“I’m not sure if it works”: School nurses’ experiences of sleep-promoting work in Sweden
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ABSTRACT

Objectives: Lack of sleep is a common problem in children and adolescents of school age (students), and it is a health aspect that affects the ability to assimilate into the school’s education and thereby falls within the school nurses promoting work. This study aimed to describe school nurses’ experiences of sleep-promoting work.

Method: Data were collected by n = 61 school nurses’ written narratives of their sleep-promotion work. Data were analyzed using qualitative content analysis.

Results: The results describe school nurses’ experiences of sleep-promoting work in three main categories: (1) Informing and providing knowledge is the primary task. School nurses do it systematically, through dialogs with an individual student, with several students simultaneously, or with parents. (2) Benefits take place when the needs of the student guide the work. Through curiosity about the personal story, the keys to sleep-promoting work can be found, appropriate strategies can be given, and the student can be guided further if needed. (3) Barriers challenge the outcome of the work. The school nurses experience these barriers in the form of unmotivated students, unsupportive parents, and lack of prerequisites, which make the school nurses unsure of their performance.

Conclusions: School nurses experience a significant benefit in their sleep-promoting work when the needs of the student guide the sleep-promoting information, strategies, and follow-ups. To avoid feeling insecure in sleep-promoting work, school nurses need updates on the state of knowledge and evidence-based tools. Further research on sleep-promoting work at school is necessary.

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Introduction

The widespread lack of sleep and difficulties falling asleep among students, including school-aged children 1-4 and especially adolescents, 5-7 means that several students in each class are in school without optimal conditions due to their sleep. Since too little sleep can negatively affect memory, learning ability, concentration, social interactions, and mood, 8-10 school results, education, and health can be negatively impacted. 8,9,11 Lack of sleep is a health aspect that affects the ability to assimilate the school’s teaching and falls within the responsibility of school health care. 12

Promoting good sleep among students to avoid persistent lack of sleep, sleeping difficulties, health-related problems, and school failures is of the utmost importance. A Norwegian study has emphasized the need for early identification of problematic sleep habits, as 68% of adolescents with insufficient sleep between the ages of 16-18 maintained the same unhealthy sleep patterns when surveyed 6 years later. 13 From a public health perspective, the school should be a perfect place for sleep-promoting work because the school is an arena with the conditions to reach out with sleep-promoting work to students of all ages, both children and adolescents. 14 This is because all students attend school, regardless of background and socioeconomic standard. In addition, all students meet the school nurse regularly during all school years. School nurses’ tasks can be directed differently 15-17; in some countries, school nurses’ role mainly focuses on medical care and disease prevention, and in other countries, the role is primarily focused on health promotion work 18,19 where healthy sleep can be included. However, there is a lack of knowledge about how school nurses work with students’ sleep.

In Sweden, school nurses can promote students’ sleep as their primary role is to work with health promotion and prevention to support their development toward education goals. 12 According to
the Swedish Education Act, all students are entitled to at least four health dialogs during mandatory school, in preschool class with the parents, in the 4th and 7th grades, and the first year of upper secondary school. The health dialog is a face-to-face session (on average 45-60 minutes) where the school nurses perform physical check-ups such as vision, hearing, back, and growth. Still, the primary focus of the health dialog is a student-centered conversation based on the student’s self-perceived physical, mental, and social health.12,21 The school nurses’ role is to provide students with knowledge about healthy lifestyles and factors, such as sleep, food, exercise, stress, smoking, alcohol or drugs, sex, and relationships that contribute to health or ill health.12 If necessary, parents are contacted, and the student is followed up on another occasion. In addition to promoting sleep in individual health dialogs, the school nurse can encourage sleep at a group and organizational level.12 However, reviews of completed sleep interventions in school classes show only an increase in knowledge of the students but no long-term change in their sleep behavior.22,23

To continue to advance the field of sleep and circadian science with a public health lens, designing sleep-promoting interventions for schools that influence students’ sleep in a longer perspective is desirable.24 There are few studies on how school nurses’ sleep-promoting work is carried out. Therefore, this study aimed to describe school nurses’ experiences of sleep-promoting work.

