

Results of the subject History of Stomatology taught in the distance teaching modality

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ABSTRACT

Introduction: the subject History of Stomatology is a course of the major, which in the 2020-2021 school year was taught with a new study plan and in distance learning modality. **Objective:** to describe the results of the course History of Stomatology taught in distance teaching modality during the 2020-2021 academic year at Faculty of Stomatology of Santiago de Cuba. **Method:** a cross-sectional, descriptive, observational study was carried out in the period from February to March 2021. The universe consisted of 30 first-year students of Stomatology. Form of admission to the University, place of origin, quality of the final report, final grades, and subjects of greater difficulty were the variables studied. Descriptive statistics were used. **Results:** 36,7 % of the students entered right after High School and most of the students (43,3 %) belonged to the main municipality of Santiago de Cuba. 60 % of the students developed a final work of excellent quality. Twenty-three students concluded the course with the highest grade, representing 76,7 %. A 100 % promotion was obtained. Topics II and III were the ones that offered the greatest difficulty to the students in the evaluations which were carried out. **Conclusions:** the results of the course History of Stomatology taught in the distance learning modality during the 2020-2021 academic year to students of the Faculty of Stomatology of Santiago de Cuba were satisfactory in terms of promotion and academic results.

Keywords: Distance learning; History of Dentistry; Academic Performance.

Among its objectives, the pedagogical model of the majors studied in Higher Education in Cuba seeks to ensure the quality of the integral and critical training of the professional's personality, through its substantive processes¹. In this sense, the work of the teacher in the application of the study plan is essential as an active part of the process².

The start of the 2020-2021 school year has had different characteristics, especially for first-year students of Medical Sciences³.

The implementation of Curriculum E in the Stomatology major during this school year has coincided

with the scourge of the coronavirus disease 2019 (COVID-19), a situation that quickly and radically changed both life and habits of the Cuban medical students. They turned to the communities to demonstrate that the relay of Cuban health is guaranteed, joining the active inquiry of patients suspected of having COVID-19, for which they were previously trained in issues related to biosafety and other epidemiological measures^{4,5}.

The implementation of this new curriculum has been a challenge for students and teachers. Among its main transformations, the most relevant ones are the curricular flexibility, the protagonism of the student, and the increase in the curricular strategies and courses, whose contents are coherently integrated into the curriculum as a complex network of variables that encompass axiological, pedagogical, idiomatic, cultural, ecological, and historical aspects, all with multiple edges⁶.

Regarding the historical plane, its study is pertinent to illustrate the fundamentals of evolution in time, space and interrelation, from the perspective of relating past-present-future.

The Stomatology major in Cuba was lacking in its curriculum of a subject that proposed as its object of study the historical evolution of the profession. In light of the events, a historical approach of the students to their work is understood as necessary and pertinent, something vital for the professionals who exerci-



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Conflict of interests

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se it, because this means recognizing history as knowledge of the past that helps to understand the present and to be prepared for the future.

Consequently, the subject History of Stomatology, a course taught in the first semester of the major, aims to relate the knowledge, doctrines, theories, and scientific discoveries that led to the progress of stomatology as a science, from the most remote times to the current moments. The analysis of the process of construction of the professional identity and its mechanisms of socialization favor the learning of the role of the stomatologist and its relationship with the other socio-sanitary professions^{7,8}.

Its main objective is to complete the humanistic training of the student by offering the global perspective of the profession in order to obtain a broader and more enlightening vision of the present, as well as critical and constructive thinking in practice. This is why it's so important to ensure the quality of the learning of this subject.

The objective of this research is to describe the results of the course History of Stomatology taught through distance learning process during 2020-2021 academic year at the Faculty of Stomatology of Santiago de Cuba.

METHOD

Type of study: a descriptive, cross-sectional, observational study was carried out by the inclusion of students from the Faculty of Stomatology that belongs to the University of Medical Sciences of Santiago de Cuba, from February to March 2021.

Universe and sample: the universe consisted of 30 first-year Stomatology students, who showed their willingness to participate in the study. Students who had already received the subject were excluded because they were readmitted students.

