

RESEARCH ARTICLE

Dealing with adolescents' recurrent pain problems in school health care—Swedish school nurses' view

Marie Golsäter^{1,2}  | Stefan Nilsson^{3,4}  | Helena Wigert^{3,4,5} 

¹Child Health Care and Futurum, Region Jönköping County, Barnhälsövarlden, Jönköping, Sweden

²CHILD Research Group, School of Health and Welfare, Jönköping University, Jönköping, Sweden

³Institute of Health and Care Sciences, The Sahlgrenska Academy at University of Gothenburg, Gothenburg, Sweden

⁴Centre for Person-Centred care (GPCC), Institute of Health and Care Sciences, The Sahlgrenska Academy at University of Gothenburg, Gothenburg, Sweden

⁵Division of Neonatology, Sahlgrenska University Hospital, Gothenburg, Sweden

Correspondence

Marie Golsäter, School of Health and Welfare, Jönköping University, Box 1026, SE 551 11 Jönköping, Sweden.
Email: marie.golsater@ju.se

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Abstract

Aim: To explore school nurses' strategies for supporting adolescents with recurrent pain.

Design: An explorative inductive qualitative design.

Method: Twenty-one Swedish school nurses were interviewed, and the interviews were subjected to content analysis.

Results: The findings show that the nurses are aware that recurrent pain problems are common among the adolescents. In their attempt to support these adolescents, the nurses describe how they are striving in attempts to acquire an understanding of the adolescents' situation, to understand the cause of the pain problem and to devise strategies that can be used to help the adolescents handle the situation.

KEYWORDS

adolescents, content analysis, nursing, recurrent pain, school nurses

1 | INTRODUCTION

Pain symptoms are frequently reported over the adolescent period (Swain et al., 2014). A widely accepted definition of recurrent pain is a pain described as persisting for 3 months or longer. A study from the United States showed that about 20%–35% of children and adolescents are affected by recurrent pain (Friedrichsdorf et al., 2016). Recurrent pain problems are also a common health problem among children and adolescents in Sweden (Holm, Ljungman, Åsenlöf, & Söderlund, 2013). Recurrent pain may persist into adulthood; a study has shown that almost 17% of the patients reported a history of recurrent pain in childhood and nearly 80% of these patients stated

that the pain in childhood had persisted into adulthood (Hassett et al., 2013). In a Swedish study, stomach pain was described as a common problem, with 22% of the girls and 9% of the boys reporting having stomach pain more than once a week (Public Health Agency of Sweden, 2014). Also having a headache more than once a week was described as a common problem, reported by 29% of 15-year-old girls and 13% of the boys in this age group. Torres-Ferrus et al. (2019) showed that headaches are a common pain problem, having an impact on adolescents' quality of life and to some extent affected their lifestyle habits. Lifestyle habits are stated to play an important role in promoting health and development in order to reach the educational goal of the Swedish school health services.

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2 | BACKGROUND

The Swedish school health services are organized as a school-based health service with school nurses based at the school. According to the health monitoring programme, the school nurse invites children and adolescents for health visits including a health dialogue every 3 years. The children and adolescents also have the opportunity to visit the school nurse based on their own problems and needs, such as pain-related problems (Socialstyrelsen, 2014). School nurses have described everyday pain generally as a three-part phenomenon, having physical, social and psychosocial dimensions. Further, the school nurses stated that everyday pain in adolescents incorporates problematic relationships and distressing experiences, high expectations and unhealthy living habits (Høie et al., 2017). However, even though the nurses understood that recurrent pain has different reasons, they stated the importance of ruling out whether there is a medical condition causing the pain. To further be able to capture the cause of adolescents' pain problems, the nurses in Høie et al. (2017), Rosvall and Nilsson (2016) and Nilsson, Rosvall, and Jonsson (2016) identified the importance of creating a trustful relationship with the adolescents. The need for a trustful relationship with the school nurse has also been described by adolescents with recurrent pain problems as an important factor (Nilsson et al., 2016; Rosvall & Nilsson, 2016). In a study by Golsäter Sidenvall Lingfors and Enskar (2010), adolescents describe health visits according to the health monitoring programme as an opportunity to build a trustful relationship with trust the school nurse. Further, to capture an overall picture of the adolescents' health and life situation incorporating pain problems, a health questionnaire has been described by both adolescents and school nurses as a facilitating component for shedding light on the adolescent's own description of the situation (Golsäter, Sidenvall, Lingfors, & Enskär, 2011). Adolescents describe the need for a person-centred approach in meetings with the school nurse to be able to make use of the nurse's professional support (Golsäter et al., 2010). To be able to further promote health for adolescents with recurrent pain, there is a need to explore school nurses' strategies when caring for adolescents with recurrent pain problems in school.

