

## Universities and programs promoting health in Mexico Universidades y programas de promoción de la salud en México

Viridiana Espinoza-Espinoza<sup>a</sup>

### Abstract:

**Introduction:** Universities are the ideal place to promote health because it offers facilities to provide comprehensive care as marked by the World Health Organization (1986) in the Ottawa Charter for health promotion. **Objective:** To describe the health promotion programs of higher education institutions in Mexico. **Methodology:** The review was carried out in PUBMED, CROSSREF, LILACS, SCIELO and government institutions indexing sources. For the selection of articles, it was considered to analyze government pages such as the Red Mexicana de Universidades Promotoras de la Salud (RMUPS) and public and private universities due to lack of information. The review criteria that were taken into account were the objective, areas of attention, type of user, level of prevention and finally operation of the health promotion programs of the universities. **Results:** The similarities of their objectives were identified from the programs of higher education institutions reviewed, promoting healthy styles and the relationship they have in the use of the wide group of services such as medical, nutritional and psychological care as the main, the variety of program operationalization and where it is shown that 100% manage a level of primary prevention. **Conclusions:** There is a clear and direct interests by the authorities of the different universities in Mexico, there are currently 43 institutions that make up the RMUPS.

### Keywords:

Health promotion programs, health promoting universities, healthy universities in Mexico

### Resumen:

**Introducción:** Las universidades son el lugar idóneo para promocionar la salud debido a que ofrece facilidades para brindar atención integral como lo marca la Organización Mundial de la salud (1986) en la Carta de Ottawa para la promoción de la salud. **Objetivo:** Describir los programas de promoción de la salud de instituciones de educación superior en México. **Metodología:** La revisión fue efectuada en fuentes de indexación PUBMED, CROSSREF, LILACS, SCIELO e instituciones gubernamentales. Para la selección de los artículos se consideró analizar páginas gubernamentales como la Red Mexicana de Universidades Promotoras de la Salud (RMUPS) y de universidades públicas y privadas debido a la falta de información. Los criterios de revisión que se tomaron en cuenta fue el objetivo, áreas de atención, tipo de usuario, nivel de prevención y por último operación de los programas de promoción de la salud de las universidades. **Resultados:** De los programas de instituciones de educación superior revisados se identificaron las similitudes de sus objetivos, la promoción de estilos saludables y la relación que tienen en la utilización del amplio grupo de servicios como la atención médica, nutricional y psicológica como principal, la variedad de la operacionalización del programa y donde se muestra que el 100% maneja un nivel de prevención primaria. **Conclusiones:** Existe un interés claro y directo por parte de las autoridades de las diferentes universidades en México, actualmente son 43 las instituciones que conforman la RMUPS.

### Palabras Clave:

Programas de promoción de la salud, universidades promotoras de la salud, universidades saludables en México

### INTRODUCTION

Universities are the ideal place to promote health because it offers facilities to provide comprehensive care, since 1986, the World Health Organization (WHO) marked it in the Ottawa Charter as environments that support and promote health.<sup>1,2</sup> For this reason, they have the task of reviewing the health promotion programs in Mexican universities and pay attention to the similarities and differences of their objectives, operation and level of attention of those programs. In this sense, it is important

to specify whether Mexican universities that have a health promotion program are emerging as Health Promotion Universities (HPU) which in turn are defined as privileged spaces for the creation of a health promotion context for educational community, since they improve the health profile through the development of education, research and knowledge sharing, which contributes to the well-being and sustainability of the community as a whole<sup>3</sup> and that they have a responsibility to generate a culture of Health Promotion ratified in subsequent

