from the classroom, the stays, the social service and other professional experiences that contribute to their training. Only 11.23% of the jobs correspond to the clinical area, so it will be necessary to extend the invitation to advanced students to share the challenges they experience in clinical cycles. One aspiration is that professionals in the health area build a robust relationship with various formations that favor multidisciplinary collaboration, to optimally address the demands of society.

The separation between the sciences and the humanities has marked a chapter that must be rewritten, since global challenges demand a different approach, the participation of students from different degrees enriches the event and allows to know the priorities from different points of view, which in times crisis makes it easier to determine and address priorities.

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