2.1 | Aim

The aim of this study was to explore school nurses' strategies for supporting adolescents with recurrent pain.

3 | METHOD

3.1 | Study design

To be able to explore school nurses' strategies, an explorative inductive qualitative design was used, and interviews were conducted with school nurses. The interviews were analysed according to Elo and Kyngäs' (2008) method of qualitative content analysis.

3.2 | Participants

Information about a forthcoming research project concerning how to support adolescents with recurrent pain problems in school health care was given to school nurses from south-western Sweden. The school nurses received information through information letters and oral information in conferences and appointed meetings in the different municipalities. Twenty-one school nurses were recruited for the interviews, based on having expressed interest in taking part in further studies to develop methods aiming to support adolescents with recurrent pain problems. They were all female, and 18 were registered specialist nurses, two were registered nurses, and one was a midwife. The ages of the participants ranged from 28–64 years (mean = 49.4, median = 50), and their work experience as a nurse ranged from 3–43 years (mean = 23.7, median = 26) and as a school nurse from 6 months–26 years (mean = 10.2, median = 12). Thirteen school nurses worked in secondary schools (adolescents 12–16 years; seven in private and six in public schools). Eight worked in upper secondary schools (adolescents 16–19 years; three in private and five in public schools). Fourteen worked full-time, caring for 100–1,000 adolescents (mean = 489, median = 490); seven work part-time (70%–85%), caring for 270–550 adolescents (mean = 387, median = 381). The participating school nurses were working in both public and private schools and have long experience of working as a school nurse. They have comprehensive knowledge of encountering adolescents with different health issues such as recurrent pain problems, and this could be understood as a purposeful sampling (Polit & Beck, 2016).

3.3 | Data collection

The interviewer contacted the participants by telephone, and time and place for the interview were decided. The interviews were conducted between September 2016–December 2017, were recorded digitally and lasted 23–65 min (mean = 42, median = 43). The interviews were conducted in Swedish by the last author, who had long experiences from conducting research interviews. All interviews were performed in a room at the school nurse's workplace, except for two which were performed in a room at a hospital. The research group designed an interview guide based on earlier research. The interview guide started with one main question: "How do you experience supporting adolescents with recurrent pain?" The participants were encouraged to speak openly about their experiences, and follow-up questions were used to strengthen the researcher's understanding of the narratives.

3.4 | Data analysis

The interviews were transcribed verbatim in Swedish, and qualitative inductive content analysis was conducted following the procedure described by Elo and Kyngäs (2008). The interview texts were read through separately by two of the authors (MG and HW) to get an overall understanding of their content. Then, meaningful units

TABLE 1 Overview of the findings based on subcategories, generic categories and main category

