



LUND UNIVERSITY

School nurses' view of schoolchildren's health and their attitudes to document it in the school health record - a pilot study.

Clausson, Eva; Petersson, Kerstin; Berg, Agneta

Published in:
Scandinavian Journal of Caring Sciences

DOI:
[10.1046/j.0283-9318.2003.00245.x](https://doi.org/10.1046/j.0283-9318.2003.00245.x)

2003

[Link to publication](#)

Citation for published version (APA):
Clausson, E., Petersson, K., & Berg, A. (2003). School nurses' view of schoolchildren's health and their attitudes to document it in the school health record - a pilot study. *Scandinavian Journal of Caring Sciences*, 17(4), 392-398. <https://doi.org/10.1046/j.0283-9318.2003.00245.x>

Total number of authors:
3

General rights

Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

School nurses' view of schoolchildren's health and their attitudes to document it in the school health record – a pilot study

Eva Clausson¹ MSc, RNT, RSCN (Doctoral Student), Kerstin Petersson² PhD, RNT, RSCN and Agneta Berg¹ MSc, PhD, RNT, RMN

¹Kristianstad University, Department of Health Sciences, Kristianstad, Sweden, and ²Lund University, Department of Nursing, Faculty of Medicine, Lund, Sweden

Scand J Caring Sci; 2003; 17; 392–398

School nurses' view of schoolchildren's health and their attitudes to document it in the school health record – a pilot study

This study highlights school nurses' view of schoolchildren's health and their attitude to document it in the school health records. A strategic sample of 12 school nurses was interviewed. The interviews were semistructured and analysed with qualitative content analysis. The findings showed that the school nurses' viewed schoolchildren as physical healthy although they called attention to growing problems related to a changed lifestyle. Psychosocial ill-health was however increasing and the most common reason for visiting the school nurse was psychosomatic expressions. According to the nurses' descriptions, health was related to the individual, the school and the

family situation. The family situation was mentioned as one of the most important factors of schoolchildren's health. The nurses described no problem to document schoolchildren's physical health. Ethical consideration, tradition, lack of time and the structure of the record were however factors that were said to hinder the documentation of the psychosocial health. In order to promote, protect and recover schoolchildren's health, more research is needed about how beliefs, experience, ethical consideration and resources influence the school nurse's daily work with schoolchildren's health.

Keywords: school nursing, school nurses' experience, schoolchildren's health, school health records, family, interview, qualitative content analysis.

Submitted 25 September 2002, Accepted 8 September 2003

Introduction

Although Swedish schoolchildren, in a World Health Organization (WHO) Collaborative study by Marklund, 1997 (1) considered themselves as healthy, psychosomatic complaints and emotions of depression have increased during the last decades (1, 2). This paradox needs to be investigated further. As the school nurse in Sweden is the key person that continues the health surveillance and immunizations and keeps School Health Records (SHR) during the school age period (3), she/he might be in an important position to shed a light on this paradox. There is however, little empirical knowledge available about the school nurses' views and documentation in the SHR of

schoolchildren's health. Such knowledge can be one means of gaining insight into schoolchildren's health and adding valuable knowledge to the development of support strategies during the school age period.

Several studies have shown that psychosomatic complaints, such as headache and stomach pain are increasing among schoolchildren (4, 5). Headache was the most common symptom followed by stomach pain (5, 6, and 1). 'Somatizing' can be an expression for schoolchildren to say something important about themselves and their problems (7). Natviq et al. found associations between school-related stress experience and a risk of psychosomatic symptoms among adolescents (8). In a previous study, Danielsson and Marklund found that the number of young people with psychosocial ill-health was increasing both among 11-year-old schoolchildren as well as in higher ages (2). These are alarming results and must be taken seriously. It is proposed that school nurses can be in an ideal position to identify and meet these problems (9).

Correspondence to:

Eva Clausson, Kristianstad University, Department of Health Sciences, SE-291 88 Kristianstad, Sweden.
E-mail: eva.clausson@hv.hkr.se

The School Health Service (SHS) continues the child health care during the school age period from 6–7 to 19 years of age (3). Health, in the Swedish School law (10), is expressed as 'mental and physical health' and in a report from the Swedish National Board of Health and Welfare (3) it includes mental, physical and social dimensions. The main objective of the SHS is, according to the School law, 'to follow, maintain and recover the schoolchildren's physical and mental health, and work for healthy habits among them' (10). The local community is responsible for its organization. This could mean a variation of resources spent in the field of action (3). The school nurse together with the physician mainly carries out the health programme. Nursing in SHS includes promotion, prevention and protection of schoolchildren's health. One of the tasks of SHS is early detection of delayed development and other impairments. The profession has changed during the 20th century from detecting physical health problems to more relation-based health problems. This includes nursing interventions such as collaboration with parents, teachers and/or other caregivers (3). Keeping of records within the SHS organization is regulated by the law and by a number of regulations published by the National Board of Health and Welfare (11–13). It has, however, been found that the knowledge of schoolchildren's health is seldom systematized and that data from SHS are sparse and unreliable (14).

