



HEALTH EDUCATION FOR PRE-ADOLESCENTS: AN EXPERIENCE REPORT ON THE INTEGRATION OF EXTENSION ACTIVITIES INTO THE CURRICULUM

EDUCAÇÃO EM SAÚDE PARA PRÉ-ADOLESCENTES: UM RELATO DE EXPERIÊNCIA SOBRE CURRICULARIZAÇÃO DA EXTENSÃO

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ABSTRACT: This article aims to document the experience gained during the development of an educational intervention integrating extension activities into the undergraduate curriculum, specifically within the Collective Health I course. The intervention comprised several stages, including situational diagnosis through engagement and visits to a municipal school, needs assessment, planning, and development of health education strategies tailored to the observed reality, implementation of activities with sixth- and seventh-grade students, and obtaining feedback from the community. The outcomes of this process are described as part of the final stage of integrating extension activities into the curriculum, emphasizing the impact of knowledge exchange with the community on the training of future physicians, as evidenced by the feedback provided by the medical students involved.

KEYWORDS: Community-Institutional Relations. Health Education. Hygiene. Public Health.

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RESUMO: O objetivo deste artigo é documentar a experiência adquirida no processo de elaboração de uma intervenção educacional de curricularização da extensão, realizada durante a graduação, no componente curricular de Saúde Coletiva I. Esta intervenção envolveu as etapas de diagnóstico situacional, com contato e visita à escola municipal, levantamento de necessidades, planejamento e elaboração de estratégias de educação em saúde para as ações de acordo com a realidade apresentada, intervenção com os estudantes do sexto e do sétimo ano do ensino fundamental e feedback da comunidade. Os resultados alcançados foram neste trabalho descritos como parte da última etapa da curricularização da extensão, levantando o impacto da troca de aprendizados com a comunidade na formação de futuros médicos, por meio do feedback dos acadêmicos.

PALAVRAS-CHAVE: Educação em Saúde. Extensão Comunitária. Higiene. Saúde Coletiva.

INTRODUCTION

Parental guidance in establishing and maintaining proper hygiene habits from early childhood is crucial for children to develop these practices and sustain them autonomously throughout later stages of life. Parents are recognized as the most influential figures for children, especially those aged 0 to 12 years, as encompassed in this study¹. Furthermore, pre-adolescence, a phase marked by significant biological, physiological, and behavioral changes, represents a critical transition from childhood to adolescence. It is also a period when personal hygiene demands evolve, necessitating targeted health education initiatives in various contexts to promote healthy and age-appropriate habits.

Promoting personal hygiene habits is internationally recognized as an effective means of preventing diseases among children and adolescents. It encourages individuals to adopt behaviors that foster health². For instance, a similar study conducted in Zambia, Africa, utilized a program called WASH (Water, Sanitation, and Hygiene), which demonstrated the effectiveness of school-based initiatives in enhancing health and hygiene knowledge. The program's participants were more likely to share hygiene-related messages with their caregivers, and their understanding of the topic increased significantly after the intervention³.

Despite these advances, educational gaps persist in the context of personal hygiene. Factors contributing to these gaps, as highlighted in the literature, include the lack of age-appropriate approaches to the topic, particularly during pre adolescence, including hygiene during puberty and its connection to sexual education. Additionally, there are deficiencies in training healthcare professionals and educators to address these socially sensitive or “taboo” topics⁴.

Given the interplay between health and disease and the vulnerabilities within communities regarding personal hygiene habits, especially in economically disadvantaged populations, this report aimed to address these gaps by implementing an educational initiative within the Brazilian context. The initiative sought to provide practical insights into its execution while addressing local needs identified by the Family Health Strategy (ESF). This approach aimed to contribute to the prevention of various hygiene-related and sexually transmitted diseases affecting both children and adolescents.

