

Participation of the students of the University of Medical Sciences of Las Tunas in national student scientific events

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ABSTRACT

Introduction: medical students in Las Tunas show, in the course of their university trajectory, active participation in student scientific events, which has been worthy of important recognitions. **Objective:** to characterize the participation of students of the University of Medical Sciences of Las Tunas in national student scientific events. **Method:** an observational, descriptive, and cross-sectional study was carried out; the universe was made up of 101 students from Las Tunas who participated in the 8 events organized by the country's medical sciences universities during the 2018-2019 academic year. The studied variables were: event, type of work, prize, assistantship, degree and published papers. Descriptive statistics were used. **Results:** the event with the highest participation was the ONCOFORUM (24,8 %) and the most frequent modality was the Bibliographic Review developed by 54 students. Thirty-two works were awarded and 12,9 % obtained a relevant award. Twenty-four point eight percent of the participants were in their second academic year. The assistantship with the highest representation was Internal Medicine (9,9 %); 59,4 % of the papers did not have a student assistant as the main author. Only 21 papers managed to be published. **Conclusions:** the Stomatology, Nursing and Health Technologies degrees must be integrated into the scientific research movement with greater participation, as well as the design of strategies in search of an increase in scientific activity, its quality, and the publication of these results in scientific journals.

Keywords: Medical Education; Research; Health Sciences.

The development of scientific activity in health students is as relevant as that of clinical skills, which is why the curriculum of medical sciences contemplate in their different subjects, curricular strategies aimed at their potential, together with assistance work and teaching¹.

This constitutes a way of preparing future professionals in the use of the clinical and scientific method in solving health problems, as well as in the development of skills for searching information, analysis, and application of evidence-based medicine².

For this, the Student Scientific Groups (GCE) are formed in all the universities³ whose main objectives are to stimulate scientific activity and research culture in young university students, with emphasis on the Faculties, Headquarters and Municipal University Branches; develop the inter-sectionality of sciences, delving into the study of history, the problems of young people and society, as well as achieving a real social impact.

Among the recognized ways of promoting the art of research is the participation in student scientific events or scientific conferences, which constitute one of the most important extracurricular activities in which the student participates. There they are allowed to show the skills acquired during the course in matters of scientific research and thus prepare them for their future life as a quarry of the country's high research centers⁴. In the case of Las Tunas Medical University Student Federation (FEU), its participation in scientific events at any level has been highly relevant, obtaining the first national place in several investigative events⁵.

The study of this scientific activity becomes vital, to, from the work at the GCE, channel the work of the students towards the most important lines and educate them in the art of research⁶. Such mo-



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Conflict of interests

The authors declare no conflict of interest.

tivation led to the realization of the following work that aims to characterize the participation of the students of the University of Medical Sciences of Las Tunas in national student scientific events developed in the period from September 2018 to September 2020.

METHOD

Type of study: an observational, descriptive and cross-sectional study was carried out at the University of Medical Sciences of Las Tunas, from September 2018 to September 2020.

Universe and sample: the universe was made up of 101 students who participated in the 8 events organized by the universities of medical sciences during the 2018-2019 academic year.

Variables and data collection: the studied variables were: event, work modality, award, assistantship, degree, and published papers.

The data were collected from the database prepared with the official reports of accepted and awarded works of each event.

Statistical processing: a database was created in Microsoft Excel 2010. Descriptive statistics were applied using absolute and relative frequency.

Ethical standards: the approval was obtained from the Ethics Committee and the Scientific Council of the University of Medical Sciences of Las Tunas. The ethical principles of beneficence, non-maleficence, justice, and autonomy established in the II Declaration of Helsinki were respected.

RESULTS

The event with the highest participation was the ONCOFORUM, with 25 participants (24,8 %) and the most frequent modality was the Bibliographic Review developed by 54 students (Table 1).

A total of 32 works were awarded and 12,9 % obtained a relevant award (Table 2).

The assistantship with the highest representation was Internal Medicine (10 for 9,9 %), however, 59,4 % of the papers did not have a student assistant as the main author. Twenty-four point eight percent of the participants were in their second academic year (Table 3).

Ninety-seven percent of the students who presented papers were doing a Medicine degree (Table 4).

Of the 101 works presented, only 21 (20,8 %) of them managed to be published.