<sup>a</sup> Consultorio privado, Pachuca de Soto, Hidalgo <https://orcid.org/0000-0003-1512-6418>, Email: [viridiana0espinoza@gmail.com](mailto:viridiana0espinoza@gmail.com)

declaratory documents at international level derived from the Ottawa Charter using as a conceptual / operational framework the Social Determinants of Health (SDH) and the Sustainable Development Goals (SDGs).<sup>3,4</sup> In addition to all this, in 2003, the Movement of Health Promoting Universities in Latin America emerges<sup>5</sup> from which actions of health promotion and health education are given in order to produce changes in lifestyle<sup>2</sup> and where attention has been focused on getting universities and higher education institutions to commit to developing an institutional culture of Health Promotion with clear and articulated link: academia-society- community guaranteeing development of intersectoral policies favorable to health.<sup>6</sup> In this way, higher education institutions seek to understand the phenomena and provide solutions that enrich and guide the national, regional and global future. That is to say, the very existence of a university implies its participation in the culture and relevant processes of the nation to which it belongs this is why reference is made that it is a suitable place to become a HPU and that it can be verified through an institutional policy for the continuous and sustained improvement of health promotion actions.<sup>7,8</sup>

As indicated by Valle et al.<sup>9</sup> Mexico has extensive experience in the field of health promotion and public health campaigns, but the resources are not available and recognizing it implies the urgency of developing multisectoral strategies that promote the prevention agenda and control of chronic diseases, so strategies such as: Strategy of healthy environments, healthy Municipalities and Health Promoting Universities which have been developed gradually in Mexico. It is important to point out that networking is essential in the research and action of health sciences in an interconnected and global world. For this work that has been talked about, the networks of Health Promoting Universities in Latin America were institutionalized in 2003 and took the form of the Latin American Network of Health Promoting Universities in 2007.<sup>10</sup> In Mexico, the Red Mexicana de Universidades Promotoras de la Salud (RMUPS) is created in April 2004 and it is constituted in 2018 which is integrated by public and private higher education institutions, it aims to establish the inter-institutional bases of support and collaboration to become healthy universities contributing to human and social, healthy and sustainable development within the framework of its powers, functions, policies and programs which will be also addressed in this research.<sup>11</sup>

**METHODOLOGY**

The review was carried out by manual and electronic search of articles related to promotion programs of institutions of higher education in Mexico, in indexing sources PUBMED, CROSSREF, LILACS, SCIELO and government institutions. The search terms were: Health promotion programs, health promoting universities, healthy universities in Mexico. The selection of the articles was made considering an indefinite period for related articles, websites of public and private universities that have a particular interest in health promotion or that have a healthy life program. Articles or pages from government institutions that did not have a health promotion or healthy living program and that were not from a university in Mexico were excluded. The review criteria that were taken into account were the objective, attention areas, users, level of prevention and operation of the program. The results and findings were incorporated into a database in order to contrast the variables or review criteria for the organization of this article.

**RESULTS**

Thirty articles and programs of higher education institutions were selected that met the criteria of methodological quality and review that were mentioned earlier, 20% were detected in CROSSREF, 53.3% is information from government institutions such as the Mexican Network of Health Promoting Universities and websites of public and private universities, 6.7% in SCIELO, 16.6% in PUBMED and 3.3% in LILACS.

**Table 1.** Active Universities in the Mexican Network of Health Promoting Universities.

Active Universities in RMUPS	
Centro de Estudios Universitarios 16 de sept.	Universidad de Guanajuato
Centro Universitario del Pacifico	Universidad de las Californias Internacional
Instituto Politécnico Nacional	Universidad de Morelos
Instituto Tecnológico de Matamoros	Universidad de Monterrey
Instituto Tecnológico de Sonora	Universidad de Navojoa
Instituto Tecnológico de Sonora. Navojoa	Universidad de Quintana Roo
UNAM FES, Aragón	Universidad de Sonora
Universidad Anáhuac Mayab	Universidad Durango Santander Campus
Universidad Autónoma de Aguascalientes	Universidad La Salle Cancún
Universidad Autónoma de Baja California Sur	Universidad La Salle México
Universidad Autónoma de Campeche	Universidad La Salle Noroeste
Universidad Autónoma de Chiapas	Universidad Politécnica de Aguascalientes
Universidad Autónoma de Chihuahua	Universidad Politécnica de Guanajuato
Universidad Autónoma de Ciudad Juárez	Universidad Politécnica de Pachuca
Universidad Autónoma de Nayarit	Universidad Regional del Sureste Oaxaca
Universidad Autónoma de Nuevo León	Universidad Rosaritense
Universidad Autónoma de Yucatán	Universidad Tecmilenio, Campus Las Torres
Universidad Autónoma de Zacatecas	Universidad Veracruzana
Universidad Autónoma del Estado de Hidalgo	Universidad Vizcaya de las Américas
Universidad Autónoma del Estado de Morelos	Universidad de Ciencias y Artes de Chiapas
Universidad de Colima	Centro de Estudios Universidad Xochicalco
Universidad de Guadalajara	

