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Original article

Adolescent health promotion: Nola Pender's model through participatory virtual workshops*

Promoção da saúde do adolescente: modelo de Nola Pender por meio de oficinas virtuais participativas

Promoción de la salud del adolescente: modelo de Nola Pender por medio de talleres virtuales participativos

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Abstract

Objective: to discuss the care-educational dialogical course of Nola Pender's Health Promotion Model through participatory virtual workshops with adolescents. **Method:** participatory research, with an action research approach, carried out in a unit of the Federal Network of Professional and Technological Education in the Midwest region. Seven workshops were held with 15 adolescents and with interpretative analysis. **Results:** the theme of the workshops addressed the components of the Health Promotion Model: Characteristics and individual experiences; Behavior-specific cognitions and affect; and Behavior outcome. The content produced was elaborated in the diagram of the Model itself. **Conclusion:** the dialogical character of participatory research validated the workshops as care-educational technologies, which supported the practice of nurses in awareness and empowerment to meet the specificities of this population and provided reflections, changes in health behaviors and autonomy of adolescents.
Descriptors: Adolescent Health; Nursing Theory; Models, Nursing; School Nursing; Health Promotion

Resumo

Objetivo: discutir o percurso cuidativo-educativo dialógico do Modelo de Promoção da Saúde de Nola Pender por meio de oficinas virtuais participativas com adolescentes. **Método:** pesquisa participativa, com abordagem da pesquisa-ação, efetuada em uma unidade da Rede Federal de Educação Profissional e Tecnológica na região Centro-Oeste. Realizaram-se sete oficinas com 15 adolescentes e com análise interpretativa. **Resultados:** a temática das oficinas abordou os componentes do Modelo de Promoção da Saúde: Características e experiências individuais; Sentimentos e conhecimentos sobre o comportamento que se quer alcançar; e Comportamento de promoção da saúde desejável. O conteúdo produzido foi elaborado no diagrama do próprio Modelo. **Conclusão:** o caráter dialógico da pesquisa participativa validou as oficinas como tecnologias cuidativo-educacionais, as quais apoiaram a prática do enfermeiro na conscientização e no empoderamento para atender às especificidades dessa população e propiciaram reflexões, mudanças nos comportamentos de saúde e autonomia do adolescente.
Descritores: Saúde do Adolescente; Teoria de Enfermagem; Modelos de Enfermagem; Serviços de Enfermagem Escolar; Promoção da Saúde

Resumen

Objetivo: discutir el recorrido cuidativo-educativo dialógico del Modelo de Promoción de la Salud de Nola Pender por medio de talleres virtuales participativos con adolescentes. **Método:** investigación participativa, con abordaje de la investigación-acción, efectuada en una unidad de la Red Federal de Educación Profesional y Tecnológica en la región Centro-Oeste. Se realizaron siete talleres con 15 adolescentes y con análisis interpretativo. **Resultados:** la temática de los talleres abordó los componentes del Modelo de Promoción de la Salud: Características y experiencias individuales; Sentimientos y conocimientos sobre el comportamiento que se quiere alcanzar; y Comportamiento de promoción de la salud deseable. El contenido producido fue elaborado en el diagrama del propio Modelo. **Conclusión:** el carácter dialógico de la investigación participativa validó los talleres como tecnologías cuidado-educacionales, las cuales apoyaron la práctica del enfermero en la concientización y el empoderamiento para atender a las especificidades de esa población y propiciaron reflexiones, cambios en los comportamientos de salud y autonomía del adolescente.
Descriptores: Salud del Adolescente; Teoría de Enfermería; Modelos de Enfermería; Servicios de Enfermería Escolar; Promoción de la Salud

Introduction

Adolescence, chronologically defined as the second decade of life (between 10 and 19 years of age),[1] is a crucial phase in the life course of every human being. In this sense, the full evolution of this age group reflects the level of development of its country, since this group is affected by all policies implemented.[1]

An initiative of the World Health Organization (WHO), the Global Accelerated Action for the Health of Adolescents (AA-HA!), states that investing in the health of this population implies

triple benefit - today, in adulthood and in the next generation.[1] This audience has unique perspectives on the most varied topics, but its opinion is usually disregarded. The covid-19 pandemic was proof of this, and the consequences of the decisions made for the education and health of adolescents are worrying.[2]

In Brazil, in the last 30 years, mortality among people aged 10 to 24 years represented an average of 50,000 deaths/year, with a predominance of variables such as male sex and external causes – which include interpersonal violence, transport injuries, suicide and accidents.[3] On the other hand, discussions constantly emerge on the national scene on issues such as the age of criminal responsibility, the disarmament statute and the adolescent health book.