DISCUSSION

To encourage the development and improvement of student scientific work, new spaces have been created for the dissemination of knowledge, events

that allow students to present the results of their work and, in turn, obtain recognition for it. These events cover the different branches of health, encouraging research in different areas of science.

ONCOFORUM is an event sponsored by the University of Medical Sciences of Las Tunas that takes place annually, to stimulate research on neoplasms, contributing to the training of specialists in oncological and hematological diseases, and raise the quality of services of health¹. As it is an event promoted by this university, the participation of students from Las Tunas is higher than the rest, a fact that is predictable.

Although the greatest participation was in the ONCOFORUM and GINECOSS, only one presentation belonged to Oncology assistant students and none to Gynecology and Obstetrics. These two specialties are among those prioritized by the MINSAP (Ministry of Public Health), due to the importance of maternal and child health and the fight against cancer, so the work with the research lines that respond to this problem must be greater.

It is noteworthy that the academic year with the highest participation was the second academic year, a result similar to that obtained in other research carried out on this subject^{4,5}. According to the international literature⁷, the academic year is an indicator of the evolution of the student during his career, so it would be logical that a student of higher years such as fifth and sixth year would be at the top of these results because they have already received the different modules of Research Methodology and Biostatistics, they have participated in the training of GCE and have experience on previous events⁸.

This could be related to the predominance of the Bibliographic Review modality, since taking into account that this is only allowed, in most cases, for students who are in first or second year, students of higher years must present original articles, which are a bit more complex for them.

In addition, students of higher years have a greater academic load and assistance hours, which can reduce the time they spend on research⁹.

The high participation of Internal Medicine assistant students stands out concerning other assistantships; it is considered the mother of medicine and many specialties are linked to it in terms of research topics.

The FEU of medical sciences of Las Tunas has obtained in different events the first place of scientific emulation, which reflects the quality of the works presented and of the research activity of this university^{4,5}, however, it is necessary to increase the quality with the objective that not only 31,6 % of the presented papers obtain results.

Table 1. Distribution of participations according to event and type of presented article. University of Medical Sciences of Las Tunas. September 2018-September 2020

Event	Final report	Bibliographic review	Case Presentation	Finished product	Total	%
AHT	5	2	0	0	7	6,93
ONCOFORUM	7	14	2	2	25	24,8
GYNECOSS	11	11	0	0	22	21,8
PEDIACAM	4	4	1	0	9	8,9
CARDIOSANTIAGO	5	7	0	0	12	11,9
HAVANA SURGERY	3	3	0	0	6	5,9
MEDIGUASO	4	6	0	2	12	11,9
DRUG FORUM	-	7	-	-	8	7,9
Total	39	54	3	4	101	100

Source: official reports of each event.

Other universities in the country also stand out in the scientific sphere, such as the University of Medical Sciences of Villa Clara, which obtained the first place award in the scientific emulation of the National Student Scientific Forum of Medical Sciences for five consecutive years^{10,11}. Getting young science to occupy a relevant place is the work of the GCE in conjunction with the tutors, the subject groups, and the Editorial Committees of the Student Scientific Journals of each province.

Table 2. Distribution of the awarded investigations according to obtained results

Prize	No.	%
Relevant	13	12,9
Outstanding	12	11,9
Mention	7	6,9
Total	32	31,6

Stomatology, Nursing, and Health Technologies, despite not being among the degrees with the highest enrollment at the national level, constitute

pillars for people's health, the conservation, restoration, and self-care of life, which is based on the relationship nurse-patient¹². When referring to health technologies, this is a very broad field that requires professionals prepared to deal with new technologies, carry out actions of prevention, promotion, research, treatment, and rehabilitation of the health problems of the population¹³.

There is no doubt about the high importance of these professions for their correct development in a high-quality health system such as the Cuban one, and their preparation in terms of research is imminent, as well as creating spaces for them to develop their skills, either promoting more events related to their themes or guiding them to improve these aspects.

Regarding publication, it can be seen that a low percentage of papers is published. In general, there is a tendency to identify the student as a passive agent in research due to the vision of the student as an apprentice, but it is necessary to change it since the student constitutes the engine of transformation and the basis of historical continuity of the profession.

Some authors reaffirm that inadequate training in research, little motivation, long teaching hours and little free time influence the low level of student publication^{14,15}.

