



HEALTH PROMOTION ACTIONS IN UNIVERSITIES IN THE FACE OF THE COVID-19 PANDEMIC: A SCOPING REVIEW

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ABSTRACT

Objective: to map in the literature the universities' health promotion actions and strategies in the context of the new coronavirus (COVID-19) pandemic.

Method: a Scoping Review, based on the procedures recommended by the Joanna Briggs Institute. Based on these perspectives, the following guiding question was established: which health promotion actions and strategies were implemented in universities with the internal community and its surroundings in the COVID-19 pandemic? The searches were carried out in March 2021 in the databases of public, restricted and gray literature information portals.

Results: a total of 38 studies were selected and three categories were elaborated based on them, namely: 1) Actions and strategies for coping with COVID-19 in universities; 2) Inclusive and Social protection actions and strategies for groups vulnerable to COVID-19 in universities; and 3) Health and Well-being Education actions and strategies in the face of COVID-19 in universities.

Conclusions: the study evidenced that health promotion actions and strategies in universities become a reality when the proposals find institutional support, inter- and transdisciplinary mobilization and integration with governmental sectors and private initiative, in addition to engagement of the academic population. Several actions were observed in different scenarios, showing social commitment and a critical stance in the face of COVID-19, aiming at a fairer and more sustainable society through knowledge.

DESCRIPTORS: Health promotion. Students' health. Higher Education Institutions. COVID-19. Student Health Services.

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AÇÕES DE PROMOÇÃO DA SAÚDE NAS UNIVERSIDADES EM FACE DA PANDEMIA DO COVID-19: *SCOPING REVIEW*

RESUMO

Objetivo: mapear na literatura as ações e estratégias de promoção da saúde das universidades no contexto da pandemia do novo coronavírus (COVID-19).

Metodo: *Scoping Review*, baseado nos procedimentos recomendados pelo Instituto Joanna Briggs. Com base nestas perspectivas, ficou estabelecida a pergunta norteadora: quais ações e estratégias de promoção da saúde foram realizadas em universidades com a comunidade interna e seu entorno na pandemia do COVID-19? As buscas foram realizadas em março de 2021 nas bases de dados de portais de informação públicos, restritos e de literatura cinzenta.

Resultados: foram selecionados 38 estudos e com base nesses foram construídas três categorias: 1) Ações e estratégias de enfrentamento do COVID-19 nas universidades 2) Ações e estratégias inclusivas e de Proteção social a grupos vulneráveis ao COVID-19 nas universidades 3) Ações e estratégias de Educação em saúde e bem-estar em face do COVID-19 nas universidades.

Conclusões: o estudo evidenciou que ações e estratégias de promoção da saúde nas Universidades acontecem quando a proposta encontra apoio institucional, mobilização inter e transdisciplinar, integração com setores governamentais e iniciativa privada, além do engajamento da população acadêmica. Observaram-se diversas ações em diferentes cenários, demonstrando comprometimento social e posicionamento crítico em face do COVID-19, visando uma sociedade mais justa e sustentável pela via do conhecimento.

DESCRITORES: Promoção da saúde. Saúde do estudante. Instituições de ensino superior. COVID-19. Serviços de saúde para estudantes.

ACCIONES DE PROMOCIÓN DE LA SALUD FRENTE A LA PANDEMIA DE COVID-19: REVISIÓN DE ALCANCE

RESUMEN

Objetivo: mapear en la literatura las acciones y estrategias de promoción de la salud de universidades en el contexto de la pandemia del nuevo coronavirus (COVID-19).

Método: revisión de alcance, basada en procedimientos recomendados por el Instituto Joanna Briggs. A partir de estas perspectivas se estableció la pregunta orientadora: ¿Qué acciones y estrategias de promoción de la salud se realizaron en las universidades con la comunidad interna y su entorno durante la pandemia de COVID-19? Las búsquedas se realizaron en marzo de 2021 en las bases de datos de los portales de información públicos, restringidos y de literatura gris.

Resultados: se seleccionaron 38 estudios y en base a estas tres categorías se construyeron: 1) Acciones y estrategias para afrontar el COVID-19 en las universidades; 2) Acciones y estrategias inclusivas y de protección social para grupos vulnerables al COVID-19 en las universidades; y 3) Acciones y estrategias de Educación para la Salud y el Bienestar frente al COVID-19 en las universidades.

Conclusiones: el estudio mostró que las acciones y estrategias de promoción de la salud en las Universidades suceden cuando la propuesta encuentra apoyo institucional, movilización inter y transdisciplinaria, integración con los sectores gubernamentales e iniciativa privada, además del compromiso de la población académica. Se observaron diversas acciones en diferentes escenarios, en los que se demostró compromiso social y posicionamiento crítico frente al COVID-19, con miras a una sociedad más justa y sostenible a través del conocimiento.

DESCRIPTORES: Promoción de la salud. Salud estudiantil. Instituciones de educación superior. COVID-19. Servicios de salud para estudiantes.



INTRODUCTION

Universities and research centers have gained major prominence due to the interdisciplinary, multidisciplinary and transdisciplinary contribution through research, health promotion and extension activities, without even wasting the opportunity generated by the COVID-19 pandemic¹. Despite the deep crisis and uncertainties that the COVID-19 pandemic has caused around the world, it revealed that it is possible to devise alternatives for the ways of living, working and seeking common well-being.

In general, universities have been leading knowledge production and innovation through teaching, research and extension activities. Regarding the professionals trained at the higher education level, they hold positions for the provision of services in the public and private spheres. In addition to activities directly linked to the population, qualified human resources hold management positions in health services and in institutional spaces for the formulation, supervision and evaluation of public policies².

With a view to the advances in Higher Education Institutions, knowledge construction is articulated with practices in the salutogenic perspective, which can influence the process of adopting healthy behaviors and attitudes. In this way, the universities' social commitment is evident, reflecting on the health of their community and surroundings, representing a positive fact and an indicator of the potential of universities as health promoters.

The First International Conference on Health Promotion, held in Canada in 1986, defined Health Promotion as a process of training the community to be active an active participant in improving its quality of life and health, which is one of the paths to equality in health, accompanied by egalitarian resources, favorable environments, access to information, experiences and skills³.

In this perspective, one of the commitments to foster Health Promotion is recognizing people as the main resource to achieve it, stimulating concrete and effective collective actions aimed at priorities, decision-making and definition of implementation strategies. It is worth noting that this premise does not exclude the State's responsibility for the health of the population, as it is a constitutional duty⁴.

Thus, through joint and interdisciplinary actions, the University can become a participatory space and enhance the transformation of the living and health conditions of the people who attend it, having as protagonists individuals who take control of their own space, creating conditions that favor the health of the entire community. The Health-Promoting Universities (HPUs) concept refers to higher education institutions that develop an organizational culture guided by values and principles associated with the global Health Promotion movement, with support based on their own institutional policy for the encouragement and permanence of Health Promotion actions in their broadest sense⁵.