All this shows that there is a need to consider the data, the overall health of the adolescent and the very perspective of this population. The school environment becomes conducive to the implementation of health policies and interventions because it is the shared space among peers and committed to the full development of students.

With about 661 units distributed throughout all Brazilian states,[4] most institutions of the Professional and Technological Education Network (PTE) have their own unit of student care with professionals such as nurses, nursing technicians, social worker, psychologist, dentist and doctor, but, even among these assisted adolescents, the understanding of school health may be related to hygienic practices and the hegemonic care model.[5]

In the PTE context, it would be possible to consolidate intersectoral practices and partnerships with teachers for effective health actions,[5] however, long-standing professional training in the area of adolescent health is also incipient, since this theme appears as an appendix of the discipline of child health and the actions developed have a strictly normative character.[6]

In addition, a meta-synthesis that aggregated health promotion studies in the context of PTE demonstrated shared challenges such as: institutional policy of removal from the server for research, workload of students' subjects and hegemonic educational practice.[7] An integrative literature review brought together only five studies that used educational technologies with adolescents, these being called light-hard, which used games and workshops.[8]

With this purpose of consolidating actions for adolescent health, the contemporary nurse can elaborate his/her practice from guidelines, scientific evidence, theories and

technologies. In this fundamental interweaving between education and care, the concept of Care-Educational Technology (CET) is established, which transcends the conception of technology as a product or process of strictly educational, care or information purpose, being anchored in the precepts of human praxis,[9] permeated by authentic dialogue that problematizes reality to transform it.[10]

The care-educational path, in turn, concerns the itinerary of activities that promote assistance and stimulate reflection and praxis,[11] making it dialogical by this nature. The Health Promotion Model (HPM) developed by Nola Pender is a reference with the intention of supporting nurses in the trajectory of health promotion. The HPM has three components: Individual characteristics and experiences; Behavior-specifc cognitions and affect; and Behavior outcome.[12]

In view of the above, the problem on which this research is based is the gap between the nursing care-educational practices and adolescent health promotion, with the following research question: how can the Care-Educational Technology promote the path of HPM, in a dialogical way, for health promoting behaviors among adolescents?

Thus, the objective of this study was to discuss the dialogical care-educational path of Nola Pender's HPM through participatory virtual workshops with adolescents.

Method

Participatory research was developed, guided by the reference of action research, which comprises a dialogical process between researcher and participants in the elaboration of a collective problem/knowledge.[13]

The research site was a rural unit of the PTE Network located in the Midwest region, where the researcher had been working as a nurse for six years. This context and the experiences before the pandemic favored the students' knowledge of the researcher through the actions and services performed, consolidating itself as an important reference of health orientation. With the intention of providing effective health promotion, beyond the routine of predefined schedules, but from the real and dialogical demands of adolescents, the researcher sought to improve knowledge in participatory epistemology at the opportunity of the PhD course.

The participants were selected by convenience. During a virtual meeting of presentation of an interdisciplinary project entitled "Me, you and our environment: building a collective ecological consciousness", among other activities, students were invited to participate in the Health Promotion proposal guided by the nurse, and those interested should fill out a virtual form. The selection criteria were: to be a high school student integrated to the computer technician; and to participate in the Project. These criteria were stipulated because, thus, the participants had defined the bond and the schedule of meetings of the Project, factors that favor the itinerary of health promotion.[12] The exclusion criteria included: students who did not participate in most meetings.

The invitation to participate was made to 70 students, and 18 of them were interested in participating in this research among the activities offered in the project, however, only 15 students participated – 13 female and 2 male, all adolescents aged between 16 and 19 years old. Three students were excluded from the analysis due to recurrent absence and non-adherence to the proposed activities, being lack of interest reported as the reason.