Source: Own elaboration

In Mexico there are 5,343 higher education institutions that represent an opportunity to build health promotion models that favor the creation of healthier populations.<sup>9</sup> Table 1 lists the 43 universities that are part of the RMUPS and that meet the characteristics of a HPU, including: structure and formal program of systematic activities of Health Promotion (HP) activities involving teachers, students and other members of the university community.; It implies the appointment of university officials responsible for coordinating the HPU program and ensuring the systematization of actions with the support of representatives of different faculties, schools and disciplines of study; to render periodic reports of the actions of HP that it undertakes internally on campus and externally with its direct link in social affairs, matters of public policies favorable to health, intersectoral actions and advocacy in health.<sup>2</sup>

Table 2 shows the synthesis of the health promotion programs that were reviewed of universities in Mexico where the similarities of their objectives were identified, promoting healthy styles and the relationship they have in the use of the wide group of services such as medical, nutritional and psychological care, mainly, the variety of program operationalization and where it is shown that 100% manage a level of primary prevention.

Of the programs described in Table 2, 50% of the programs have the entire university community as users, 33.3% to students and 16.7% to teachers, students and administrative workers. Likewise, regarding the operationalization of the programs to carry out its activities, 16.7% of the programs operate from an office, 33.3% carry out health education sessions, 33.3% design spaces for health promotion, 8.3% work together with other dependencies and finally 8.3% is part of the study plan. In relation to the areas of attention, 83.3% of the programs have physical, mental and sexual health care, including also the

prevention of addictions, 8.3% is more focused on the physical design of healthy environments.

**Table. 2** Synthesis of the health promotion programs of universities in Mexico.

COLLEGE	OBJECTIVE	AREAS OF ATTENTION	LEVEL OF PREVENTION	USERS	OPERATION OF THE PROGRAM
Universidad de Zacatecas (UAZ) <sup>12</sup>	Boost in the university community, individual and social responsibility regarding health, which facilitates the formation of healthy lifestyles that raise their quality of life, through preventive education.	Physical, mental and sexual health. Nutritional counseling and oral health and addictions: tobacco, alcohol and drugs.	Primary	Teachers, students and administrative workers	The program operates from a Nursing Office promoting healthy lifestyles.
Universidad Nacional Autónoma de México (UNAM) Facultad de Estudios Superiores (FES), Zaragoza <sup>13</sup>	Promote and strengthen the participation of university students in the development of health promotion, health education, self-care and self-monitoring actions, to maintain, improve or recover health, well-being and quality of life at the individual and collective level.	Healthy environments: sustainable environment, training of health promoters. Diagnosis of determining factors.	Primary	University community	Health education sessions are organized periodically.
Universidad Veracruzana (UV) <sup>9,14</sup>	Promote the health and well-being of the university community by promoting healthy environments and lifestyles.	Mental health, health education, inclusive education, psychopedagogical guidance and sexual and reproductive health.	Primary	University community	Propitious spaces are designed to promote healthy eating and physical activity.
Universidad de Sonora (UNISON) <sup>9</sup>	Promote the health of students by promoting the culture of health care and promoting physical activity and sports.	Medicine, nutrition, nursing, psychopedagogy, and physical activity (Culturest).	Primary	Students and workers	A joint work is carried out among various units (ISSSTESON, DISE, STAUS, schools of Sports Sciences and Nutritional Sciences and General Administrative Secretariat).
Universidad Autónoma de Querétaro (UAQ) <sup>15</sup>	Form integrally healthy individuals committed to their environment contributing to the human, social and labor development of the university community through a culture in favor of health.	Medical care	Primary	University community	Basic care is provided to the University community.
Instituto Politécnico Nacional (IPN) <sup>16</sup>	Provide a professional advisory, companionship, training and follow-up service for students that promote their self-knowledge, to achieve their integral development as citizens with a critical sense and committed to their reality.	Educational and Vocational Orientation, Psychosocial Orientation, Health Orientation and Psychological Orientation. Services: General medicine, nutrition, dentistry, optometry and counseling.	Primary	Students	His lines of work focus on psychosocial development, health promotion and individual orientation.
Universidad Autónoma de Nuevo León (UANL) <sup>17</sup>	Promote the culture of prevention and promotion of healthy lifestyles, to consolidate and constantly strengthen	Nursing, nutrition and psychology.	Primary	Students	It promotes a cleaning environment, promotes areas for the disabled, develops work spaces and studies

