Communitary Health and EMINUS
Original Article

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SUMMARY

Introduction: *We analyzed the implementation of practices of the educational experiences of Community Health of the Veracruz Region School of* *Medicine of the Universidad Veracruzana in favor of the integration and biopsychosocial approach of the inhabitants of the community of La Huaca, from the city of Veracruz.*

Material and methods: We collected information on the activity developed in forums, including the delivery of a final group work in the Eminus Educational platform, the analysis of classroom and community learning, with the participation of students and teachers of Community Health of the August 2017-January 2019 cycle.

Results: We sought to reflect the opinion of acceptance and / or rejection of students against community educational practices, as well as proposals to improve the teaching-learning-assessment process, the relationship between the socio-medical area and the environmental environment of the practices. carried out in the Barrio de la Huaca.

Discussion: The present work favors a change from the traditional teaching of medicine in which the decontextualization of the individual is emphasized, by the only biologistic approach and the fragmentation of the classic teaching-learning process in which the model atomized by disciplines is prioritized, seeking to approach to a proposal with biomedical, socio-medical and environmental characteristics.

Keywords: Community health, Huaca, Community educational practices, Meaningful learning, transversality.

INTRODUCTION

The concept of health is understood as biological, psychological and social well-being; it is not just the absence of disease [1]; if we overlap the previous definition with the daily work of patient care and the teaching-learning process, the traditional education systems present a decontextualization of the individual; these systems tend towards a biologist-only approach, with fragmentation of the classical teaching-learning process in which the model atomized by disciplines is prioritized [2]. The objective of this work was to analyze the impact on medical students regarding the planning and implementation of community educational practices focused on the integration of a biopsychosocial approach in their environment; this was done on a teaching-learning-evaluation process based on a specific reality, with a record of the activities carried out in the Eminus educational platform.

The educational experiences of Community Health have been for more than 15 years part of the Curriculum of the Degree of Surgeon of the Faculty of Medicine Veracruz Region of the Universidad Veracruzana; they are organized under an Academy and a Community Health Coordination; In the year 2017 a curricular redesign was carried out in which the community educational experiences in their thematic contents and credits were restructured.

In the visit made in 2015 by the COMAEM (Mexican Commission for the Accreditation of Medical Education), the Community Health Area met favorably with the provisions of the evaluation instrument, without observations or recommendations; work is currently under way to give a satisfactory answer to the 2017 self-assessment instrument.

The Universidad Veracruzana offers the benefit of having the Eminus Educational Platform which has facilitated the teaching-learning process of various

educational experiences, especially those belonging to the Academies of the Medical Social Area.

The use of digital platforms in the Academic Area of Health Sciences has been used worldwide, with satisfactory results in the students' graduation profile; in the Veracruz Region School of Medicine of the Universidad Veracruzana, its use has been based on educational experiences designed in an approach based on professional competencies according to the AMFEM (Mexican Association of Faculties and Schools of Medicine); the benefits of online medical education using Eminus have been demonstrated for pedagogical purposes and for evaluation of the educational process [3].

The community of the Barrio de la Huaca, in its urban landscape, is made up of wooden houses or masonry with roofs of Marseille tile or palm; the majority of its inhabitants are of limited economic resources; it is made up of more than 20 courtyards and small spaces that forces the overcrowding of people and household goods; in some of the courtyards there are areas of opportunity that require multidisciplinary intervention to favor personal and community hygiene; the playgrounds are visited by the students of the various educational experiences of the Community Health area, applying actions of an Operational Program of Field Practices that aims to promote community development through the implementation of actions based on health education and prevention activities of the health-disease process.

Going through the Huaca neighborhood, talking with its people, going through its alleys and inner courtyards, is entering a past rich in tradition and cultural elements, from which prominent figures with a recognized career in music, sports, politics, education have emerged. This has allowed its survival in the face of the onslaught of the changes generated by modernity and the growth of a city.

67% of the students perceive as acceptable the level of community participation in the educational experiences of Community Health in the Barrio de la Huaca [4]. The knowledge of the perception and the satisfaction of the students with respect to the development of their educative competitions in the employment of the technologies of the information strengthen the educational innovation; this is reflected in the fulfillment of the indicators of teacher professionalization of the academic plant of the Veracruz Region School of Medicine of the Universidad Veracruzana. The perception of the student in his learning with Eminus support in the educational experience of Socio demografía was good in 34 students, excellent in 13 students, regular in 4 students, deficient in 1 student and very deficient in a student [5].