The articulation of diverse knowledge for the encouragement of Health Promotion actions is a promising strategy in the field of Public Health because it generates solutions to problems that affect the entire community. Faced with a global health crisis such as the one generated by COVID-19 and with an unfavorable reality in the Brazilian sociopolitical-economic context, and also considering that the contingency of resources in health and education is a sad reality, participatory, sustainable and propositional management models must be stimulated, committed to a comprehensive, solidarity-based and expanded conception of health, in addition to oriented towards exercising the university's social commitment.

Thus, the study aims at mapping in the literature the universities' health promotion actions and strategies in the context of the new coronavirus (COVID-19) pandemic.



METHOD

This is a review prepared according to the Scoping Review methodology recommended by the Joanna Briggs Institute and guided by the *Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews* (PRISMA–ScR) checklist⁶.

The scoping review technique is being widely used in the health area for the purpose of synthesizing and disseminating the results of studies on a given subject matter. The objective of a scoping review is to map, through a rigorous and transparent method, the state-of-the-art of a thematic area, aiming to provide a descriptive view of the studies reviewed, although without critically evaluating them or even summarizing diverse evidence from different research studies, as is the case in a systematic review⁷.

This scoping review adopted the PCC (Population, Concept and Context) acronym, where P= Higher Education Institutions, C= Health Promotion; and C= Pandemic OR COVID-19; and sought to answer the following question: Which health promotion actions and strategies were implemented in universities with the internal community and its surroundings in the COVID-19 pandemic?

From the CPP elements, the terms to define the search strategy were identified and organized. The standardized and synonymous terms in Portuguese and Spanish were used in the Descriptors in Health Sciences (*Descritores em Ciências da Saúde*, DeCS) and the English terms were employed in the Medical Subject Headings (MeSH) and Embase Subject Headings (Emtree), that is, all controlled vocabularies (Chart 1). The terms identified were organized to conduct the search strategies in the databases. The Boolean operators used were *OR* and *AND*.

The search strategy that was carried out in March 2021 in the databases of public and restricted information portals was defined after the term identification stage: Regional Portal of *Biblioteca Virtual em Saúde* (BVS) and its main databases: *Literatura Latino-Americana e do Caribe em Ciências da Saúde* (LILACS), Índice *Bibliográfico Español em Ciencias de la Salud* (IBECS) and *Banco de Dados em Enfermagem* (BDENF), among others. Medical Literature, Analysis, and Retrieval System Online (MEDLINE) database, via PubMed and PubMed Central (PMC) of the National Library of Medicine and in the Scientific Electronic Library Online (SciELO).

The following databases were employed in the CAPES Journals Portal: Embase (Elsevier), Scopus (Elsevier), Web of Science (Clarivate Analytics), Cumulative Index to Nursing and Allied Health Literature - CINAHL (EBSCO) and Education Resources Information Center (ERIC). A manual search was carried out in *Biblioteca Digital Brasileira de Teses e Dissertações* (BDTD), *Instituto Brasileiro de Informação em Ciência e Tecnologia* (IBICT) and Open Grey (Grey literature in Europe), although not yielding any results.

The inclusion criteria adopted were as follows: studies in the Open Access format, dissertations and theses, and ministerial ordinances and guidelines that dealt with the theme of the study. The time frame was determined by the year of emergence of COVID-19, 2020 to March 2021. There was no definition regarding languages. The scientific articles excluded were those that did not answer the research question, that were limited to the pathophysiology of the disease or that were not in line with the study objective.

After conducting the searches in the different databases, the records were imported into the Endnote reference manager to identify duplicates. They were subsequently exported to the *Rayyan* application of the Qatar Computing Research Institute (QCRI). The *Rayyan* system is an online application and was developed to assist researchers in the selection process corresponding to systematic reviews, allowing for the inclusion of collaborators, translators and viewers. These can conduct the selection process individually and simultaneously with the participant blinding options by using the *Blind on* or *Blind off* buttons. The system identifies and generates decision graphs and



Chart 1 - Mapping of terms in the controlled vocabularies for the search strategy. Niterói, RJ, Brazil. 2021.

PCC	Terms identified		
Participant	"Educação Superior" OR "Educación Superior" OR "Ensino Superior" OR "Enseñanza Superior" OR Ensino OR Enseñanza OR Docência OR Docentes OR Docente OR Educador* OR Professor* OR "Professor Universitário" OR "Professores Universitários" OR Universidades OR Faculdade* OR Universidade OR Universitari* OR Estudantes OR Estudante OR Estudiante* OR Aluno* OR Alumno* OR "Profesor Universitario" OR Profesora OR Profesores OR Estudante* OR graduando* OR graduação OR "Instituições de Ensino Superior" OR "Instituciones de Enseñanza Superior" OR ((Instituições OR Instituciones) AND ("Ensino Superior" OR "Enseñanza Superior")) acadêmico* OR graduanda* OR acadêmica.*		
Part	"Education, Higher" OR Faculty OR Universities OR University OR "Higher Education Institutions" OR "Education, Graduate" OR "Graduate Education" OR "Educations Graduate" OR "Graduate Educations" OR "Higher Education" OR Graduate OR "undergraduate student" OR "graduate student" OR academic* OR "Activities, Training" OR "Academic Training" OR "Activities, Training" OR "Educational Technic" OR "Educational Technics" OR "Educational Technique" OR "Educational Techniques" OR "Teaching Method" OR "Teaching Methods" OR "Technic, Educational" OR "Training Technic" OR "Training Technics" OR "Training Techniques."		
Concept	("Promoção da Saúde" OR "Promoción de la Salud" OR "Campanhas de Saúde" OR "Programas de Bem-Estar" OR "Promoção do Bem Estar" OR "Promoção em Saúde" OR "universidade promotora de saúde" OR "universidades promotoras de saúde" OR "universidad promotora de lasalud" OR "universidade saudável" OR "Universidad promotora de salud" OR "Universidad Saludable" OR "Serviços de Saúde" OR "Servicios de Salud" OR Prevenção OR Preventivo* OR preventiva* OR "Educação em Saúde" OR "Educación en Salud" OR "Educar para a Saúde" OR "Educação Sanitária" OR "Educação para a Saúde" OR "Educación Sanitaria" OR "Educação para la Salud"). ("Health Promotion" OR "Promotion, Health" OR "Promotions, Health" OR "Promotional" OR "Items, Promotional" OR "Promotional Items" OR "Item, Promotional" OR "Items, Promotional" OR "Promotional Items" OR "Health Campaigns" OR "Campaign, Health" OR "Campaigns, Health" OR "Health Campaigns" OR "Campaign, Health" OR "Campaigns, Health" OR "Health Campaigns" OR "Campaign, Health" OR "Campaigns, Health" OR "Health Campaigns" OR "Revention program" OR "health" OR "Health Campaign" OR "Prevention programs" OR "Prevention program" OR "Health Promoting Universities" OR "Health Promotion OR "Promoting university" OR "Health Promoting Universities" OR "Health Promotion OR "Health-promoting university" OR "Health Promoting Universities" OR "Health Promotion University" OR "Health Promoting Universities" OR "Health Education" OR "Education, Health").		
Context	Pandemias OR Pandemia OR COVID-19 OR "Novo Coronavírus" OR "Coronavírus 2019-nCoV" OR "Coronavirus de Wuhan" OR "Epidemia por 2019-nCoV" OR Coronavírus OR "Nuevo Coronavirus."		
C	Pandemics OR Pandemic OR COVID-19 OR "COVID 19" OR "2019-nCoV" OR 2019- nCoV OR "Coronavirus Disease-19" OR "Coronavirus Disease 19" OR "2019 Novel Coronavirus Disease" OR "2019 Novel Coronavirus Infection" OR COVID19 OR "Coronavirus Disease 2019."		



allows visualizing conflicts during selection. Any and all disagreements were resolved by consensus and with joint participation.⁸

The selection process can be monitored by means of the sector graph generated by the *Rayyan* system, which shows the documents included (*include*), excluded (*exclude*) and those in doubt (*maybe*). In *Rayyan*, the documents were selected by title, abstract and subject matter (*topics*). The documents included for reading the full texts were exported to an *Excel* spreadsheet, generated in *Rayyan*.

