

**Youth vocabularies mediated on the webradio about human immune defense against
Covid-19**

**Saberes vocabulares da Juventude mediados na webrádio sobre defesa imunológica
humana contra a Covid-19**

**Vocabularios juveniles mediados en el webradio sobre la defensa inmune humana
contra Covid-19**

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Abstract

Describe the vocabulary knowledge of youth son about human immune defense in the presence of Covid 19. Descriptive research, carried out in April 2020, with 64 young high school and university students who participated in the “In Tuning with Health” program on the Radio AJIR website. Knowledge was categorized and analyzed based on the Vocubular Universe and Thematic Analysis. 31 questions-discourses made up the Vocubular Universe of Youths, highlighted for organic and bodily defense, signs and symptoms, forms of transmission, prevention strategies, risk groups, sequelae, immune system, treatment, drugs, vaccine, cure, asymptomatic, social isolation and primary care. Online dialogical communication enabled the exchange of knowledge expressed by experiences in the context of the pandemic in contemporary times. The mediation of youth knowledge about the new coronavirus via web radio was constituted as a practice of educational nursing webcare, motivating health promotion in the context of the pandemic.

Keywords: Nursing care; Students; Coronavirus; Severe acute respiratory syndrome; SARS virus.

Resumo

Descrever os saberes vocabulares das juventudes sobre defesa imunológica humana na presença do Covid 19. Pesquisa descritiva, realizada em abril de 2020, com 64 jovens escolares do Ensino médio e universitário que participaram do Programa “Em Sintonia com a Saúde” no site da *Web Rádio AJIR*. Os saberes foram categorizados e analisados tomando por

base o Universo Vocabular e Análise Temática. Resultados: 31 perguntas-discursos compuseram o Universo Vocabular das Juventudes, em destaque para defesa orgânica e corpórea, sinais e sintomas, formas de transmissão, estratégias de prevenção, grupos de risco, sequelas, Sistema imunológico, tratamento, fármacos, vacina, cura, assintomáticos, isolamento social e cuidados primários. A comunicação dialógica online possibilitou troca de saberes expressas pelas vivências no contexto da pandemia na contemporaneidade. A mediação dos saberes da juventude sobre o novo coronavírus via web rádio se constituiu como prática de *web*cuidado educativo de enfermagem, motivando à promoção da saúde no contexto da pandemia.

Palavras-chave: Cuidado de enfermagem; Estudantes; Coronavírus; Síndrome respiratória aguda grave; SARS vírus.

Resumen

Describe el conocimiento del vocabulario del hijo joven sobre la defensa inmune humana en presencia de Covid 19. Investigación descriptiva, realizada en abril de 2020, con 64 jóvenes estudiantes de secundaria y universitarios que participaron en el programa "En sintonía con la salud" en el sitio web de Radio AJIR. El conocimiento fue categorizado y analizado en base al Universo Vocabular y al Análisis Temático. 31 discursos-preguntas conformaron el Universo Vocabular de Jóvenes, destacado por defensa orgánica y corporal, signos y síntomas, formas de transmisión, estrategias de prevención, grupos de riesgo, secuelas, sistema inmune, tratamiento, drogas, vacuna, cura, asintomática, aislamiento social y atención primaria. La comunicación dialógica en línea permitió el intercambio de conocimiento expresado por experiencias en el contexto de la pandemia en los tiempos contemporáneos. La mediación de los jóvenes sobre el coronavirus a través de la radio web se constituyó como una práctica de cuidado web de enfermería educativa, motivando la promoción de la salud en el contexto de la pandemia del nuevo coronavirus.

Palabras clave: Cuidado de enfermera; Estudiantes; Coronavirus; Síndrome respiratorio agudo severo; Virus del SARS.

1. Introdução

In the last year, the World Health Organization (WHO) alerted the world to the existence of Corona Virus Disease-Covid-19 (Huang et al., 2020), 19 because it was the year in which the virus was registered (Liu et al., 2020) and declared it an Emergency Public

Health situation of international importance due to the illnesses caused by the Sars-Cov-2 nanovirus (of the Coronaviridae family), which causes Severe Acute Respiratory Syndrome (SARS), which risks human life, especially the elderly, people with comorbidities or in precarious health and social conditions (Zhu et al., 2020; WHO, 2020; OPAS, 2020).

