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TRAINING OF CAREGIVERS IN CHILDHOOD EDUCATION CENTERS (CEIM) IN THE ENVIRONMENTAL HYGIENE PROCESS

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All content in this magazine is licensed under a Creative Commons Attribution License. Attribution-Non-Commercial-Non-Derivatives 4.0 International (CC BY-NC-ND 4.0). Abstract: The Municipal Early Childhood Education Centers, which welcome children from 4 months to 4 years old, represent one of their first contacts with the school community, outside the direct supervision of those responsible. These places have specific epidemiological characteristics, as the group in question is at a stage of incomplete immunological development, making them more susceptible to infectious diseases. The Environmentalist Theory of Florence Nightingale, founder of Modern Nursing, highlights the importance of environmental hygiene, since the environment directly influences health. In this sense, poor environmental hygiene in Municipal Early Childhood Education Centers can facilitate the spread of pathogenic agents, highlighting the need to train multidisciplinary professionals to promote children's health. Objective: Promote knowledge and train professionals at Early Childhood Education Centers on environmental hygiene. Methodology: This article describes an extension project carried out in Municipal Early Childhood Education Centers with the aim of promoting the health and well-being of children by improving environmental hygiene. Results: The project had a positive impact, mainly due to the receptivity and engagement of participating employees, and the production of permanent materials. Conclusion: The project highlighted the importance of environmental hygiene in Early Childhood Education Centers, recognizing the vulnerability of children to diseases due to their immunological development. Educational materials inspired by Florence Nightingale's Environmental Theory were created to train professionals and promote healthy practices. Identifying the gap in knowledge highlights the continued relevance of this initiative, highlighting the need for more research in the area and the importance of multidisciplinary collaboration

in promoting child health.

Keywords: Environmental Hygiene, Health, Nursing.

INTRODUCTION

Municipal Early Childhood Education Centers (CEIM) are institutions responsible for the care and education of children aged 0 to 5 years, full or part time, regulated and supervised by competent bodies of the education system, in accordance with CNE/ CEB resolution n° 5/ 2009, established by the Ministry of Education as the first stage of Basic Education (Brazil, 2018).

Preschool institutions are recognized as environments with special epidemiological characteristics due to the presence of children with habits that facilitate the spread of infectious diseases. Young children exhibit behaviors such as putting their hands and objects in their mouths, close contact with other children, fecal incontinence and lack of personal hygiene practices, which increase the risk of disease transmission. Furthermore, as they do not have immunity to infectious agents due to lack of exposure, infants and preschoolers end up more susceptible (Nesti and Goldbaum, 2007).

Insufficient hygiene in these places, together with factors such as crowding and lack of personal hygiene care, can facilitate the spread of epidemics (Brasil, 2008). According to research carried out by Pedraza, Queiroz and Sales (2014), parasite infections, respiratory and diarrheal diseases are those that most affect CEIM. Family income and maternal education directly affect the prevalence of these infections, reflecting issues of socioeconomic inequalities. The forms of transmission of these infections can be direct, through contact with infected people or animals, and indirectly, such as through consumption of food, water or contaminated objects and surfaces (Brasil, 2022b).

Florence Nightingale, considered the founder of Modern Nursing, highlighted the importance of environmental hygiene in her theory for health promotion. During the Crimean War, she observed that the external environment directly influenced the recovery of injured soldiers, realizing that simple measures, such as hand washing and clean beds, could reduce infection and mortality rates. Nightingale not only emphasized the importance of direct patient care, but also recognized the need for an organized environment (Bezerra et al, 2018).

Florence, when caring for wounded soldiers during the war, propagated her beliefs and thoughts, establishing a model of nursing care. This way, the Environmentalist Theory was born, which focuses on controlling the environment and humanized assistance to promote health (Donoso; Wiggers, 2020). Furthermore, she highlights nursing as an art that must have practical, organized and scientific training, and be capable of serving medicine, hygiene and surgery. (Alves et al., 2021).

In this sense, health actions must be carried out in these institutions and schools, promoting a collaborative dialogue between education, health and community professionals. It is crucial to consider the environmental, epidemiological reality and local needs when deciding the thematic axes to be developed. Health promotion requires a community approach strengthened at school, which encourages autonomy and the exchange of knowledge between the school and communities (Brazil, 2022a).