Seven virtual workshops were conducted by the main researcher, comprising the data collection period between May and December 2021. The workshops were organized thematically according to the components of the HPM, and methodologically with the Psychodramatic Pedagogy,[12,14] which establishes the dialogical phases: warming, dramatic action and sharing.

Several technologies, such as CET, were used to contemplate the path of HPM, as well as data collection, such as: Google Meet, for virtual meeting room; MOODLE® (Modular Object-Oriented Dynamic Learning Environment) to share the perceptions and learnings of each workshop with all the project members; and WhatsApp® for interaction of the group itself in the interval of time between the workshops. Moreover, other applications and websites were used to favor the proposals of participatory techniques, such as: photovoice, photo-elucidation and collaborative design[15] (Chart 1).

Chart 1 – Participatory strategies used in the care-educational path of the Health Promotion Model. Brazil, 2021

HPM Component	HPM Category	Workshop or period	Technique	Resource

Individual characteristics and experiences	Previous behavior	Initial contact	Form	Google forms®
	Personal factors	Initial contact	Form	WhatsApp®
Behavior-specific cognitions and affect	Perceived benefits of actions	1st	Photovoice	Padlet®
	Perceived barriers of action	2nd	Photo-elucidation	Padlet®
	Perceived Self-efficacy	1 month*	Habit Calendar	Google sheets®
	Activity-related affect	1 month*	Habit Calendar	Google sheets®
	Interpersonal influences	3rd	Photovoice	Padlet®
	Situational influences	4th	Shared drawing	Jamboard®
Behavior outcome	Commitment to a plan of action	5th	Habit Calendar	Google sheets®
	Immediate competing demands (low control) and Preference (high control)	6th	Habit Calendar	Google sheets®
	Health-promoting behavior	7th	Games about healthy habits	Wordwall®

*Note: Time interval between the 5th and 6th meeting.

Each workshop lasted approximately one hour, being recorded, as well as transcribed and analyzed consecutively through interpretative analysis under the reference of health promotion of Nola Pender and the dialogic of Paulo Freire.[10,12] Therefore, the thematic nuclei were the HPM categories themselves, and, after reading the material produced, in line with the senses and meanings learned, the statements and contributions were attributed in the HPM itself and considered in the construction of subsequent workshops.

The research followed all the ethical precepts required (Resolutions 466/2012, n. 510/2016 and n. 580/2018 of the Ministry of Health), as well as was approved by the Ethics Committee on November 20, 2020 (Opinion n. 4,411,334) and authorized by the institution where it was developed. All participants and guardians signed the Assent Form and the Informed Consent Form, respectively. In this sense, in order to provide the confidentiality of the data, the participants were assigned, randomly, the coding S (student), followed by increasing Arabic numbering. The structuring of this article was guided by the items determined for qualitative studies of the Consolidated Criteria for Reporting Qualitative Research.

Results

Participants built collective and individual perspectives on various health topics related to the concepts of HPM. In the first workshop, which addressed the "Perceived benefits of actions", in order to understand what they considered as healthy behavior and self-care, students were urged to present, through images, the practices that had benefits for their own health, from the guiding phrase "I take care of myself when..."

The images shared showed, for the most part, individual activities, related to hygiene, sleep, physical activity and pastime, such as watching TV. The students emphasized these practices as an opportunity for abstraction of reality, necessary to obtain relaxation and tranquility.

> *Bathing, for me, is a sacred moment, you know? I think about everything I did through the day, I think about what I am going to do tomorrow, I relax.* (S1)
> *When I am watching series, anything, it seems like I forget about the world, it makes me relax, feel good. When I am watching it, it makes me forget about the world.* (S6)
> *I feel good taking care of my skin, taking time out of the day to take care of my skin.* (S10)
> *Until I vent to someone, I do not feel good, if anything is happening. So I think this is very important.* (S11)
> *I realize sleep is very good. For both mind and body* [...] *and I am not used to sleep early and I know it is something I need to learn, because people say: 'If you sleep after 11 pm, you are killing yourself faster'.* (S5)
> *I think the benefit that physical activity can bring is helping with health, that is the main point, and also, at least when I exercise, it relieves stress. I take out my stress on exercise, so it relieves.* (S7)

The category "Perceived barriers of actions" was elaborated in the second workshop, in which the proposal was to discuss habits and practices that could be harmful, mainly because, if

performed thoughtlessly, they become barriers to healthy practices. The images suggestive of such practices were organized and presented by the researcher in Padlet®, from a previous integrative review performed by the main author of this article who compiled themes of health promotion using the HPM.