It can cause pneumonia, heart disease, kidney failure, septicemia and death (Huang et al., 2020; Liu et al., 2020; Zhu et al., 2020). Its first signs and symptoms include fever, drycough and dyspnoea. 12,768,307 cases of COVID-19 (215,539 new compared to the previous day) and 566,654 deaths (5,037 new compared to the previous day)(OPAS, 2020) were confirmed worldwide until July 13, 2020, with 1,884,967 cases and 72,833 deaths in the Brazil (Brasil, 2020); and on July 14, 2020 with 139,437 cases and 6,977 deaths in Ceará, the state in which this research was developed(Ceará, 2020).

In March 2020, the government of Ceará decreed horizontal isolation and ran television and internet campaigns with the message “stay at home” (Ceará, 2020). While staying at their homes, many people began to use cyber content more for entertainment and also for information about the pandemic. This made cyberspace and social networks (WhatsApp, Facebook, Instagram and Twitter and others) sources of information, reliable or not (fake news) about the disease. Now, actions to beat Covid-19 require scientific foundation and partnership with the community, also influenced by knowledge about culture, economics and social life, especially in the school and university field.

In this study, educational health action with dialogical mediations was used in the virtual space with information about the pandemic to youths from schools/universities. The fluidity of this communication in the virtual world has undertaken daily narratives arising from human coexistence, causing adherence/refusal of actions/health care in coping with Covid-19. The knowledge produced in the digital was supported by the educational web care, discursive practice of the youths when “talking and saying about themselves”, pointing out needs and wants with mediation via web radio, digital technology of virtual communication accessible to the navigating public in the cyberspace of the Internet (Torres et al., 2015).

In educational web care, digital technology via web radio connected dialogical knowledge announced as the Vocabular Universe of youths, composing Paulo Freire's Culture Circles (Torres et al., 2015; Freire, 2013; Freire, 2019; Damasceno&Nobre, 2013) to understand which knowledge is “said” about human immune defense in contact with the vector cause of the pandemic.

Thus, in order to identify this vocabulary knowledge of youth, it is asked: what is the knowledge of young people about human immunology in the presence of Covid-19? How can

the knowledge of vocabulary universes generate practices of web care? This research aimed to describe the vocabulary knowledge of youth on human immunological defense in the presence of Covid-19.

2. Materials and Methods

Descriptive research with youths, their knowledge about Covid-19 and the exploration of the vocabulary universe supported by the Paulo Freire method. It was developed in the cyberspace of Web Rádio AJIR, an online channel founded in 2007 by young people from the Youth Association of Irajá along with the team of researchers from the Laboratory of Collective Health Practices (LAPRACS) at the State University of Ceará (UECE). Its purpose is to disseminate information and knowledge in digital spaces on the Internet, working in communication and health education, with diversified content programming, prioritizing themes on collective health with school and university youth. This online channel is connected with basic and higher education institutions in cities in the South, Center-South, North and Coastal regions of Ceará (Torres et al., 2019).

It is noteworthy that on the server that hosts the content of this web radio there are accesses registered by the numbers of the Internet Protocols (IP's) devices of navigators from different countries. The synchronous and asynchronous programming on the radio web site has a weekly schedule with the production of the “In Tune with Health” program, in connection with the school and university youth public, which accesses this health communication content directly from their mobile devices logged on the Internet (Torres et al., 2015; Torres et al., 2019).

The direct virtual contact with the youth audience makes it possible to better understand their health demands, as well as the ways they practice caring for themselves and the community. These possibilities are established as a “drawing” of communication and dialogical extension, converging with the Paulo Freire Method, with regard to the interactions that produce and compose the knowledge of the youths' vocabulary universes, making it possible to apprehend the reading of their needs and glimpse semantic rewrites and discursive, to elaborate emancipatory practices in the context of life (Freire,2013; Freire,2019) of youths and their surroundings.