Subsequently, the full texts were carefully read by two independent reviewers, who extracted the data using an instrument designed by the researchers with the following data: title of the article, year of publication, methodology, university and country, listing all texts that were pertinent to the review research question. Whenever necessary, the materials selected were revisited to obtain a better understanding of the data or to solve disagreements between the reviewers.

During the phase to summarize the studies, Bardin's content analysis technique⁹ was performed, which allowed generating the categories that emerged from this analysis, illustrated the topics of interest and answered the research question. Finally, it should be clarified that the current study did not receive any funding and did not require approval by any Research Ethics Committee, as it was carried out exclusively through scientific texts for a review of the scientific literature, as recommended by Resolution 510/16¹⁰.

RESULTS

The studies selected for examination illustrate varied experiences of successful initiatives carried out in Universities around the world and whose guiding thread is Expanded Health Promotion in the academic environment and its surroundings. The sample of this review consisted in 38 studies. The PRISMA-ScR flowchart shows the totality of the bibliographic searches and the process to select the studies (Figure 1).

The thematic analysis of the 38 studies revealed three categories that summarize the prevalence in the cited texts and gather the topics of interest found: 1) Actions and strategies for coping with COVID-19 in universities; 2) Inclusive and Social protection actions and strategies for groups vulnerable to COVID-19 in universities; and 3) Health and Well-being Education actions and strategies in the face of COVID-19 in universities.

Actions and strategies for coping with COVID-19 in universities

This thematic category consisted of 13 articles that are outlined in Chart 2, whose information refers to the title, year of publication, methodology and university/country where the actions were developed.

Inclusive and Social protection actions and strategies for groups vulnerable to COVID-19 in universities

This thematic category consists of 9 articles that are outlined in Chart 3, whose information refers to the title, year of publication and university where the actions were developed.

Health and well-being education actions and strategies in the face of COVID-19 *in* universities.

In this thematic category, 16 studies comprised Chart 4 with diverse information about title, year of publication and university where the actions were developed.



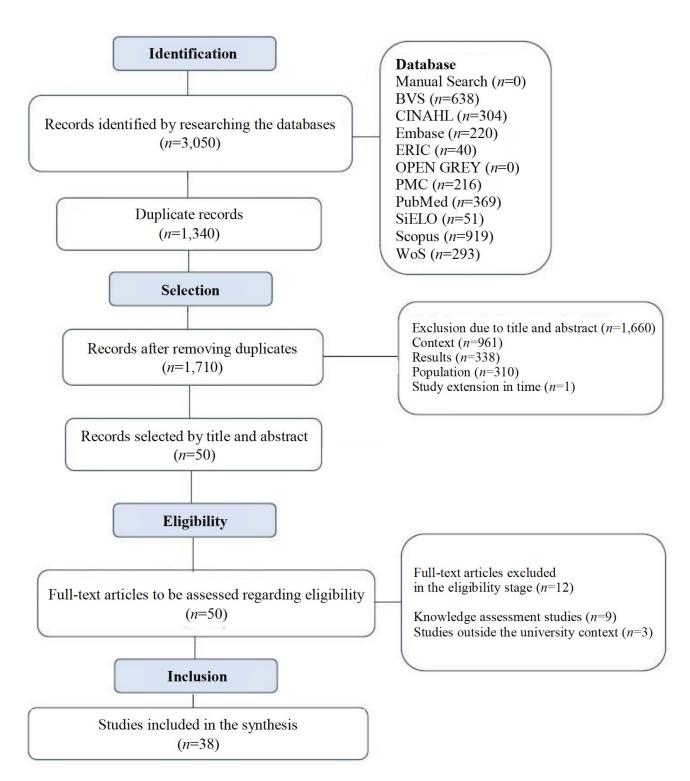


Figure 1 - PRISMA-ScR Flowchart.



Chart 2 - Actions and strategies for coping with COVID-19 in universities, according to title, year of publication, university and country. Niterói, RJ, Brazil. 2021.

No.	Title/Year Methodology		University/Country	
01	"Everything will be fine". Duration of home confinement and "All-or-nothing" cognitive thinking style as predictors of traumatic distress in platform during the COVID-19 Italian lockdown. 2020. ¹¹	Study carried out through the digital platform of the Counseling and Consultation Service for Students. Participants:103 Italian university students.	University of L'Aquila, Italy.	
02	"Umuntu Ngumuntu NGA bantu" (A person is a person because of others people); Reflections on student's experiences of social isolation and the impact of a peer to peer mental Health Support group during COVID-19 lockdown in South Africa. 2020. ¹²	Intervention project carried out with 46 undergraduate students from the Language and Linguistics School at the University of Western Cape.	University of Western Cape, South Africa.	
03	A university-wide preparedness effort in the alert phase of COVID-19 incorporating Community Mental Health and task shifting strategies: experience from a Bornean Institute of Higher Learning. 2020. ¹³	Experience report on the resumption of the academic activities in a university on the Island of Borneo.	University Malaysia Sabah, Malaysia.	
04	Actions and strategies implemented by Nursing schools and departments of Federal Universities in the face of COVID-19. 2020. ¹⁴	Documentary research on the characterization of the actions and strategies to face the new coronavirus (COVID-19) pandemic implemented by five public educational institutions in Brazil:	Universidade Federal de São Paulo, Universidade Federal do Amazonas, Universidade de Brasília, Universidade Federal do Ceará and Universidade Federal de Santa Catarina, Brazil.	
05	Bringing students' health and Well-Being onto a Health System EHR - The benefits of integration in the era COVID-19. 2020. ¹⁵	To report the implementation of a university electronic recording system integrated with the health and counseling services for students.	University of California, United States.	
06	How are university hospitals facing the COVID-19 Pandemic in Brazil? 2020. ¹⁶	Documentary study, based on diverse information made available on the official websites of 44 university hospitals from the Brazilian federal education network.	35 public universities in Brazil.	
07	Mending invisible wounds: supporting the mental health needs of nurses during COVID-19. 2020. ¹⁷	Massachusetts Nurses Association interview on emotional support to nurses promoted in partnership with the Boston University.	Boston University, United States.	
08	Priorities for addressing the impact of the COVID-19 pandemic on college students' mental health. 2020. ¹⁸	Reflection study on the university students' mental health care needs.	Harvard Medical School, United States.	