In this workshop, simulating a social network, the request that guided the activity was "Leave your cookie", which comes from a common term on the internet in which 'to cookie' is to like or leave praise in a publication; students were invited to like what they supported or shared in their reality. By checking the most liked images, the researcher encouraged them to argue about these behaviors.

Participants liked images related to vaccination, poor posture, use of screens at night, sugary foods; and did not like those that referred to smoking, alcohol prohibition and prevention of Sexually Transmitted Infections (STI). Some justifications about such positions are presented.

> *I sit in the chair anyway, so the posture* [...] *And regarding the pain, wow! I have been feeling pain for a while now. So, you have to start this habit of keeping your posture, because otherwise, in a few years, my spine will be 'damaged'.* (S6)
> *Oh!!! a candy* [...] *no one refuses a candy.* (S1)
> [alcoholic beverage] *I think that at the limit, just for fun I think you can, taking it with the family I think so. Now, in a place you do not know that could make you feel bad or go overboard, I do not think so. But, with the family, I think it is okay.* (S3)
> *It is a question of limits, because there is no point: 'I'm 17 years old and tomorrow I turn 18, then on the first day of 18, go there and get drunk'.* (S5)

For the third workshop, in order to build perspectives on the category "Interpersonal Influences", students were invited to bring, from the work in pairs, photos of situations in the community that affect collective health.

Most of the images represented the environment – trees, about which the students talked regarding their influences and representations on everyone's health. The pandemic situation was also highlighted, remembering that the cause and solution of this event involve health actions in the individual and collective aspect.

> *A tree transmits shade, something that everyone uses, even the neighbors use. It also conveys, I consider that the tree is life, especially in the scenario we are living in with a lot of deforestation and many fires. For me, having trees is something very important.* (S5)
> *When we talk about health, sometimes there is a good and a bad part. Because health will not always be good. You can have bad health, there are things that*

> *affect your health, but also things that bring benefits. Just like the photos, the tree is beneficial, the manhole is bad for your health.* (S1)
> *I think vaccination is something very important. We have been vaccinated since childhood and now with this pandemic, I see several people who do not want to be vaccinated, because it will not work, because it was created in a short time. But, today, we have good technology to create vaccines and save lives and this helps the community. Some diseases were eradicated because of the vaccine, the vaccine is something that helps the community a lot and is essential.* (S5)
> *Some people say: 'It is okay, you were not vaccinated'. No, it is not okay. If you were not vaccinated, you will continue transmitting it and you will only stop making people sick, killing people, when everyone is vaccinated, because there will be no one transmitting the disease..* (S3)
> *Improving health, the health of the environment. Leaving places cleaner, taking care of ourselves, our food, taking care of our mind also helps.* (S6)
> *Sometimes a child notices more than an adult. Because adults pollute more, with the use of cars, destruction, the excessive desire to evolve, but they do not think about the future, what could happen.* (S7)
> *We are growing and sometimes we do not even realize that we are throwing trash on the ground, polluting.* (S11)

In the fourth workshop, under the theme of the category "Situational influences", considering that it was tree day, the creation of a collective design on the Jamboard® platform was suggested for the adolescents, propitiating reflections of health constructions in adolescence.

Through the collective drawing, students recognize the impacts of practices on current and future health. Moreover, nature refers to the space in which experiences of tranquility and connection are lived, as well as significant relationships with people, such as grandparents and friends, being the habit of drinking *tereré* common in the research locality and that happens in these spaces.