	the quality of university education.				without risks and other things that help students to their integral development.
Universidad Autónoma de Campeche (UACAM) <sup>18</sup>	Promote healthy lifestyles among the university community.	Somatometry (weight and height), prescription medication application, vital signs monitoring, detection of chronic diseases, promotion of healthy sex life, health education, cures, bandages, health guidance and counseling, reproductive health education.	Primary	University community	It generates healthy spaces, culture and environmental education.
Universidad de Morelos (UM) <sup>19</sup>	Promote healthy life and social responsibility as a way of life.	Health promotion	Primary	University community	Institution that belongs to the Seventh day Adventist Church.
Universidad Autónoma del Estado de Hidalgo (UAEH) <sup>20</sup>	Promote healthy lifestyles for undergraduate students, through the development of cognitive, emotional, physical and social skills, to favorably deal with health risks.	Health and addiction prevention, responsible sexuality, health and nutrition.	Primary	Students	It is part of the curriculum. <sup>20</sup>
Universidad Metropolitana de México (UAM) <sup>21, 22</sup>	Promote capacities and favorable attitudes toward their own health care and take action to improve the conditions of university services and encourage their use.	Diagnosis of health, sexual and reproductive health, prevention of gender violence, oral health, physical activity.	Primary	Students	Strengthens the development of their capacities to make decisions about their health care and ensure that the environment in which they operate is favorable.
Benemérita Universidad Autónoma de Puebla (BUAP) <sup>23-26</sup>	Promote the adoption of healthy lifestyles.	Medical, nutritional and physical activation guidance.	Primary	University community	University accompaniment sessions, timely HIV detection campaigns, talks and workshops on health care.

Source: Own elaboration.

## DISCUSSION

It was observed that both private and public universities, and those who are and not part of the RMUPS have similarities in terms of their objectives where most promote the adoption of healthy lifestyles and preventive culture in favor of health, aimed at offering services that allow their students to be in continuous attention to their physical, mental and social health as it marked by the WHO (1946) in its definition of health.<sup>27</sup> So much so that it stands out in the synthesis that higher education institutions are related and they use a wide group of services related to health, sports, nutrition, medical care, psychological care, etc., which are essential for the establishment of lifestyles that promote health and that tackle issues such as food and nutritional issues, sexual health, mental health, physical activity and finally, in some cases they create spaces to promote self-care and to carry out activities related to these issues.<sup>28</sup>

Regarding the way of work of each of the health promoting institutions, it not different, since in some cases they are part of the development plan of the institution as it is the case of the UAHE and in some other cases, there are only facilities that promote health activities such as the UNAM and UV. Both UNAM and BUAP develop activities such as demonstrations, campaigns, talks, workshops, fairs, etc., so is shown that these spaces are available for carrying out these activities.<sup>9,13,14,20,23-26</sup>

All the health promotion programs of thereviewed universities in Mexico are unified in relation to the level of prevention, since all of them carry out primary prevention actions such as the promotion of healthy lifestyles, medical, nutritional, psychological, dental, optometry care.; There are also some programs with somatometry, medication application, vital signs monitoring, detection of chronic diseases, cures and bandages, as is the case of UACAM.<sup>18,28</sup>

In the case of sport or physical activity it was found a private institution such as the UNISON<sup>9</sup> that emphasizes generating a culture in contribution to the development of each subject as a person, in interaction with other people and the surrounding environment. So it is so that it has agreements with schools of Sports Sciences for joint work. In addition to this, it is an institution that works with different dependencies of the health sector as the Institute of Social Security of Government Workers

in the State of Sonora (ISSSTESON), the Directorate of Student Services (DISE) and the Union of Academic Workers of the University of Sonora (STAUS) for the operationalization of their program.