No.	Title/Year	Methodology	University/Country	
09	Protecting higher education institutions from COVID-19: insights from an Italian experience. 2020. ¹⁹	Experience report of actions adopted at the small- sized Italian public university with 277 undergraduate students,370 PhD students, 312 professors and 193 administrative employees.	Scuola Superiore Sant'Anna, Italy.	
10	Public health academic alliance for COVID-19 response: the role of a National Medical Task Force in Puerto Rico. ²⁰	Experience report of the Puerto Rico Medical Task Force. Team consisting of researchers and specialists from the Medical Sciences School at the University of Puerto Rico and collaborators from other health professions and specialties, as well as representatives of the main professional organizations in Puerto Rico.	<i>Universidad de Puerto Rico</i> , Puerto Rico.	
11	Telesaúde em tempos de COVID-19: Acolhimento, organização em rede e integração ensino-serviço. 2020. ²¹	Experience report about the implementation of the Telehealth Service in the premises of a university, where 23 students and professors underwent training from the project coordinators and the Municipal Health Secretariat.	<i>Universidade do Oeste Paulista,</i> Brazil.	
12	The response to a pandemic at Columbia University Irving Medical Center's Department of Obstetrics and Gynecology. 2020. ²²	Report of actions taken to control COVID-19 and ensure the safety and well-being of patients, professors and employees from the Obstetrics and Gynecology department.	Columbia University Irving Medical Center, United States.	
13	Preparing for the unseen threat of infectious disease. 2020. ²³	Experience report of actions adopted by the Bellevue College for the safety of students, professors and employees.	Bellevue College, United States.	

Chart 2 - Cont.

Chart 3 - Inclusive and Social protection actions and strategies for groups vulnerable to COVID-19 in Universities
according to title, year of publication, university and country. Niterói, RJ, Brazil. 2021.

No.	Title/Year	Methodology	University/Country
14	Implementation of a medical student run Telemedicine program for medications for opioid use disorder during the COVID-19 pandemic. 2020. ²⁴	Extension project: Telemedicine Clinic according to the Telemoud model for opioid users.	University of Miami Miller School of Medicine, United States.
15	Children's Summer Smile Drive. 2021.25	Oral Health extension project aimed at disadvantaged populations.	University of Michigan, United States.
16	Labor preventiva e implementación de estrategias docentes durante la COVID-19 en la Universidad de Ciencias Médicas de Santiago de Cuba. 2020. ²⁶	Extension project: Search for symptomatic COVID-19 patients in communities.	Universidad de Ciencias Médicas de Santiago, Cuba.
17	COVID-19: Contingency actions for the provision of meals of employees of a university hospital in southern Brazil. 2020. ²⁷	Observational and descriptive case study.	Universidade Federal do Rio Grande do Sul, Brazil.
18	Creating a culture that values diversity and inclusion - An action-oriented framework for nursing schools. 2020. ²⁸	Case study: Creation of the Diversity, Inclusion and Equality Program.	Duke University, United States.
19	Ensino em saúde LGBT na pandemia da COVID-19: oportunidades e vulnerabilidades. 2020. ²⁹	Experience report: Creation of an elective academic discipline of Health Care for the LGBT population.	Universidade Federal do Rio Grande do Norte, Brazil.
20	More than inconvenienced: the unique needs of U.S. College students during the COVID-19 Pandemic. 2020. ³⁰	Case study: Situation of University students in the USA in the face of the COVID-19 pandemic.	Tulane University School of Public Health and Tropical Medicine, United States.
21	O caminho se faz ao caminhar: novas perspectivas da educação médica no contexto da pandemia. 2020. ³¹	Experience report: Conduction of multiprofessional webinars using digital tools for Health Promotion.	Universidade do Estado do Rio Grande do Norte, Brazil.
22	Zooming toward a telehealth solution for vulnerable children with obesity during coronavirus disease 2019. 2020. ³²	Experience report: Use of Telehealth in pediatric weight control.	Columbia University Vagelos College of Physicians and Surgeons, United States.
23	Mobilizing a community-academic partnership to provide DIY hand washing stations to skid row residents during COVID-19. 2020. ³³	Extension action experience report: Provision of hand washing stations for the homeless.	University of Southern California, United States.

Chart 4 - Health and well-being education actions and strategies in the face of COVID-19 in universities,
according to title, year of publication, university and country. Niterói, RJ, Brazil. 2021.

No.	Title/Year Methodology		University/Country		
24	Influence of COVID-19 on College Physical Education and its countermeasures. 2019. ³⁴	Experience report on a combination between the sports campaign and education at a distance.	Hubei University of Technology Engineering and Technology College, China.		
25	Changing the game: college dance training for well- being and resilience amidst the COVID-19 crisis. 2021. ³⁵	Experience report on the implementation of dance classes for students during the COVID-19 pandemic.	University of South Florida, United States.		
26	Knowledge, attitudes, and preventative practices (KAPs) towards COVID-19 among international students in China. 2021. ³⁶	Study conducted with 300 students from 13 universities in relation to their attitudes in the face of the Covid 19 pandemic.	13 different universities in Hubei, China.		
27	Lean on your land grant: one university's approach to address the food supply chain workforce during the COVID-19 pandemic.2020. ³⁷	Extension Action report with essential agricultural workers with an approach on occupational health and safety.	Ohio State University, College of Food, Agricultural and Environmental Sciences, United States.		
28	Desafios das fake news com idosos durante Infodemia sobre COVID-19: experiência de estudantes de medicina. 2020. ³⁸	Experience report on a multicenter activity based on the pilot project of <i>Faculdade Evangélica Mackenzie</i> <i>do Paraná</i> to promote health education for the aged population through social networks and online communication.	Faculdade Evangélica Mackenzie do Paraná, Brazil.		
29	Estratégia musical para cuidar de discentes de Enfermagem: experiência no enfrentamento da COVID-19. 2020. ³⁹	Experience report on the elaboration of a music video involving 32 nurses, professors of the undergraduate Nursing course of a public university in southern Brazil.	Universidade Federal da Fronteira Sul, Brazil.		
30	Estratégias de ensino à distância para a educação interprofissional em Saúde frente à pandemia COVID-19. 2020.40	Experience report of the activities performed by a PET-Health group, linked to <i>Universidade Estadual de Feira de Santana</i> and to the Center for Diabetic and Hypertensive Care, conducted from March to June 2020.	Universidade Estadual de Feira de Santana, Brazil.		
31	Mental health, substance use, and well-being in higher education: supporting the whole student. 2021.41	Report of recommendations from the National Academies of Sciences, Engineering and Medicine on mental health care for university students.	The National Academies Press - New York, United States.		
32	Mindfulness in class and in life: mental health and emotional resilience alongside academic studies. 2020. ⁴²	Experience report on the offer of an academic discipline on mindfulness for university students.	University of Southern California, United States.		