> *The fruits of health could be our own habits we have. So, if we have better habits, if not, we need to pursue them and they would be fruitful in our lives, in our health.* (S5)
> *It looks like a cycle, because there in the corner is the seedling from when we were little. Then there is the big tree, from when we were teenagers, and then there is another tree with several fruits where we have our experiences.* (S13)
> *Plants bring life to everyone, because from them, we can plant a tree or seedling in memory of a loved one and with all the trees we see, we have hope for a better future.* (S15)
> *In the tree I thought of, I contributed the trunk, because the Ipê seedling is also known as a trunky tree.* (S9)
> *At my grandmother's house, I lived my entire childhood, there are several Ipê seedlings, if I am not mistaken, they can be rose, purple and yellow and I loved drinking* tereré *beneath them, I played beneath them, I played house. The tree was also my imaginary friend, her name was Bianca. I loved it!* (S2)

In the fifth workshop, based on the experiences of previous meetings, a Habit Calendar (Figure 1) was presented for the students, to be shared in individual mode and editable in Google Sheets®. This calendar was a construction of the researcher from the contributions of students in the workshops on their main practices related to health. Thus, healthy and harmful habits were listed, as well as other signs and symptoms that could be present due to the epidemiological situation (covid-19) and the life cycle (menstruation, acne).

After the presentation, the students analyzed the Habit Calendar and suggested that, in individual use, each of them could personalize, signaling the habits most relevant to themselves in bold or including others, thus keeping what made sense to the participant. In addition, this spreadsheet allowed the researcher to interact with the student through comments, sending notifications and guidance – scientific and motivational.

My habit calendar - 21 days

		September				October																
	Freq.	Mon 27	Tue 28	Wed 29	Thu 30	Fri 01	Sat 02	Sun 03	Mon 04	Tue 05	Wed 06	Thu 07	Fri 08	Sat 09	Sun 10	Mon 11	Tue 12	Wed 13	Thu 14	Fri 15	Sat 16	Sun 17
Healthy habits																						
Stydying	4h/day	X	X	X	X	X			X	X	X	X	X			X			X			
Physical activity	3x week											X				X						X
Skincare	2x week									X			X					X				X
Sunbath	15min/day										X											
Empathy	1x day	X			X	X						X	X			X	X				X	
Movies or series	1x week					X	X	X	X			X	X	X	X					X	X	
Reading	x day									X									X			
Meditation	1x day									X		X										X
Gardening	1x day	X									X											X
Covid prevention	1xday	X	X			X	X	X				X		X		X	X					
Harmful habits																						
Sleeping <6h or > 8h			X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Stress		X	X				X			X					X		X			X	X	
Social media								X														
Ultra-processed foods									X	X					X							
Alcohol								X									X				X	
Symptoms																						
Loss of taste																						
Loss of smell																						
Runny nose																						
Cough																						
Fever																						
Diarrhea																						
Intestinal constipation																						
Menstruation							X	X	X	X	X	X	X									
Acne		X									X	X				X				X	X	

Figure 1 - Habit calendar of individual filling in Google sheets®. Brazil, 2021

The time to use the Habit Calendar was 21 days, and, in the sixth workshop, students shared their experiences. This record provided self-knowledge and organization of the students' routine.

> *I printed it because I could not use it in my cell phone, I printed it and glued it on my wardrobe so it is easier to remember so I can write it down. I thought I did almost nothing. I did not exercise. And now, I joined a volleyball group and I am starting to improve. But, when I first wrote it down in the spreadsheet, I realized that I do not do anything*. (S13)
> *I realized that I do practically nothing in terms of physical activity, very, very, very little. Sometimes, I walked a little, I already marked, because for me that was a physical activity. So, some things I even removed, because they were really things I did not do and it was cool to see the things I did during the week and did not even realize I was doing them and sometimes they could benefit or harm me. So, it was pretty cool.* (S5)
> *One thing I have noticed is that I do not sleep well. Maybe that is why I am sometimes more stressed lately, anxious, it is because I do not sleep.* [...] *This table is good, because it makes us think about our habits. About what we are doing and it harms our health, I really liked it*. (S6)
> *The sunbath, indeed, because now I want to tan, so I sunbathe. But it has increased a lot, because I only stayed in the bedroom. And also when I go to campus, I really sunbathe. So, I already consider the sunbath of the week*. (S3)
> *I used to sleep with my cell phone beside me and now, I put my cell phone in the bathroom, charging. And then, I do not stay near my cell phone, because when I am near it I feel like touching it at night. I am trying to sleep more*. (S10)

In the seventh workshop, as a closing of the shared path, a site was used to create educational games, in which the researcher addressed the behaviors discussed in the meetings; thus, through the game, students could interact and clarify doubts. In the compilation of the workshops, the students, at various times, learned a link between practices and shared health perspectives, and also that these provided reflections and changes in health behaviors.

