

The School Health Program as an opportunity for teaching child health in undergraduate nursing courses: an experience report

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ABSTRACT

Objectives: to report the experience of professors and a nurse in teaching child health to undergraduate nursing students, using the School Health Program (PSE, Portuguese acronym) as a practical training setting. **Methods:** this is an experience report on the practical activities of the child health discipline, developed through a partnership between a university, a Family Health Strategy unit, and a philanthropic school affiliated with the municipal education network, for implementing the School Health Program actions. **Results:** forty nursing students, divided into six groups, carried out activities related to two axes of the program: 1. monitoring and follow-up of the health conditions of children and adolescents enrolled in the school (including anthropometric measurements, blood pressure monitoring, and visual acuity screening); and 2. health education activities for children and adolescents, led by the nursing students from planning to implementation, covering topics such as healthy eating and prevention of domestic accidents. **Conclusion:** the PSE represents an excellent opportunity for teaching child health, as it enables the practical application of health policies and related programs, fosters the integration of theoretical and practical knowledge, and promotes the development of core competencies for professional practice.

Descriptors: Education, Nursing; Students, Nursing; Child Health; Social Programs; Health Policy.

INTRODUCTION

Undergraduate nursing education, guided by the National Curriculum Guidelines^(1,2), emphasizes the coordination between theory and practice as the axis for developing knowledge, skills, and attitudes required for nurses to work in various clinical, care, or management settings. This coordination is achieved through a teaching-service partnership, which provides experiences conducive to consolidating competencies, as well as the clinical reasoning and critical thinking necessary for healthcare decision-making⁽³⁾.

Several healthcare network settings have been used as practice fields for undergraduate nursing education. Placing students in spaces that extend beyond healthcare services broadens their view of the healthcare system and its coordination^(4,5). In this context, schools, through the School Health Program (PSE, Portuguese acronym), stand out as an essential field for undergraduate practical activities, contributing to the debate on the Brazilian Unified Health System (SUS, Portuguese acronym), especially in health prevention and promotion actions, early screening of changes, and monitoring of vulnerable children and adolescents, in addition to carrying out educational activities⁽⁶⁾.

The PSE, an intersectoral policy for health and education, was established by Decree No. 6.286/2007 and is part of the strategic actions of the National Primary Care Policy (PNAB, Portuguese acronym)⁽⁷⁾, aimed at health prevention, promotion, and care to address vulnerabilities that affect the development of children and young people in the public school system. Its principles include intersectorality be-

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tween health and education, sustainability of actions in the territory, co-responsibility among networks, promotion of citizenship, and qualification of public policies^{8,9}.

The program is coordinated between schools and Primary Health Care (PHC) services, and organized into three areas: prevention/promotion, health education for schoolchildren, and health education for teachers. Its strategies include clinical, nutritional, ophthalmological, oral, hearing, and psychosocial assessments; promotion of healthy eating; vaccination updates; accident and violence prevention; and COVID-19 prevention^{8,9}.

Implementation occurs in coordination with policies such as the Family Health Strategy (ESF, Portuguese acronym)¹⁰ and the National Policy for Comprehensive Child Health Care (PNAISC, Portuguese acronym)¹⁰, through multidisciplinary actions led by Family Health teams. The actions are agreed upon between the school and the health unit, and subsidized assessments enable early detection of health problems^{6,8}.

Given the richness of the PSE, authors have highlighted its potential for teaching nursing in public health and as a field for mandatory supervised internships^{4,11}. Thus, the program is a locus for teaching child health in undergraduate nursing programs, promoting understanding of the health care network and the evaluation of care indicators. In addition, it is worth highlighting its relevance in developing competencies in health promotion through theoretical and practical experiences in the school context and the PSE¹².

Therefore, this study aimed to report the experience of professors and a nurse in teaching child health to undergraduate nursing students, using the School Health Program as a field of practice.

METHODS

This study describes the experience gained in the child health discipline of the Undergraduate Nursing Program at the Federal University of Goiás between May and July 2023, which was made possible through a partnership between the University, a Family Health Center, and a philanthropic school affiliated with the municipal education network.

The discipline is offered to students in the seventh semester of the course and includes theoretical (32 hours) and practical (64 hours) activities. The activity related to the PSE involves four hours of activities at the school, which are associated with other fields, such as a Family Health Center in Goiânia.