Health Education plays a vital role in health care practices in the community, and it is essential that professionals are well prepared to offer complete care to the population. The integration of teaching with health services during academic training stands out as a means of strengthening educational practices in health. (Gueterres et al., 2017). To strengthen ties between academia and the community, it is crucial to recognize the importance of University Extension as an accessible approach and horizontal dialogue in the effective dissemination of knowledge (Freire, 2014). University Extension plays a central role in combining teaching, research and interaction with society, thus contributing to the practical application of knowledge and promoting interdisciplinary education (Brazil, 2018).

In the sense of University Extension, this article seeks to describe participation in a project that aims to promote health and well-being in Municipal Early Childhood Education Centers. By recognizing the importance of interaction between academia and the community, the project seeks to integrate theoretical knowledge with educational practices in health, aiming to meet the specific needs of these institutions. Through collaboration between education and health professionals, the objective is to implement actions that promote hygiene, disease prevention and health promotion, contributing to the healthy development of children and strengthening ties between the university and the local community.

METHODOLOGY

The methodology used is an experience report, with the aim of providing a detailed narrative of the university extension project developed at the Municipal Early Childhood Education Centers (CEIM).

The extension project "Training caregivers in early childhood education centers in the environmental hygiene process" through the Institutional Extension Scholarship Program (PIBEX) offered by ``Universidade Estadual do Mato Grosso do Sul`` (UEMS). PIBEX aims to promote the development of extension projects, granting scholarships to students, to integrate the academic environment with the community (BRASIL, 2023).

The project was developed between 2022 and 2023, in the city of Dourados/MS and included the participation of the authors, as well as other teachers and students of the Nursing course at the Dourados unit.

Initially, the methodology included a review of literature related to the topic, in order to obtain theoretical opinion and knowledge on the topic. During this process, a difficulty was seen in searching for specific articles and publications on the subject, however, the articles, booklets and manuals found allowed us to identify best practices, common challenges and gaps in existing knowledge, providing a solid basis for the development of management strategies. intervention.

In addition, visits were made to schools in order to dialogue with local coordination and observe the reality of Municipal Early Childhood Education Centers to implement the themes covered in the project. In total, four CEIMs were visited in the city of Dourados/MS. These visits were essential to understand the specific context of each institution, identify the needs and challenges faced by caregivers and children, and adapt intervention strategies according to the particularities of each location.

analyzing and verifying After the locations, permanent reference materials were developed to assist caregivers in Municipal Early Childhood Education Centers. These materials included a folder containing basic information about environmental hygiene care, such as cleaning practices, adequate ventilation and space organization, in an accessible and easy to understand manner. Also including a detailed, elaborate booklet fundamental covering concepts about environmental hygiene, the importance of this care for promoting children's health and the story of Florence Nightingale, considered the founder of Modern Nursing.

The inclusion of Florence's story aimed to associate nursing with environmental care, highlighting the relevance of this area in the context of health and reinforcing the importance of the role of caregivers in ensuring a healthy and safe environment for children. These materials were designed to serve as practical and informative guides, offering ongoing support to professionals involved in CEIM even after the extension project has been completed.

RESULTS AND DISCUSSIONS

During the visits, there was a good receptivity to the topic in the meetings held and in the initial contact with the team at the Municipal Early Childhood Education Centers. During these moments, doubts and questions were identified by professionals, demonstrating a genuine interest in the approach to environmental hygiene and its relevance to children's health.

Furthermore, the CEIM coordination has already proposed other themes of individual interest in each location, for collaboration and implementation of future actions. This initiative demonstrates recognition of the importance of partnership with the university and the potential significantly positive impact of the activities proposed in the extension project.

After the visits carried out, we highlighted the need to provide support materials to consolidate the concepts discussed and expand knowledge about environmental hygiene among professionals at Municipal Early Childhood Education Centers. Therefore, folders and booklets were developed for permanent consultation (Figure 1).