> *The images are very different from each other. Some exercise and others sleep and even though they are different, they have a connection*. (S5)
> *It was cool, because it showed that not everyone thinks the same and that at every moment, something a person thinks, they have an argument to say. I understood that this difference in choices was a cool thing* [...]*it was the same thing, but, even two people who chose* [...]*I accept that, but maybe they had different opinions.* (S6)
> *From the moment we drew that tree at the meeting, I could see that if we always work together we can change the entire decadent situation in which the environment finds itself, and the entire environment around us.* (S3)
> *Each one doing a little, everything in the end became a great art.* (S1)

Although each workshop has designated a thematic and technical proposal, considering the dialogical character of participatory research and HPM, as well as Psychodramatic Pedagogy, which favors diverse and spontaneous manifestations, the materials – transcription of workshops, chat, form and MOODLE – were considered, so that, during the course of care and education, the relationships between the experiences with the HPM, which is presented in

Figure 2, were constructed.

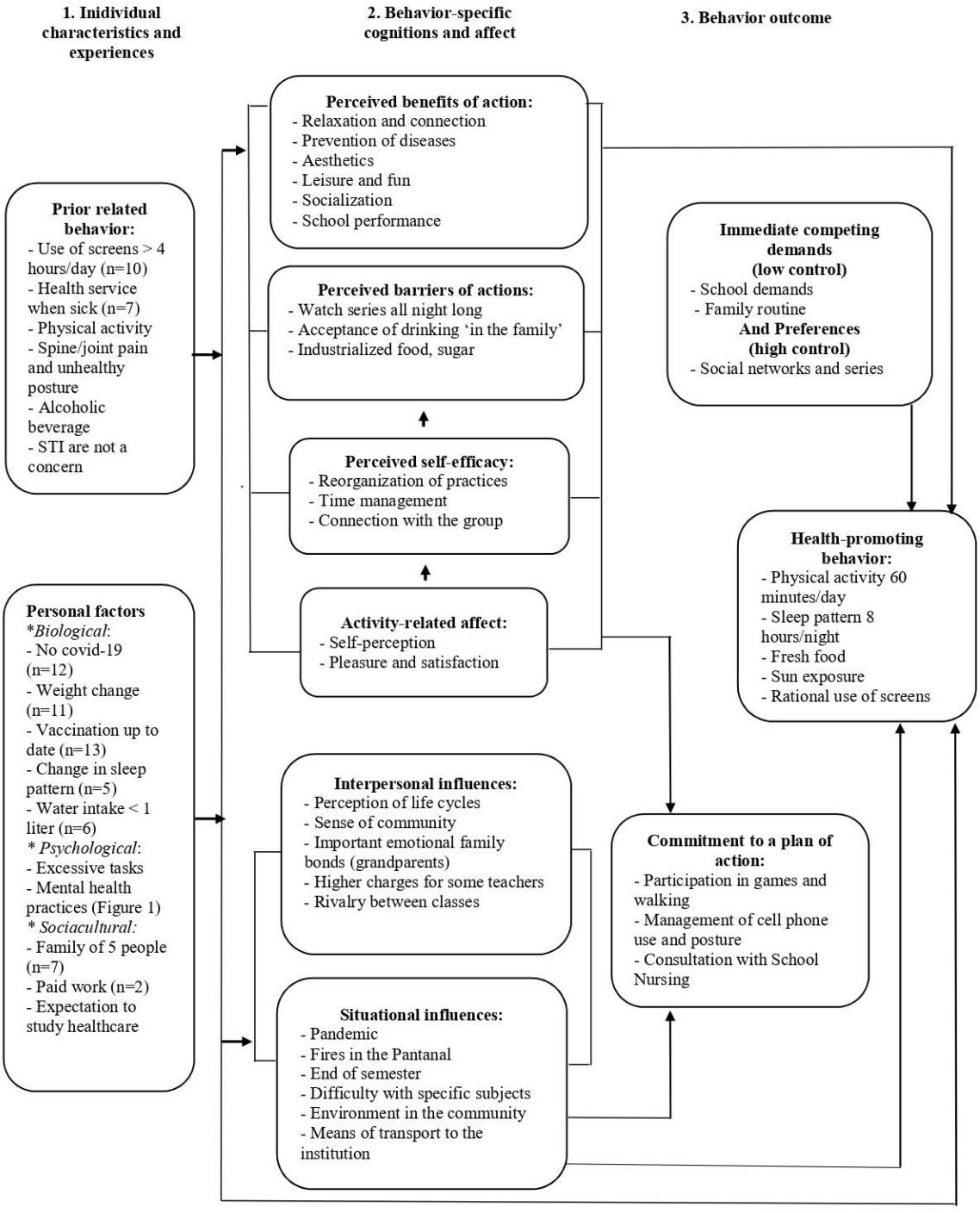

Figure 2 - Diagram of Nola Pender's Health Promotion Model applied to a group of adolescents through participatory strategies. Brazil, 2021
Note: the quantitative data presented in Component 1 represents the majority of answers on the virtual form

Discussion

The HPM mobilizes care and education practices, and its implementation with the collective enabled a trajectory of health promotion, under its integral and diverse aspect. The CET used in this course of care and education, in order to contemplate the components of the HPM, favored the connection of the nurse with the contemporary adolescent, in a problematized way with the reality, as well as allowed advances and alignments necessary in the construction of health promoting behavior in a dialogical way.

The fact that most students interested in participating in the Nursing/health group are female (n=13), as well as the information of half of the group seeking health services only when ill (n=7), corroborates a study that showed that female adolescents are more interested and seek more health services, however, in general, most of them do not have this habit.[16]

The perceptions of health care of students in the HPM categories were convergent and complementary: as they mature, the definition of health can become more inclusive and abstract.[12] Health practices such as academia, walking, hygiene, watching series, sleep, crafts, meditation, reading and music were present, demonstrating a particular organization to seek moments of tranquility and what they consider healthy for themselves. These individual modalities may be related to the covid-19 pandemic and the routine of studies, which restrict the possibility of time and meetings between students.[7,17-18]

Personal contact is essential in this phase of life for the development of resilience, social roles and identity, whose exchanges are authentic dialogues for belonging and transformation.[10-12,17] Study shows that passive sedentary activities, like watching TV and listening to music, can be more harmful concerning indicators of depression than sedentary activities that require cognitive action.[19]