The data of the interactions of the participants produced in the Program In Tuning with Health carried out on April 15, 2020 were used as empirical content of this research. In this live program, 64 young people participated, with 22 from high school and 42 university

students, all participants of the research signed the Free and Informed Consent Form, and had their image preserved by receiving the codename Young in our research so as not to expose their identity.

The organization of the production of the program was reordered with the coordinator, who guides, directs and mediates the guest with expertise in the subject, from his residence with a computer with digital devices, which capture the image and audio of guest and other mediators from the territories that receive the name of plateau, whose function is to transmit the speeches and questions of the young people present in the digital room on GoogleMeet and in the WhatsApp groups of each institution registered in the program.

This audiovisual content is directed to the space of the radio web site that due to the Covid-19 pandemic, the production of the programs needed to go through changes of environment, thus, leaving the Web Radio AJIR studio located on the campus of the State University of Ceará (UECE) in Fortaleza, Ceará, Brazil, for residences of members of the production team, shortly after Decree No. 33.510, of March 16, 2020 on an emergency state of social isolation and remote classes at educational institutions(Ceará, 2020). It should be noted that WebTv hosts the YouTube channel on the website: <http://www.uece.ajir.com.br>, from Web Rádio AJIR, with repercussions for the other social networks of the online channel on the Internet.

The content of communication and health education aggregates several devices such as verbal and written language, mediated by posted texts (messages of interaction of the program's production team with the participants) in the various channels, connecting to the epiphany of the mediator's speeches, plateaus and guest(Torres et al., 2015). It is emphasized that one week before the program is held, its production team carries out advertising on a banner available on the website and social networks on the web radio (Figure 1).

Figure 1. Program: In tune with Health (S@S), Theme: Defense of the Body in Times of Covid-19, 2020.



Source: Official website of Radio AJIR Web, official Instagram and Facebook.

The content of the digital channel programming is diversified and aimed at the school and university youth audience. The topics discussed are suggested by the participants who answer an online form at the end of each program with assessment items and suggested topics for subsequent programs. With this, it is intended to equalize the knowledge of the nursing educational web care to the needs of the participants, contemplating the curricular bases of the educational institutions and the appreciation of the culture of these subjects constituted in their community social networks.

In this research, it was chosen the terminology “youth” as it does not only consider their age and/or biological constructs, but, above all, the understanding of the diverse cultural scenarios that produce crossings and assemblies, norms, disciplinarians and/or transgressors in the context of life of these subjects (Torres et al., 2015; Torres et al., 2019; Sales & Vasconcelos, 2016; Sposito&Tarábola, 2017). Furthermore, the concept of territory adopted in this research refers to political geography, which privileges it as “a space for building a material base on which society produces its own history” (Santos, 2014). Now, in addition to delimited physical spaces, mediations in the virtual are elastic, porous and polysemic due to the connected interactions of native cultural knowledge that embody the “said” linguistic discussions of the youth's life experiences.

Regarding the organization of the results, it was listed by the contents of the Questions-Discourses (QD) (Torres et al., 2015), analyzed based on Thematic Analysis (Minayo, 2011) in connection with Universe of Vocabulary Knowledge (Freire, 2019; Brandão, 2011). Therefore, the QDs were collected in WhatsApp groups and facilitated by the territories' plateaus. The numerical classification in increasing order, Young 1, Young 2, was used for basic education and University student 1, University student 2, for college education, in the identification of QDs. For the analysis of the QD, it was sought to explore the Universe of Vocabulary Knowledge, supported by Paulo Freire (Brandão Neto et al., 2014), composed of three stages: Investigation, thematization and problematization.

In the investigation, the Vocubular Universe (Freire, 2019) is discovered, from which the Generating Words are extracted, which, in this research, are composed by the knowledge as discursive practices of the question-discourses of school and university youths. These QDs were generated in the interactions about the immunological base knowledge constituted by the "place of speech" of the guest - nurse and researcher of chronic and epidemiological diseases - interconnected by the web site with synchronous mediation in this cyberspace giving a spin of semantic and polyphonic volatility of production and records of words generating the languages of the program participants with expressions loaded with singular and native universes of the cultural modes in which they are reiterated, regulated, named and/or subverted.

