

SELF-CARE ACTIONS IN SCHOOL HEALTH: AN INTEGRATIVE REVIEW

AÇÕES DE AUTOCAUIDADO NA SAÚDE ESCOLAR: REVISÃO INTEGRATIVA

ACCIONES DE AUTOCAUIDADO EN SALUD ESCOLAR: UNA REVISIÓN INTEGRADORA

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How to cite this article: Mendieta MC, Buss E, Vargas NRC, Ceolin S, Gonçalves KD, Heck RM. Self-care actions in school health: an integrative review. Rev baiana enferm. 2019;33:e31799.

Objective: to analyze scientific publications to know the self-care actions in health carried out at school. **Method:** this is an integrative review study. The search was performed in the Latin American Health Sciences Literature (LILACS), in the Scientific Electronic Library Online (SciELO) and in Public Medline (PubMed). **Results:** the integrative review sample comprised 25 studies, all from the PubMed database, which made it possible to understand health self-care actions in the school environment, through three main themes: disease-focused school actions and programs, methodology of actions in schools and the role of nursing in school self-care. **Conclusion:** the analysis of the publications showed that most health self-care actions in schools focus on pathologies, few studies used active methodologies and took into account the sociocultural context of the student, which, consequently, can make the actions less effective in the long term.

Descriptors: School Health Services. Nursing. Self-care. Nursing Care. Health Education. Health Promotion.

Objetivo: analisar publicações científicas para conhecer as ações de autocuidado em saúde realizadas no âmbito escolar. Método: trata-se de estudo tipo revisão integrativa. A busca foi realizada na Literatura Latino-Americana em Ciências da Saúde (LILACS), no Scientific Electronic Library Online (SciELO) e no Public Medline (PubMed). Resultados: totalizaram a amostra da revisão integrativa 25 estudos, todos da base de dados PubMed, que possibilitaram compreender as ações de autocuidado em saúde no âmbito escolar, por meio de três temas principais: ações e programas escolares com foco em doenças, metodologia das ações nas escolas e papel da enfermagem no autocuidado escolar. Conclusão: a análise das publicações demonstrou que a maioria das ações de autocuidado em saúde nas escolas foca em patologias, poucos estudos utilizaram metodologias ativas e levaram em consideração o contexto sociocultural do escolar, o que, por consequência, pode tornar as ações menos efetivas em longo prazo.

Descritores: Serviços de Saúde Escolar. Enfermagem. Autocuidado. Cuidados de Enfermagem. Educação em Saúde. Promoção da Saúde.

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Objetivo: analizar publicaciones científicas para conocer las acciones de autocuidado en salud realizadas en el ámbito escolar. Método: es un estudio del tipo revisión integradora. La búsqueda se efectuó en la Literatura Latino-Americana em Ciências da Saúde (LILACS), en Scientific Electronic Library Online (SciELO) y en Public Medline (PubMed). Resultados: 25 estudios totalizaron la muestra de la revisión integradora, todos de la base de datos PubMed, estudios que permitieron comprender las acciones de autocuidado en salud en el ámbito escolar, por medio de tres temas principales: acciones y programas escolares enfocados en enfermedades, metodología de las acciones en las escuelas y el rol de la enfermería en el autocuidado escolar. Conclusión: el análisis de las publicaciones demostró que la mayoría de las acciones de autocuidado en salud en las escuelas se enfoca en patologías, pocos estudios utilizaron metodologías activas y tuvieron en consideración el contexto sociocultural del ámbito escolar, lo que, por consecuencia, puede hacer que las acciones sean menos efectivas a largo plazo.

Descriptor: Servicios de Salud Escolar. Enfermería. Autocuidado. Cuidados de Enfermería. Educación en Salud. Promoción de la Salud.

Introduction

School education is considered protagonist in the formation of the individual. The school is the space that welcomes the individual for their socialization, with similarities and differences, and where knowledge is structured. It can therefore be a strategic environment for the development of various actions aimed at improving the health conditions of children and adolescents through health promotion⁽¹⁾, encouraging healthy human development and constructive and harmonious relationships, as well as self-care.

Self-care is characterized as a function that allows people to perform activities aimed at preserving life, health and well-being. As an ability to take care of itself, it needs to be encouraged and practiced from childhood so that it becomes a continuum in people's lives⁽²⁾.