The Physical Activity Guide of the Brazilian Population ratified the indication of 60 minutes daily of moderate to vigorous physical activity up to 17 years of age.[20] Study with adolescents in a related institution, from the PTE Network, revealed that a good level of quality of life related to health was associated with behaviors such as frequent physical activity, satisfaction with weight and sleep.[21]

There were some limitations in the students' health knowledge through beliefs such as compensating late sleep, weekly sunbath; social conventions such as the acceptance of sugar

and alcohol; deliberate use of screens, in addition to adequate indications for the age group about the time of sleep and physical activity. These statements are situated in what Freire called situations-limits that lead to acts-limits, in the sense of signaling to the perspective of limiting knowledge that restricts behaviors and attitudes,[10] for which only the problematization of reality, created in group, can incite to want more, learn more and transform the world from transforming oneself.

Moreover, they demonstrate the need for health literacy that is related to the quality of life of adolescents.[22-23] Health literacy is defined as cognitive and social competence for accessing, understanding and using information to make health decisions and improve quality of life.[24]

Harmful practices, such as poor posture and use of screens, were shared in the group, which involve the use of cell phones and computers, which, in this age group, is important to be considered, because they can bring benefits, but also losses, such as promoting, at the same time, approach and distancing from the family.[25] Study with 286 adolescents from the Northeast region reported smartphone dependence/addiction in more than 70% of the sample, and the time of use of the device was around 6 to 9 hours a week and on the weekend respectively.[25] Less sleep hours, cervical pain and common mental disorder were factors associated with smartphone dependence.[25]

Behavioral addiction is a new concept, and it can have many similarities with substance addiction, and both can begin in adolescence.[26] The prevalence of addiction behaviors in adolescence is high and, for some, it becomes evident with the passage of time, as the addiction related to the internet.[26] This reality is a fact to be problematized, and dialogue can be a powerful ally for thinking and doing differently.[10]

The acceptance of alcohol was an important point of discussion, and adolescents argued strongly against the ban, claiming that they can have discernment for the use of this substance, allowed in Brazil only after 18 years (Law n. 9,294/1996). Associated with alcohol consumption in early adolescence, there is the excessive consumption of maternal alcohol or from the best friend and the non-nuclear family,[27] confirming the importance of modeling and interpersonal influences in the acquisition of behaviors,[12] for whom only dialogue can highlight this reality to be codified, decoded and critically unveiled,[10] breaking tradition and harmful social habit.