The educational experiences offered in the school year August 2018-January 2019 were: Socio demography, Sexual Education, Maternal and Child Health, Public Health, Control of Chronic Degenerative Diseases and Maternal and Child Health, taught by 13 teachers, some of whom taught the same experience in different sections and / or also teachers who taught various educational experiences in different sections [6].

Eminus is a tool that comes hand in hand with the high-level computer developments of commercial license (WebCT) and open access (Moodle) that

in 2002 changed the way of distance education. In 2005, Eminus version 1 served 800 students. In 2008, version 2.2 reached 10,000 students, an amount that doubled in one year. For 2013, version 3 reached 25,000 users, of whom about 1,300 were teachers; finally in 2016 there were 40,000 students, 1400 academics, 6312 courses (2,182 in Xalapa, 1,711 in Veracruz, 829 in Córdoba Orizaba, 763 in Poza Rica - Tuxpan and 827 in Coatzacoalcos - Minatitlán) with an average of 4000 daily accesses.

The current version of Eminus has a virtual desktop, monitoring control and a content management and creation module, in addition to the basic interaction functions between teachers and students. Eminus version 4 expects a migration to the cloud, 98% stability and availability, as well as greater integration with web services such as OneDrive, Office 365 or Google to facilitate document editing, video viewing and storage files in the cloud [7].

In the pedagogical literature, the interests, thematic preferences and learning in the field of public health have been described based on the opinion of students in school research groups of the ConCiencia en tu Barrio health project; in this project, the students perform an analysis whose results emphasize the situation of abandoned animals, the management and elimination of garbage and safety and urban infrastructure, visualizing the role of social actors and the positive / negative impact on the community, valuing the learning obtained through the observation of other communities and the interaction between neighbors; this has favored the application of didactic strategies for the promotion of local health and the development of basic

notions of community health and motivation in students linked to the socio-environmental reality of their communities [8].

In recent years a new concept has been incorporated to define our model of society: the knowledge society. This idea has associated a new type of literacy linked to our society, involved with a high consumption of information. From a traditional literacy based on literacy skills, we are moving to a digital literacy in which technological skills and information are needed. To be self-sufficient, we need to know how to navigate through endless sources of information, know how to discriminate the information received and increasingly know how to master the overload of information they provide us through the web.

In the present work, the first steps have been taken so that the Community Health subjects are developed according to the Transversa Program of the Universidad Veracruzana, which began in November 2013; this program aims to incorporate, under a systemic and complex vision, the cross-cutting issues of interculturality, gender, sustainability, internationalization, inclusion, health promotion, human rights and justice, and art-creativity, in the functions of the Universidad Veracruzana. Its vision is based on the design of strategies to contribute to the integral formation of university students, academics, authorities, administrative personnel and technical personnel. This leads to the strengthening of the university identity. That is, Transversa is committed to the dialogue of knowledge for the systemic understanding of complex problems around cross-cutting issues and the collegial construction of innovative

alternatives that contribute to their solution. Hence, the Transversa Program has as fundamental axes the systemic and complex vision, the multi, inter and transdisciplinary work, and the culture of dialogue [9].

Faculty of Medicine of the Universidad Veracruzana contributes to the training of professionals in their graduation profile, in addition to training citizens aware of their professional, individual and collective responsibility. Hence the need to influence the present work, from a systemic view, in students, teachers and community inhabitants; this is intended to ensure that each and every one of the members of the university community are distinguished by their behavior respectful of the environment, the plurality of habits and customs, human rights and gender diversity; it is intended that they be inclusive, creative, careful of their health and that of others, and be aware of their condition in the world. In addition, those who aspire to be part of our institution, are attracted by this university culture [10].

In the Course of Educational Experiences of Community Health August 2018-January 2019 had the opportunity to make links with various university actors as well as the health sector whose intervention we believe has left a favorable impact on the university community and the Barrio de la Huaca.

METHODS

It was an observational, descriptive, retrospective and transversal study, through the review of the information contained in the forums developed in the educational platform Eminus of the Course entitled Educational Experiences of Community Health August 2018-January 2019 of the Faculty of Medicine Region Veracruz of the Veracruzana University.