Variables and data collection: form of entrance to the University [High School (IPU, by its acronym in Spanish), Contest, School for Sports Initiation (EIDE, by its acronym in Spanish), Order 18, Female Voluntary Military Service (SMVF, by its acronym in Spanish), Active Military Service (SMA, by its acronym in Spanish), Ministry of Interior-Revolutionary Armed Forces (MININT-FAR, by its acronym in Spanish), self-financed], place of origin (Santiago de Cuba, Contramaestre, Palma, II Frente, Songo la Maya, III Frente, foreign students), quality of final work (bad, fair, good, and excellent, awarded according to a 5-point grading scale), final grades of the students [minimum (3 points), intermediate (4 points), maximum (5 points)], and subjects of greater difficulty were the variables studied. The promotion of the subject was obtained as a result of dividing the number of approved students by the initial enrollment expressed as a percentage.

A model was made for data collection, which was filled in in each case with the information obtained from the promotion report of the subject.

Statistical processing: the data was processed using the statistical program EpiInfo 6.0, using descriptive statistics. For the description of the qualitative variables, the statistical functions of absolute frequency and relative percentage were used.

Ethical standards: the study was approved by the Medical Ethics Committee and the Scientific Council of the Faculty of Stomatology of Santiago de Cuba. The bioethical principles established in the II Declaration of Helsinki were respected and the data obtained were used only for research purposes.

RESULTS

36,7 % of the students entered through High School (IPU, by its acronym in Spanish), 16,7 % through the Female Voluntary Military Service (SMVF) and the rest through other sources.

Most of the students (43,3 %) belonged to the main municipality of Santiago de Cuba.

60 % of the students developed a final work with excellent quality and no report was evaluated as poor quality.

23 students concluded the course with the highest grade (5 points), representing 76,7 %, and only one obtained the minimum passing grade (Table 1). A 100% promotion of the subject was obtained.

Table 1. Distribution of students according to form of admission to the University and final grade of the subject. Faculty of Stomatology of Santiago de Cuba. Academic year 2020-2021

University entry form	Minimum passing grade	Intermediate rating	Highest rating
IPU	0	1	14
Contest	0	0	2
EIDE	0	1	0
Order 18	0	1	1
SMVF	0	0	2
SMA	0	2	1
MININT-FAR	0	0	2
Self-financed	1	1	1
Total (%) *	1 (3,3)	6 (20)	23 (76,7)
*n=30			
Source: Promotion report of the subject.			

The topics that generated the greatest difficulty for the study were Topic II "The development of Stomatology in Cuba in the 15th to 19th centuries. International influence for the scientific development of the profession" and Topic III "Cuban stomatologists and their role in the struggles for independence".

DISCUSSION

The world is in an emergency situation against the COVID-19 pandemic⁹. In Cuba there have been many measures and actions carried out to overcome the devastating effects of the disease, such as the modifications made in the school year in order to achieve the permanence in their homes of teachers and students (depending on the epidemiological situation of each locality), thus reducing the spread of the virus^{10,11}. For these reasons, the first year of the Stomatology major began the school year in January 2021 in the distance learning modality, implementing Curriculum E.

Students have worked in the morning by carrying out the epidemiological investigation actions of the suspected cases of COVID-19 and during the rest of the day they have carried out the tasks directed by the teachers of the different subjects, like the course of History of Stomatology in a distance learning modality through the Virtual Classroom and a WhatsApp group, finally achieving its promotion.

100 % of the students in this study were promoted, keeping similar results to what was reported by Corona *et al*¹² about Stomatology students in their research, where all those who received the distance course passed the subject, although in a different subject and year. According to Aguilar *et al*¹³ promotion is a fundamental indicator to measure the results of any educational system, being essential to estimate academic efficiency.

Regarding the quality of the final work of the subject, it was considered that the favorable results could be due to the preparation, commitment, and responsibility of the students and teachers involved in the process. Five works were selected to be presented in events related to the topics addressed. This way, participation in scientific events is encouraged and the exchange of experiences and the creation of collaboration networks that can become scientific societies is encouraged^{14,15}.

In the two municipalities where the quality of the work was affected, it was found that these students had difficulty with access to information due to the lack of a mobile phone or poor signal coverage of the devices.

The systematic, controlled, and organized follow-up of the teaching allowed that at the end of the course only a student finished with the final minimum grade, which could be due to the fact that he comes from an English-speaking country and showed difficulty in communicating in Spanish and in the different evaluations.