Method

Design

An inductive qualitative design was adopted to address this study’s aim. Using an open-ended question asking for school nurses’ written narratives of their sleep-promotion work. An open-ended question is a suitable data collection method for studying responses with information, views, or perceptions.24 The study was performed in January 2023. Data were analyzed using qualitative content analysis.25,26 The study followed the ethical regulations and guidelines outlined in Swedish law, where no ethical approval is needed when no sensitive personal data are requested, such as birth number, religion, race, or health status.27 The Code of Ethics of the Declaration of Helsinki was carefully followed by fulfilling the requirements of information, consent, confidentiality, and usage.28

Participants and settings

The participants of this study consisted of school nurses (n = 61) in western Sweden; all were female. Of those, 93% worked in a school in the municipal sector and 7% in the private sector. In Sweden, a relevant Master of Science in Nursing (1-1.5 years at university) is required after the regular Bachelor of Science in Nursing (3 years at university) to work as a school nurse (Table 1).

Procedure and data collection

To collect data, the author contacted the development officer of students’ health care in a city in western Sweden and informed her about the study orally. The development officer consented to conduct the research and subsequently sent an e-mail with written information about the study and a link to the questionnaire to all her employed school nurses. The study was available to complete for 1 week. The answers were anonymous, and no personal data could be detected. Of the n = 105 school nurses who were offered the question, n = 61 comprise the sample for this study, with a response rate of 58%.

The data consisted of (n = 61) school nurses’ written narratives based on the question: Please describe freely and descriptively your sleep-promoting work for students’ sleep. The narratives were between 2 and 17 sentences (mean 12). In addition to the question about their sleep-promoting work, the school nurses also consented to participate in the study by clicking a box and answering five background questions. Questions pertained to which grades the school nurses worked with, how many students they were responsible for on a full-time basis, whether they worked in a municipal or private school, how many years they have worked as school nurses, and what education they have (Table 1).

Data analysis

Data were analyzed using qualitative content analysis with an inductive approach.25,26 In the first step of the analysis process, the data in the form of the original transcript were read repeatedly in their entirety. In the second step, the data were de-contextualized into meaning units, meaning that words and sentences pertaining to the aim of the study were marked and lifted out of the text into a new document with a table where all meaning units were collected; see an example in Table 2. In the third step, the meaning units were condensed and coded. Coding means labeling the condensed meaning unit with a descriptive code close to the original text and on a low level of abstraction and interpretation.25,26 To decrease the risk of missing essential content, the original transcript was read in parallel to ensure its content was preserved, which is an aspect of credibility. After that, the codes were carefully sorted into groups based on similarities and differences during re-contextualization. Finally, after an abstraction and interpretation of the text, nine subcategories and three main categories emerged while maintaining the manifest content. The analysis process moved back and forth between the original text and its parts to ensure trustworthiness. The author has recurrently processed and discussed the analysis, subcategories, and main categories in research seminars to ensure dependability. Quotes are used in the result and Table 3 to ensure credibility.25

Ethical considerations

Ethical research principles were carefully followed by fulfilling the requirements of information, consent, confidentiality, and usage.27 To ensure the ethical principles, the written information about the study made clear that participation was voluntary, and written informed