The booklet created was a detailed tool, designed to offer comprehensive information on the importance of environmental hygiene, especially in the context of children's health. Initially, in order to establish a connection between the nursing profession and environmental care, Florence Nightingale's Environmental Theory was briefly presented.

Furthermore, the booklet addressed fundamental concepts, such as the differences between cleaning and disinfection, providing clear guidance on how to carry out each of these activities effectively. Cleaning organization routines were also included, adapted from other booklets found, to offer practical and applicable guidelines for CEIM professionals.

One of the central points of the booklet is the emphasis on the importance of hand washing, an essential habit to prevent the spread of infectious diseases. This section detailed correct handwashing procedures and highlighted their relevance for maintaining a safe and healthy environment for children and caregivers, as some diseases have the potential for contamination and transmissibility across all ages.

The complementary folder was designed as a more summarized version of the main concepts covered in the booklet. Its objective was to provide an overview of essential topics related to environmental hygiene in an accessible and easy-to-understand way for professionals at Municipal Early Childhood Education Centers.

In this sense, Santana et al. (2021) states that university extension plays a fundamental role in health promotion and health education, as it provides an opportunity for students and teachers to apply their knowledge in practice, while actively collaborating with the community. Through diverse strategies, extension activities facilitate the communication of topics related to health promotion, encouraging active community participation in discussions and reflections on health issues. In Public Health, Environmental Health has generated demands in Primary Care, given the environmental and health risks for the population. The actions developed by professionals must provide technical knowledge about quality of life, which influences human well-being (Moniz et al., 2020). Furthermore, Pereira et al. (2010) propose health promotion, based on presenting a new lifestyle that is more balanced between humans and the environment, involving political, educational and health scenarios.

In this context, Nesti and Goldbaun (2007) recommend continuous hygiene care, including employee training and parental guidance, cleaning, disinfection and adequate hygiene of environments, as well as hand washing, as preventive measures against diseases. Associated with environmental care, Borson, Cardoso and Gonzaga (2018) bring Florence Nightingale's Theory, emphasizing the importance of nursing in maintaining patients' vital capacities, aiming at well-being and disease prevention.



Figure 1: Images of permanent consultation materials created during the project.(Source: Photos prepared by the authors, 2023.)

CONCLUSION

The importance of Municipal Early Childhood Education Centers as care and education spaces for children aged 0 to 5 is evident, as are the challenges related to environmental hygiene and disease prevention in these institutions. Florence Nightingale's Theory highlights the relevance of nursing in promoting health through maintaining a healthy and safe environment.

The extension project developed at CEIM sought to integrate theoretical knowledge with educational practices in health, aiming to meet the specific needs of these institutions. Receptivity to the theme of environmental hygiene was positive by the coordination and team of the places visited, highlighting the interest of professionals and the possibility of future collaborations.

Given this, it is essential to continue investing in initiatives that promote environmental hygiene, disease prevention and health promotion in early childhood education institutions, aiming at the healthy development of children and strengthening ties between the university and the local community. Collaboration between education and health professionals is essential to guarantee an environment conducive to the well-being and safety of children, contributing to a healthier and more conscious society.

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REFERENCES

ALVES, A. S.; SEPP, V. J.; LOUREIRO, L. H.; SILVA, C. M. A teoria ambientalista no ensino e na prática profissional em enfermagem: uma revisão integrativa. **Revista Práxis,** Centro Universitário de Volta Redonda – Unifoa, v. 13, n. 25, p. 36-40, 2021.

BEZERRA, C. M. B. Análise descritiva da teoria ambientalista de enfermagem. **Enfermagem em Foco,** Rio de Janeiro, v. 9, n. 2, p. 79-83, 2018. Disponível em:http://revista.cofen.gov.br/index.php/enfermagem/ article/view/1105/450.

BORSON, L. A. M. G.; CARDOSO, M. S.; GONZAGA, M. F. N. A Teoria Ambientalista de Florence Nightingale. **Revista Saúde** em Foco, [s. l], v. 10, p. 1-5, 2018.