In this sense, health and education are constantly approaching, when thinking about living conditions, constituting a path to the achievement of quality of life. However, there is a major challenge in this interaction⁽³⁾: education professionals should work on health issues, and health professionals should use appropriate teaching practices.

The school provides the learning process of health education by bringing together, in the same environment, people in full growth and development. To this end, instigating self-care through health education requires professionals to have a thorough knowledge of the subject, to enable the construction of this knowledge about

health focused on the social practice of well-being and a healthy life⁽³⁾.

In this construction, which must be combined with health professionals, the student should not be seen as a passive being, who develops repetitive actions, but rather an active information processor, that is, makes his own discoveries. For this to occur effectively, it is suggested that the approach be contextualized in its reality. In this proposal, the teacher is a learning facilitator and not just an information transmitter⁽⁴⁾.

In this context, current proposals, which involve health promotion at school, demonstrate that dialogue based on students' experiences is essential. This requires an approach that relates the diversity of the context of the school community, which consists of subjects who have different knowledge⁽¹⁾. As a result, the importance and need for active and innovative pedagogical practices that focus on the integral formation of critical and reflective citizens in different life contexts is emphasized⁽⁵⁾. However, it is known that health actions historically developed at school have often focused on the biomedical look focused on the disease or its prevention. This way of thinking has been insufficient to make school a space to produce health⁽⁶⁾.

Given this, it is reflected that, today, in the face of advances in both health and education, especially in the scientific area, health education practices in schools, especially as regards the encouragement of self-care, remain restricted to

traditional teaching methodologies, and focus only on the disease.

Thus, the present study had as its guiding question: “What health self-care actions are practiced and/or encouraged at school?”. The objective of this paper is to analyze scientific publications to learn about self-care actions in health in schools.

Method

This is an integrative review study, a methodological strategy that allows a systematic and comprehensive search, critical evaluation and synthesis of relevant research on a particular subject⁽⁷⁾. This was developed in six stages⁽⁸⁾. Initially, the theme was identified and the research question was selected: What are the health self-care actions practiced and/or encouraged at school?

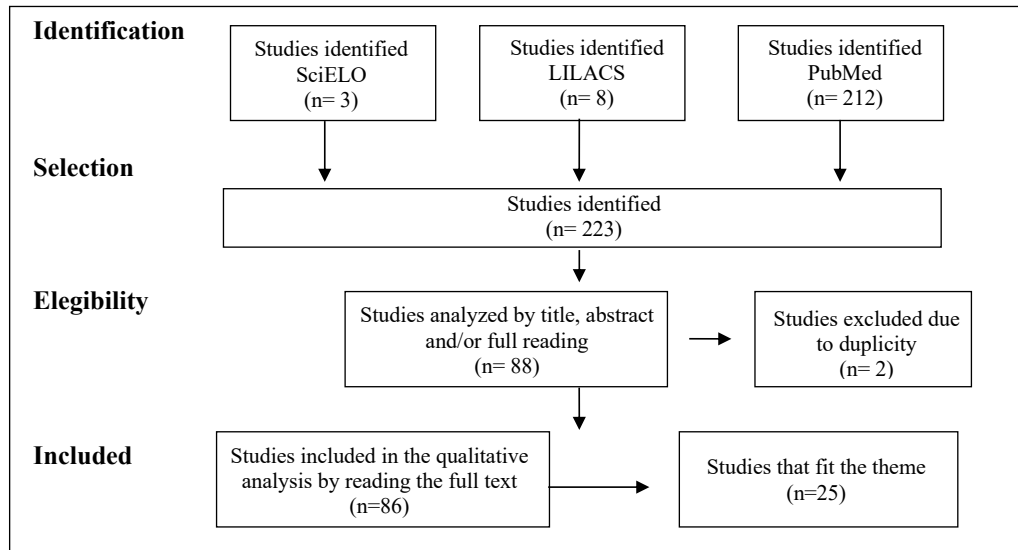
In the second stage, the criteria for inclusion and exclusion of studies were established. The inclusion criteria were scientific articles dealing with the theme, published in Portuguese, English or Spanish, and published in the last 10 years (2009-2018), aiming to obtain the most recent and relevant studies. The exclusion criterion was not to be an original research article. The Descriptors on Health Sciences (DeCS), School Health and Self-Care Services (or School Health Services and Self Care) were consulted, and the Boolean operator “*and*”. It is noteworthy that the descriptor “School Health Services” was used,

since there is no descriptor for the term “School Health”.