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Overview of the participants’ workplaces, number of students per full-time, and year as a school nurse</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplaces</td>
<td>School nurses</td>
</tr>
<tr>
<td>n = 61 (%)</td>
<td></td>
</tr>
<tr>
<td>Primary school with children aged 6-12</td>
<td>29 (47%)</td>
</tr>
<tr>
<td>Secondary schools with adolescents aged 13-16</td>
<td>17 (28%)</td>
</tr>
<tr>
<td>Upper secondary school with adolescents aged 16-19</td>
<td>15 (25%)</td>
</tr>
<tr>
<td>Year working as a school nurse</td>
<td></td>
</tr>
<tr>
<td>0-2 y</td>
<td>13 (21%)</td>
</tr>
<tr>
<td>3-5 y</td>
<td>10 (17%)</td>
</tr>
<tr>
<td>6-10 y</td>
<td>12 (20%)</td>
</tr>
<tr>
<td>11-15 y</td>
<td>13 (21%)</td>
</tr>
<tr>
<td>≥16 y</td>
<td>13 (21%)</td>
</tr>
<tr>
<td>Subjects in their Master of Science in Nursing</td>
<td></td>
</tr>
<tr>
<td>Pediatric nurse</td>
<td>28 (44%)</td>
</tr>
<tr>
<td>Primary health care</td>
<td>24 (39%)</td>
</tr>
<tr>
<td>School nursing</td>
<td>8 (14%)</td>
</tr>
<tr>
<td>Another specialist nursing program</td>
<td>1 (1.5%)</td>
</tr>
<tr>
<td>No specialist nursing program but were studying</td>
<td>1 (1.5%)</td>
</tr>
</tbody>
</table>

* One university in Sweden has a specialist nursing program that is exclusively for school nursing.
consent was obtained from all participants. As the development officer emailed information and a link with the questionnaire to the school nurses, the author had no contact with the participants, and the questionnaire was thereby answered anonymously. Furthermore, no sensitive personal data was requested. The written information described that their narratives would constitute data for a scientific paper and an article in their national trade journal.

**Results**

The results describe school nurses’ experiences of sleep-promoting work in three main categories: *Informing and providing knowledge* is the primary task, *Benefits take place when the needs of the student guide the work*, and *Barriers challenge the outcome of the work*; each of these with three subcategories.

**Informing and providing knowledge is the primary task**

The school nurses’ experiences are that informing and providing knowledge is their primary task in the systematic sleep-promoting work. Either in the form of dialogs with an individual student, with several students simultaneously in a group or class, or with parents. Sometimes, information and knowledge transfer occur on all three levels to reach out in several ways to strengthen each other.

**Table 3**

<table>
<thead>
<tr>
<th>Main categories</th>
<th>Subcategories</th>
<th>Quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informing and providing knowledge is the primary task</td>
<td>To individual students</td>
<td>“…In connection with the health dialogues, I talk a lot about sleep, why it is important to sleep while growing, and what happens during sleep. Why you shouldn’t check your phone just before sleep, etc. Of course, I put it on a “low” level, so I don’t lose them completely…” (13)</td>
</tr>
<tr>
<td></td>
<td>To a group or class</td>
<td>“…I have met students in groups of about 5-6 (grade 3). Where I ask questions about sleep and let the students answer freely what they believe in. Then I give information about the sleep…” (6)</td>
</tr>
<tr>
<td></td>
<td>To parents</td>
<td>“…We have a sleep lecture for all new 7th graders to show what sleep means to us and what happens when we get too little sleep. It will be a good start that we can then build on both in groups and individually…” (7)</td>
</tr>
<tr>
<td>Benefits take place when the needs of the student guide the work</td>
<td>Being curious to the personal story</td>
<td>“…How I work with sleep problems depends on the cause of the sleep deprivation. It is important to explore the cause of too little sleep. When students can’t fall asleep or wake up at night, I explore their lifestyle and well-being to get an overall picture of the student’s life situation…” (27)</td>
</tr>
<tr>
<td></td>
<td>Give appropriate strategies</td>
<td>“…I am working with a sleep diary to have a picture of the student’s sleep patterns to better guide the student on what can be changed…” (32)</td>
</tr>
<tr>
<td></td>
<td>Guide further if needed</td>
<td>“…If the student has major sleeping difficulties that have been going on for a long time, I advise the student and the parent to book an appointment at the health center for further assessment to treat the sleep habits…” (26)</td>
</tr>
<tr>
<td>Barriers challenge the outcome of the work</td>
<td>Unmotivated students</td>
<td>“…At health dialogues in grade 8, or when the student for some other reason has a conversation with me, and it appears that the sleep is inadequate, I usually have a conversation with the parents (after the student’s consent)” (48)</td>
</tr>
<tr>
<td></td>
<td>Unsupportive parents</td>
<td>“…It’s challenging to help or guide students who don’t want help or don’t see it as a problem…” (28)</td>
</tr>
<tr>
<td></td>
<td>Lack of prerequisites</td>
<td>“…I experience that many students don’t think they need 8-9 h of sleep every night; they don’t feel their body’s signals…” (9)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“…It’s hard to change sleep habits as parents often let their children stay up longer. Parents find it difficult to limit screen time in their children…” (4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“…I have talked to parents who say that the student always goes to bed at the same time and that they have a good routine at home, but that turns out not to be true…” (6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“…There’s not always time for follow-up, so I don’t always know if it’s worked…” (1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“…I have a document that I have written myself with the title “Tips for those who want to be able to sleep better.” There are several tips that I have taken from reliable sources. But it would have been good if there were ready-made material, so you don’t have to create it yourself…” (17)</td>
</tr>
</tbody>
</table>
Through curiosity about the personal story, the keys to sleep-promoting work when the individual’s needs guide the work.