Main category	Striving in attempts to understand the causes and provide support		
Generic category	Trying to acquire understanding of the adolescent's situation	Trying to define the adolescent's situation	Trying to support the adolescent's capacity in managing their situation
Subcategory	Learning about the adolescent's situation from him/herself	Determining whether there are medical causes for the pain	Providing advice
	Learning about the adolescent's situation from others	Exploring lifestyle habits and life situation	Trying to create opportunity for reflection

were selected based on which ones reflected the purpose of the study. These units were then coded and put in coding sheets. The coding sheets were processed by all three authors and were also discussed in the research group to ensure trustworthiness. In the next step, generic categories and subcategories were created based on the similarities and differences among the content. In the last step of the analysis, the main category emerged: striving in attempts to understand the causes and provide support (see Table 1). Swedish text was used for the content analysis; following this, the resulting codes, categories and subcategories were translated into English by a professional language editor for publication purposes. The three authors had different experiences both as school nurses and as paediatric nurses working with adolescents with pain problems which were discussed through the analysis process. The authors' experiences facilitated in understanding the nurses' descriptions but also need to be reflected on as this preunderstanding might affect the findings. To further strengthen the trustworthiness of the analysis, the authors had an ongoing discussion throughout the different steps of the analysis, and all have long experience of working with content analysis (Elo et al., 2014).

3.5 | Ethics

Ethical approval was obtained from the Regional Research Ethics Committee in Gothenburg, Sweden (Dnr 172-16). The school nurses were given oral and written information about the study, gave their written informed consent and was informed about guaranteed confidentiality and their right to discontinue the interview at any time without having to specify the reason.

4 | FINDINGS

The findings in Table 1 show subcategories and generic categories and further the main category "Striving to understand the cause and provide support" showing the school nurses' strategies for supporting adolescents with recurrent pain.

4.1 | Striving in attempts to understand the causes and provide support

School nurses are aware that recurrent pain problems are common among the adolescents at their schools and describe dissatisfaction

at not always knowing who these adolescents are. The nurses describe situations of adolescents knocking on their door and not having the possibility to take the time to talk to them. They describe it as unsatisfactory and hard to handle when they do not have time to meet adolescents as often as they wish and might even miss adolescents with recurrent pain problems completely. The nurses largely perceive themselves as having competence to care for adolescents with recurrent pain but need organization and methods that are possible to use in the framework of the school health care. They describe an absence of routines/methods as a main concern when trying to care for adolescents with recurrent pain.

4.2 | Trying to acquire understanding of the adolescent's situation

According to the nurses, the risk of not being aware of adolescents with recurrent pain problems is mainly created by a lack of opportunities to meet with the adolescents and a lack of strategies for follow-up. They describe how they can become aware of adolescents with recurrent pain in many ways: by contact with the adolescent him/herself, with other professionals at school, with other adolescents at the school or with the adolescent's parents. Further, they describe a feeling of uncertainty regarding the fact that there are most likely many adolescents with recurrent pain problems affecting their everyday life about whom they as school nurses are not aware of.

4.2.1 | Learning about the adolescent's situation from him/herself

One way the school nurses get into contact with adolescents with recurrent pain problems is through the encounter at health visits according to the national health monitoring programme. In the health dialogue, which is one part of the health visit, the adolescent has the possibility to describe his/her situation through both a health questionnaire and their conversation with the school nurse. The nurses describe that this encounter offers a possibility to get an overall picture of the adolescent's situation:

In the health dialogues, then, as you meet these students and you can understand that there are things when you talk a little more in-depth about it and when

they've gotten a little more trust in who I am, they dare to talk and open themselves in another way.

(Interview 11)

Further, adolescents with recurrent pain problems sometimes contact the school nurse when they have pain problems during the school day. According to the school nurses, the adolescents mostly report headaches or stomach aches. In some cases, the adolescent just asks for a painkiller. The nurses interpret adolescents who tend to visit the school nurse with pain-related problems more frequently as having recurrent pain:

And this happens all the time that they come, but that's when you get to catch up with them. You often notice the ones who come often.

(Interview 17)

For these adolescents, the school nurses try to find a way to invite them to a scheduled visit to map their pain problem more truthfully.

When there is no opportunity to invite the adolescent to a scheduled visit, this may result in not obtaining an understanding of his or her situation, according to the nurses.