Goiânia is a capital city with 1,437,237 inhabitants¹³, of whom approximately 662,400 (43.69%) live in areas covered by the Family Health Strategy. In the context of the activity, the Family Health Center partner has four Family Health Strategy teams that serve 13,493 users, comprising 6,165 registered families. These teams carry out PSE activities in three schools and a daycare center. The experiences reported in this text refer to PSE activities with children and adolescents aged 3 to 11 years, distributed in classes from kindergarten to 5th grade in one of the schools in the territory assigned to the health unit.

Due to this program's importance for strengthening the PNAISC and other public health policies and its potential to promote a holistic approach to child health and facilitate intersectoral coordination between health and education, the PSE actions developed by the Family Health Strategy were incorporated into the teaching-learning process of students as a field of practice.

Forty students in the child health discipline participated in the teaching process, divided into six groups of 6 to 8 students each, supervised by three professors. The subject covers theoretical and practical content related to the role of nurses in PHC for children, as well as its coordination with programs such as the PSE. Although the subject covers the age group 0 to 9 years, following the PNAISC, the consultations were carried out according to the school's demand, including adolescents up to 11 years old. The actions performed by the students during the practical activities of child health teaching and learning were included in the PSE's health condition and health promotion assessment axes; however, given the course syllabus, the focus was on monitoring children. It should be clarified that, as the practice groups succeeded in one another, there was continuity of activities, so that the students continued with a broader action plan, developed under the leadership of the professors.

As this is a report of experiences arising from curricular teaching activities, submitting it to a research ethics committee was unnecessary. All ethical procedures, such as respect for dignity and privacy, were strictly followed. The actions took place in institutional settings, with faculty supervision, without collecting identifiable data, and with an exclusive focus on the students' educational process.

RESULTS

In the first axis, actions were carried out to monitor and follow up on the health conditions of children and adolescents between 3 and 11 years old enrolled in school, in which Family Health Strategy professionals (nurses, physicians, dentists, nursing technicians, and community health agents) participated, in addition to undergraduate nursing students and professors. Among the actions carried out, the most notable were anthropometry, blood pressure measurement, and visual acuity assessment by nursing students.

Using growth charts (height, weight, and BMI) recommended by the WHO and available in the child's health booklet¹⁴, students not only collected data but also analyzed scores and intervened in the health-disease process and health education. Cases of overweight and obesity were identified, and children received guidance and referral for specialized nutritional follow-up. The experience reinforced the importance of monitoring child growth in primary health care and the role of school health, enabling early detection of eating disorders, screening for cardiovascular risks^{15,16}, and identification of social vulnerabilities, coordinating intersectoral actions. This actively demonstrated the functioning of the SUS care network, with schools as the entry point.

In addition to growth data, blood pressure was measured and classified according to parameters established for gender, age, and

height⁽¹⁷⁾. The initiative provided students with an opportunity to learn and discuss the importance of annual blood pressure screening from childhood⁽¹⁸⁾, the identification of diseases that can lead to changes in blood pressure in children, and the prevention of diseases in adulthood, promoting health from the early years of life.

Finally, the students assessed the children and adolescents' visual acuity using the Snellen chart, a screening test necessary for the early identification of any loss of visual acuity that could cause learning difficulties for children in the school environment⁽¹⁹⁾. Anthropometric data, blood pressure, and visual acuity assessments were recorded on a specific PSE form. Considering that some children are beneficiaries of *Bolsa Família* (a national income transfer program for families with a per capita income of less than R\$ 218/month)⁽²⁰⁾, the data recorded was also used to maintain the benefit.

In the second axis, health education activities were carried out for children aged 8 to 11, led by nursing students in the planning and execution stages, with topics focused on healthy eating and prevention of domestic accidents.

Regarding healthy eating, a board game was implemented in the classroom itself, in which children moved through all the houses to the finish line and interacted with questions and answers. The game, designed by nursing students under the supervision of professors, divided the class into two groups. These groups answered multiple-choice questions (10 in total) about food groups, healthy foods, and the consumption of ultra-processed foods. As the group answered a question correctly, they were entitled to choose an action card from a box randomly. The actions included advancing one to three spaces (5 cards), losing a turn (1 card), or winning the game (1 card). Three students mediated the game, while the professor controlled the time. This dynamic allowed for the inclusion of children and adolescents in a participatory and interactive way, motivating them to learn about healthy foods and good habits, considering that playful strategies based on gamification are effective for health education in the context of healthy eating among children⁽²¹⁾.