Chart	4	-	Cont.
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No.	Title/Year	Methodology	University/Country	
33	Os conceitos de Florence Nightingale em tempos de pandemia da COVID-19 retratados em história em quadrinhos: relato de experiência. 2020.43	Experience report of a university extension action about the process to elaborate a comic that incorporate the concepts of Florence Nightingale's environmental theory to the fight against the new coronavirus.	Escola de Enfermagem Anna Nery Rio de Janeiro, Brazil.	
34	Strengthening core competencies and skills of medical and public health students for digital health. 2020.44	Experience report on the use of modern it approaches implemented in medical and public health curricula with themes focused on digital health and service delivery in health emergencies.	Palacky University Hospital Olomouc, Czech Republic	
35	Supporting the well-being of health care providers during the COVID-19 pandemic: The Cope Columbia response. 2020. ⁴⁵	The study describes Cope Columbia, a peer support program developed by professors in a large city, in the Psychiatry Department of a medical center to support emotional well-being and increase professional resilience.	Columbia University Medical Center; New York State Psychiatric Institute, United States.	
36	University lecturers and students could help in community education about SARS-CoV-2 Infection in Uganda. 2020. ⁴⁶	The objective was to determine the diverse knowledge, attitudes and preparation/practices of professors and students in the fight against COVID-19. Descriptive and cross-sectional study conducted with 103 professors and students, men and women aged from 18 to 69 years old in western Uganda. The data were obtained through a previously tested questionnaire and made available online.	<i>Universidade Internacional de Kampala</i> , Western Campus, Africa.	
37	Utilizing academic-community partnerships with nursing students to improve hand hygiene in elementary students to reduce transmission of COVID-19. 2021. ⁴⁷	This study describes a collaborative partnership initiative that expanded access to health in the promotion of education in schools to increase knowledge about the reduction of infectious diseases such as COVID-19 for Nursing students.	Vanderbilt University School of Nursing, Nashville, United States.	
38	Variation in the timing of COVID-19 communication across universities in the UK. 2021.48	Experience report on how United Kingdom universities used the social media to raise awareness and provide guidance and advice about the disease to students and employees.	Columbia University, United States.	

DISCUSSION

The studies analyzed evidenced an important tendency to the theme related to mental health. In this sense, one of the actions was the implementation of a free and online emotional support service, offered through a digital platform, aiming at serving university students. The driver for such implementation was confinement since, from the second month, the probability of a post-traumatic experience and of an "all or nothing" thinking style among young adults can increase over three times, being fundamental that there are preventive psychological interventions available to contain the structuring of psychopathological profiles¹¹. In another study, emotional support for young students was deployed using the peer support strategy, and it was integrated into a teaching and learning project called "*Clínica do Escritor* (online)" ("The Writer's Clinic [online]")¹².

Given the pandemic event, universities intensified support in the assembling of the teams that provide front-line services. *University Malásia Sabah* strengthened the University Health Center to screen cases in contacts, education in health and the contingency plan. This procedure helped to control import of the contamination cases into the *campus*¹³. In Brazil, Nursing Schools and Departments of the Federal Universities of São Paulo, Amazonas, Brasília, Ceará and Santa Catarina established strategies to respond to the communities with remote teaching actions, use of a digital platform for information, online courses on self-care and engagement of professors in the manufacture of Personal Protective Equipment items¹⁴. The University of California implemented an electronic medical record system in the university health system, which allowed for agility in case management and improvements in care quality and safety, thus increasing access to health in its community and surroundings¹⁵.

A documentary study mapped the ongoing actions in 44 federal university hospitals from Brazil in the fight against the COVID-19 pandemic¹⁴. Changes in routines with supplementary reinforcement of the biosafety issues to prevent transmission of the virus were implemented, as well as suspension of consultations not related to COVID-19 and elective surgeries. In terms of management, new professionals were hired and teams were trained¹⁶.

Educational materials related to the pandemic were prepared in the Extension area. In teaching, educational-training activities were suspended and the hospitals' commitment to the development of studies on the topic stood out. In this way, it was sought to reorganize the services provided and to establish means to provide conditions for the fulfillment of the hospital mission in the context of the Unified Health System. The provision of mental health and self-care services for nurses was also addressed in studies by the Massachusetts Nurses Association¹⁷.

Priority actions to meet the current needs related to mental health in universities were also carried out, with an emphasis on some recommendations, namely: guaranteeing access to mental health services, proactively searching for cases of students in social vulnerability and providing cognitivebehavioral therapy, peer support and coalition building opportunities¹⁸. It is noted that international students have faced many complex challenges such as limited *campus*-based services, restricted travel ability, and uncertainty in relation to their visa status outside their home countries. The effects of these sudden changes can generate considerable psychological distress, in addition to insecurity¹⁸.

The University of Pisa, Italy, proposed discussing priority and protective actions to be implemented in higher education institutions based on international guidelines and on the University's accrued experience¹⁹. The protective actions to fight against the pandemic developed at the University of Puerto Rico were supported by the Governor of Puerto Rico, who designated a medical task force to provide guidance and assess the Government's response to the pandemic. Collaboration between the academia and the Government has improved Puerto Rico's public health response²⁰.

The implementation of a Telehealth service proved to be effective as a mechanism for organizing the care flow in the health care network from a medium-sized municipality in western São Paulo. The



creation of a task force in the Obstetrics and Gynecology Department at the Columbia University Irving Medical Center in New York also proved effective in streamlining care and providing safety measures for parturients^{21–22}.

Joining forces in the fight against the COVID-19 pandemic proved to be a promising strategy at the Austin Peay State University, United States, where they prepared a public safety management plan, consisting of messengers from across the *campus* with students, professors and representatives of the Information Technology area, Fire Department, Police Departments and ambulance service. Together, they reformulated the emergency management plan according to their needs and in a participatory manner²³.

The University of Miami Miller School of Medicine presented a product based on the implementation of an innovative virtual program called *Telemoud* run by students. With the syringe distribution program for injectable drug users suspended due to the pandemic, the students crafted a transition from the clinic to an online enrollment model: *Telemoud*²⁴. The online consultations and patients' evaluations showed efficacy and resoluteness, as well as they provided the students with a rich experience in the treatment of opioid addicts.

The University's involvement with sectors of the population traditionally excluded from the academic spaces and activities can produce a scenario of mutual learning among the participants, as well as the joint elaboration of solutions to the problems to be faced.

The experience at the University of Michigan, United States of America, promoted an Oral Health education project focused on young people in situations of social vulnerability in the Southeast area of Michigan²⁵. The extension action sought to promote Oral Health education and provided oral hygiene materials donated in partnerships with companies and shopkeepers.

A study developed in Cuba by the University of Medical Sciences of Santiago de Cuba sought to integrate Teaching to Extension through home care actions for groups of patients with chronic degenerative diseases, with student support following previously established protocols²⁶. The action contributed to the incorporation of Information Technology into the students' training, in addition to providing a valuable educational experience.