BRASIL. Ministério da Educação. Conselho Nacional de Educação. **Resolução nº 7, de 18 de dezembro de 2018.** Brasília, 2018. Disponível em: https://normativasconselhos.mec.gov.br/normativa/view/CNE_RES_CNECESN72018.pdf

BRASIL. Ministério da Educação. **Higiene e Segurança nas Escolas.** Brasília, DF. Diretoria de Políticas de Formação, Materiais Didáticos e Tecnologias para a Educação Básica, 2008. Disponível em: http://portal.mec.gov.br/seb/arquivos/pdf/profunc/higi ne.pdf

BRASIL. Ministério da Educação. **Proex divulga edital de seleção para o PIBEX 2023.** Brasília, 2023. Disponível em: https://www.gov.br/ebserh/pt-br/hospitais-universitarios/regiao-norte/chu-ufpa/comunicacao/noticias/proex-divulga-edital-de-selecao-para-o-pibex-2023#:~:text=O%20PIBEX%20busca%20promover%20o,contextos%20externos%20ao%20ambiente%20 acad%C3%AAmico.

BRASIL. Ministério da Saúde. **Caderno temático do Programa Saúde na Escola : saúde ambiental [recurso eletrônico]** / Ministério da Saúde, Ministério da Educação. – Brasília : Ministério da Saúde, 2022.

BRASIL. Ministério da Saúde. **Doenças diarreicas agudas (DDA): Transmissão.** Brasília, 2022. Disponível em: https://www. gov.br/saude/pt-br/assuntos/saude-de-a-a-z/d/dda/transmissao

DONOSO, M. T.; WIGGERS, E. V. Discorrendo sobre os períodos pré e pós Florence Nightingale: a enfermagem e sua historicidade. **Enfermagem em Foco**, Sl, v. 1, n. 11, p. 58-61, fev. 2020. Disponível em: http://revista.cofen.gov.br/index.php/ enfermagem/article/view/3567/803.

FREIRE, P. **Extensão ou Comunicação** [Recurso eletrônico]. 2014. Disponível em:https://fasam.edu.br/wp-content/uploads/2020/07/Extensao-ou-Comunicacao-1.pdf. Acesso em: Acesso em: 17 set. 2023.

GUETERRES, É. C.; ROSA, E. DE O.; SILVEIRA, A.; SANTOS, W. M. Educación para la salud en el contexto escolar: estudio de revisión integradora. **Enfermería Global**, n. 16 v. 2, p. 464–499, 2017. https://doi.org/10.6018/eglobal.16.2.235801.

MONIZ, M. A.; DAHER, D. V.; SABÓIA, V. M.; RIBEIRO, Crystiane Ribas Batista. Environmental health: emancipatory care challenges and possibilities by the nurse. **Revista Brasileira de Enfermagem**, [S.L.], v. 73, n. 3, p. 1-5, 2020. FapUNIFESP (SciELO). http://dx.doi.org/10.1590/0034-7167-2018-0478.

NESTI, M.M.; GOLDBAUM, M. Infectious diseases and daycare and preschool education. **Jornal de Pediatria**, [S.L.], v. 83, n. 4, p. 299-312, 2007. Jornal de Pediatria. http://dx.doi.org/10.2223/jped.1649.

SANTANA, R. R.; SANTANA, C. C. A. P.; COSTA NETO, S. B.; OLIVEIRA, E. C.; Extensão Universitária como Prática Educativa na Promoção da Saúde. **Educação & Realidade**, [S.L.], v. 46, n. 2, p. 1-17, 2021. FapUNIFESP (SciELO). http://dx.doi. org/10.1590/2175-623698702.

PEDRAZA, D. F.; QUEIROZ, D.; SALES, M. C. Doenças infecciosas em crianças pré-escolares brasileiras assistidas em creches. **Ciência & Saúde Coletiva**, [S.L.], v. 19, n. 2, p. 511-528, fev. 2014. FapUNIFESP (SciELO). http://dx.doi.org/10.1590/1413 81232014192.09592012.

PEREIRA, F. G. F.; DE ATAÍDE, M. B. C.; CAETANO, J. ÁFIO. Saúde ambiental e promoção da saúde: experiência de ensino na enfermagem. **Ensino, Saude e Ambiente,** v. 5, n. 3, 30 out. 2013.