Rydell and Sundelin examined SHR and interviewed school nurses and found that most information of psychosocial health was missing in the records (15). As empirical knowledge focusing the school nurses' views and documentation of schoolchildren's health in the SHR is rare it seems worthwhile to further investigate schoolchildren's health from the school nurses' perspective. The aim of the study was to describe the school nurses' view of the schoolchildren's health and their attitude towards documenting it in the SHR. Further aim was to create a base for a national survey to school nurses in Sweden.

Method

Informants and setting

Twelve school nurses from six different communities of varied size and social structure in the southern part of Sweden participated in the study during a period between 1996 and 2001. One big city, two rural communities, and three middle-sized communities were included. In the two rural communities all school nurses were interviewed ($n = 4$). In the big and middle-sized communities the coordinating school nurse made the sample ($n = 8$). The rural communities had, to a great extent, middle class inhabitants. The big and middle-sized communities were represented by schools in varied district areas such as a great part of immigrants, social assistance, lone-parent families and/or mixed population. The majority of the

informants was employed part-time and was responsible for several schools. Some of them worked as district or paediatric nurses during the summer vacations. Both compulsory school (CS) and upper secondary school (US) were represented. The informants were all female and their age was Median (Md) = 51.5 years (range 40–60). Their experience of being a school nurse was Md = 8.5 years (range 1–22). All of them had a long experience of nursing Md = 27.5 years (range 14–37). In Sweden, SHS has been a responsibility for the communities since the middle of the 20th century which implies varied resources spent on the activity. The former standard of approximately 800 pupils per fulltime employed school nurse varies in this context between 600 and 1000 (mean 823) pupils per nurse converted into fulltime employment. The informants gave their informed consent to participate in the study and, that the participation could be withdrawn at any time. There was no relationship of dependence between the interviewer and the interviewees. The informants in the study had the right to expect that any information collected during the study would be kept in strictest confidence (16).

Interviews

The first author (EC), also trained as a school nurse, conducted the tape-recorded interviews lasting between 40 and 60 minutes. They took place at the school nurse's consultation room. The interview started with a presentation of the interviewer and a further explanation of the aim of the study. Each informant was then asked, as freely as possible, to tell their views of the schoolchildren's health and secondly, their views of how they document it in the SHR. Follow-up questions were asked to deepen, develop further or clarify the answers (17). The interviews were carried out from a semistructured guide and included the following areas: the school nurses' views of the schoolchildren's physical and psychosocial health, and how they document it in the SHR. The interviews were transcribed verbatim by the first author (EC).

Analysis

The interview text was analysed by means of qualitative content analysis (18, 19). Qualitative analysis is concerned with meanings, intentions, consequences and context (20) and interpretations of the text can range from concrete to abstract levels (21). The analysis was performed according to the following steps:

- 1 To ensure identification of all the written answers were numbered and then transformed into one text document.
- 2 To apprehend essential features and to obtain ideas for further analysis the authors, independently, repeatedly read the text as open-minded as possible. Four areas seemed to be central: physical health, psychosocial illness, easy to document and difficult to document.

Table 1 School nurses' view and documentation of schoolchildren's health, categories and subcategories

Physically healthy and psychosocially unhealthy school children
Health/ill-health related to the individual
Health/ill-health related to the family
Health/ill-health related to the school situation
Easy to document physical status and difficult to document psychosocial status in school health records (SHR)
Possibilities/hindrances related to tradition, time and structure
Possibilities/hindrances related to ethical considerations

3 The first author (EC) reread the text taking all aspects of the text into account. This analysis resulted in 570 meaning units, i.e. words, phrases and sentences. The meaning units were then sorted according to how they related to the areas above.

4 The authors (EC, AB) reflected on, interpreted and discussed the meaning units' relevance for the areas. This step in the analysis identified two central categories and five subcategories (Table 1).

5 All the meaning units were then sorted into the subcategories, and in order to enhance credibility the authors (EC, KP, AB) compared categories and subcategories with the statements and the original text. Consensus was reached concerning the categories and the subcategories. To further enhance credibility of the findings, quotations from the original text are presented in the result section – nurse numbered 1–12.