For the past 2 years, the Community Health Coordination has carried out a total of four forums, in which the students of the educational experiences present, under a systematized methodology, a final work of the activities carried out during the school period studied. These forums indicate the fulfillment of the actions and, in turn, the identification of the areas of opportunity according to the Manual of Community Practices of the Veracruz Region School of Medicine of the Universidad Veracruzana; the first 3 forums were held in person at the Cinquantenaire Classroom in a single day of work that represented an effort of participating students, teachers and organization by the Community Health Coordination; starting at 8 AM, every 20 minutes a team was presented sharing their presentation of the final group work to an audience made up of students from other community educational experiences; the activity culminated at 4 PM; in some presentations it was not possible to comment and / or give feedback to the students who presented the results of their community work; the organizing committee collected the total of files of each participating team; this difficulty led to the task of reflecting, analyzing and looking for innovative strategies for a better academic performance, promoting the enrichment of the productivity of both teachers and students.

Taking this into account, the Community Health Coordination implemented a course in Eminus entitled Experiences of Community Health from

August 2017-January 2018, in which with an instructional design according to reality and based on the benefit of the use of Information Technology, teachers and students were invited; forums were labeled to collect the information based on the pedagogical and assistance tasks both in the classroom and in the community of each of the community health education experiences of the referred school period; it should be mentioned that it was not an easy task because the implementation of the proposed methodology had to be socialized, without omitting that it was the first time that the modality of this educational activity was carried out; little by little, students who registered manually as members of the Course on Eminus were added; the teachers were oriented and the Director of the Faculty of Medicine was given the role of viewer of the Course; the Eminus collection of the thematic contents of the community educational experiences was shaped in the corresponding forums and the last forum was dedicated to the participation of the students sharing their final group work; their participation was no longer an exhausting day; instead, the final work delivery forum remained open for several days, which favored each of the students of the various educational experiences had the opportunity to know and issue comments on the work of all other colleagues; at the end of the course, the analysis of the information contained in Eminus was made to share it in the present investigation.

RESULTS

The educational experiences offered in the school year August 2018-January 2019 were: Socio demography, Sexual Education, Public Health, Control of Chronic Degenerative Diseases and Maternal and Child Health; they was

attended by 13 teachers; it should be noted that there are teachers who taught the same community educational experience in different sections and also teachers who taught various community educational experiences in different sections.

During the school year, the following results included in Eminus forums were documented (graph 1):

Socio-demography

In the platform Eminus 35 participations were presented, which included 25 weekly reports, uploaded by students, about the activities carried out in the classroom and community. In addition, the teacher presented an article based on the community practices of the Infant and Child Health educational experience, an article on sociodemographic indicators in Mexico, the content of a ponence on breast cancer prevention, the partial evaluation of the educational experience, conclusions of the course prepared by a student, three files with presentation of thematic contents, a database of diabetic patients from the Huaca neighborhood as well as a file with the progress report of the educational experience.
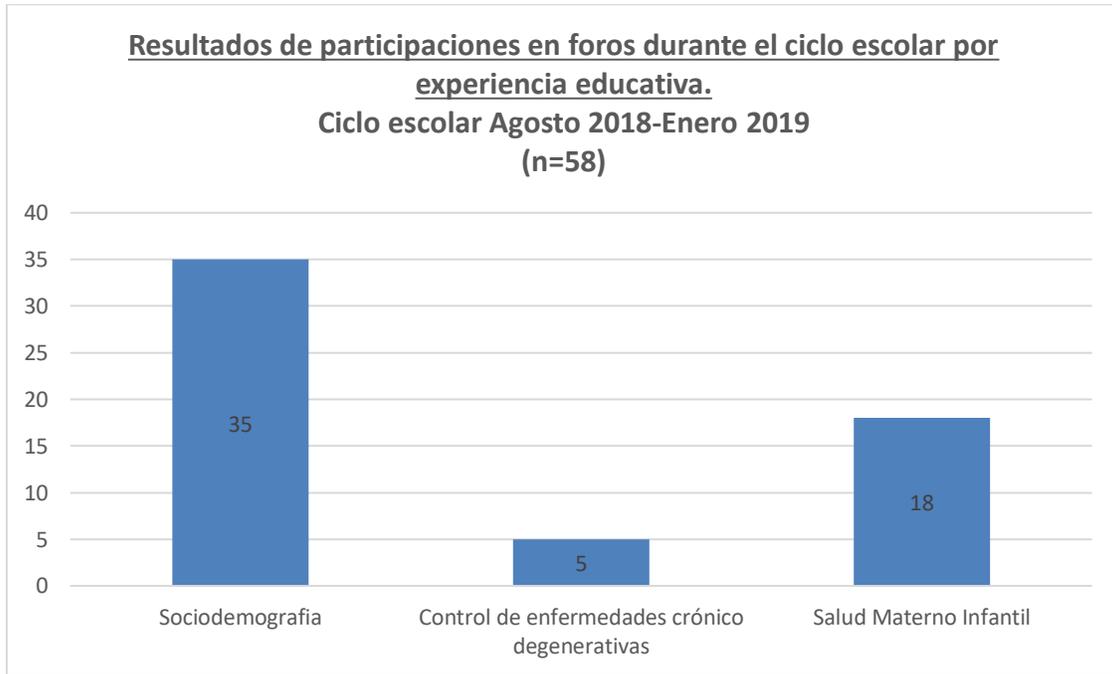
Control of Chronic Degenerative Diseases