The search was performed in the Latin American Health Sciences Literature (LILACS), in the Scientific Electronic Library Online (SciELO) and in Public Medline (PubMed). In the LILACS database, the search was performed using the “Search via Form iAH”, with the search for “words” and not by subject descriptor, since, thus, a larger number of studies was reached. At SciELO, we searched for “All Indexes”. In PubMed, the search occurred for MeSH Terms. The search and analysis of the productions were carried out from January to March 2019.

The searches were performed with the descriptors in English and Portuguese, in order to identify in which language the best results would be obtained. However, the descriptors in English were only used in PubMed, since in the other searches, there was a higher result with descriptors in Portuguese.

A total of 223 studies were identified, of which 86 were selected for reading and analysis because they had previously established inclusion criteria. For this selection process, the recommendations of the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) (Figure 1)⁽⁹⁾.

Figure 1 – Flowchart of study selection for integrative review

Source: Created by the authors.

The third stage consisted of reading the 86 articles selected in full to identify if they answered the research question. After this reading, 25 studies totaled the sample of this integrative review, all from the PubMed database, and were part of the fourth step, which consisted of completing and evaluating the instrument with data from the selected publications. This evaluation was performed by four researchers. To collect data from the articles, an instrument was elaborated with the following information: library/database, authors, title, main theme, study objective, methodology, year of publication,

journal, research location, main results and level of evidence.

The fifth stage consisted of discussion and interpretation of the results, followed by the sixth stage, which presented the evidence found.

Results

The final sample of this review consisted of 25 studies (Chart 1), identifying three main themes: Disease-focused school actions and programs; Methodology of actions in schools; Role of nursing in school self-care.

Chart 1 – Scientific production related to self-care actions in school health from 2009 to 2018 (continued)

| Title of the Article and Year | Objective | Level of Evidence |
|--|--|--------------------------|
| Self-care management of type 1 diabetes has improved in Swedish schools according to children and adolescents. 2017(10) | Evaluate self-care support for children with diabetes at school hours. | III |
| Effectiveness of a school-and community-based academic asthma health education program on use of effective asthma self-care behaviors in older school-age students. 2015(11) | Evaluate the effectiveness of an asthma health education program. | II |
| Effectiveness of a modified open airways curriculum. 2015(12) | Apply a condensed asthma education program and evaluate its effectiveness. | III |

Chart 1 – Scientific production related to self-care actions in school health from 2009 to 2018 (continued)

| Title of the Article and Year | Objective | Level of Evidence |
|--|---|-------------------|
| Training at-risk youth to become diabetes self-management coaches for family members. 2014(13) | Evaluate the impact of a school health program on self-care actions for family members with diabetes. | III |
| The effectiveness of an integrated multicomponent program for adolescent smoking cessation in Taiwan. 2014(14) | Develop and evaluate a smoking cessation program for high school smoking students. | II |
| Evaluation of a pilot national online asthma e-learning program for secondary school students. 2014(15) | Evaluate an on-line pilot program distance for asthmatic students. | III |
| Diabetes management in Swedish schools: a national survey of attitudes of parents, children, and diabetes teams. 2014(16) | Investigate attitudes among children and adolescents with diabetes, their parents and their health care team about diabetes care at school. | III |
| Establishing a model to assess the effects of school support and self-care behaviors on life satisfaction in adolescents with type 1 diabetes in Taiwan. 2013(17) | Build a model that assesses the effects of school support and self-care behaviors on adolescents with type 1 diabetes in Taiwan. | III |
| Process and outcomes of school nurse case management for students with asthma. 2014(18) | Evaluate the impact of the school nurse on health management and the academic impact on schoolchildren with asthma. | III |
| Effects of coping-skills training in low-income urban african-american adolescents with asthma. 2012(19) | Determine the effects of a coping skills training program with African American adolescents with asthma. | II |
| Peer-led education for adolescents with asthma in Jordan: a cluster-randomized controlled trial. 2012(20) | Determine the impact of a health education program on high school asthma students in Jordan. | II |
| Medication use patterns among urban youth participating in school-based asthma education. 2011(21) | Evaluate whether participation in a school-based asthma program improved the use of asthma medication among high school students. | III |
| Improving the mental health, healthy lifestyle choices, and physical health of Hispanic adolescents: a randomized controlled pilot study. 2009(22) | Evaluate the preliminary effectiveness of a behavioral and cognitive education program with adolescents. | II |
| Reducing adolescent use of harmful legal products: intermediate effects of a community prevention intervention. 2009(23) | Assess preventive intervention to reduce the use of legalized harmful substances among students from three rural Alaska communities. | III |
| Effects of a school-based weight maintenance program for Mexican-American children: results at 2 years. 2010(24) | Evaluate the results of a lifestyle-based weight maintenance program with overweight children at a school in Houston, Texas. | II |