Benefits take place when the needs of the student guide the work.

To individual students

The school nurses describe that their regular health dialogs during school are essential for reaching out with information and knowledge to each student individually. Information and knowledge about sleep are conveyed with different approaches. Some school nurses describe that during the health dialogs, they want to inform about the need for sleep, such as recommended sleep length; the importance of sleep concerning growth, the immune system, memory, concentration, physical and mental health; what makes sleep difficult, that is, screens, balance; and tips for better sleep, that is, routines, relaxation, and no screens in the bedroom. Another described approach is to distribute information brochures. Another method is to catch the moment, informing and providing knowledge about sleep when students visit the school nurse spontaneously with other issues. The school nurses’ experience is that sleep is not an isolated problem, so paying attention to it when students have different health and well-being issues feels natural.

“...In conversations with students, it is good to return to sleep, both in the health dialogues and if they are searching for something else... all to increase understanding of the importance of sleep...” (7)

To a group or class

School nurses describe that they educate students in groups or classes. The lectures, which aim to inform and provide new knowledge about the need for sleep, the importance of sleep, consequences for health and education, routines, screen use, and other hinder to sleep, can either take place systematically for all students, for example, grades four or seven or take place based on needs that have been noticed in a particular class. Sleep information is generally given simultaneously with information about other lifestyle factors, such as diet and exercise. Sometimes, the school nurses meet the students in smaller groups of five to seven instead of the whole class. This form of information and knowledge transfer is described as well-functioning if the group is safe.

“...at group level, I meet the students by class with general information about the importance of good lifestyle habits including sleep...” (43).

To parents

The ways that school nurses describe their use to reach out to parents with information and knowledge about sleep are varied. What is described are brochures, information letters, information at parent meetings in specific grades, or contact with parents of individual students where sleep is a problem. The degree of contact with parents also varies among school nurses. Some school nurses say they only occasionally involve parents or provide information at parent meetings; others say it is necessary to involve parents in working with students’ sleep and cooperating with parents. The experience among the school nurses is that parents are involved more the younger the students are.

“...I usually inform about sleep and physical activity at parent meetings...” (48).

Being curious about the personal story

An experience described as necessary is to be curious about the personal story. Being curious about the personal story means being responsive when the student expresses their life situation and being able to perceive factors that can affect the student’s sleep. It also means having an understanding and respect for the student’s circumstances. The conversation that starts from the personal story is, according to the school nurses, helped by motivational interviewing, trust between the student and school nurse, the school nurse’s ability to capture the student’s interest, to encourage student self-reflection, and always proceed from the student’s needs. The experience is that sleeping difficulties arise in the light of other things, such as an imbalance in life, worries, problems in the family or friends, or missing routines around basic needs. The school nurses, therefore, mean that they need to listen to and explore the personal story.