Furthermore, the intervention was designed to enhance the training of medical students, fostering an empathetic understanding of community needs and strengthening the connection between theory and practice. It aimed to equip students with skills for more effective and humanized care in their future professional endeavors, aligning with Brazil's National Education Plan (PNE) guidelines⁵. Thus, this study aimed to describe the experience of integrating extension activities into the curriculum through a health education intervention conducted with adolescent students at a municipal public school in Joinville, state of Santa Catarina (SC).

METHODOLOGY

Historically, the inseparability of research, teaching, and extension was recognized as a fundamental principle of higher education by the Brazilian Federal Constitution of 1988 and was further reinforced in 2012 with the publication of the National Extension Policy⁶. In 2018, the National Education Council (CNE) approved Resolution No. 7/2018, which mandates that 10% of the total credit hours in undergraduate curricula be dedicated to extension activities⁷.

The inclusion of extension activities in undergraduate curricula aims to foster positive social transformations by establishing effective exchanges between universities and community needs.

Through this interaction, students plan and implement extension activities that address identified demands. As a result, they develop essential skills such as communication, empathy, and leadership, complementing their technical competencies and enriching their professional training⁸.

In light of the curricular integration of extension activities in the medical undergraduate program at the University of the Region of Joinville-SC (Univille) and the development of extension projects within the Collective Health I course, a health education initiative focusing on personal hygiene for adolescents was developed in response to a community demand. To achieve this, the institutional methodology known as “Extension Arcs,” designed based on Resolution No. 7/2018, was adopted.

The Extension Arcs methodology comprises the following stages: Community, Situational Diagnosis, Planning, Intervention, and Feedback from both the community and the students⁹. Each of these stages is detailed below.

COMMUNITY AND SITUATIONAL DIAGNOSIS

The term community is defined as the environment that welcomes university students, allowing them to engage in activities that contribute to their academic and professional development. This space must present demands that students can address, fostering a mutually beneficial interaction. The situational diagnosis involves identifying the real needs that students will encounter. This step includes understanding the local context based on the needs expressed by the community and public data (indicators) related to the identified demands. It encompasses assessing challenges and issues in the community, thereby culminating in selecting a specific problem to address⁹.

During the initial contact between the team of medical students and the school requesting the educational intervention on personal hygiene, a situational diagnosis was conducted as part of the Collective Health I curriculum. This process adhered to the planning and organizational steps outlined in the national curricular guidelines¹⁰. Considering the demands of the local Family Health Primary Unit (UBSF) and the School Health Program (PSE)¹¹, this project aimed to address the educational needs of sixth- and seventh-grade students regarding personal hygiene habits essential from preadolescence onward.

The first visit, scheduled and coordinated by the local UBSF, involved listening to the school’s administration and coordination team through interviews about the local conditions and characteristics. During the situational diagnosis, the need for health education initiatives within the community context was identified. Considering the municipal demands of the PSE and in partnership with the school’s pedagogical management department, personal hygiene was chosen as the central theme to be addressed with sixth- and seventh-grade classes. This decision aligned with the students’ educational demands and the academic level of the medical students, who were in the second semester of their training.

Introducing this theme greatly contributes to promoting a culture of safe hygiene, disseminating knowledge on proper techniques, and preventing diseases, thereby ensuring a healthier school environment for students¹². The activities were organized based on a plan to distribute the educational demands among the school’s classes, aiming to establish a connection with the target audience, optimize their experience, and encourage active participation in the initiative.

PLANNING

In the integration of extension activities into the curriculum, planning represents the phase of detailed organization of the steps necessary for implementing the intervention. It includes operationalizing the activities the team selects, utilizing tools for task division, time optimization,

material provision, and action forecasting. This phase considers the team's conditions and the local environment to ensure the efficient development of the project⁹.

To develop the intervention, the chosen action plan method was the adapted "5W2H," which encompasses the following questions: the 5W - What (what will be done?); Why (why will it be done?); Where (where will it be done?); When (when will it be done?); Who (who will do it?), as well as the 2H - How (how will it be done?); How Much (how much will it cost?)¹³. During the planning process, responsibilities were distributed among the medical students so that the activities could be conducted simultaneously in classrooms for two sixth and seventh-grade groups, with the students divided into two working groups of three members each. This organization occurred during an activity led by the supervising professor in the classroom.