4.2.2 | Learning about the adolescent's situation from others

Signals from other professionals at school are one way the school nurses get information about adolescents with recurrent pain problems. For example, most schools have a school absenteeism programme and the teachers or counsellors may pay attention to the school nurse when an adolescent has a high number of absences from school. Recurrent pain problems are described as a common occurrence affecting the adolescent, leading to school absences:

From the school health team you can learn that there's a lot of school absence, so you get to know about it.

(Interview 19)

Also, teachers who encounter adolescents describing pain problems or ill health notify the school of this. Further, friends of adolescents with recurrent pain problems are described as one party who can appeal to the school nurse to contact the adolescents, as are parents of adolescents with recurrent pain problems.

4.3 | Trying to define the adolescent's situation

The school nurses describe that, when encountering an adolescent with recurrent pain problems, they use different strategies to try to get an overview of the adolescent's situation by mapping the possible causes of the pain. Mapping the situation related to the adolescent's pain problems incorporates medical as well as lifestyle-related issues and trying to create an atmosphere that encourages the adolescent to share his or her narratives in a trustful relationship.

4.3.1 | Determining whether there are medical causes for the pain

In one of the first encounters with adolescents with recurrent pain problems, the school nurse often tries to exclude underlying medical causes for the pain. This is done by taking a medical history, performing visual assessment and using diary notes to help the adolescent describe the pain's pattern and intensity. However, the nurses largely describe a lack of structure and methods, such as pain measurement scales for taking the medical history in a reliable way. The nurses also describe a lack of methods to identify whether the pain has psychosomatic origin. Based on their medical knowledge, one main strategy used is to rule out medical causes for the pain, by referral to a healthcare centre or other instance with access to medical assessment by a physician:

So, to a certain limit, you have to pass it on to a doctor; there might be a need for blood sampling or something, so there's not something I miss in any way. Not only that it's stress or psychosomatic. I feel it's important to exclude medical reasons.

(Interview 6)

The nurses describe that assessing whether pain problems have a medical or psychosomatic origin is a big challenge when encountering adolescents with recurrent pain problems.

4.3.2 | Exploring lifestyle habits and life situation

The school nurses describe trying to map the adolescents' lifestyle habits, mainly involving food, physical activity and sleep patterns, as a strategy for finding any underlying lifestyle-related factors that may be causing the pain problem. The nurses describe lifestyle-related factors as one of the aspects they first look into when meeting with adolescents with pain-related problems. Giving the adolescent access to something to eat, for example breakfast or an earlier lunch at school, is described as one way to determine whether the pain was related to insufficient nutritional intake. The nurses describe that, by going through different lifestyle-related factors such as physical activity or sleep habits, they tried to help the adolescent capture what was causing the pain:

Be a person who might give tips and advice and start asking about this with sleep and food and things like that and how things are with them.

(Interview 1)

By asking questions and exploring how adolescents perceive their situation, the school nurses try to get an overall understanding of their psychosocial situation and possible issues causing pain problems. Problems related to the school as well as home situation are described by the nurses as possible outcomes of these conversations. Further, they describe trying to collaborate with other professionals

at school to deepen their understanding of the adolescents' situation, for example looking at the frequency of school absences and relations with friends. Being part of the school health team along with the principal, teachers, counsellors and special education teachers is also described as offering opportunities to learn more about the adolescents' situation. Furthermore, contact with parents is described as another way to form an overall picture of the adolescent's psychosocial situation to further determine any underlying causes of the pain problems.

4.4 | Trying to support the adolescent's capacity in managing their situation

The school nurses describe trying to support the adolescents in dealing with the pain problem in both the short and the long term. They describe trying to find alternatives that might help the adolescents figure out how to handle the pain. In the short term, the nurses largely provide the adolescents with advice based on the nurses' professional knowledge. In the long term, they try help the adolescent reflect on his or her own situation and on what might be affecting it. In a trustful relationship, according to the nurses, a mutual understanding can emerge where the adolescent can receive support from the nurse.

A lack of knowledge of how to encounter adolescents with recurrent pain problems is described as an obstacle to achieving this relationship. In an overall perspective, the nurses largely describe a lack of strategies and structures for working in a long-term perspective and can instead only work in a short-term perspective.