“...it is important as a school nurse to be alert and sensitive to the individual student is experiencing. It does not work to skip all probing questions and tell the student what to do to sleep better without listening to the student’s story about his situation, or to give the student information if he has not asked for help to get better sleep...” (17).

Give appropriate strategies

School nurses describe that giving appropriate strategies is part of their sleep-promoting work. School nurses share strategies partly general strategies, such as regularity, routines, listening to music, reading, no screen use at bedtime, relaxation, and physical activity. To find the most suitable strategy for the student, some school nurses use a sleep diary that the student must fill in for a week or two. While finding, testing, and evaluating sleep strategies, school nurses mean that the student needs to be aware that it takes time to change a habit and establish a new one. The students need patience, and the school nurses’ experience is that it requires time and commitment to support the student.

“...it’s a lot about helping students plan their time and find space for sleep...” (14).

Guide further if needed

To guide further if needed is described by the school nurses as a necessary action. If a student’s sleep problem requires treatment and does not improve through the support provided by the school nurse, it is the school nurse’s responsibility to refer them to other health professionals. Another type of further guidance is motivating the student to consent to contact their parents for further involvement and support at home.

“...what works best, according to my experience, is to have a good dialogue with the parents...” (21)

Barriers challenge the outcome of the work

Some barriers challenge the outcome of the school nurse’s sleep-promoting work. The school nurses experience these barriers: unmotivated students, unsupportive parents, and a lack of prerequisites.

Unmotivated students

Unmotivated students are experienced as making the school nurses’ mission to promote students’ sleep more difficult. It’s about students who don’t share, sense, or realize that their sleep is too short for their health and well-being. Unmotivated students also include those students who want to avoid making changes, especially if these require patience; they want a quick fix. In these
situations, school nurses experience frustration; they want to support the students’ sleep but also need to have them on board.

“...a challenge is to get the student to understand that their far too short sleep may become problematic in the future, even if they do not experience it as a problem at the moment...” (2).

Unsupportive parents

A phenomenon that school nurses describe as a barrier that challenges their sleep-promoting work is unsupportive parents. Parental support and boundary setting in the home are experienced as necessary. Still, when parents do not take responsibility, set boundaries, and allow their children to be up late at night, school nurses feel they are working under a headwind. Unsupportive parents mean further that parents in the meeting with the school nurse may be motivated and committed to helping their child with sleep hygiene but do not follow through on the commitment at home.

“...My experience is that the parents go to bed at a normal time and have no knowledge of the youth's late-night habits, or that they think the youth can fend for themselves...” (48)

Lack of prerequisites

Lack of prerequisites, such as lack of time, tools, and updates on the state of knowledge, challenge school nurses’ desire to engage and feel satisfied with the sleep-promoting work. The school nurses’ experience is that students they have noticed and communicated with about sleep, who were given strategies to test, often do not get a follow-up due to lack of time. Nor is the sleep-promoting work that took place in a group or class followed up, leading to a feeling of not knowing whether the effort was beneficial. Further, school nurses sometimes need clarification on whether they are correctly asking the students questions about sleep during the health dialog. A screening tool that captures several dimensions of sleep or a training session on using a sleep diary would help them in their daily work.

“...I saw a sleep screening tool that looked good but hasn’t had time to check. Would like something that becomes clearer, that you could use in the conversation with the children and their parents...” (47).

According to the school nurses, missing tools is a significant challenge in sleep-promoting work. They describe that there are no ready-made models to work from; instead, each school nurse searches for or creates material in the form of brochures, PowerPoints, and videos. Even the structure of sleep education is made by school nurses themselves. According to the school nurses, this means a significant amount of time but also an experience of uncertainty as they do not feel sure they are up to date on the latest knowledge in the field.