To try to minimize this, strategies have been outlined through the FEU congresses, specifically the 9th, such as the creation of student scientific

Table 3. Distribution of works according to the author's academic year and assistantship

Assistantship	Academic year				No. (%)*
	2	3	4	5	
Internal Medicine	6	3	1	0	10 (9,9)
Nephrology	0	0	0	7	7 (6,9)
Cardiology	2	3	0	0	5 (5)
Endocrinology	0	2	1	0	3 (3)
Hematology	0	3	0	0	3 (3)
General Surgery	0	1	0	1	2 (2)
Neurosurgery	1	0	0	1	2 (2)
Pharmacology	2	0	0	0	2 (2)
Comprehensive General Stomatology	2	0	0	0	2 (2)
Anesthesiology and Resuscitation	0	1	0	0	1 (0,9)
Biochemistry	0	1	0	0	1 (0,9)
Oncology	0	-	1	0	1 (0,9)
Cosmetic Surgery and Caumatology	0	1	0	0	1 (0,9)
Intensive Medicine and Emergencies	0	0	0	1	1 (0,9)
No assistantship	12	9	7	12	40
Total (%)	25 (24,8)	24 (23,8)	10 (9,9)	22 (21,8)	81 (80,1)

*The presentations of the first and sixth-year students were omitted.

journals belonging to each of the MINSAP universities, in the case of Las Tunas, EsTuSalud was created.

Career	No.	%
Medicine	98	97
Stomatology	2	2
Nursing	1	1
Total	101	100

The creation of the magazine arises as an initiative to contribute to the dissemination of the results obtained in the research activity of the students of the health sciences degrees. This aims to support these students from the first years of their respective careers to help awaken in them an interest in research and subsequent publication of their research experiences.

CONCLUSIONS

It is necessary for the Stomatology, Nursing, and Health Technologies degrees to integrate into the scientific research movement with greater participation, as well as the design of strategies in search of an increase in scientific activity, its quality, and the publication of these results in scientific journals.

AUTHORSHIP

Lilisbeth de la Caridad Benítez Rojas: conceptualization; research; formal analysis; original draft writing; writing review and editing.
 Luis Alcides Vázquez González, Dannelys Aimeé Polanco Velázquez, Sahily de la Caridad Rojas Pérez, Antolín René Benítez Rojas: conceptualization; research; formal analysis; writing review and editing.

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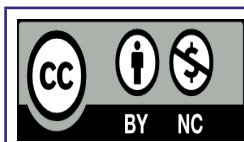
Participación de los estudiantes de la Universidad de Ciencias Médicas de Las Tunas en eventos científicos estudiantiles nacionales

RESUMEN

Introducción: los estudiantes de la salud en Las Tunas muestran en el transcurso de su quehacer universitario una activa parti-

participación en eventos científicos estudiantiles, la cual ha sido merecedora de importantes reconocimientos. **Objetivo:** caracterizar la participación de los estudiantes de la Universidad de Ciencias Médicas de Las Tunas en eventos científicos estudiantiles nacionales. **Método:** se realizó un estudio observacional, descriptivo y transversal; el universo estuvo constituido por 101 estudiantes tuneros que participaron en los 8 eventos organizados por las universidades de ciencias médicas del país durante el curso 2018-2019. Se estudiaron las variables: evento, modalidad de trabajo, premio, ayudantía, carrera y trabajos publicados. Se aplicó estadística descriptiva. **Resultados:** el evento con mayor participación fue el ONCOFORUM (24,8 %) y la modalidad más frecuente fue la Revisión Bibliográfica desarrollada por 54 estudiantes. Fueron premiados 32 trabajos y el 12,9 % obtuvo premio relevante. El 24,8 % de los participantes cursaba el segundo año académico. La ayudantía de mayor representación fue Medicina Interna (9,9 %); el 59,4 % de las ponencias no tenía a un alumno ayudante como autor principal. Solo lograron ser publicados 21 trabajos. **Conclusiones:** resulta necesario que las carreras de Estomatología, Enfermería y Tecnologías de la Salud se integren al movimiento científico investigativo con mayor participación, así como es imprescindible el diseño de estrategias en búsqueda de un incremento de la actividad científica, de su calidad y de la publicación de estos resultados en revistas científicas.

Palabras clave: Educación médica; Investigación; Ciencias de la Salud.



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