Chart 1 – Scientific production related to self-care actions in school health from 2009 to 2018 (conclusion)

| Title of the Article and Year | Objective | Level of Evidence |
|---|---|--------------------------|
| Improving asthma management in the elementary school setting: an education and self-management pilot project. 2018(25) | Evaluate an asthma education and self-assessment program through a partnership between an elementary school and a nursing school. | VI |
| A cluster randomized theory-guided oral hygiene trial in adolescents – A latent growth model. 2017(26) | Test whether interventions guided by the “Precautionary Adoption Process” theory are more effective than conventional dental instruction in changing oral hygiene with adolescents. | II |
| Self-efficacy theory-based intervention in adolescents: a cluster randomized trial-focus on oral self-care practice and oral self-care skills. 2017(27) | Examine the effectiveness of dental education guided by the theory of self-efficacy in improving oral self-care in adolescents. | II |
| Enhancing asthma self-management in rural school-aged children: a randomized controlled trial. 2016(28) | Test the effects of two modes of application of an educational intervention on asthma self-care with school-age children living in rural areas. | III |
| A theory-guided school-based intervention in order to improve adolescents’ oral self-care: a cluster randomized trial. 2016(29) | Evaluate the effectiveness of oral hygiene interventions guided by socio-cognitive theory in adolescents. | II |
| The effectiveness of gain-versus loss-framed health messages in improving oral health in Iranian secondary schools: a cluster-randomized controlled trial. 2014(30) | Examine the effects of handover-based interventions on oral self-care behaviors and health among Iranian adolescents. | II |
| Effect of a school-based oral health education program on use of recommended oral self-care for reducing the risk of caries by children in Nigeria. 2015(31) | Evaluate the effect of a school-based oral health education program on the use of oral self-care measures to reduce caries. | II |
| Pediatric obesity and asthma quality of life. 2013(32) | Report the effects of childhood obesity and asthma on quality of life and coping and control in low-income African-American adolescents with asthma. | II |
| Increasing availability to and ascertaining value of asthma action plans in schools through use of technology and community collaboration. 2013(33) | Evaluate school nurses’ responses to the Electronic Asthma Action Plan regarding the project’s efficiency, self-efficacy and impact on asthma self-care. | VI |
| An intervention to increase high school students’ compliance with carrying auto-injectable epinephrine: a MASNRN study. 2012(34) | Test the effectiveness of school nurse interventions for the availability of self-injecting epinephrine. | II |

Source: Created by the authors.

Most of the publications (24%) were from 2014. Of the 25 studies, the journals with the highest number of publications were the

International Journal of Pediatric Dentistry with 3 studies (12%), followed by The Journal of School Nursing, Journal of School Health and The

Journal of Nursing Research with 2 studies each (8%). Regarding the countries of origin of the studies, the ones that had the most publications were the United States of America (USA), with 14 publications (56%); followed by China, Sweden and Lithuania, with 2 publications each (8%); and Nigeria, Iran, Canada, Jordan and Ireland, with 1 publication each (4%).

The studies had different focuses for their actions in schools; however, asthma stands out as the theme of 11 studies, totaling 44%, followed by oral health, with 5 studies (20%) and diabetes, with 4 studies (16%).