This process synthesizes and configures the thematization of the universe of youth vocabulary knowledge, since the dynamism with which communication circulates in the digital integrating and shortening time and space, as well as causing non-linear sequential effects of the QDs that they find in mediation and return to the participants resonance of their health needs, expressed by the enunciative cultural contents experienced in their living territories.

The coporeification of this phase took place when a young person, through the plateau who verbally communicates his question, highlighting his name, place and giving meaning to his written speech, atomized by the generator theme, which in this study was the "immune defense of the human body in contact with the new coronavirus", has meaning and effect of the dialogic circularity shared with the others present in the virtual communication network, enabling the awareness of the nursing and health web care, mediated in the virtual environment of the web radio (Torres et al., 2019).

The problematization phase took place due to the syntheses of the QD presented as critical perspectives of vocabulary knowledge, capable of transforming the lived context of

youth (Freire, 2019; Brandão, 2011) structured in the languages singled out as ways of overcoming to “be more” vocalized in the “unprecedented viable” of everyday life of their lives (Brandão Neto et al., 2014). Thus, the structuring of the QD, as knowledge of the vocabulary universe of youths, was systematized in the following thematic categories: 1) Universe of schoolchildren's doubts about Covid-19 and 2) Coronavirus: reading the world by reading the words.

This research is part of the project “Use of Web Radio in training and health care: experimenting communication and health education strategies with youth”, meeting the ethical precepts of Resolution 466/12 (Brasil, 2012) and approved by the Research Ethics Committee of the University State of Ceará-UECE in Opinion No. 3,478,945.

3. Results

The research revealed that knowledge and education can be synthesized by the experiences of youths in school institutions or not highlighting the importance of territory as a space for subjectivation and representation, which materialize in human behaviors as modes of emancipation in social spaces.

So, this work calls for the analysis of the territories of knowledge concretely constituted, as it allows other forms of discourse, privileging health communication to promote educational nursing care based on the experiences of the actors-subjects with their vocabulary universes in the production health education on Covid-19.

And through this reading of the world, which sought to dive into the universe of youth, encouraged to send “question-discourse”, allowing health professionals and students to get closer in a learning relationship, approximated by language and culture. This relationship of exchanges, direct or indirect, uses the logic that the nurse, when educating in health, needs to understand the relationship of the subject and their life history, in order to work favorable relations for the accomplishment care. In this sense, it was observed that mediations on the web radio intertwine the educational process in health, when using media devices to promote dialogues with its youth audience. Next, 31 questions-discourses about COVID-19 will be described, systematized in categories.

3.1 Universe of questions about a Covid-19

Table 1 shows the discourse questions of the participants in the interactions mediated during the program with the theme "Defense of the body in times of COVID 19" of the web radio AJIR. Of the sixty four (64) participants in total, there were fourteen (14) questions asked by high school students and forty two (42) questions asked by university students who asked questions-discourses emerged about: risk groups, preventive strategies, forms of transmission, signs and symptoms, in addition to understanding about social isolation, sequelae in the immune system, forms of treatment, medications used, vaccines, cures and asymptomatic people. Two (2) high school kids questioned Covid-19 in general. In this discussion, a vocabulary universe of words focused on primary nursing care emerged, as well as for risk groups, forms of transmission, signs and symptoms, among others.

Table 1. Questions-discourses by schoolchildren during the “In Tune with Health” Program on Immunology and Covid-19.

<i>Young 1: Washing your hands, rubbing alcohol and not leaving the house... In addition to these Covid-19 prevention methods, is there any other type of prevention?</i>
<i>Young 2: How long is the use of a mask? How many days should you change?</i>
<i>Young 3: Who has leukemia is very likely to get Covid-19?</i>
<i>Young 4: Even with the use of a mask and alcohol gel, is it possible to catch the virus?</i>
<i>Young 5: What is the trend of the next few months on Covid-19 - improving or getting worse?</i>
<i>Young 6: What are the differences between Covid-19 and flu / cold symptoms?</i>
<i>Young 7: How should I sanitize the masks?</i>
<i>Young 8: Does cleaning the house with bleach mixed with water and some detergent and disinfectant kill the virus?</i>
<i>Young 9: How long should you wait to make sure you have Covid-19, even if you don't feel the symptoms?</i>
<i>Young 10: How to differentiate an allergic attack from coronavirus symptoms? Who is</i>