In EMINUS there were 5 participations, which consisted of a file uploaded by the teacher with the topic Intervention in the Community, two rubrics uploaded by the teacher, a file with a clinical case and photographs of an inhabitant, as well as a comment on the subject prepared by a student.
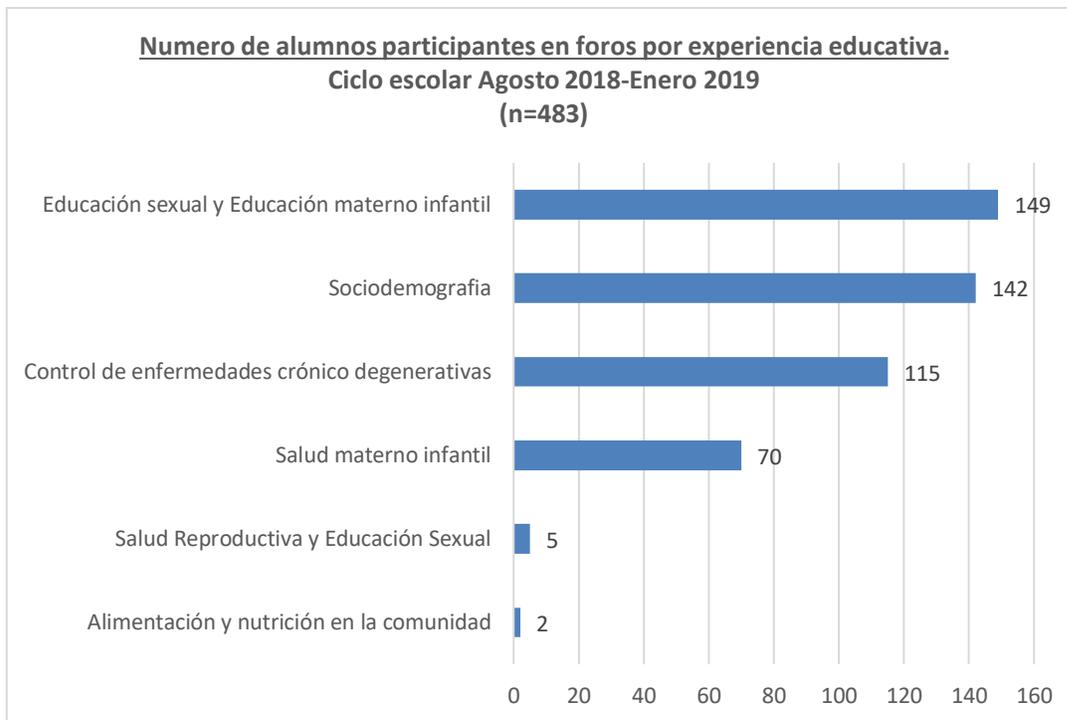
Maternal and Child Health

EMINUS registered 18 participations, which included a file with the educational experience program, a file uploaded by the teacher with partial evaluation, two files with feedback given by the teacher, seven comments made by students, a file uploaded by a student with the subject of Maternal and Child Sexual Education, a file uploaded by a student with the thematic content of maternal and child characteristics, as well as three files on recognition and photos of activities carried out in the assigned courtyards.

Resultados de participaciones en foros durante el ciclo escolar por experiencia educativa.
Ciclo escolar Agosto 2018-Enero 2019
(n=58)

Graph 1. Results of participation in forums during the school year by educational experience

Regarding the final group work delivery, results were recorded in figure 2.