The methodological quality of the studies was concentrated on Evidence Levels⁽³⁵⁾ II (52% of studies), III (40% of studies) and VI (8% of studies).

Discussion

Reading the 25 studies resulted in the identification of three themes: Disease-focused school actions and programs; Methodology of actions in schools; and Role of nursing in school self-care, which will be presented below.

Disease-focused school actions and programs

In the analysis of the studies, it was found that most focused on self-care with some specific pathology. Of the 25 studies,^{11(11-12,15,18-21,25,28,32-33)} addressed asthmatic students - 9 of them were in the USA^(11-12,18-19,21,25,28,32-33) - and 10 evaluated the effectiveness of different programs at school for the control of this disease^(11-12,15,19-21,25,28,32-33).

The study in Texas (USA) addressed students in transition from elementary to high school, in which a program was implemented – Staying Healthy-Asthma Responsible and Prepared (SHARP) – to promote asthma self-care. After the program, there was improvement in the management of asthma episodes, as well as improved behaviors for health promotion⁽¹¹⁾.

Another study used the program The Open Airways, in a condensed manner, in order to verify its effectiveness compared to the original

program - instead of 6 40-minute sessions, 20-minute sessions were performed. Children aged 8-12 years were included, and the program, as modified as well as the original version, was found to be effective in improving knowledge of how to manage triggers and asthma symptoms, as well as improving the technique of inhalation⁽¹²⁾.

The program Teen Educational Asthma Management (TEAM) has been used in two common author searches^(19,32). This program includes three main steps: asthma education, coping skills training, and reinforcement nursing visits⁽³²⁾. One of these studies was conducted with 13 to 19 year olds from an urban school. Asthma-driven absence decreased after program implementation. In addition, there was greater knowledge about self-care with asthma⁽¹⁹⁾. The second study, which used TEAM, to assess the impact on quality of life of adolescents with asthma and obesity, concluded that obesity, despite negatively affecting quality of life, did not interfere with asthma coping and control⁽³²⁾.

The Program Triple A was chosen in the study conducted in Jordan with adolescent students with asthma. For the recruitment of students, the self-administered questionnaire International Study of Childhood Asthma and Allergy (ISAAC) was used, validated instrument to evaluate asthma. The authors concluded that the health of these asthmatics was significantly improved after the intervention⁽²⁰⁾. Another study, which also used ISAAC to recruit high school students from urban schools, implemented the program Kickin' Asthma in order to improve the use of asthma drugs and, in fact, found significant improvements in the use of medication⁽²¹⁾.

In addition, other studies involved asthma as their main theme, such as the on-line program with students aged 15-16⁽¹⁵⁾, and two studies^(25,33) based on – Asthma Action Plans (AAP) – which consist of self-care plans for asthma control and prevention. In one of them, developed with elementary school students, nursing students performed educational activities to identify the AAP and found the students' knowledge increase after the activities⁽²⁵⁾. Other research has developed an electronic portal to

facilitate the transfer of AAP to school. School nurses evaluated the portal and considered it an ally in school health care, which would provide increased communication between health professionals, family members and school⁽³³⁾.

All studies involved asthma, with the justification that it caused school failure and impaired school performance. Thus, it could be inferred that these different types of programs consisted of effective alternatives for working with health education with asthmatics at school and could impact on the improvement of self-care and reduction of school absences due to crises.

In addition to asthma, other studies have implemented activities to work with students on diabetes. A study conducted in San Francisco (USA) stood out, as it sought to train healthy adolescents to be self-care coaches for diabetic family members, thus encouraging self-care and the autonomy of others⁽¹³⁾. However, the method of this training was not detailed, leaving the question about the coherence of these actions in relation to the practices already performed by these people in the family. Thus, the importance of activities consistent with the socio-cultural reality of the students is emphasized, so that they become effective.

In addition to this study, three others also focused on diabetes^(10,16-17). Two investigated the actions of diabetic students and their parents on diabetes care at school^(10,16), demonstrating that there are deficiencies in the support of school self-care management. Another, conducted in Taiwan, sought to establish a model to assess the effects of school support and self-care behaviors on life satisfaction of type 1 diabetic adolescents⁽¹⁷⁾. The program consisted of applying questionnaires, self-care scales, and glucose tests to provide diabetes management and school support⁽¹⁷⁾.