In Brazil, *Universidade Federal do Rio Grande do Sul* developed a contingency plan to alleviate the food crisis imposed by the pandemic on the health workers at a university hospital. The action consisted of guaranteeing and encouraging food support for these workers, as well as providing guidance through informative materials on protective care measures in the face of the pandemic²⁷.

The pandemic and its consequences affected some minority and vulnerable groups overwhelmingly and disproportionately. These groups include racial and ethnic minorities. The Duke University Durham School of Nursing, located in North Carolina, United States of America, incorporated the creation of strategies for an organizational culture, with a view to valuing inclusion and diversity in Nursing Education and, similarly, in Brazil, *Universidade do Rio Grande do Norte* resorted to digital platforms as instruments for exchanging experiences in LGBT Health Education^{28–29}.

The act of valuing inclusion initiatives for the historically excluded social segments should be a goal to be established in the Universities and, in this perspective, the University of Southern California, Los Angeles, established a community partnership in support of people in extreme poverty and the homeless in order to encourage hand hygiene, in addition to other protective measures³³.

Protective and inclusion measures targeted at the students were addressed in another two studies analyzed^{30–31}. The proposals were based on strategies to help the students stay in the undergraduate courses, offering social support, remote learning opportunities and participation in institutionalized research and extension activities; in addition to weight control Telehealth actions during the pandemic³².



In China, the Hubey University Technology Engineering and Technology College mobilized a distance sports campaign by offering online physical education classes to university students. In addition to the issues linked to physical activity, the students received educational support aimed at autonomy, common sense, subjectivity and innovative ability³⁴.

One of the changes that the pandemic imposed on teaching in the universities was the intensified use of digital technologies by resorting to social networks for the dissemination of information^{36–38,40,42–43,47}. The reach of the social media is broad and facilitates the diffusion of diverse information on health and care to specific groups. With a focus on comprehensive health, the South Florida Public Health School in the United States of America implemented an online dance class project for university students, the community and the surroundings³⁵.

Digital tools allowed for innovative work to be carried out, focused on the initial and continuing training of students, professors and health professionals, as well as on the production of instructional resources and academic disciplines based on mindfulness and on digital health for students^{42,45}.

The partnership between professors and health professionals can contribute to generating creative and innovative initiatives in education, as shown by the action promoted by the Vanderbilt University School of Nursing. The study describes the collaborative partnership between Nursing students and the school health team, which expanded access to health care by training the students in hand hygiene and other protective measures⁴⁸.

A university extension action initiative generated the production of didactic materials about the concepts of Florence Nightingale's Environmental Theory in the fight against COVID-19. The activity was carried out with the participation of students and professors of the Undergraduate Nursing Course at *Universidade Federal do Rio de Janeiro*⁴⁴. Furthermore, in support of the students, the National Academy of Sciences, Engineering and Medicine in Washington produced a Report of recommendations for mental health, well-being, and prevention of psychoactive substance use by university students⁴¹.

Additionally, bold measures were used in Brazil, such as the one that was implemented through a creative and innovative strategy produced by *Universidade Federal da Fronteira Sul*, in Chapecó, which resulted in professors of the undergraduate Nursing course producing a music video involving 32 nurses. The video was structured to reflect the students' relevance in the University routine, and the music served as a beacon to externalize feelings during the pandemic period³⁹. At the Columbia University, it was possible to generate collective empowerment by means of peer support, as in the aforementioned study, which had the participation of professors from the Psychiatry Department of the Columbia University in New York⁴⁶.

CONCLUSION

This scoping review provides diverse evidence that health promotion actions and policies in the Universities are effectively implemented when the proposals find institutional support, inter- and transdisciplinary mobilization, and integration with the governmental sector and private initiative, as well as engagement of the academic population. The study can compile diverse information that may come to foster initiatives both within and outside Universities and guide interventions in the scope of Health Promotion, aiming at the context of Health-Promoting Universities.

Several actions and strategies implemented in different scenarios were observed, showing the social commitment and critical stance of the national and international universities in the face of COVID-19, aiming at a fairer and more sustainable society through knowledge. It is concluded that some advances have been made, particularly as a result of actions and strategies developed in these environments, strengthening the relationship between University and society.

In summary, the study shows that, in order to overcome the contemporary challenges, it is necessary to mobilize all sectors responsible for strengthening Health Promotion in Higher Education



Institutions, establishing networks and devising strategies that meet the demands of the university community and its surroundings, thus stimulating other initiatives. In this sense, the findings of the current study constitute essential information to foster possible initiatives both within and outside Universities, as well as to guide new interventions in Health Promotion and public policies aimed at the context of Health-Promoting Universities. This finding reinforces the perception about the relevance of the current study and the objective on which it is focused.

REFERENCES

- 1. Ojo E, Lorenzini E. Global higher education beyond pandemics in a future of uncertainties. Texto Contexto Enferm [Internet]. 2021 [cited 2021 Nov 11];30:e20210101. Available from: https://doi. org/10.1590/1980-265X-tce-2021-0101
- 2. Minowa E, Watanabe HAW, Nascimento FA, Andrade EA, Oliveira SC, Westphal MF. Contribution of universities to the review of the National Health Promotion Policy. Saúde Soc [Internet]. 2017 [cited 2021 Nov 01];26(4):973-86. Available from: https://doi.org/10.1590/S0104-12902017169405
- 3. World Health Organization. The Ottawa charter for health promotion. Geneve: WHO; 1986.
- 4. Czeresnia D, Freitas CM, organizadores. Promoção da saúde: conceitos, reflexões, tendências. Rio de Janeiro, RJ(BR): Fiocruz; 2009.
- 5. Arroyo HV. El Movimiento de Universidades Promotoras de la Salud. Rev Bras Promoç Saúde [Internet]. 2018 [cited 2021 Nov 01];31(4). Available from: https://doi.org/10.5020/18061230.2018.8769
- Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. Ann Intern Med [Internet]. 2018 Oct 2 [cited 2021 Oct 4];169(7):467-73. Available from: https://doi.org/10.7326/M18-0850
- Peters M, Godfrey C, Khalil H, McInerney P, Parker D, Soares C. Guidance for conducting systematic scoping reviews. Int J Evid Based Healthc [Internet]. 2015 [cited 2021 Oct 4];13(3):141-6. Available from: https://doi.org/10.1097/xeb.00000000000000050
- 8. Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. Rayyan-a web and mobile app for systematic reviews. Syst Rev [Internet]. 2016 Dec 5 [cited 2021 Oct 15];5(1):210. Available from: https://doi.org/10.1186/s13643-016-0384-4
- 9. Bardin L. Análise de conteúdo. São Paulo, SP(BR): Edições 70; 2011.
- 10. Ministério da Saúde (BR). Conselho Nacional de Saúde. Resolução nº 510, de 7 de abril de 2016. Dispõe sobre as normas aplicáveis a pesquisas em ciências humanas e sociais cujos procedimentos metodológicos envolvam a utilização de dados diretamente obtidos com os participantes ou de informações identificáveis ou que possam acarretar riscos maiores do que os existentes na vida cotidiana, na forma definida nesta Resolução. Diário Oficial da União [Internet]. Brasília, nº 98, p. 44-6, 24 maio 2016 [cited 21 Feb 2022]. Available from: http://bit.ly/2fmnKeD
- Giusti L, Salza A, Mammarella S, Bianco D, Ussorio D, Casacchia M, et al. # Everything Will Be Fine. duration of home confinement and "all-or-nothing" cognitive thinking style as predictors of traumatic distress in young university students on a digital platform during the COVID-19 Italian lockdown. Front Psychiatry [Internet]. 2020 Dec 15 [cited 2021 Oct 4];11:574812. Available from: https://doi.org/10.3389/fpsyt.2020.574812
- Obuaku-Igwe C. 'Umuntu ngumuntu ngabantu'(a person is a person because of other people): reflections on student's experiences of social isolation and the impact of a peer to peer mental health support group during covid-19 lockdown in South Africa. YVJ [Internet]. 2020 [cited 2021 Oct 4];(spe):58-71. Available from: https://pesquisa.bvsalud.org/global-literature-on-novelcoronavirus-2019-ncov/resource/pt/covidwho-923200