These results are considered to be influenced by the efficient self-preparation that young people who enter Cuban universities currently possess. The quality of the teaching process translates into a

high degree of ethical-moral values, professional technical rigor, scientific level, and dedication to work, so as to guarantee adequate health care and the consequent satisfaction of the population that will receive its services.

As stated by Cepero *et al*¹⁶, Higher Medical Education in Cuba needs to prepare the new generations of professionals so that they are capable of satisfying outstandingly the needs of a society that struggles to occupy a preponderant place among developing countries.

Regarding the topics and contents with the greatest difficulty in the evaluations of the subject, it was evidenced that the teaching results of the evaluations were affected by the insufficient method of preparation of the student in vital aspects of the subject History of Cuba, low power of synthesis and interpretation, and lack of basic texts for the subject.

According to Curriculum E, six subjects are taught, of which the contents that offered the greatest difficulty to the students in the evaluations carried out were Topic II "The development of Stomatology in Cuba in the 15th to 19th centuries. International influence for the scientific development of the profession" and Topic III "Cuban stomatologists and their role in the struggles for independence".

The subject History of Stomatology is included as part of a new training program, whose system of objectives and content responds to the students that the country needs. Its study is carried out in a context characterized by the presence of COVID-19, where students have taken on the arduous task of cooperating in its confrontation.

The evaluation of the students was carried out in compliance with the standards and quality criteria previously established for this special situation. The exhibited results of this variant of distance education show quality in the teaching-learning process, highlighting the use of the virtual classroom as a space that promotes collaborative and cooperative learning.

Teachers give students access to the different learning objects that they use in the courses, and offer the student, among other facilities, the possibility of learning without coinciding in space or time, assuming the learning functions that traditional face-to-face education systems possess¹⁷.

CONCLUSIONS

The results of the course History of Stomatology taught in the distance learning process modality during the 2020-2021 academic year to students of the Faculty of Stomatology of Santiago de Cuba were satisfactory in terms of promotion and academic results.

AUTHORSHIP

AAA: conceptualization, formal analysis, research, methodology, validation - verification, writing - original draft, writing - review and editing. VMCR and IMT: formal analysis, project management, research, resources, writing - original draft, writing - review and

editing. LPS and TMCR: monitoring, visualization, research, writing - original draft, writing - review and editing.

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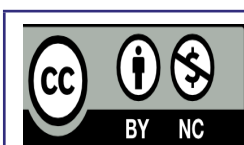
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Resultados de la asignatura Historia de la Estomatología impartida en la modalidad enseñanza a distancia

RESUMEN

Introducción: la materia Historia de la Estomatología, es una asignatura propia que en el curso escolar 2020-2021 se impartió con un nuevo plan de estudios y en la modalidad enseñanza a distancia. **Objetivo:** describir los resultados de la asignatura Historia de la Estomatología impartida mediante la modalidad enseñanza a distancia durante el curso 2020-2021 en la Facultad de Estomatología de Santiago de Cuba. **Método:** se realizó un estudio observacional, descriptivo, de corte transversal, en el período de febrero a marzo del 2021. El universo estuvo constituido por 30 estudiantes de primer año de la carrera de Estomatología. Fueron estudiadas las variables: forma de ingreso a la Universidad, lugar de procedencia, calidad del informe final, calificaciones finales y temas de mayor dificultad. Se empleó estadística descriptiva. **Resultados:** el 36,7 % de los estudiantes ingresaron por la vía de Instituto Preuniversitario y la mayoría (43,3 %) pertenecían al municipio cabecera Santiago de Cuba. El 60 % de los estudiantes desarrollaron un trabajo final con excelente calidad. Concluyeron la asignatura con la máxima calificación 23 estudiantes representando el 76,7 %; se obtuvo una promoción del 100 %. Los temas II y III fueron los que ofrecieron mayor dificultad en las evaluaciones realizadas. **Conclusiones:** los resultados de la asignatura Historia de la Estomatología impartida en la modalidad enseñanza a distancia durante el curso 2020-2021 a estudiantes de la Facultad de Estomatología de Santiago de Cuba fueron satisfactorios en cuanto a la promoción y resultados académicos.

Palabras clave: Enseñanza a distancia; Historia de la Odontología; Rendimiento académico.



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