4.4.1 | Providing advice

The nurses describe actions where they give adolescents advice aimed at affecting the pain problem in different ways. The advice can be either short term, for example giving them a painkiller and/or instruction to go eat something, or more long term, for example telling them to try changing their sleep habits. Lifestyle habits such as food intake, physical activity and sleep are described as common topics for advice related to pain.

Offering advice concerning structure for their school work to help adolescents with recurrent pain problems is also described as one way to support them in handling their school situation. In situations where stress and worry in the school situation were assumed to be causing the pain problem, the school nurse collaborated with other professionals at the school to arrange the school situation in the best possible way:

For one girl we've worked a lot with adaptation to schedule and adaptation to the test and that she should own her situation. If she feels bad, she goes home or stays here and rests.

(Interview 10)

Giving advice about relaxation, and in some cases also giving instructions for it, is also described as a strategy for supporting the adolescent in managing the situation with recurrent pain.

4.4.2 | Creating opportunity for reflection

The nurses describe that being available for the adolescent through follow-up meetings helps them create opportunities for reflection and discussion with the adolescent about how to reduce the pain problems. In these encounters, they can also determine the ways where the nurse can support the adolescent. Trying to create an atmosphere where the adolescent can experience trust and security is described by the nurses as a prerequisite for gaining access to the adolescent's own picture of his or her situation. The nurses describe that, in a trustful relationship, they can help adolescents reflect on how different aspects of their lifestyle and life situation can have an impact on the pain problem:

Thus, during the conversation, try to make them aware that it doesn't have to be like this.

That there are things that can be done about it, so to speak and then discuss why...or how you could do such things and what could be suitable for them to do.

(Interview 12)

Using images as a way to open up for a discussion about what is affecting the adolescents' pain situation is described as one way to create reflection, but the nurses largely lack both structures, as, for example, enough time for scheduled visits and material and methods for achieving this, that is easy to use in school health care. Working with motivational interviewing techniques, especially when the pain problem was likely caused by lifestyle habits, was also one way to encourage reflection and support the adolescent in handling the situation.

5 | DISCUSSION

The aim of this study was to explore school nurses' strategies for supporting adolescents with recurrent pain. The findings show that the nurses are aware that recurrent pain problems are common among the adolescents but experience a lack of structure and methods to support them. In their attempt to support these adolescents, the nurses describe that they are striving to acquire an understanding of the adolescents' situation, to understand the cause of the pain problem and to devise strategies that can be used to help the adolescents handle the situation. As a prerequisite, the need to establish a trustful relationship with the adolescent is highlighted. These findings could be understood as an attempt to work in line with a person-centred perspective as described by Ekman et al. (2011) based on the core concepts of listening to the narratives, establishing a partnership and a jointly agreed-on health plan.

The nurses express feeling that they might miss adolescents suffering from recurrent pain problems due to a lack of routine for identifying these adolescents. The health dialogues, according to the national health monitoring programme, were mentioned as one important occasion for coming into contact with adolescents and a

chance to listen to their narratives in line with a person-centred approach (Ekman et al., 2011). These results are in line with Hilli and Wasshede (2017), describing school nurses' work when caring for adolescents with mental health problems.