In addition to task allocation, the following pedagogical strategies were identified, as presented in Table 1:

Table 1: Pedagogical strategies used in planning the health education intervention on personal hygiene for adolescents through the integration of extension activities into the curriculum, Joinville-SC, Brazil, 2024.

Step	Description of the Activity	Objective	Resources
1. Video Presentation	Screening of the video "Little Mouse Taking a Bath" from the program "Castelo Rá Tim Bum."	Engage students in a playful manner and introduce the topic of hygiene.	Video "Little Mouse Taking a Bath."
2. Distribution of Colored Balloons	Each balloon contains a hygiene habit (good or bad), written on paper.	Stimulate attention to the activity and introduce the concepts of hygiene habits.	Colored balloons with papers inside.
3. Activity with Balloons	Popping balloons and forming two lines: one for those who judged the habits as good and another for bad habits.	Stimulate reflection on hygiene habits by analyzing the knowledge of pre-adolescents.	Classroom space for line formation.
4. Hygiene Explanation	Explanation of the importance of regular hygiene, encouraging the creation and reinforcement of continuous healthy habits.	Correct incorrectly identified habits in the lines and consolidate learning about personal hygiene.	Interactive slides with hygiene information, including sex education, appropriate for the age range.
5. Q&A Session	Ask questions to evaluate the students' understanding of the activity.	Verify understanding and clarify doubts.	Box for anonymous questions, along with paper and pens.
6. Closing	Screening of the song video "Wash One Hand, Wash the Other" and distribution of candies, approved by the school.	Reinforce learning in a playful manner, engaging students and rewarding participation.	Video "Wash One Hand, Wash the Other" and a pack of candies.

Source: The authors.

INTERVENTION

This stage corresponds to the moment when students are immersed in the community, observing, participating in, and implementing the planned actions. During this phase, it is essential to adapt the planning to the conditions observed in the setting, interact with the participants, and demonstrate competencies, thereby showcasing the students' potential as future professionals⁹.

On the day of the intervention designed for the school students, the preparation for the activities marked the beginning of the engagement. During the organization phase, personal hygiene habits—both appropriate and inappropriate—were selected, written on pieces of paper, and placed inside balloons, which were inflated prior to the first interaction with the classrooms where the intervention took place. The balloons were distributed among the students, and it was proposed that, after popping the balloons and reading the notes inside, they evaluate and classify the hygiene habit as either appropriate or inappropriate.

During the activity, it was observed that sixth-grade students demonstrated a greater understanding of proper hygiene habits, which surprised the team. Following the activity, a slide-based presentation was delivered to clarify any questions that arose during the activity and to address additional topics identified during the workshop preparation as likely to be of curiosity and interest to the students. The goal was to guide personal hygiene practices.

The discussion of personal hygiene topics included a practical approach to oral, body, intimate, and hand hygiene. The discussion was framed by considering the onset of puberty and the bodily and hormonal changes occurring during this life stage.

The presentation began with the topic of Hand Hygiene (HH), aiming to ensure that students understood the consequences of their behaviors regarding HH. These consequences, highlighted by the students, included the increased presence of potential pathogenic microorganisms on hands, which can be transferred to the mouth, eyes, and nose—key entry points for pathogens to initiate infectious processes in the human body¹⁴. The students were then informed that hands frequently come into contact with contaminated surfaces, making it essential to clean them before eating, after sneezing or coughing, and before and after using the restroom.

Additionally, another point raised was the importance of not sharing personal items such as utensils and water bottles, emphasizing the contamination potential for spreading diseases, with common examples being influenza and COVID-19¹⁵. This segment concluded by highlighting that HH is a simple and accessible measure with excellent cost-effectiveness for preventing healthcare-associated infections, aiming to interrupt the transmission of microorganisms through direct and indirect contact with contaminated individuals and objects¹⁶.