Three studies focused on overweight⁽²⁴⁾, smoking⁽¹⁴⁾ and oral health⁽³⁰⁾. The study of 10- to 14-year-olds in a Texas school evaluated a weight-maintenance program. Follow-up was performed for two years and, at the end, there was an improvement not only in weight, with

a decrease in Body Mass Index (BMI), but also a reduction in cholesterol and triglycerides⁽²⁴⁾.

A program to develop smoking cessation for high school smoking students was conducted in Taiwan. At the end of the survey, a urine test performed by participants to confirm abstinence demonstrated the statistical effectiveness of the program⁽¹⁴⁾.

Related to oral health, research evaluated an intervention with high school students, by delivering two types of informational pamphlets: one with loss framing, which highlighted the risks of not taking care of oral health, and another, with gain, with benefit exposure. After assessment based on the opinion and attitudes reported by the students, the authors found that the risk-sensitive leaflets were most effective in encouraging oral health self-care⁽³⁰⁾.

All the programs and activities put into practice in these researches were considered effective for the students and could be a possibility of replication in different places. However, it is clear that these actions are predominantly directed to the disease and not to health. Its relevance is unquestionable, however, what we want to emphasize is that most of the studies included in this integrative review, despite seeking self-care actions in health, resulted in studies aimed at self-care before an established pathology, ignoring the health promotion, focusing only on the prevention of diseases and illnesses.

Most of these studies justified that the choice was due to the absence of children/adolescents in the school associated with the pathology, with an impact on the teaching-learning process.

A study conducted in a public school in Salvador, Bahia, Brazil, identified that there are different social and health aspects related to school failure, such as sexual initiation in adolescence, teenage pregnancy, experience of psychological violence and the need to reconcile school with work to help support the family⁽³⁶⁾.

In addition to these factors, the pedagogical practice of health actions at school also needs to be coherent, so that learning becomes meaningful for the student. This methodological aspect of the activities will be discussed below.

Methodology of actions in schools

The studies approached the students in different ways regarding the learning methodology.

Thus, some stood out for detailing the resources used in the development of these activities, such as discussions, stories, games, leaflets and videos^(12,19,28). However, in most studies this clarification was absent.

The program The Open Airways, which consists of six 40-minute educational sessions, it was adapted to one study with 20-minute sessions. It has been applied at a school with children ages 8 to 11 for an interactive approach to asthma based on group discussions, games, theaters, posters and leaflets with playful activities. In order to involve the student in the learning process, this program can be carried out at school by any trained person: nurse, school staff, family members and community volunteers⁽¹²⁾.

A similar structure was developed in the study using Kickin' Asthma, described by the authors as an adaptation of The Open Airways at the cognitive level of adolescents. In the Kickin' Asthma, four 50-minute sessions were conducted by nurses through activities that included games, videos and theaters to promote asthma education. It is noteworthy that the first session consisted of knowing how each student faced asthma, frequency of symptoms, use of health services, self-care actions and medications used⁽²¹⁾.

Also focused on asthma, the Asthma Plan for Kids program was put into practice with rural students, with 16 sessions of 15 minutes, for 5 weeks, through games, leaflets and practical activities, interspersed with brief didactic presentations. The authors found that the students who participated in the activities had a decrease in hospitalizations and medical appointments due to the reduction of asthma severity⁽²⁸⁾.

The playful activities are positive, as they enable the integral development of the student, in the social, physical, intellectual, cultural and

emotional spheres. Through these activities, students form concepts, relate ideas, make logical relationships, develop oral and body expression, provide integration, and build their own knowledge⁽³⁷⁾, including health issues.

On the other hand, it must be considered that the use of playful methods does not guarantee a change in traditional teaching paradigms, which disregard the knowledge and sociocultural context of each school. An example of this could be identified in the research that carried out educational activities on asthma at school, in which their authors, despite using playful materials such as educational games and conversation circles, stated that only at the end of the study did they realize the gap because they did not have cultural values taken into account during activities⁽¹⁹⁾.