- Mukhsam MH, Jeffree MS, Pang NTP, Rahim SSSA, Omar A, Abdullah MS, et al. A universitywide preparedness effort in the alert phase of COVID-19 incorporating community mental health and task-shifting strategies: experience from a Bornean institute of higher learning. Am J Trop Med Hyg [Internet]. 2020 Sep [cited 2021 Oct 4];103(3):1201-3. Available from: https://dx.doi. org/10.4269%2Fajtmh.20-0458
- 14. Cunha ICKO, Erdmann AL, Balsanelli AP, Cunha CLF, Lopes Neto D, Ximenes Neto FRG, et al. Ações e estratégias de escolas e departamentos de enfermagem de universidades federais frente à COVID-19. Enferm Foco [Internet]. 2020 [cited 2021 Oct 4];11(1):48-57. Available from: http://revista.cofen.gov.br/index.php/enfermagem/article/view/4115
- Reeves JJ, Longhurst CA, San Miguel SJ, Juarez R, Behymer J, Ramotar KM, et al. Bringing student health and Well-Being onto a health system EHR: the benefits of integration in the COVID-19 era. J Am Coll Health [Internet]. 2020 Nov 12 [cited 2021 Oct 4]. Available from: https://www.tandfonline.com/doi/full/10.1080/07448481.2020.1843468
- Santos JLGD, Lanzon GMDM, Costa MFBNA, Debetio JO, Sousa LPD, Santos LSD, et al. How are university hospitals coping with the COVID-19 pandemic in Brazil? Acta Paul Enferm [Internet]. 2020 [cited 2021 Oct 4];33:eAPE20200175. Available from: https://doi.org/10.37689/ acta-ape/2020AO01755
- 17. Parè J. Mending Invisible Wounds: supporting the mental health needs of nurses during COVID-19. MNA [Internet]. 2020 [cited 2021 Nov 01];90(4):4-5. Available from: https://www.massnurses. org/files/file/MassNurse%20September%202020%20EV.pdf
- Liu CH, Pinder-Amaker S, Hahm HC, Chen JA. Priorities for addressing the impact of the COVID-19 pandemic on college student mental health. J Am Coll Health [Internet]. 2020 Oct 13 [cited 2021 Oct 4]. Available from: https://doi.org/10.1080/07448481.2020.1803882
- 19. Quattrone F, Borghini A, Emdin M, Nuti S. Protecting higher education institutions from COVID-19: Insights from an Italian experience. J Am Coll Health [Internet]. 2020 Jul 23 [cited 2021 Oct 4]. Available from: https://doi.org/10.1080/07448481.2020.1791885
- Cruz-Correa M, Díaz-Toro EC, Falcón JL, García-Rivera EJ, Guiot HM, Maldonado-Dávila WT, et al. Public health academic alliance for COVID-19 response: the role of a national medical task force in Puerto Rico. Int J Environ Res Public Health [Internet]. 2020 Jul 5 [cited 2021 Oct 8];17(13):4839. Available from: https://www.mdpi.com/1660-4601/17/13/4839
- 21. Esteves LSF, Beneti R, Damaceno DG, Ballista VA, Santos AGV, Borsari DA, et al. Telessaúde em tempos de COVID-19: acolhimento, organização em rede e integração ensino-serviço. Enferm Foco [Internet]. 2020 [cited 2021 Oct 4];11(2):172-78. Available from: http://revista.cofen.gov.br/ index.php/enfermagem/article/view/3899
- 22. Yates HS, Goffman D, D'Alton ME. The response to a pandemic at Columbia university Irving medical center's department of obstetrics and gynecology. Semin Perinatol [Internet]. 2020 Oct [cited 2021 Oct 10];44(6):151291. Available from: https://doi.org/10.1016/j.semperi.2020.151291
- 23. Rahn J. Preparing for the unseen threat of infectious disease. Campus Secur Rep [Internet]. 2021 [cited 2021 Oct 4];17(1):5-7. Available from: https://doi.org/10.1002/casr.30643
- 24. Castillo M, Conte B, Hinkes S, Mathew M, Na CJ, Norindr A, et al. "Implementation of a medical student-run telemedicine program for medications for opioid use disorder during the COVID-19 pandemic." Harm Reduc J [Internet]. 2020 Nov 17 [cited 2021 Oct 4];17(1):1-6. Available from: https://harmreductionjournal.biomedcentral.com/articles/10.1186/s12954-020-00438-4
- 25. Mundus R. Children's summer smile drive University of Michigan Student capter of ADHA. ADHA [Internet]. 2020 [cited 2021 May 03];9:26-7. Available from: http://pubs.royle.com/publication/ frame.php?i=679873&p=&pn=&ver=html5&view=articleBrowser&article_id=3808874