<i>infected may not develop the fever?</i>
<i>Young 11: Who has caught the coronavirus, is at risk of getting it again?</i>
<i>Young 12: Are children and pregnant women more or less likely to become infected?</i>
<i>Young 13: Does the “risk group”, in addition to the elderly, also fit into this category, young people with cardiovascular problems, respiratory problems, among others?</i>
<i>Young 14: Can humans be infected with a new coronavirus of animal origin?</i>

Source: WhatsApp and Facebook from Web Rádio AJIR, (2020).

It was observed that the young students showed interest in learning about Covid-19, expressed in the dialogues and questions about hygiene with the correct use of alcohol gel, materials to be used in the hygiene of the home environment and time of use, exchange and cleaning of homemade masks.

However, questions about the differences between the main symptoms of the disease and the indications of common flu, colds and allergies also presented in the vocabulary of students, with emphasis on some groups that consider them at risk, such as the elderly, pregnant women, infants, children, people with disabilities, with leukemia, immunocompromised and even young people with some comorbidity.

3.2 Coronavirus: reading the world by reading words

Of the forty-two (42) university students, seventeen (17) question-discourses emerged on: risk groups, preventive strategies, forms of transmission, signs and symptoms, in addition to understanding about social isolation, sequelae in the immune system, forms of treatment, drugs used, vaccines, cures and asymptomatic people.

In this reading of the world experienced during the pandemic, the questions of university students also related to how humans can be infected by a new coronavirus of animal origin, the importance of quarantine, flattening of the curve, disease prevention, groups with a higher risk of developing disease, whether they could buy products from other countries or go to the supermarket. Concerns are described in the following statements:

Table 2. Questions-discourses by University students (US) during the “In Tune with Health” Program on Immunology and Covid-19.

University student 1: <i>Which country is most advanced in developing the vaccine against COVID-19?</i>
University student 2: <i>Should the influenza vaccine be taken if the person has a corona?</i>
University student 3: <i>What is the great danger that the vaccine brings if it does not work? when is it tested?</i>
University student 4: <i>Whoever caught the virus and was cured may contain antibodies in their blood to cure terminally ill patients?</i>
University student 5: <i>Should we be especially careful with purchases of objects that arrive from other countries or that we buy at the supermarket?</i>
University student 6: <i>People who were infected by the virus usually have sequelae in their lungs when they heal. Asymptomatic patients also have sequelae?</i>
University student 7: <i>After the “famous” peak period, will the case numbers decrease?</i>
University student 8: <i>In China there was a decrease in the cases of COVID-19, they must have used a method in addition to isolation, how can Brazil ask for help?</i>
University student 9: <i>Can coronavirus cause sequelae, even after curing?</i>
University student 10: <i>We know that the right thing is to use soap and water for effective cleaning, but does using wet wipes as a practical way to clean some surfaces also work?</i>
University student 11: <i>How does the body, through the immune system, fight infection with the new coronavirus, which causes COVID-19 disease?</i>
University student 12: <i>If a person can have COVID-19 more than once, does the second time tend to be a more serious or less serious case?</i>
University student 13: <i>Should someone who is immunocompromised wear a mask?</i>
University student 14: <i>What are the special risks of COVID-19 for pregnant women?</i>

University student 15: *What are the main differences between COVID-19 and pneumonia that we already knew?*

University student 16: *How can covid19 affect people with disabilities?*

University student 17: *Will the fever of COVID-19 generally be high?*

Source: WhatsApp and Facebook from Web Rádio AJIR, (2020).

The words that make up the universe of youth's vocabulary knowledge were mediated as a dialogical strategy when the guest problematized the questions, emphasizing the immune system, flattening the curve, social isolation, drugs and vaccine, as it had already been discussed the concept of the disease, risk and prevention groups before the program was developed.