According to the nurses, one of their first assignments when encountering an adolescent with recurrent pain problems was to rule out the possibility that the pain was caused by a medical condition. Therefore, a referral was often made for a medical examination to determine whether the pain had a medical origin. This approach is in line with Norwegian school nurse's descriptions in Høie et al. (2017). Adolescents with recurrent pain is a common experience for a school nurse, and as the nurses both in the present study and in Høie et al. (2017) describe, the pain can have different reasons, such as problems in the school situation or lifestyle issues, but they as nurses are trained to always bear in mind the medical origin. It is described as difficult to not make everything into a medical problem while on the other hand not missing medical conditions in need of medical care. By referring the adolescent for a health examination by a physician, the nurses in the present study try to avoid missing medical conditions. However, they describe this as a challenging task since at the same they know that recurrent pain problems to a great extent can be caused by stress and psychosocial conditions often related to the school situation. For example, adolescents in Rosvall and Nilsson (2016) describe how the organization at school, with different tests and teachers unable to modify the pedagogy to the adolescent's individual needs, was stressful and could thus cause and uphold recurrent pain problems. Hjern, Alfven, and Östberg (2008) also reported a higher frequency of recurrent pain in adolescents experiencing a stressful school situation. The nurses describe discussing the school situation when trying to explore possible causes for the adolescents' pain problems. This balancing act between knowing that recurrent pain problems among adolescents are largely caused by psychosocial conditions and on the other hand having an obligation to take into account medical issues is a challenging task for school nurses. Further, it entails a risk of shifting focus from the adolescent's narrative to the nurse's medical perspective. This situation could hinder the nurses from listening to the adolescents' own narratives and thereby not understand factors affecting the adolescents' pain problem. The importance of focusing on the specific circumstances that affect the adolescent's daily lives, in line with a person-centred approach, is described by adolescents in Golsäter et al. (2010).

Another common strategy to further try to define the adolescent's health and life situation was to look into different lifestyle-related issues. The nurses describe that, by mapping different lifestyle issues such as food and sleep habits, they tried to explore factors that might contribute to the pain problem. Lifestyle habits have been shown to be a common cause of recurrent pain, for example Torres-Ferrus et al. (2019) showed that headaches are one common pain problem that has an impact on quality of life for adolescents. Adolescents who more commonly had headaches had also a higher body mass index, more often reported sleep problems and more seldom ate breakfast.

This knowledge, in combination of the national guidelines for school health care in Sweden (Socialstyrelsen, 2014) describing the aim of promoting healthy lifestyle habits, could be one explanation for the strategy of exploring lifestyle habits among adolescents with recurrent pain problems. However, these results also indicate a risk that the focus shifts from the adolescent's narrative to a conversation guided by the school nurse professional perspective. Golsäter, Enskar, and Harder (2014) describe how school nurses are balancing between flexible and directed strategies when trying to take the adolescent's own perspective as well as the guidelines perspective in mind.

Adolescents have described health dialogues according to the national programme as an opportunity to get to know the school nurse and, in a trustful relationship, be able to share about their situation and establish a mutual understanding (Golsäter et al., 2010). The nurses in the present study also highlight the need of a relationship, where a mutual understanding can emerge, where the adolescent can receive support in line with a person-centred approach (Ekman et al., 2011). The importance of creating trust to be able to build a forthcoming relationship to support adolescents with health problems in school is furthermore described by the nurses in Hilli and Wasshede (2017). The challenges in creating such relationships are discussed by adolescents and school nurses in Rosvall and Nilsson (2016), whereby the lack of opportunities to come into contact with each other without having prearranged these encounters was stressed. Further, this lack of opportunities to come into contact with and build a trustful relationship was described as an obstacle by adolescents with recurrent pain problems seeking support from the school nurse, even if they perceive a need for support (Nilsson et al., 2016).

The school nurses in the present study describe how they try to support the adolescents' own capacity for managing the situation with recurrent pain. However, due to a lack of structures for working in a long-term perspective, the nurses' support largely had a short-term perspective, for example giving them a painkiller. The nurses describe that lacking the opportunity to invite adolescents with pain problems to scheduled visits might result in not learning the cause of the problems more truthfully and thus not being able to offer support in the long-term perspective. Providing advice without asking for or having the time to listen to the adolescents' own description is not in line with a person-centred perspective as described by Ekman et al. (2011). Our findings show that school nurses want to encounter adolescents with recurrent pain in a person-centred way; however, the school nurses describe obstacles in terms of lack of existing resources to fulfil the adolescents' needs in line with the school nurses in Jönsson, Maltestam, Tops, and Garmy (2019).