Following this line of operationalization there are those who operate from an office such as the UAZ, UAQ, IPN and UACAM to mention some; some people periodically organize health education sessions such as UNAM and BUAP as the activities mentioned above.<sup>12,13,15,16,18,23-26</sup>

From the findings of this study it is important to mention that institutions also promote a clean environment, promotes areas for the disabled, and develops work spaces and other things that help students to get an integral development as described by UANL; in this sense, UACAM focuses more on environmental education.<sup>11,18</sup>

From the foregoing, the promotion programs of universities in Mexico need to be further consolidated, increasingly involving the different actors committed to the health of the student and the university community, as Grossmeier mentions, the challenge for health today is to infuse well-being and sustainability, and not all the universities that were reviewed achieve this second concept.<sup>29</sup>

The community concept reflects the idea that people's behavior and well-being are influenced by interaction with others, and here, health promotion requires local participation and leadership to facilitate the transmission and adoption of interventions to bring about change<sup>30</sup> for this reason it is highly relevant that there are such programs that promote the health of the university community in a way that generates a culture in health and the appropriate environments where students, teachers, administrative personnel and all the personnel that are involved are participating, as is the case of some universities that were reviewed such as BUAP, UM, UACAM, AUQ, UNISON and UAZ to name a few.<sup>9,12,15,18,19,23-26,30</sup>

As Newton J et al. point out, the need for a comprehensive university approach that pays attention to complex interactions and interconnections between components and highlights how the organization can function effectively as a social system. Since the social, cultural and political environments, in which people live, learn, work and spend their free time influence their health and well-being, this indicates the importance of paying attention to the various components to produce health and well-being in the university environment and to be understood as a valuable means.

Having healthy policies and incorporating health promotion into the curriculums, remain challenges. Challenges that are only tackled by the UAEH as it can be seen from all the programs that were reviewed.<sup>20,32</sup>

## CONCLUSIONS

The review suggests that most of the universities work towards similar goals by pursuing the characteristics of a UPS.

There is a clear and direct interest on the part of the authorities of different universities for the existence of health promotion programs in higher education institutions in Mexico.

It is appropriate to obtain scientific evidence regarding this issue, since it has been little research due to the lack of information from universities that have a health promotion program to refer to the improvement and optimization of current strategies.

There are currently 43 institutions that form the Mexican Network of Health Promoting Universities (RMUPS) and that fulfill an active and accompanying role, that is to say, of the 5,343 institutions of higher education that exist in Mexico, 0.8% are part of in the RMUPS .

## Thanks

I am infinitely grateful to all the people who were able to contribute to this review.

## Conflict of interests

The author declares that there is no conflict of interest for the publication of this article.