4. Discussion

Contemporary human life in the virtual interconnects over the Internet, brings people together during the social isolation caused by the pandemic. At this time, using digital technologies to produce health knowledge supported by Freirean methods can expand the concept and practice of extended care, which, through dialogicity, can lead to the social transformation of health practices in healthcare services.

The pandemic has impressed health care with the ability to work collectively with communities in different nations, creating a global response (Williams & Cañon-Montañez, 2020; Hudson & Ball, 2018) by the need to rethink processes of validation of care modes, arising from the subjects' demands. It is necessary to point out the relevance of territories as a place of exchange, as a social space capable of overcoming impositions of natural and social needs. The idea arising from territory alludes to the condition of proximity between individuals, in a constant exchange of relationships, sublimating possible social differences, made impossible by the very closeness that involves social subjects (Boleiz, 2011).

This relationship of proximity, in addition to the physical distances of the territories, can be provided by the Internet as a means of dialogical production in the understanding of a world where everyone is susceptible to Covid-19, the global economic crisis, however, equally capable of helping and support each other to create a network of connections at the other end of the Covid-19 path (Abreu, 2020; OPAS, 2020).

In times of pandemic crisis, true information is an important ally in fighting the disease. Thus, strategies are needed to ensure access to the correct information through digital channels, where a large part of the population accesses and seeks health information. Given the importance raised in the questions on social isolation and disease transmission, studies by the Pan American Health Organization (PAHO) confirm transmission of Covid-19 person-to-person via streak /aerosols (droplets from the nose and mouth, which spread when a person with Covid-19 coughs, sneezes or talks). These first droplets are relatively heavy, do not travel far and fall quickly to the ground. People can get coronavirus if they breathe these droplets from an infected person. However, there is no consensus on their level of transmissibility. Therefore, the distance of more than one meter between people is important (Hui, 2017; Marinelli et al., 2020). These droplets can also land on objects and surfaces such as tables, door handles, cell phones and handrails. People can catch the virus by touching these objects or surfaces with their hands and then touching their eyes, nose or mouth. That is why it is important to wash your hands regularly with soap and water or to clean them with gel alcohol as a hand sanitizer (Brasil, 2020).

Coronaviruses can persist on surfaces for a few hours or even several days, and may vary, for example, depending on the type of surface, temperature or humidity of the environment. The time may vary from material to material, remain up to three days in metal and plastic, but in less time in fabric (Onder et al., 2020). Thus, in the midst of the pandemic, many seek health care because they suspect contamination by Covid-19, even if the real picture is of another respiratory disease. It is essential that people know the warning signs to seek care in health services. Attention must be doubled in cases of fever for more than 48 hours, dyspnoea, effort to breathe, pale or cyanotic skin, in addition to nausea, vomiting and even excessive sleepiness in children and the elderly (Furlan et al., 2020; Fakari&Simbar, 2020).

The most common symptoms of COVID-19 are fever, tiredness, runny nose and dry cough. Some people may experience pain, nasal congestion, headache, conjunctivitis, sore throat, diarrhea, loss of taste or smell, nausea, vomiting, rash on the skin or discoloration of the fingers or toes. These symptoms are usually mild and begin to appear gradually, passing days after infection (Li, 2020; Anderson et al., 2020; Shereen et al., 2020).

Other knowledge of the study subjects is related to more vulnerable groups, understood as risk groups, including people with chronic respiratory diseases, heart disease, diabetes, hypertension, pregnant women, in addition to the elderly, as they are at greater risk of becoming seriously ill (WSAVA,2020). Now, several conditions can decrease the immune

response, such as AIDS, use of immunosuppressants, chemotherapy, corticosteroids in high doses or for more than 15 days, among others, favoring the increase in severity if affected by infectious diseases (Huang et al., 2020).

However, youths questioned about pregnancy, the risk that pregnant women takes if she becomes infected and the possibility of vertical transmission. There are no data in the literature that prove that the mother can transmit the virus to the baby during pregnancy. However, pregnant women suffer from an immune deficit in their bodies, increasing the risk of infections. The guidelines for pregnant women are: maintain prenatal care, hygiene care and avoid crowding. If the pregnant woman has flu-like symptoms, her consultations/routine exams should be postponed for 14 days and performed separately from other patients if necessary (Li, 2020; Anderson et al., 2020; Shereen et al., 2020; WSAVA, 2020; Brasil, 2020).