Numero de alumnos participantes en foros por experiencia educativa.
Ciclo escolar Agosto 2018-Enero 2019
(n=483)

Experiencia educativa	Número
Educación sexual y Educación materno infantil	149
Sociodemografia	142
Control de enfermedades crónico degenerativas	115
Salud materno infantil	70
Salud Reproductiva y Educación Sexual	5
Alimentación y nutrición en la comunidad	2

Graph 2. Students participating in forums, by educational experience

DISCUSSION

In 2012, Aguirre and Ruiz, as teachers of the Universidad Veracruzana, affirmed that educational proposals have been complemented with the growth of distance and virtual education, with the use and inclusion of Web resources and educational platforms. This is how teachers have received training for the development of digital, didactic and disciplinary competences; educational institutions have been concerned with fostering learning environments conducive to the generation of knowledge in the current information society; the use of Information Technology does not solve the complexity of the teaching-learning-evaluation process, but it does favor the recreation of adequate educational environments, or the design of mediation strategies; the teaching staff and students can be recognized as educational agents in a virtual world that favorably promotes the sense of collaboration, innovation, imagination, creativity and co-responsibility in favor of collaborative work for the benefit of society at large [11].

The digital platforms within educational institutions are, nowadays, an indispensable resource, since thanks to their easy access in person or remotely, it is possible to strengthen the learning-teaching-evaluation processes, allowing feedback in real time or asynchronous to work in areas of opportunity both in the activities and / or resources implemented in educational platforms.

The virtual platforms have gained a very significant space in the educational institutions of higher education, since they have become a tool that allows the transfer of knowledge; that contributes to the acquisition, assimilation and construction of knowledge; virtual platforms are a valuable contribution for teachers, becoming a dynamic resource, capable of

improving and enhancing the educational competences of the student through the different applications of the use and taste of students, promoting critical thinking and meaningful knowledge [12]

The communication processes between teachers and students are facilitated by the digital platforms with which the institution counts. Having well-structured developments that fit the way each student learns, is of utmost importance to have a greater impact and better results.

Conclusions

In the EMINUS platform, 619 participations of students and teachers were documented with respect to the Fourth Community Health Forum, corresponding to the August 2018-January 2019 school year. In those participations, comments were recorded on the presentations of the other community subjects; it is worth mentioning that in the products of final works, health promotion actions were included with evidence of a database and photographs that give credit to the work carried out; it is interesting that a section of the educational experience of Socio demography organized, thanks to the support of the School's Directorate, a gastronomic sample for the consumption of diabetic patients from the Huaca neighborhood; this was possible thanks to the connection with a Nutritionist from the Universidad Veracruzana who prepared the menus. It is worth mentioning that given the success obtained, the inhabitants of the Huaca District requested and were given the recipes; there was the participation of teachers and students of the Faculty of Veterinary Medicine regarding the creation of family gardens in the community; another group of students

showed the products of the action of recycling waste, which gave rise to various Christmas decorative items and of practical use in the home; during the exhibition of the aforementioned products, a dialogue was held with the teacher of the educational experience so that such an important activity would be part of the actions of the next school period; the idea was to make it reach the inhabitants of the community for their own use and / or even to commercialize them, generating diversity in the sources of their economic income. Some teachers took their students to the Preventive Medicine Services of Health Institutions (ISSSTE), which allows the student to perform activities in a real environment of medical-care practice; In a talk about the prevention of mammary gland cancer, the theme was presented by interspersing educational sheets with paintings by Salvador Dalí, which is achieved by disseminating the prevention of the disease under an approach to disseminate the art through famous paintings; This is part of the integration of the Transversa Program of the Universidad Veracruzana to the activities of the teaching-learning-assessment process of the Community Health subjects of the Veracruz Region School of Medicine of the Universidad Veracruzana.

In the Sexual Education subject, 113 participations were registered; in Control of Chronic Degenerative Diseases, 77 participations were registered, followed by the subjects Maternal and Child Health and Sociodemography with 37 and 43 participations, respectively.

Recomendations

There were educational experiences of the first semester of the Faculty that had good levels of participation, although some sections had low participation of students and teachers; in the educational experiences of higher semesters, a huge level of participation was presented, with the elaboration of feedback comments towards other subjects; this information is of interest to identify the factors that could reduce the participation of students and teachers in the teaching-learning process through the EMINUS platform.

In December 2018, the university community had the opportunity to know and analyze the computer content of the publication entitled Prospective Aproach facilitated by the Universidad Veracruzana in which the 2018-2024 Nation Project was divulgated; the thematic contents related to community health are: promotion of sustainable societies, access to online education, development of community and rural school plots, chronic degenerative diseases, preventive focus on health, integral primary health care and, finally, promotion of research and evaluation with the support of higher education institutions [13].

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