Regarding oral hygiene, proper tooth brushing is the primary measure for preventing periodontal diseases and their systemic consequences¹⁷. Students were guided on the correct brushing movements, the appropriate amount of toothpaste, and the brushing duration, using a prototype provided by the university's dentistry department.

It was emphasized that brushing for two to four minutes at least three times daily is highly effective in preventing orthodontic complications such as periodontal pockets and cavities¹⁸. Students were alerted to the importance of care and patience during this practice to ensure proper teeth cleaning, dental floss use, and attention to often-overlooked areas, such as the inner mouth, gums, and tongue. Furthermore, the self-perception of oral health reflects various health-related factors and can be used in medical practice to measure treatment needs and the social impacts of oral diseases, which can serve as entry points for severe infections like endocarditis¹⁹.

For body hygiene, the importance of washing commonly neglected areas of the body, such as the ears, navel, back, and feet, was highlighted, as well as areas like the armpits and groin, which produce more sweat, friction, and odor, particularly during puberty. It was noted that these areas require special attention during cleaning, along with the use of deodorant to neutralize stronger odors and habits like changing into clean shirts after physical education classes.

A more specific approach was taken regarding intimate hygiene, considering the taboos and difficulties many individuals face when discussing this topic with parents or guardians. The team used simple yet accurate language for body parts, avoiding abbreviations, nicknames, and pejorative jokes to convey the seriousness of the subject.

For feminine health, the onset of menstruation for many girls was addressed, emphasizing the need for special care regarding the use and changing of sanitary pads or other menstrual hygiene products. According to the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation, and Hygiene, women should have access to hygienic menstrual products that can be changed privately, as well as access to water and soap for routine cleaning of the intimate area²⁰. This cleaning should be done with a neutral soap that does not harm the vaginal microbiota, avoiding perfumes and other inappropriate products for this region.

Regarding male intimate health, boys were instructed on retracting the foreskin and cleaning the glans to prevent the accumulation of secretions and urine, which can cause infections and unpleasant odors. Similarly, the use of neutral soap with running bathwater was recommended. It is well-known that implementing hygienic practices among the male population is more challenging since most men seek healthcare services only when experiencing significant health issues. However, educational strategies targeting young individuals are crucial for raising awareness about men's health care through adulthood, promoting health within this group, and preventing avoidable diseases such as sexually transmitted infections (STIs)²¹.

The intervention in the four classrooms concluded with a Questions and Answers session, where students could ask questions aloud or anonymously by writing them on pieces of paper collected in a box to ensure anonymity. The questions were addressed and answered so that all students could hear and benefit from the responses. More sensitive questions about students' intimacy were answered individually to avoid embarrassment and encourage further questions, fulfilling the educational purpose of the intervention.

Finally, the presentation ended by emphasizing to the students that these hygiene habits should be practiced daily to effectively incorporate them into their lives. While most students recognized the importance of hygiene practices, they did not consistently follow them. This observation highlighted not only the impact of a lack of information on behavioral hygiene habits but also the absence of role models and direct monitoring by guardians—who are often away working throughout the day—as well as potential limitations in water supply and lower socioeconomic status, which can significantly hinder adherence to these habits²². This situation reinforces the urgent need for ongoing and sustained educational interventions.

COMMUNITY FEEDBACK

Community feedback involves assessing the intervention experience, highlighting whether the identified needs were met, either fully or partially. This evaluation reflects the perspectives of those who received the implemented actions and their impact⁹.

After the extension activity was conducted, the teachers who observed the intervention were asked to evaluate the activities. The results indicated that the students enjoyed participating and believed the topic was important, highlighting its impact on their hygiene habits. Additionally, it was clear that the students' favorite part was the balloon activity, and the adjustments made during both the planning and implementation stages were crucial for achieving positive results during this single interaction with the students. Another significant point was the verbal feedback provided by the teachers during breaks between activities. The teachers expressed gratitude for the initiative and emphasized the real need to present this content to the students, as they frequently noticed a lack of family knowledge regarding some personal hygiene practices.