Cultural values are relevant because children and adolescents carry their experiences, life stories, as well as their previous knowledge to the school, directly influenced by their socio-cultural contexts, which need to be valued and articulated, so that teaching/learning occurs effectively⁽³⁸⁾.

In addition to the studies already mentioned, another has invested in different methods such as the internet⁽¹⁵⁾. There has been a growing rapprochement between teaching and the internet, given the close link that exists today, especially among children and adolescents, with computers, tablets and cell phones.

A research in Ireland has put in place an on-line program to support asthmatic adolescent schoolers. It has been shown to be a positive experience as it has increased knowledge of the disease⁽¹⁵⁾. The authors also pointed out that information and communication technology could allow adolescents to become healthier. On the other hand, studies have shown that the Internet, although well accepted by adolescents, even when it comes to health, is less used by them, because they fear that many sites are unreliable. Therefore, programs such as the one implemented in the study would be a secure means of providing information on-line on

health and provide greater autonomy for these adolescents⁽¹⁵⁾.

Another relevant aspect observed was studies that included not only students in their activities, but also family members, teachers and community^(11,25,31). An example of this was the study conducted to evaluate a school asthma program⁽¹¹⁾. Schoolchildren conducted activities supported by a book designed on the basis of the SHARP program, designed to be colorful, fun and educational. Family members, teachers and the community were invited to participate in an “asthma health fair” program to share important information for the care of asthmatic family members. After the activities, it was found that asthma knowledge, management, acceptance and control improved⁽¹¹⁾.

A research also referred to the inclusion of people from the community, besides school children. In the asthma education program, which aimed to identify AAP⁽²⁵⁾, the educational sessions conducted by nursing students included elementary school students, teachers and also family members, to provide continuity of activities in the school space⁽²⁵⁾.

An oral health education program, developed at school, began with educational activities with family members and also training with teachers to integrate the curriculum with educational sessions, and only later involved students⁽³¹⁾.

A research conducted with adolescents with severe food allergies at risk of death from anaphylactic event provided guidance on the use of injectable epinephrine through leaflets and videos, and periodically checked the availability of the drug to school children. The authors have described that periodically checking for epinephrine availability does not increase the likelihood that students will have the available drug⁽³⁴⁾. In this case, the sociocultural context, which could influence the decision and the possibilities of access to the medication, was ignored. This observance could possibly help in understanding different realities and thus stimulate self-care.

Three oral health studies conducted individual or paired activities with adolescent students^(26-27,29).

One aimed to evaluate the effectiveness of individual interventions based on the Precaution Adoption Process Model (PAPM) as opposed to traditional dental guidelines. This model helped in understanding how the adolescent promoted a behavior change and found increased oral hygiene⁽²⁶⁾.

The other two studies aimed to evaluate different interventions with adolescent students, aiming at oral self-care. One of them performed peer interventions, guided by socio-cognitive theory, with the participation of a dentist⁽²⁹⁾. The other research had an individual approach, guided by the theory of self-efficacy, was conducted by a dentist, who began by asking the student to demonstrate oral self-care. Based on this report, it provided feedback, showing deficiencies in its performance⁽²⁷⁾. Both surveys evaluated outcomes after 6 and 12 months of interventions, and both concluded that oral self-care improved after 6 months and discontinued care after 12 months^(27,29).

Other research studies, when detailed, reported using traditional asthma methodologies⁽¹¹⁾, oral health⁽³⁰⁾. One of them, aimed at reducing the use of legalized harmful substances, only read materials for students⁽²³⁾. Other studies did not detail how activities were developed^(19-22,25).

It was found that the use of school space for the realization and/or encouragement of self-care has focused in different countries, specifically on disease, and not on health, predominantly through traditional pedagogical practices. However, those that included playful and creative activities did not detail whether the sociocultural contexts of the students were taken into account for the performance of such activities, which makes it questionable whether, in fact, there were changes in approach that would no longer centralize knowledge in the professional field, be it education or health.

It is not enough to approach health self-care issues in the school space, through specific activities, decontextualized from the reality of children and adolescents, which do not promote a critical and reflective look of the students nor encourage a change in attitudes in the long term.