According to the guidelines for Swedish school health care (2014), school nurses should work from a health-promotive perspective, in collaboration, with other professionals at the school. The school nurses in this study tried to arrange the school situation for adolescents with recurrent pain problems, but it seems that the school nurses' collaboration in the school was more on an individual level for each adolescent, instead of working with an overall

structure to provide a health-promotive school environment as the national guidelines argue for (Socialstyrelsen, 2014). The challenge to work with an overall health-promotive perspective and also meet the needs of each adolescent is also highlighted by school nurses in Rosvall and Nilsson (2016) and Hilli and Wasshede (2017) descriptions of how to develop the work in the school organization.

These results argue for the need to develop methods to support school nurses in working with a person-centred approach in a long-term perspective, based on the core concepts of listening to the narrative, establishing a partnership and a jointly agreed-on health plan to understand each adolescent's individual situation (Ekman et al., 2011). In a trustful relationship, in which both adolescents (Golsäter et al., 2010; Nilsson et al., 2016) and school nurses (Hilli & Wasshede, 2017; Nilsson et al., 2016) argue for, it is possible to build a relationship allowing the adolescent to be an active partner and use his or her own resources in collaboration with the school nurse's professional knowledge, in line with a person-centred approach (Ekman et al., 2011). To create opportunities to work using a person-centred approach, school nurses need more knowledge, as well as time and structures, to work with adolescents with recurrent pain problems and to promote health in the school organization.

5.1 | Limitations

The participating nurses had expressed interest in taking part in further studies to develop methods aiming to support adolescents with recurrent pain problems, which could be understood as a limitation as they might have a special interest in this work and thereby are not representative of all school nurses. Further, all the school nurses were working in the Swedish School Health Care Services, in south-western Sweden. The selection of the participants has to be considered regarding transferability of the results to school nurses working in other countries. According to Polit and Beck (2016), member checking could be used to further strengthen the trustworthiness; this was not used in the present study and has to be reflected on as a limitation of the study.

6 | CONCLUSION

This study highlighted the lack of routines and guidelines for how to care for adolescents with recurrent pain problems at school. The results argue for the development of school-based interventions to promote health among adolescents, as well as supporting adolescents with recurrent pain problems in a long-term perspective. Interventions based on a person-centred approach could be one way to develop school-based interventions with a health-promotive, long-term perspective.

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CONFLICT OF INTEREST

No conflicts of interest have been declared by the authors.

AUTHOR CONTRIBUTIONS

MG, SN and HW: Study design. HW: Data collection. MG and HW: Data analysis. MG, SN and HW: Manuscript preparation.

ORCID

Marie Golsäter  <https://orcid.org/0000-0002-0156-6677>

Stefan Nilsson  <https://orcid.org/0000-0002-8847-9559>

Helena Wigert  <https://orcid.org/0000-0002-1615-1925>

REFERENCES

- Ekman, I., Swedberg, K., Taft, C., Lindseth, A., Norberg, A., Brink, E., ... Sunnerhagen, K. S. (2011). Person-centered care – Ready for prime time. *European Journal of Cardiovascular Nursing*, 10(4), 248–251. <https://doi.org/10.1016/j.ejcnurse.2011.06.008>
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative content analysis: A focus on trustworthiness. *SAGE Open*, 4(1), 1–10. <https://doi.org/10.1177/2158244014522633>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107–115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Friedrichsdorf, S. J., Giordano, J., Desai Dakoji, K., Warmuth, A., Daughtry, C., & Schulz, C. A. (2016). Chronic pain in children and adolescents: diagnosis and treatment of primary pain disorders in head, abdomen. Muscles and joints. *Children*, 3(4), 42. <https://doi.org/10.3390/children3040042>
- Golsäter, M., Enskar, K., & Harder, M. (2014). Nurses' encounters with children in child and school health care: Negotiated guidance within a given frame. *Scandinavian Journal of Caring Sciences*, 28(3), 591–599. <https://doi.org/10.1111/scs.12087>
- Golsäter, M., Sidenvall, B., Lingfors, H., & Enskar, K. (2010). Pupils' perspectives on preventive health dialogues. *British Journal of School Nursing*, 5(1), 26–33. <https://doi.org/10.12968/bjnsn.2010.5.1.46596>
- Golsäter, M., Sidenvall, B., Lingfors, H., & Enskar, K. (2011). Adolescents' and school nurses' perceptions of using a health and lifestyle tool in health dialogues. *Journal of Clinical Nursing*, 20(17/18), 2573–2583. <https://doi.org/10.1111/j.1365-2702.2011.03816.x>
- Hassett, A. L., Hilliard, P. E., Goesling, J., Clauw, D. J., Harte, S. E., & Brummett, C. M. (2013). Reports of chronic pain in childhood and adolescence among patients at a tertiary care pain clinic. *The Journal of Pain*, 14(11), 1390–1397. <https://doi.org/10.1016/j.jpain.2013.06.010>
- Hilli, Y., & Wasshede, K. (2017). Swedish school nurses' perspectives on caring for and promoting the health of adolescents with mental health problems – A qualitative study. *Clinical Nursing Studies*, 5(3), 1–9.