“...most often I feel that if I am going to do a sleep intervention in a class, then I have to create it myself, which makes me unsure if I am using the right sources and therefore the task becomes too time-consuming and has to be prioritized away...” (5)

Discussion

The result revealed that school nurses experience that informing and providing knowledge is their primary task in their sleep-promoting work. They mean it can be hard to reach out satisfyingly. However, it is beneficial when the student’s needs guide the sleep-promoting work. If so, the right advice can be delivered, and appropriate strategies can be found. The school nurses also point out some barriers that challenge the outcome of the sleep-promoting work, such as students’ lack of motivation, unsupportive parents, and lack of prerequisites.

Recurring in the school nurses’ expression of the sleep-promoting work was that the primary task is to spread information and knowledge. This aligns with the school nurse’s mission of providing students with knowledge that promotes a healthy lifestyle. However, reflecting on how information and knowledge are conveyed is essential. It can be given based on the school nurses’ desire to provide crucial knowledge to the student or explicit needs. Previous research shows that it can be challenging for school nurses to adapt the dialog based on each student’s needs and wishes related to time pressure and workload. But the challenge could also be derived from the fact that today’s healthcare professionals are trained to provide information, knowledge, and advice and, to some extent, forget to listen to the patient’s voice before giving advice. This is fundamental and an undervalued potential when healthcare now emphasizes shared decision-making, patient engagement, and participation. The findings in this study also pointed out the benefits that the school nurses experienced when the students’ needs were listened to and were allowed to guide the conversation about sleep. The students thus became motivated and involved in their solution. Strategies and support could be shaped to suit the individual student’s needs and conditions. The school nurses further described that they gave information and knowledge at different levels, individually, in class, and to parents, but that they were unsure whether it was effective or not. Adolescents themselves mean that information and knowledge given as a lecture are useless, especially if they cannot be active participants, work in groups, and reflect together – it does not improve their sleep.

Reviews of sleep interventions further highlight the problem of finding effective sleep-promoting interventions in school. The studies emphasize that interventions in school classes increase sleep knowledge, but unfortunately, there is no long-term improvement in the students’ sleep behavior. Furthermore, it is seen that educational interventions alone do not have an effect but must be combined or replaced with behavioral interventions. Individual behavioral or cognitive sleep interventions given in special care and based on more than two face-to-face sessions have a good effect and increase adolescents’ sleep. Individual meetings on several occasions are seen as a crucial finding for positive outcomes on sleep, which can guide the design of school nurse’s sleep promotion work. An essential key in the promotion work is that the school nurse often has a valuable relationship with the students, which is critical when supporting and guiding them. Adolescents clarify that tips, advice, or strategies are more likely to be individualized and directed to them instead of general if they have a relationship with the school nurse. School nurses’ promotional work also includes all students, and many students would, with optimal interventions, be guided to good sleeping habits without specialist health care treatment. In addition, the school nurses in this study describe that involving the parents in the sleep-promoting work is advantageous, especially regarding younger students. However, research shows that maintaining and even reintroducing parents’ bedtime in adolescents gives longer sleep duration than adolescents with no bedtime rules, suggesting parents should also be involved with older students. Further research is required where parents are included in the intervention the school nurse delivers.