## REFERENCES

- [1] Rejas Tataje NJ, Gutiérrez Campos LJ. Documento Técnico. Orientaciones técnicas para promover universidades saludables. Ministerio de Salud. Dirección General de Promoción de la Salud. Available from: <http://bvs.minsa.gob.pe/local/MINSA/3396.pdf> [Accessed 22 February 2020].
- [2] Martínez-Sánchez JM, Balaguer A. Universidad saludable: una estrategia de promoción de la salud y salud en todas las políticas para crear un entorno de trabajo saludable. Arch. Prev. Riesgos Labor. 2016;19(3): 175-77.
- [3] Ferreira FMPB, Brito IS, Santos MR. Health promotion programs in higher education: integrative review of the literature. Rev. Bras. Enferm. 2018;71(Suppl 4): 1714-23.
- [4] Arroyo HV. El movimiento de universidades promotoras de la salud. Rev. Bras. Promoç. Saúde. 2018;31(4): 1-4.
- [5] Arroyo-Acevedo HV, Durán Landazabal G, Gallardo Pino C. Diez años del Movimiento de Universidades Promotoras de la Salud en Iberoamérica y la contribución de la Red Iberoamericana de Universidades Promotoras de la Salud (RIUPS). Glob. Health. Promot. 2015;22(4): 64-8.
- [6] Arroyo HV. Mirada al Movimiento Iberoamericano de Universidades Promotoras de la Salud. Horizonte sanitario. 2017;16(3): 149-51.
- [7] Muñoz M, Cabieses B. Universidades y promoción de la salud: ¿cómo alcanzar el punto de encuentro? Rev. Panam. Salud Pública. 2008; 24(2): 139-46.
- [8] Rincón-Méndez AY, Mantilla-Urbe BP. Universidades Promotoras de la Salud: Reflexión para su implementación desde los determinantes sociales de la salud. Rev. Univ. Salud. 2020; 22(1): 24-32.
- [9] Valle Hernández Y, Denman Champion CA. Universidades Promotoras de la Salud en México: el caso de la universidad de Sonora. Comunitania. 2018;(16): 9-30.
- [10] Martínez-Riera JR, Gallardo Pino C, Aguiló Pons A, Granados Mendoza MC, López-Gómez J, Arroyo Acevedo HV. La universidad como comunidad: universidades promotoras de salud. Gac. Sanit. 2018; 32(S1): 86-91.
- [11] Red Mexicana de Universidades Promotoras de la Salud, A. C. (RMUPS). Conoce la RMUPS. 2019. Available from: <https://www.uv.mx/rmups/> [Accessed 16 February 2020].
- [12] Organización Panamericana de la Salud (OPS). Una nueva mirada al movimiento de las Universidades Promotoras de la Salud en las