There are numerous shortcomings in the process of producing health at school, which often turn out to be ineffective actions. Health professionals and/or educators often blame the population for not achieving health improvement⁽³⁹⁾; however, they do not realize that the failure is often not in the population, but in the way to try to promote health in school. As a result, both the school population and professionals are now discrediting the power of this activity and possibly becoming less and less involved in these actions.

The school, as an institution, needs to face its social duty not only related to health issues, but also to form citizens capable of articulating knowledge critically, and using this knowledge to bring about individual and collective change.

Role of nursing in school self-care

Although the role of nursing was not the focus of the review, during the analysis of the studies it was possible to observe the presence of nurses in the research, the so-called “school nurses”^(12,15,19,28,33-34). Some studies suggest that this professional should be more present in this context, as they understand that they would contribute significantly to the self-care process in health^(15,19,33). They further argue that public health nurses have a major responsibility in providing services⁽¹⁵⁾.

On the grounds that, in the review developed, many studies have examined the impact of school-based programs on students with asthma but do not provide adequate design of program components, which makes replication difficult, research in Chicago/Illinois (USA) reviewed the school nurse’s case management process for asthma delivery of specific interventions⁽¹⁹⁾. The study demonstrated the impact of managing these professionals on the health of children with chronic diseases, such as asthma, to make them more autonomous in managing their own symptoms.

In the Minnesota study, the authors noted that recognizing the school nurse as a member of the health team and the school as a place

for the exchange of health information would result in the provision of essential care at the school, reducing number of emergency and absenteeism visits due to illness, with consequent improvement in learning outcomes⁽³³⁾.

It is understood the relevance of the presence of nurses in schools, but their performance should be based on health actions that go beyond the biologicist conception, so that, in this way, it can generate impacts on the health of the student, especially with regard to self-care in children. However, the great demand for nursing work is considered, especially in places where there is no specific nurse for the school, as well as the impact that the training of this professional can cause when guided by the biomedical model.

A limitation of this research is the use of the descriptor “School Health Services”, defined in PubMed and Descriptors in Health Sciences (DeCS) as preventive health services provided to students, which may have led to the identification of studies that approached, mostly, the self-care in school health to biologicist questions, leaving to include researches that approached school health in a broad way, contextualized in the sociocultural reality.

Although no included study has been conducted in Brazil, it is considered that this integrative review contributes, by stimulating critical reflection by health and nursing professionals, about the experiences exposed in different countries. Given the current panorama of self-care in health at school, it is necessary to carry out activities that promote self-care in health at school, through actions that consider the school in its socio-cultural context.

Conclusion

Health education actions at school are historically limited regarding the theme and teaching methodology. For this reason, the present integrative review provides an overview of self-care health actions currently carried out in schools, making it possible to identify gaps in this process in different countries and demonstrating that the problem is global.

Health self-care actions at school are still linked to pathologies, especially those that cause students to be absent from school and, consequently, interfere with the teaching-learning process. This perspective is important, and this research has a positive impact, but it is believed that it is necessary to go beyond the focus on the disease to produce health effectively in school.

Besides the theme worked in schools, another point that stood out was the way these actions were performed. Different strategies were identified in the studies, such as on-line programs, games, stories, leaflets, videos and discussions, however the sociocultural issue was not taken into consideration, which can impact the effectiveness of the actions, especially in the long run.

Nursing professionals play a central role in this context, due to their proximity to the school context, having the potential to effectively encourage self-care actions in health.

The absence of Brazilian productions in this study indicates the need to increase the scientific dissemination of research that places nurses as protagonists in health promotion in the country's schools, especially with regard to self-care. Thus, the present study provides contributions to these and other health professionals, encouraging them to perform effective actions in the school environment.

Collaborations:

1 – conception, design, analysis and interpretation of data: Marjoriê da Costa Mendieta, Eliana Buss, Natália Rosiely Costa Vargas and Silvana Ceolin;

2 – writing of the article and relevant critical review of the intellectual content: Marjoriê da Costa Mendieta, Eliana Buss, Natália Rosiely Costa Vargas, Silvana Ceolin, Kamila Dias Gonçalves and Rita Maria Heck;

3 – final approval of the version to be published: Marjoriê da Costa Mendieta, Kamila Dias Gonçalves and Rita Maria Heck.

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Received: July 29, 2019

Approved: October 18, 2019

Published: December 19, 2019



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