- Hjern, A., Alfven, G., & Östberg, V. (2008). School stressors, psychological complaints and psychosomatic pain. *Acta Paediatrica*, 97(1), 112–117. <https://doi.org/10.1111/j.1651-2227.2007.00585.x>
- Høie, M., Haraldstad, K., Rohde, G., Fegran, L., Westergren, T., Helseth, S., ... Johannessen, B. (2017). How school nurses experience and understand everyday pain among adolescents. *BMC Nursing*, 16(1), 53. <https://doi.org/10.1186/s12912-017-0247-x>
- Holm, S., Ljungman, G., Åsenlöf, P., & Söderlund, A. (2013). How children and adolescents in primary care cope with pain and the biopsychosocial factors that correlate with pain-related disability. *Acta Paediatrica*, 102(10), 1021–1026. <https://doi.org/10.1111/apa.12352>
- Jönsson, J., Maltestam, M., Tops, A. B., & Garmy, P. (2019). School Nurses' Experiences Working With Students With Mental Health Problems: A Qualitative Study. *The Journal of School Nursing*, 35(3), 203–209. <https://doi.org/10.1177/1059840517744019>
- Nilsson, S., Rosvall, P.-Å., & Jonsson, A. (2016). Adolescent-centered pain management in school when adolescents have chronic pain – A qualitative study. *Global Journal of Health Science*, 9(4), 8–19. <https://doi.org/10.5539/gjhs.v9n4p8>
- Polit, D., & Beck, C. (2016). *Nursing research*, 10th ed. Philadelphia, PA: Lippincott Williams & Wilkins.
- Public Health Agency of Sweden (2014). *Health Behaviour in School-aged Children (HBSC), Results from Sweden of the 2013/14 WHO Study*. Stockholm, Sweden: Public Health Agency of Sweden.
- Rosvall, P.-Å., & Nilsson, S. (2016). Challenges of engagement with health services in Sweden's schools: listening to the views of school nurses and students with recurrent pain. *Pastoral Care in Education*, 34(1), 3–12. <https://doi.org/10.1080/02643944.2015.1119878>
- Socialstyrelsen (2014). *Vägledning för elevhälsan (Guidelines for School Health Care)*. Stockholm, Sweden: Socialstyrelsen.
- Swain, M. S., Henschke, N., Kamper, S. J., Gobina, I., Ottová-Jordan, V., & Maher, C. G. (2014). An international survey of pain in adolescents. *BMC Public Health*, 14(1), 447. <https://doi.org/10.1186/1471-2458-14-447>
- Torres-Ferrus, M., Vila-Sala, C., Quintana, M., Ajanovic, S., Gallardo, V. J., Gomez, J. B., ... Pozo-Rosich, P. (2019). Headache, comorbidities and lifestyle in an adolescent population (The TEENs Study). *Cephalalgia*, 39(1), 91–99. <https://doi.org/10.1177/0333102418777509>

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