This study indicates that the school nurses’ sleep-promoting work was challenged by not having models or guidelines on how the sleep-promoting work should be laid out for the best effect. Further, the school nurses felt unsure if their sleep knowledge was sufficient or current. The feeling of being unprepared, under-supported, and having inadequate resources is also seen in previous research about school nurses’ health-promoting work when the school nurse’s role shifts to promotion and health education from earlier, more nurturing assignments. That the school nurse has adequate knowledge is a cornerstone for adolescents to trust the school nurse and dare to ask for support. Given sufficient knowledge,
Richardson et al.\textsuperscript{35} show that health professionals (registered nurses, medical practitioners, psychologists, social workers, occupational therapists, pharmacists, dentists, and sleep coaches) have a knowledge gap regarding children's and adolescents' sleep. Less than half of the health professionals who worked with children and adolescents answered sleep questions correctly, and the reported time of sleep training during their undergraduate or postgraduate education was lacking. This study's findings and previous research point to a need for updated knowledge and prerequisites in the form of time and tools for school nurses to perform satisfactory sleep-promoting work. Screening tools, guidelines, information materials, and evidence-based conversation models were particularly requested. In addition to knowledge and tools, it is of utmost importance to focus on how students learn to solve their problems, how they participate in decisions and feel motivated, and how they build their capacity. For that, it is known from research that well-prepared professionals are made with continuing education, including practice training, coaching, and feedback from faculty, the workplace, and peers.\textsuperscript{36} When practitioners such as school nurses or other health professionals regularly undergo, for instance, capacity-building development, motivational interviewing, or additional relevant education, they are more likely to use it in their practices.\textsuperscript{37}

The school nurses' experiences in this study are that students' sleep is a significant health issue, something they talk about in every individual health dialog and inform, explore, and guide further. The school nurse provides an ongoing sleep promotion in a unique arena. However, their work needs good conditions in terms of time, updated knowledge, and evaluated tools. Leading sleep researchers focusing on children and adolescents are pointing out the need for school-based sleep programs that can prove an increased impact on sleep behavior.\textsuperscript{14} Continued research regarding sleep-promoting work and its feasibility, effectiveness, and scalability is necessary.\textsuperscript{33} Hopefully, by finding effective methods within the school context, many children and adolescents can be prevented from developing sleep problems.

The trustworthiness of this study was ensured by including school nurses with a broad variance of experiences of sleep-promoting work, as they had different backgrounds and conditions for carrying out sleep-promoting work. Furthermore, trustworthiness was ensured, using a critical and questioning approach in the data analysis by moving back and forth between the whole text and the meaning units and discussing the results in research seminars. Though, there were some limitations. One could be that the author herself performed the analysis. However, this analysis is manifest, that is, close to the text and not at a higher interpretive level, which makes it easier for the research colleagues who reviewed and discussed the analysis during various research seminars to judge the analysis. Another limitation might be that a questionnaire with an open-ended question misses the opportunity to ask follow-up questions to clarify the school nurses' answers. However, this applies to most questionnaires, and the choice of an open-ended question for data collection was based onPolit and Beck,\textsuperscript{24} who argue it is suitable when seeking peoples' perceptions. The sample was not randomized, and the data is from a relatively small Swedish sample, which means that the result is thus not generalizable. However, the reader decides the transferability, whether the results can be applied to other settings, contexts, or situations\textsuperscript{26} and, thus, be useful for sleep-promoting work in school health care.

**Conclusion**

School nurses experience the need for sleep-promoting work, and they talk about sleep with the students in every individual health dialog. The school nurses share a massive benefit in their sleep-promoting work when the needs of the student guidance the sleep-promoting information, strategies, and follow-ups. However, sometimes the school nurse feels unsure about their sleep-promoting work. A lack of time, tools, and updates on the state of knowledge challenge it. To meet the potential of school nurses' sleep promotion work, they need knowledge updates, evidence-based tools, and continuing education to guide students while building their capacity to turn sleep difficulties into better sleep. Further research on school nurses' sleep-promoting work and its feasibility, effectiveness, and scalability is necessary.

**Author contributions**
The sole author prepared all parts of the article, from design data collection to analysis and preparation. The author has processed and discussed the study design, analysis, subcategories, main categories, and the final manuscript with research colleagues in research seminars to ensure trustworthiness.

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**Data availability**
The data are available from the corresponding author upon request.

**Declaration of conflict of interest**
The author declares no conflicts of interest.

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**References**


29. Jakobsson M, Josefsson K, Högberg K. Adolescents’ suggestions on how to support their sleep: a focus group study. J Sch Nurs. 2022;0(0) https://doi.org/10.1177/10598405221084317


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