- Américas. Documento de trabajo. Available from: [https://www.paho.org/per/index.php?option=com\\_docman&view=document&slug=una-nueva-mirada-al-movimiento-universidades-promotoras-salud-las-americas-7&layout=default&alias=247-una-nueva-mirada-al-movimiento-universidades-promotoras-salud-las-americas-7&category\\_slug=guias-973&Itemid=1031](https://www.paho.org/per/index.php?option=com_docman&view=document&slug=una-nueva-mirada-al-movimiento-universidades-promotoras-salud-las-americas-7&layout=default&alias=247-una-nueva-mirada-al-movimiento-universidades-promotoras-salud-las-americas-7&category_slug=guias-973&Itemid=1031) [Accessed 15 February 2020].
- [13] Facultad de Estudios Superiores Zaragoza (FES Zaragoza). Universidad Nacional Autónoma de México. Coordinación de universidad saludable. Programa Universitario de Autocuidado para la salud. Available from: [https://www.paho.org/mex/index.php?option=com\\_docman&view=download&category\\_slug=technical-documentation&alias=1008-904-progautocfesz&Itemid=493](https://www.paho.org/mex/index.php?option=com_docman&view=download&category_slug=technical-documentation&alias=1008-904-progautocfesz&Itemid=493) [Accessed 16 February 2020].
- [14] García Oramas MJ. Centro para el Desarrollo Humano e Integral de los Universitarios-CEnDHIU. Available from: [https://www.uv.mx/planeacioninstitucional/files/2019/07/PLADEA\\_CEnDHIU\\_Xal.pdf](https://www.uv.mx/planeacioninstitucional/files/2019/07/PLADEA_CEnDHIU_Xal.pdf) [Accessed 16 February 2020].
- [15] Moreno-Celis U, Aguilar-Galarza BA, Anaya-Loyola MA, Romero-Márquez RS, Cervantes-Iturriaga F, Coronel-Olivo ME, García-Gasca T. Universidad Autónoma de Querétaro: Proyecto de universidad como promotora de la salud. *Digital ciencia@uaqro*. 2015;8(2): 1-9. Available from: [https://www.uaq.mx/investigacion/revista\\_ciencia@uaq/ArchivosPDF/v8-n2/1-CN.pdf](https://www.uaq.mx/investigacion/revista_ciencia@uaq/ArchivosPDF/v8-n2/1-CN.pdf) [Accessed 16 February 2020].
- [16] Dirección de Servicios Estudiantiles (DSE). Propósito general. Instituto Politécnico Nacional. Available from: <https://www.ipn.mx/dse/conocenos/> [Accessed 18 February 2020].
- [17] Castro Medellín R. Programa Universidad Saludable inicia actividades en la FCFM. Universidad Autónoma de León. Available from: <http://www.fcfm.uanl.mx/es/noticia/1862> [Accessed 17 February 2020].
- [18] Programa Universidad Saludable. Universidad Autónoma de Campeche. Available from: <https://universidadsaludable.uacam.mx/> [Accessed 19 February 2020].
- [19] Universidad Promotora de la Salud. Universidad Autónoma de Morelos. Available from: <https://www.um.edu.mx/> [Accessed 17 February 2020].
- [20] Nava Chapa G, Atitlán Gil A, Galván García M, Pimentel Pérez M, Camacho López S, Reynoso Vázquez J, Porta Lezama M. Programa Institucional de Actividades de Educación para una Vida Saludable. Universidad Autónoma del Estado de Hidalgo. Available from: [https://www.uaeh.edu.mx/division\\_academica/innovacion-academica/docs/programas-asignaturas/PIAEVS/PIAEVS.pdf](https://www.uaeh.edu.mx/division_academica/innovacion-academica/docs/programas-asignaturas/PIAEVS/PIAEVS.pdf) [Accessed 20 February 2020].
- [21] Lara N, Saldaña Y, Fernández N, Delgadillo HJ. Salud, calidad de vida y entorno universitario en estudiantes mexicanos de una universidad pública. *Hacia promoc. salud*. 2015;20(2): 102-17.
- [22] Universidad Saludable. Universidad Metropolitana de México Unidad Xochimilco. Available from: <http://universidadsaludableuamxoc.blogspot.com/p/inicio.html> [Accessed 22 February 2020].
- [23] Servicio Clínico de Psicología (SECLIPSI). Terapia psicológica. Benemérita Universidad Autónoma de Puebla. Available from: <https://www.buap.mx/content/terapia-psicol%C3%B3gica> [Accessed 20 February 2020].
- [24] Vida Sana. Benemérita Universidad Autónoma de Puebla. Available from: <https://www.buap.mx/content/vida-sana> [Accessed 20 February 2020].
- [25] Dirección de Acompañamiento Universitario. Programa de Vida Sana. Benemérita Universidad Autónoma de Puebla. Available from: <http://dau.buap.mx/?q=content/programa-vida-sana> [Accessed 20 February 2020].
- [26] Dirección de Acompañamiento Universitario. Objetivo del servicio de promoción y prevención de la salud. Benemérita Universidad Autónoma de Puebla. Available from: <http://dau.buap.mx/?q=node/1324> [Accessed 20 febrero 2020].
- [27] Organización Mundial de la Salud (OMS). ¿Cómo define la OMS a la salud? Available from: <https://www.who.int/es/about/who-we-are/frequently-asked-questions> [Accessed 22 Marzo 2020].
- [28] Vignolo J, Vacarezza M, Alvarez C, Sosa A. Niveles de atención, de prevención y atención primaria de la salud. *Arch. Med. Int.* 2011;33(1): 7-11.
- [29] Grossmeier J. The art of health promotion ideas for improving health outcomes. *Am. J. Health Promot.* 2018;32(4): 1145-56.
- [30] Hindhede AL, Aagaard-Hansen J. Using Social Network Analysis as a Method to Assess and Strengthen Participation in Health Promotion Programs in Vulnerable Areas. *Health Promot. Pract.* 2017;18(2): 175-83.
- [31] Newton J, Dooris M, Wills J. Healthy universities: an example of a whole-system health-promoting setting. *Glob. Health Promot.* 2016;23(1 Suppl): 57-65.
- [32] Suárez-Reyes M, Van den Broucke S. Implementing the Health Promoting University approach in culturally different contexts: a systematic review. *Glob. Health Promot.* 2016;23(1 Suppl): 46-56.