The environmental issues were present because the meetings were developed within the project with this theme, but also by the pandemic (covid-19) and local situation, since the Midwest region is known for agricultural expansion, as well as the occurrence of fires, which, moreover, was featured in the national news. The promotion of the vaccine, in the same way, affects the context, target of polemics in society. The favorable position of students to vaccines is consistent with the scientific safety promulgated by health reference bodies, as well as with the benefits derived from this practice that are not limited to the prevention of the disease, ensuring the stability of the educational system and its implications for food, social and economic security.[18]

Although all are vulnerable to the impacts of climate change, children are disproportionately affected because of their physical and cognitive immaturity, with repercussions observed in the manifestation of respiratory, cardiac, reproductive, infectious, poisoning diseases, allergies and in school absenteeism.[28]

The Habit Calendar, systematized by the researcher, was relevant because it allowed the visualization of shared habits, self-assessment in health and the proximity of the nurse (synchronous/asynchronous) of the health situation of each student. This product can be considered a CET, since it favored autonomy, self-care and self-management,[9] an unprecedented feasible practical example[10] in which new skills, desires and transformation movements are materialized, with protagonism.

The final games workshop was important to consolidate knowledge, Activities of artistic and playful nature can be effective resources for the rescue of the protagonist condition of adolescents and for the encouragement of critical reflections on health promotion,[29] since they may have difficulty recognizing their autonomy and making decisions about their health.[30]

This proposal requires an immersion of the educator/researcher not only on the technological resources used, but also on socioemotional skills in order to provide acceptance and empathy,[30] especially on the theoretical approach on which it is based, since the technique from technique is not able to contemplate the critical educational conception, established in the genuine relationship between educator-student. This is a challenge for the educator/researcher with this assumption/condition, both for the historical and hegemonic vertical professional training and the representation of knowledge-power that the use of technology itself can establish.

Because of the novelty and innovation of the proposal, it is relevant to point out the limitations and difficulties, which may favor other practices, research and analysis, such as the restrictions of students, intentionally or unintentionally, in the use of the camera and microphone, as well as technical issues such as freezing of the transmission and internet instability, which are factors that impair the interaction and the apprehension of individual expression. Some students may have difficulty operating some virtual resources; and, in these cases, the educator/researcher must devote attention to providing instructions carefully or providing alternatives equivalent to participation in the activity (write in chat, send by email, print, among others).

Still on the limitations, the students had difficulty remembering the theme addressed in each workshop, which was checked in MOODLE and at each meeting, that is, they referred first to the operational aspects – what was done, not what was seized/discussed, which needed to be more specifically instigated by the researcher. This can happen because some features and techniques can be new to many, making the execution more remarkable. Furthermore, there is the fact of the time difference between the workshops, around 30 days, and, thus, closer meetings could favor the perceptions of the HPM course.

The contributions of this research to nursing are related to the aggregated knowledge about educational practices, inherent to the entire area of work of nurses, but still incipient of grounded reference. The HPM stands out as an evident guide for health promotion, because, as well as the curative and preventive models have their references, health promotion should also be promoted, in addition to a deeply participatory and dialogical way.

Conclusion

Virtual participatory workshops such as CET supported the practice of nurses and the autonomy of adolescents. The CET comprise a potential space/resource for the role of nurses in awareness and empowerment in adolescent health, not only by the pandemic context, but mainly because it provides opportunities, in a contemporary, playful and systematized way, of contact with professionals and the health service. The students recognized the workshops as a moment of connection and intertwining of health purposes, mainly regarding behaviors of everyday practice, such as physical activity, food, sun exposure, sleep and rest.

The strategy was valid because it allowed the clarification that common behaviors among them, such as screen use, sleep restriction and alcohol use, cannot be normalized and need to be actively managed/mitigated. Therefore, the CET, in a reasoned and systematized way, should be used by nurses in care and educational practice to promote the health of adolescents.

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