The university student's questioning about the possibility of human infection by a new coronavirus of animal origin drew attention. It is noteworthy that the coronaviruses are part of the Coronaviridae family and affect animals and humans, as their family has four genera: *Alphacoronavirus*, *Betacoronavirus*, *Gammacoronavirus* and *Deltacoronavirus*. Each genus can cause different diseases in different animal species (WSAVA, 2020). Although in the past some *Betacoronavirus* that affected humans, such as SARS-CoV, responsible for Severe Acute Respiratory Syndrome, initially diagnosed in China in 2002 and MERS-CoV, responsible by the Middle East Respiratory Syndrome, which appeared in Saudi Arabia in 2012, have been associated with some animal species, so far WHO has found no evidence of animal origin for SARS-CoV-2 (Brasil, 2020; Brasil, 2020).

Thus, it is known until now that the main form of transmission is via people with symptoms, but some patients with Covid-19 can spread viruses 24 to 48 hours before the onset of symptoms and 3 to 4 weeks after their onset. Therefore, the Ministry of Health (MH) recommends that patients be released from isolation only after having two negative tests, with a minimum interval of 24 hours between them and that the person is clinically recovered. If testing is not possible, it is prudent for individuals to remain isolated for another two weeks after the symptoms end, as they may continue to spread the virus (Choi & Kim, 2020).

School youngs and university students were also shown speeches on the prevention of Covid-19, as what is the most effective way to protect themselves and others against the disease and these are the primary care, such as cleaning your hands frequently with soap and water, or alcohol gel, as a sanitizer, and cover the mouth with the forearm when coughing/sneezing (use a disposable handkerchief and, after coughing /sneezing, take it to the trash and wash hands) and keep a distance of more than 1 meter from people (Brasil, 2020). It is

essential to adopt good health practices and pay attention to communicational guidelines on health at risk. Because more than providing guidance on the use of masks and hand washing, it is necessary to work on the risk scenario via communication plans designed jointly with the media, health professionals, among others, highlighting the role of nurses in clinical, educational care in the face of decision-making processes/flows when facing the disease (Brasil, 2020).

However, China, where first cases happened, in addition to preventive measures, study and control changes related to the behavior of the population, case control, disinfection of environments, in addition to severe control of social distance and self-isolation if ill (Williams &Montañez, 2013;Radbruch et al.,2020). In this scenario that requires collective health actions, it is necessary to link governmental measures with the cooperation of civil society to change the epidemiological and social situation of the pandemic, as it is necessary to build a collective conscience that favors overcoming the conditions of ignorance of scientific knowledge, without disregarding the popular ones that enable changes in individual and/or collective health care (Minayo, 2011).

Therefore, preventive measures against Covid-19 have to contemplate two dimensions of health care, as so far there is no evidence of a vaccine or specific antiviral to prevent Covid-19. Infected people should receive health care to relieve signs and symptoms, while people with severe symptoms should be hospitalized. Currently, researches with vaccines are being developed in several countries, as well as clinical trials for the production of drugs in France, the United States, China, Spain, Brazil, others. Although several approved investigative agents have demonstrated antiviral activity against SARS-CoV-2 in vitro, the efficiency and efficacy in 1005 of the antiviral therapies used to treat critically ill patients with Covid-19 is still not guaranteed (Liu et al., 2020; Cyranoski, 2020; Liu et al., 2020).

In this way, some individual human protection measures were highlighted in the questions of young people, especially for the use of facial masks and their means of cleaning. This concern may be related to the non-customary use in Brazil and to have been recommended since the beginning of the pandemic, only for people with symptoms and/or health professionals and their relatives after the increase in cases started to be indicated to the general population (Chan et al., 2020).

In addition, the Ministry of Health guides the manufacture of facial masks of simple fabric (cloth) for social use, reinforced by the World Health Organization through the campaign in digital media for the population to manufacture this personal protective equipment.