Results

Physically healthy and psychosocially unhealthy schoolchildren

The first category, decided on revealing the school nurses' perception of the schoolchildren's health, implied that they were physically healthy and that psychosocial ill-health was increasing. Physical complaints were however, the most common reasons for visiting the school nurse.

The psychosocial health is bad – that is 75% of my working hours. Lonely children, children in anguish (10).

The text included both descriptions and explanations of the schoolchildren's health conditions and there were more ill-health terms expressed and explained. The related subcategories were, health/ill-health related to the individual, health/ill-health related to the family, and health/ill-health related to the school situation.

Health/ill-health related to the individual. The school nurses described the schoolchildren as mainly bodily healthy, with few physical health problems. This was expressed in terms of few physical diseases and that the schoolchildren were well examined during their infancy, e.g. following their rate of growth.

Physically they feel quite well but not psychologically. The child health care record shows they are physically healthy when they are delivered over from the child health care. The rate of growth is good, sight and hearing are very good with most of them (8).

Physical ill-health such as speech problems as well as chronic diseases, e.g. diabetes and allergy, was increasing among adolescents. The nurses also highlighted chronic illness as an existential burden for teenagers in their personal development. These types of suffering affect and limit the daily life of the schoolchild.

It's about the speech – we have the speech therapist a lot – there are a lot of allergies, eczema – one knows it's increasing (3). Having a disease and at the same time not being ill, is difficult for teenagers with diabetes. The blood sugar sways because of the development. If they drink alcohol they feel rotten for a long time. They also discover that it's a serious disease they have, with consequences in their adult lives (7).

The nurses described that the children's lifestyle could be seen as a health hazard. A lifestyle characterized by irregular diet, nonexercising and stress, seemed to accelerate during the school age period. Smoking habits also seemed to increase among the pupils. Sitting in front of the personal computer also causes over weight and health problems further on, according to the nurses.

Many visits are caused by tiredness and headache. Sleeping disorders, trouble at home, food disorders. Many of them don't eat breakfast and no lunch in school either. Smoking a couple of cigarettes in the morning and eating hamburgers in the evening when they come home (2). There is a big group who doesn't exercise – they sit in front of the computer or the video... There are quite many who are over weight (3).

Psychosomatic complaints such as headache, stomach pain and anxiety among the children were common reasons for spontaneous and frequent visits to the school nurses. Problems with low self-esteem were said to be common especially among the girls. There seemed to be lots of needs among the schoolchildren to talk and entrust to someone and the nurses described themselves in that role.

...self-reliance at a low point... especially the girls (12). Anxiety, stomach pain and headache are common. There are lots of things to talk with the children about and they need someone to entrust to (5).

Health/ill-health related to the family. The school nurses saw the family situation as an important factor of the schoolchildren's health. The structure of the family as well as conditions of living was pointed out as especially related to psychosocial health. Two perspectives were identified: one where mutuality characterized the family situation, the other where the family situation was disrupted. The nurses highlighted a family situation, characterized by mutuality and taking interest in each other's

life, which seemed to be one determining factor for the schoolchildren's health.

There are families who do a lot together and whose children feel well. They often go through school with good grades, and even if they don't have good grades, they are popular among their schoolmates because they're strong as persons (4).

Schoolchildren with disrupted family situations dominated in the nurses' narratives. They explained that abuse/disease in the family and/or alternations in living with each parent every other week are examples of factors that can cause psychosocial ill-health.

Some children have no help at home. Often the parents are divorced and the children alternate and live with each parent every 2 weeks or live with each parent for 1–2 days. And these children are sometimes very anxious (5). The hard cases are those who feel bad in a psychosocial way and I think this group is increasing or perhaps I see it more obviously. When they tell about hard family circumstances such as abuse and disease in the family (7).

Coming from another culture was seen as a risk factor for ill-health by the nurses. Especially the girls were said to be exposed.

They have a tough time. They are not allowed to live like Swedish girls, independently, to go out seeing boys. The father of the family can't accept that and then they feel really bad. They come to me, and it's not certain they tell me what's on their minds, but I notice they feel bad (6).

Health/ill-health related to the school situation. The school nurses' description of the school situation was dominated by increasing stress rather than well-being. Violence and bullying seemed to be common and an everyday experience in school. Lots of pupils are tired of school and in higher ages nonattendance seemed to be a common phenomenon.

Violence and bullying are increasing; we have lots of pupils who are tired of school (2). A great number of children who are nonattendant – 30 of 400 pupils at the senior level (10).

There were some ideas of how to work with the problems, and early detection of nonattendance together with teachers appeared to be a feasible way to prevent problems later on. The school nurses called attention to the school as an institution with opportunities to support children for the future. For instance collaboration and building network with social workers and with other professionals working in the area was expressed to be an opportunity when dealing with and/or preventing school problems and thereby promote health.