Given the high prevalence of domestic accidents among children⁽²²⁾, prevention-focused actions were carried out through a 15-minute educational video presentation, followed by a round-table discussion between nursing students and children, discussing the main types of accidents and how to prevent them. The round-table discussion was mediated by the six students and one of the professors, each responsible for talking about a type of domestic accident (burns, electric shock, handling sharp objects, and poisoning with cleaning products). The children's participation, with stories from their own experiences, showed that several of them had already been at risk of suffering a domestic accident, demonstrating the importance of the initiative.

DISCUSSION

The PSE can play an essential role in teaching child health in undergraduate nursing courses by offering a field of practice with a variety of activities that allow students to combine theory and

practice in their interaction with children and adolescents, bringing real-life situations into the academic debate. Thus, professors in this area are invited to consider this space as a field of practice and include it in their course teaching plans.

The PSE activities include disease screening and health education actions⁽²³⁾ in the context of the Family Health Strategy, so that the inclusion of students contributes to their professional preparation and competency development. This enriches their training by broadening their understanding of the health care network and prepares future nurses for real challenges in child health. It is possible to teach growth monitoring and health promotion from childhood^(5,16) by including students in PSE activities, such as health assessments, detection of eating disorders, cardiovascular disorders, and vision problems.

Experience has shown that PSE broadens pedagogical possibilities by placing students in a dynamic environment where health promotion is presented concretely, encouraging a critical view of child health care.

Intersectorality, a principle of the PNAB⁽⁷⁾, is not only taught in health institutions. The experience revealed the PSE as a privileged space for understanding the coordination between school health and PHC, highlighting its relevance in experiencing the principles of primary care, intersectorality, and longitudinality of care. Growth monitoring, often addressed normatively in the classroom, proved to be a living practice linked to health promotion, challenging teachers to rethink their strategies.

Innovative approaches, such as gamification and interactivity, can make topics more appealing and promote healthy habits, such as proper nutrition and accident prevention⁽²¹⁾. Collaboration between universities, family health centers, and schools highlights the potential of PSE in building comprehensive and continuous care that integrates teaching, service, and community. This allows students to develop a critical and broader view of health care, experiencing in practice the relevance of coordinated care networks⁽³⁾.

Through health promotion and disease prevention activities in schools, students understand their role in the healthcare network and their impact on the development of children and adolescents, strengthening the links between different spheres of care⁽³⁾. Student involvement broadens their theoretical knowledge and prepares them to develop clinical competencies. By monitoring children's health, they learn to interpret vital signs, perform preventive interventions, and recognize the importance of continuous health monitoring⁽²⁴⁾.

The focus on health education also develops communication and patient education skills. By interacting with children, students learn to adapt their language and approach to the needs of the pediatric audience, developing competencies in therapeutic communication — essential for care based on empathy and clarity⁽²⁴⁾. Participation in the PSE also promotes teamwork and interdisciplinary collaboration competencies. Working in groups with professors and Family Health Strategy professionals, students understand the importance of coordination between different areas for the well-being of children^(23,24).

As a result, the experience in the PSE promotes the development of competencies essential to health promotion. Participation in educational activities, intervention planning, and community engagement strengthens communication, management, and teamwork, in addition to broadening understanding of the social determinants of health^(12,25). This consolidates a critical and reflective education based on equity, comprehensiveness, and the value of community empowerment and participation⁽²⁵⁾.

This experience strengthens the PSE by preparing future nurses for health promotion in schools and the integration of teaching, service, and community, benefiting children and adolescents. It should be noted that including the PSE in training, in addition to preparing students, strengthens the program itself and expands access to child health, especially in a context of reduced growth and development consultations after the COVID-19 pandemic^(6,24).

Although enriching, the experience requires consideration of challenges for its implementation, such as logistics between the university, family health center, and school, prior preparation of students for communication with children, and mastery of specific competencies in school health care. It is also recognized that every experience is subjective and limited by the selective view of those who experience the phenomenon, which is inherent in studies of this nature.

CONCLUSION

From the authors' perspective, the activities in the field were an excellent opportunity for teaching child and adolescent health with a view to comprehensiveness. They valued the coordination between teaching and service, theory and practice, as well as the intersectoral aspect of primary health care. It was possible to apply in practice the knowledge built up in the university environment with students on health policies and the program described here, developing on-site competencies related to nursing consultation, anthropometric assessment, measurement, and interpretation of blood pressure in children and adolescents of different ages, as well as planning and executing health education actions in schools.

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Author contributions - CRediT

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KMS: conceptualization; methodology; project administration; resources; writing – original draft and writing – review and editing.

ECVG: resources; writing – original draft and writing – review and editing.

NDAA: conceptualization; methodology; resources; writing – original draft and writing – review and editing.

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