ACADEMIC FEEDBACK ON THE EXPERIENCE

During the academic feedback stage, students document their perceptions of the extension experience, outlining the lessons learned at each stage of the Extension Arcs. This record should reflect the formative significance of the experience in shaping the academic's professional profile⁹.

In this context, the group recognized the activity's importance and its positive impact on self-esteem, self-care, and respect for others. They noted that maintaining personal hygiene not only benefits the students themselves but also positively affects those around them in various life scenarios. Thus, individual self care actions are an effective way to promote health. Furthermore, community involvement proved essential to this intervention, enabling individuals to actively participate in the process²³.

RESULTS AND DISCUSSION

Analyzing the distinct reactions of students in each class made it possible to understand how the topic of personal hygiene affects slightly different age ranges in diverse ways. For the 6th-grade students, the majority aged 10 to 11, the focus was primarily on basic hygiene and its connection to health. These students engaged more actively and asked questions centered on puberty and discoveries typical of their age group. Conversely, the 7th-grade students, mostly aged 11 to 12, expressed interest in topics related to sexuality, even though the presented theme revolved around personal hygiene. This finding highlights the fact that even slight differences in age groups result in notable distinctions in the nature of inquiries, underscoring the impact of puberty on students' social and personal development.

Regarding the questions asked, female students predominantly focused on topics such as the menstrual cycle, intimate hygiene, and vaginal secretions, with fewer inquiries about contraceptive methods. In contrast, male students tended to direct their questions toward ejaculation and access to free contraceptive methods. A noteworthy observation was the boys' lack of knowledge about female morphology and physiology. Many of them appeared confused or uncertain about these subjects, which revealed not only a lack of accurate physiological information but also potential societal taboos originating from family environments or even the educational system itself²⁴.

Below, Figure 1 illustrates a conceptual representation of the distribution of questions by sex and content as asked by the school students during the intervention.