- 26. Dominguéz GC, Araújo JCA, Martínez IC, Domínguez CMC. Labor preventiva e implementación de estrategias docentes durante la COVID-19 en la Universidad de Ciencias Médicas de Santiago de Cuba. Medisan [Internet]. 2020 [cited 2021 Oct 4];24(6):1256-65. Available from: http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1029-30192020000601256
- 27. Strasburg VJ, Hammes TO, Gonzales ACS, Von Zeidler G, Venzke JG, Santos ZEDA, et al. COVID-19: contingency actions for the provision of meals to employees of a university hospital in southern Brazil. Sci Med [Internet]. 2020 [cited 2021 Oct 4];30(1):38769. Available from: https:// www.lume.ufrgs.br/handle/10183/217822
- 28. Cary MP Jr, Randolph SD, Broome ME, Carter BM. Creating a culture that values diversity and inclusion: An action-oriented framework for schools of nursing. Nurs Forum [Internet]. 2020 Nov [cited 2021 Oct 4];55(4):687-94. Available from: https://doi.org/10.1111/nuf.12485
- 29. Morais ACD, Tagnin LH, Araújo ACD, Sousa MIO, Barra BGA, Hercowitz A. Ensino em saúde LGBT na pandemia da COVID-19: oportunidades e vulnerabilidades. Rev Bras Educ Med [Internet]. 2021 [cited 2021 Oct 4];44(1 Suppl):e0157. Available from: https://doi.org/10.1590/1981-5271v44.supl.1-20200423
- Lederer AM, Hoban MT, Lipson SK, Zhou, S, Eisenberg D. More than inconvenienced: the unique needs of US college students during the COVID-19 pandemic. Health Educ Behav [Internet]. 2021 Feb [cited 2021 Oct 4];48(1):14-9. Available from: https://journals.sagepub.com/ doi/full/10.1177/1090198120969372
- 31. Felisberto LCDC, Giovannini PE, Diógenes ICF, Carlos LPN, Lins LFTDS. O Caminho se faz ao caminhar: novas perspectivas da educação médica no contexto da pandemia. Rev Bras Educ Med [Internet]. 2020 [cited 2021 Oct 4];44(1 Suppl):1-8. Available from: https://doi.org/10.1590/1981-5271v44.supl.1-20200422
- 32. Woo Baidal JA, Chang J, Hulse E, Turetsky R, Parkinson K, Rausch, JC. Zooming toward a telehealth solution for vulnerable children with obesity during coronavirus disease 2019. Obesity (Silver Spring) [Internet]. 2020 Jul [cited 2021 Oct 4];28(7):1184-6. Available from: https://doi. org/10.1002/oby.22860
- DiGuiseppi G, Corcoran C, Cunningham T, Nguyen H, Noel M, White P, et al. Mobilizing a community-academic partnership to provide diy hand washing stations to skid row residents during COVID-19. Health Promot Pract [Internet]. 2021 Jan [cited 2021 Oct 10];22(1):9-12. Available from: https://doi.org/10.1177/1524839920953092
- 34. Wei B. Influence of COVID-19 on college physical education and its countermeasures. Basic & Clin Pharmacol Toxicol [Internet]. 2020 [cited 2021 Oct 4];127(111):204-4. Available from: https://www.embase.com/search/results?subaction=viewrecord&id=L633830602&from=export%20%20%20%20%20http://dx.doi.org/10.1111/bcpt.13461
- 35. Bohn J, Hogue S. Changing the game: college dance training for well-being and resilience amidst the COVID-19 crisis. Health Promot Pract [Internet]. 2021 Mar [cited 2021 Oct 4];22(2):163-6. Available from: https://journals.sagepub.com/doi/abs/10.1177/1524839920963703
- 36. Wu XL, Munthali GNC. Knowledge, attitudes, and preventative practices (Kaps) towards covid-19 among international students in China. Infect Drug Resist [Internet]. 2021 Feb 11 [cited 2021 Feb 11];14(1):507-18. Available from: https://doi.org/10.2147/IDR.S291199
- 37. Jepsen SD, Pfeifer L, Garcia LG, Plakias Z, Inwood S, Rumble JN, et al. Lean on your land grant: one university's approach to address the food supply chain workforce during the COVID-19 pandemic. J Agromedicine [Internet]. 2020 Oct [cited 2021 Oct 4];25(4):417-22 Available from: https://www.tandfonline.com/doi/full/10.1080/1059924X.2020.1815623



- Yabrude ATZ, Souza ACMD, Campos CWD, Bohn L, Tiboni M. Desafios das fake news com idosos durante infodemia sobre covid-19: experiência de estudantes de medicina. Revis Bras Educ Med [Internet]. 2020 [cited 2021 Oct 4];44(1 Suppl):e0140. Available from: https://doi. org/10.1590/1981-5271v44.supl.1-20200381
- Souza JB, Brum CN, Tomasi YT, Massaroli A, Silva Filho, CC. Estratégia musical para cuidar de discentes de enfermagem: experiência no enfrentamento da COVID-19. Rev Baiana Enferm [Internet]. 2020 [cited 2021 Oct 4];34(7):e37097. Available from: http://www.revenf.bvs.br/scielo. php?script=sci_arttext&pid=S2178-86502020000100607
- Granjeiro ÉM, Musse JO, Peixoto TM, Nunes IV, Soares IMSC, Silva ICOD, et al. Estratégias de ensino à distância para a educação interprofissional em Saúde frente à pandemia COVID-19. Rev Cient Sena Aires [Internet]. 2020 [cited 2021 Oct 4];9(1):591-2. Available from: https://doi. org/10.36239/revisa.v9.nesp1.p591a602
- Scherer LA, Leshner AL, editors. Mental health, substance use, and wellbeing in higher education: supporting the whole student [Internet]. Washington, DC(US): The National Academies Press; 2021 [cited 2021 Oct 12]. Available from: https://doi.org/10.17226/26015
- 42. Weston LY. Mindfulness in class and in life: mental health and emotional resilience alongside Academic Studies. Lib Educ [Internet]. 2020 [cited 2021 Oct 10];106(3). Available from: https://eric.ed.gov/?id=EJ1279421
- Barboza LEM, Silveira ISD, Leite PC, Christoffel MM, Gomes ALM, Souza TVD, et al. Os conceitos de Florence Nightingale em tempos de pandemia da COVID-19 retratados em história em quadrinhos: relato de experiência. Esc Anna Nery [Internet]. 2020 [cited 2021 Oct 4];24(spe):e20200200. Available from: https://doi.org/10.1590/2177-9465-EAN-2020-0200
- Petráková A, Príkazský V, Hlavinka A, Holý O. Strengthening core competences and skills of medical and public health students for digital health. Eur J Public Health [Internet]. 2020 Sep 30 [cited 2021 Oct 4];30(5):165-26. Available from: https://doi.org/10.1093/eurpub/ckaa165.026
- 45. Mellins CA, Mayerb LE, Glasofer DR., Devlin MJ, Albano AM, Nash SS, et al. Supporting the well-being of health care providers during the COVID-19 pandemic: the Cope Columbia response. Gen Hosp Psychiatry [Internet]. 2020 Nov-Dec [cited 2021 Oct 4];67:62-9. Available from: https://doi.org/10.1016/j.genhosppsych.2020.08.013
- 46. Echoru I, Kasozi KI, Usman IM, Mutuku IM, Ssebuufu R, Ajambo PD, et al. University lecturers and students could help in community education about SARS-CoV-2 infection in Uganda. Health Serv Insights [Internet]. 2020 Jul 24 [cited 2021 Oct 4];13:1178632920944167. Available from: https://doi.org/10.1177/1178632920944167
- 47. Perry J, McClure N, Palmer R, Neal JL. Utilizing academic–community partnerships with nursing students to improve hand hygiene in elementary students to reduce transmission of COVID-19. NASN Sch Nurse [Internet]. 2021 Nov [cited 2021 Oct 7];36(6):333-8 Available from: https://doi. org/10.1177/1942602X20986958
- 48. Quiroz FA, Liza F, Quteineh H, Czarnecka B. Variation in the timing of COVID-19 communication across universities in the UK. PLoS One [Internet]. 2021 Feb 16 [cited 2021 Oct 7];16(2):e0246391. Available from: https://doi.org/10.1371/journal.pone.0246391



NOTES

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CONTRIBUTION OF AUTHORITY

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CONFLICT OF INTEREST

There is no conflict of interest.

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