However, for facial masks to be effective as physical barriers, even those made by people need to follow specifications such as double-sided, individual use, cotton fabric, tricoline or other, combining practices such as fully covering nose and mouth, cleaning it properly with adjustments to the face covering the lateral spaces (Liu et al., 2020). And they should be washed every two hours, with soap or bleach, soaking for about 20 minutes and should be changed if wet (Brasil, 2020). It is noteworthy that the recommendations of the Ministry of Health for the use of N95 masks (PFF2), Are for people with symptoms and/or patients with a positive test for the new coronavirus, their family, caregivers' institutions for vulnerable populations and professionals working in health services.

It is noteworthy that in mediations on the web radio with youths, it was also observed the interest in cleaning the home environment, considering that the use of cleaning products is efficient in protecting the environment. In this regard, it is important to highlight that the use of these products in home care should not be mixed with other products due to chemical reactions with the release of toxic substances and the occurrence of allergic episodes (Wang et al., 2020).

Also, the quarantine and social isolation was questioned by the participants and answered by the guest as a strategy of seclusion of healthy people for the maximum period of incubation of the disease, counted from the date of the last contact with a person infected with Covid-19 or registration of the date on which that healthy person left the source of infection (Guedes et al., 2019).

Social isolation, on the other hand, is the act of separating an individual or a group from living with other people and can be voluntary or forced. So, at the current moment of Covid-19, quarantine has functioned as a measure of social distance, which, in practice, consists in the total isolation of people who had contact with someone infected, awaiting test results and showing symptoms of the pandemic (Choi & Kim, 2020; Brasil, 2020).

It is worth noting that social isolation can influence the flattening of the epidemiological curve, one of the central concepts in public health during this pandemic, as it is represented by the number of people infected over time. For flattening the curve means delaying the spread of the epidemic, to reduce the maximum number of people affected at the same time and the health system not to be overloaded (Brasil, 2020).

In this perspective, it appears that health professionals, especially nurses, even at the limit of resource depletion, physical and emotional exhaustion in the face of the pandemic, can consider other care scenarios in this mission to cope with the disease and as perpetuating health needs. In different contexts, including the school and university environment.

However, the actions of web care with mediation in the virtual, can become self-care practices in Covid-19, which corroborates with disease prevention and control measures (WSAVA, 2020; Brasil, 2020).

For strategies to prevent this global pandemic, it is supported by Freirian pedagogies (Freire, 2019), which point to the need for the construction of knowledge, which must start from the reality of the problems experienced by the people, in order to transform it. Thus, nurses occupy a central position in promoting educational web care by developing health education practices through the production of knowledge that generates awareness of the action for transformation, given that youths demand their health needs through dialogues about health, that are ways of subjectivizing their collectivized lives in their living territories (Brasil, 2012).

Thus, the use of web radio as technologies for the production and sharing of knowledge in health promotion as other ways of teaching and learning, which in this study, operated with online communication, made it possible to understand the vocabulary knowledge of young people about the immune response of human body in contact with the new coronavirus.

5. Conclusion

The vocabulary knowledge of youths mediated on the web radio about human immunology, in contact with the new coronavirus, enabled the knowledge of this population about the pandemic and its understandings, through the ways of seeing and saying, as a care practice with yourself, which are ways of vocalizing motivations for the web of nursing and health care.

Their readings on the pandemic using the unarchived words from the vocabulary universe were updated by scientific and popular knowledge, pointing out that the emergence of this knowledge filed in the "Hard Drive" of the historical memory of humanity was atomized by the extreme situations of the global reality of coping with the covid-19, putting the tension of physical forces between nature and culture in suspension, as dialogical exercises between young school and university students.

Therefore, it is considered that the communication produced with mediation in the virtual-digital was relevant because it explored the youth's questions as bases of information about the human immunological response that propitiates the prevention, treatment and social

coexistence strategies that are protective barriers against contamination by the new coronavirus.

However, it is considered that nursing care can be mediated in digital spaces on the Internet as know-how to promote health pedagogies that add autonomy to the practices of clinical and educational web care with youth.

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