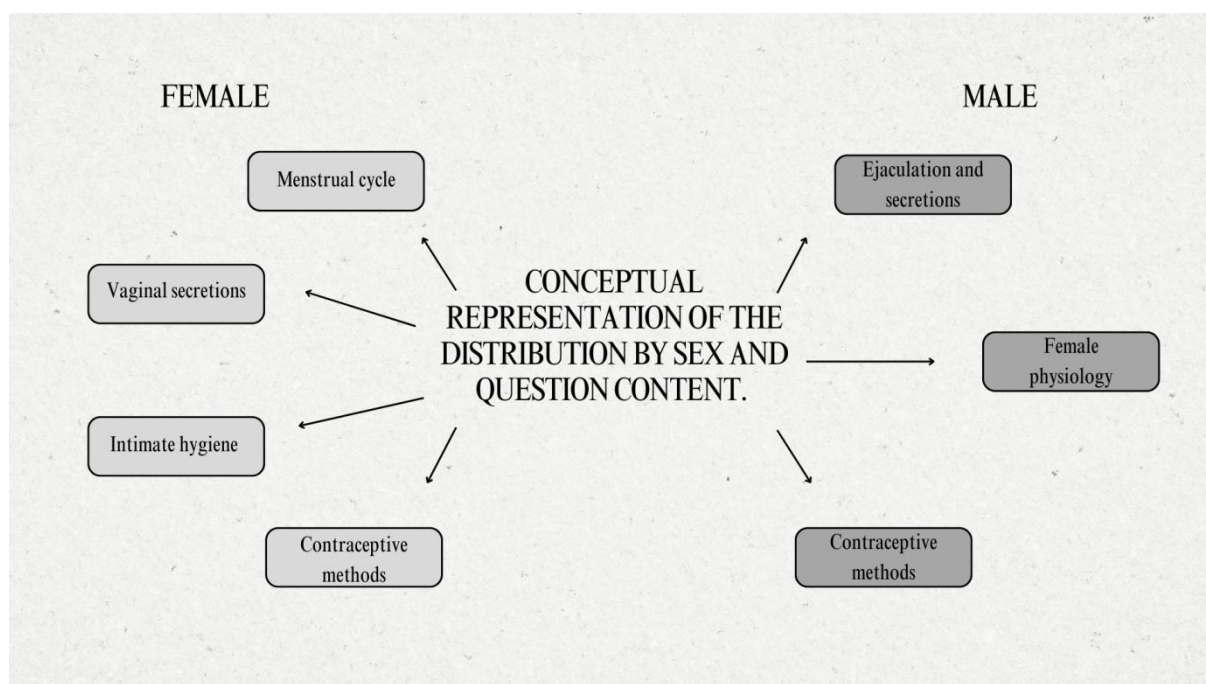


Figure 1: Conceptual representation of the distribution by sex and content of the questions posed by school students during the intervention, Joinville-SC, Brazil, 2024.

Source: The authors.

Based on the topics discussed above, the team reflected on the significant risks faced by this demographic, including unplanned teenage pregnancies, sexually transmitted infections (STIs), and other complications that arise when there is a lack of access to knowledge and freedom to seek accurate information about sexuality during pre-adolescence and adolescence²⁵.

The perceptions shared by the medical students highlighted the importance of integrating sex education with personal hygiene education for this age group. Such integration ensures that pre-adolescents and adolescents do not turn to unprepared sources or individuals for information, which might lead to misunderstandings, misinformation, or even experiences of sexual abuse or violence stemming from a lack of awareness about their own bodies. Adolescents tend to distrust educators who approach these subjects with bias, but they are more likely to trust and engage when the educator speaks with comfort and naturalness on these topics²⁶.

Regarding the feasibility and applicability of this integration of extension activities into the curriculum, the results had practical implications for pedagogical interventions targeting pre-adolescents. This educational action proved to be not only a teaching opportunity but also an occasion to highlight the importance of tailoring school content to the needs of each age group. Specifically, the action underscored the need to explore, within the school curriculum, topics such as sex education and personal hygiene, which are closely interconnected.

In this context, curricular extension activities focused on health education, conducted in schools through partnerships between educational institutions and healthcare services, can foster greater knowledge and autonomy regarding individual health. Education serves as an effective strategy to reduce rates of teenage pregnancies and sexually transmitted infections (STIs)²⁷. Moreover, the integration of personal hygiene and sex education content, developed interactively within extension activities, emphasized the importance of addressing these themes continuously. This approach should follow pre-adolescents throughout their teenage years, incorporating pedagogical and didactic strategies tailored to their age and providing educational materials that directly address their realities.

CONCLUSION

In developing the integration of extension activities into the curriculum, the implementation of the planned intervention highlighted the importance of tailoring the approach to the target audience. This action involved presenting information and instructions to students objectively while offering them opportunities to ask questions, many of which were shared among the participants in the extension activity. Following the completion of the reported experience, the questions received underscored that topics related to women's health and adolescent sexuality represent a significant knowledge demand for this target audience in such educational initiatives.

Therefore, programs and projects must address personal hygiene to be continuous, thus ensuring that the reinforcement and full implementation of hygiene habits become part of the daily lives of children and adolescents. By promoting the repetition of these habits and directing public policies toward school health promotion, it will be possible to achieve greater adherence to personal hygiene. This achievement is particularly important given that some of the most significant barriers to maintaining hygienic practices include precarious social conditions, forgetfulness of proper behaviors, and inadequate knowledge, all of which lead to substantial consequences for the population's health-disease process. Furthermore, it is worth emphasizing the relevance of this approach as a preventive strategy against various diseases that significantly affect both individual quality of life and collective health.

From the perspective of academic training, experiencing all the stages of integrating extension activities into the curriculum in this context demonstrated the importance of building knowledge through the relationship between theory and practice. Additionally, engaging in extracurricular experiences directly contributed to the development of critical skills, fostering essential competencies for the professional work processes of future physicians.

REFERENCES

1. Cavalcante MB, Franco RS, Costa SK, Meira GF. A influência dos pais ou responsáveis na saúde bucal de crianças de 0 a 12 anos. *Research Society and Development*. 2022 Dec 3;11(16):e161111638207. <https://doi.org/10.33448/rsd-v11i16.38207>.
2. Brown ER. Community action for health promotion: a strategy to empower individuals and communities. *Int J Health Serv*. 1991;21(3):441-56. <https://doi.org/10.2190/AKCP-L5A4-MXXQ-DW9K>.
3. Winter JC, Darmstadt GL, Lee SJ, Davis J. The potential of school-based WASH programming to support children as agents of change in rural Zambian households. *BMC Public Health* 21, 1812 (2021). <https://doi.org/10.1186/s12889-021-11824-3>.
4. Sá ADQ, Hora AB, Teles WS, Silva MC, Junior PCCS, Barros AMMS, et al. Challenges faced by health professionals regarding sex education in adolescence: a supplementary inquiry. *Research, Society and Development*, 2023, 12(5), e13912541643. <https://doi.org/10.33448/rsd-v12i5.41643>.
5. Planalto.gov.br. 2022. Disponível em: https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l13005.htm.
6. FÓRUM DE PRÓ-REITORES DAS INSTITUIÇÕES PÚBLICAS DE EDUCAÇÃO SUPERIOR BRASILEIRAS. Política Nacional de Extensão Universitária. Manaus: Fórum de Pró-Reitores, Maio 2012. Disponível em: <https://proex.ufsc.br/files/2016/04/Pol%C3%ADtica-Nacional-de-Extens%C3%A3o-Universit%C3%A1ria-e-book.pdf>.
7. BRASIL. (2018). Resolução no 7, de 18 de dezembro de 2018 - imprensa nacional [Internet]. Disponível em: https://www.in.gov.br/materia/-/asset_publisher/Kujrw0TZC2Mb/content/id/55877808.

8. Oliveira CVNC, Tosta MCR, Freitas RR. Curricularização da extensão universitária: uma análise bibliométrica. *Braz. J. Prod. Eng.* 25º de julho de 2020;6(2):114-27. Disponível em: <https://periodicos.ufes.br/bjpe/article/view/30835>.
9. UNIVERSIDADE DA REGIÃO DE JOINVILLE – UNIVILLE. Política de Extensão Institucional: PDI Univille 2022-2026. Disponível em: https://www.univille.edu.br/pt_br/institucional/proreitorias/proex/extensao_univille/politica_extensao/879179.
10. ABMES. Resolução CNE/CES no 7 | ABMES [Internet]. ABMES - Associação Brasileira de Mantenedoras de Ensino Superior. Disponível em: <https://abmes.org.br/legislacoes/detalhe/2665>.
11. Programa Saúde na Escola (PSE) [Internet]. Ministério da Saúde. Disponível em: <https://www.gov.br/saude/pt-br/composicao/saps/pse>.
12. Ramos LS, Gomes HALF, Aguiar TCG, Soares RMS, Corrêa MX, Morgan LTF, et al. Instruções de higiene na escola e na sociedade como ação de saúde e prevenção de doenças: uma revisão bibliográfica. *Revista Eletrônica Acervo Saúde*. 2020, 12(10), e4558. <https://doi.org/10.25248/reas.e4558.2020>.
13. Sousa HS, Melo BG, Mendes GB, Carvalho MMR, Cruz MP, Viana MF, et al. Management tools in nurses' professional practice. *Research, Society and Development*, [S. l.], v. 11, n. 16, p. e220111638167, 2022. <https://doi.org/10.33448/rsd-v11i16.38167>.
14. Belela-Anacleto AS, Peterlini MA, Pedreira MD. Hand hygiene as a caring practice: a reflection on professional responsibility. *Rev Bras Enferm*. 2017 Apr;70(2):442-445. <https://doi.org/10.1590/0034-7167-2016-0189>.
15. Amorim C de SV, Pinheiro IF, Vieira VGS, Guimarães RA, Nunes PS, Marinho TA. Higiene das mãos e prevenção da influenza: conhecimento de discentes da área da saúde. *Texto & Contexto - Enfermagem*. 2018;27(4). <https://doi.org/10.1590/0104-070720180004570017>.
16. Gurgel MC, Luz SMG, Lima APPD, Veras LMC. Higienização das mãos e sua relevância para prevenção de infecções relacionadas à assistência à saúde: revisão integrativa. *Research Society and Development*. 2022 Nov 18;11(15):e303111537103. <https://doi.org/10.33448/rsd-v11i15.37103>.
17. Sälzer S, Graetz C, Dörfer CE, Slot DE, Van der Weijden FA. Contemporary practices for mechanical oral hygiene to prevent periodontal disease. *Periodontol 2000*. 2020 Oct;84(1):35-44. <https://doi.org/10.1111/prd.12332>.
18. Joshi S, Suominen AL, Knuuttila M, Bernabé E. Toothbrushing behaviour and periodontal pocketing: An 11-year longitudinal study. *J Clin Periodontol*. 2018 Feb;45(2):196-203. <https://doi.org/10.1111/jcpe.12844>.
19. Lima AM, Junior JGP, Borges ATN, Cardoso CS, Júnior FSG. (2024). Saúde bucal de populações rurais ribeirinhas de um município do Amazonas, Brasil: avaliação do índice CPO-D e autopercepção. *Saúde E Pesquisa*, 17(3), e12575. <https://doi.org/10.17765/2176-9206.2024v17n3.e12575>.
20. Patel K, Panda N, Sahoo KC, Saxena S, Chouhan NS, Singh P, et al. A systematic review of menstrual hygiene management (MHM) during humanitarian crises and/or emergencies in low- and middle-income countries. *Frontiers in Public Health*. 2022 Sep 28;10. <https://doi.org/10.3389/fpubh.2022.1018092>.
21. Silva CSM da, Pereira Á, Silva PS da, Figueiredo NMA de. Men's knowledge on body care: a cartographic study. *Revista Brasileira de Enfermagem*. 2020;73(5). <https://doi.org/10.1590/0034-7167-2018-0988>.
22. Singh P, Faisal AR, Alam MM, Saeed A, Haider T, Asif HMA, et al. An Assessment of Personal Hygiene Practices Among Young Adults: A Cross-Sectional, Descriptive Study. *Cureus*. 2023 Aug 29;15(8):e44308. <https://doi.org/10.7759/cureus.44308>.
23. Bhuyan KK. Health promotion through self-care and community participation: elements of a proposed programme in the developing countries. *BMC Public Health*. 2004 Apr 16;4:11. <https://doi.org/10.1186/1471-2458-4-11>.

24. Graziottin A. Maintaining vulvar, vaginal and perineal health: Clinical considerations. *Womens Health (Lond)*. 2024 Jan-Dec;20:17455057231223716. <https://doi.org/10.1177/17455057231223716>.
25. Mohamed S, Chipeta MG, Kamninga T, Nthakomwa L, Chifungo C, Mzembe T, et al. Interventions to prevent unintended pregnancies among adolescents: a rapid overview of systematic reviews. *Syst Rev*. 2023 Oct 19;12(1):198. <https://doi.org/10.1186/s13643-023-02361-8>.
26. Corcoran JL, Davies SL, Knight CC, Lanzi RG, Li P, Ladores SL. Adolescents' perceptions of sexual health education programs: An integrative review. *J Adolesc*. 2020 Oct;84:96-112. <https://doi.org/10.1016/j.adolescence.2020.07.014>.
27. Spaniol C, Spaniol MM, Arruda SN. Gravidez na adolescência e educação sexual: percepções de alunas do ensino médio de um município da Serra Catarinense. *Cadernos de Pós-Graduação em Distúrbios do Desenvolvimento*. 2019, Dez;19(2), 61-83. <https://doi.org/10.5935/cadernosdisturbios.v19n2p61-83>.