We have good teachers who work on it early if they are absent. Nonattendance is increasing at the senior level. The school is important ... it is important to

capture them as early as possible ... one can support them and make them feel that someone is caring (9). We are going to build a network together with the police, child welfare clinic and social welfare who works in one of the most socially charged area... I think it is of great importance to see the environment around the child and not only the things that happen in school (5).

Easy to document physical status and difficult to document psychosocial status in school health records

The second category, decided on revealing the school nurses' attitudes of documentation, implied that it was easy to document physical health and difficult to document psychosocial health. The text included both descriptions and explanations of documenting the schoolchildren's health conditions. However, more difficulties were expressed and explained by the nurses. The related subcategories were: possibilities/hindrances related to tradition, time and structure, and possibilities/hindrances related to ethical considerations.

Possibilities/hindrances related to tradition, time and structure. Tradition, time and structure were hindrances to document in the SHR. It was said to be easy to document the physical health and ill-health as there is a long tradition within the profession. The nurses meant that there was a lack of tradition to document the schoolchildren's psychosocial health, which in turn lead to incompleteness of the documentation of the psychosocial status in the records.

I document all this physical, bandaging or spraining (12). One cannot gather the mental health in there. You have to figure it out by yourself (8).

Some nurses explained that it was common with oral reports of the psychosocial health at the delivering of SHR, when pupils, for example, are moving between schools. The nurses described that they put loose notes inside or outside the records or sum up briefly instead of documenting text in clear.

As far as I know it has been a custom here only to write short sentences about what lies behind. If you get a record like that you call that school nurse and ask what it means (8). It happens that the former school nurse calls telling me to be in touch if 'something happens' – and then you know that something will happen (2).

Lack of time was said to be a hindrance to document in the records. Contradictory to that there appeared to be possibilities to save time by using brief notes and document it later on. The possibilities of documenting in the SHR were expressed by the nurses as values of having it written down and that this can save time for further consultations.

Sometimes I have 20–30 children in the waiting room and then there's no possibility to note every visit. I keep a pad where I put notes and later write down what's important (5). I document what I think is important when having further consultations with the pupil, and I have noticed that when beginning with this, it helps me the next time when the pupil comes (11).

The nurses described a lack of structure how to document the children's psychosocial health in the SHR. The shaping of the record was said to be out of date and not appropriate for the present needs. Another difficulty to document psychosocial ill-health was explained as uncertainty about what is important to document for the future.

I think that the record we have now maybe needs to be changed so it became in a way to correspond to the present needs from the pupils (5). There is a problem with records and the children's health – what should one take into it (10)?

Possibilities/hindrances related to ethical considerations. Ethical considerations seemed to be difficult to handle and affected the nurses' decisions about what to document in the SHR. The nurses expressed for instance sensitive talks with pupils and/or suspicions about maltreatment, abuse in the family or other social evils as difficult to document. A fear of risk to stigmatize and/or to manifest prospective problems was expressed by the nurses as the record is following the pupil to the next school. They explained that as the parents had the right to read the record they were cautious with their documenting in an initial phase.

There can be a dilemma about what to write in the records since they're supposed to follow the students to high school. It can sometimes be sensitive things investigated and there might never be more and it's a pity it's supposed to be read there (6). When the children come and tell about problems with their parents before you know more, then you don't want to write too much. I know that parents can come and ask to read the record (1).

The nurses expressed some possibilities to deal with ethical dilemmas related to the documentation of the schoolchildren's psychosocial health. A useful way to share information with parents and/or other caregivers was said to be co-operation and informal meetings with the child health care clinic or the social welfare together with the family. Discussions with colleagues and/or professional guidance occur as feasible ways to diminish the uncertainty of what to document in the SHR.

We meet all the parents before the child begins in the first grade... together with the nurse from the child health care clinic who brings the record. It has been much appreciated by the parents. A group of school health nurses usually meet once a month a couple of hours and we try to guide each other as well as we can (9).

Discussion

This study aimed to describe 12 school nurses' view of the schoolchildren's health and their attitude to document it in the SHR. The findings showed that psychosocial ill-health among the schoolchildren was increasing but that physical health was good. This is in line with previous studies from schoolchildren's perspective, which have shown that Swedish schoolchildren are physically healthy and that psychosocial ill-health is increasing (1, 4, 6). In this study, health and ill-health were described as related to the individual, the family and the school situation. The findings also revealed that the nurses seemed to have a negative attitude towards documenting psychosocial ill-health in the SHR. This negative attitude was related to ethical considerations, tradition, time and structure.

The most important factor for children's and young people's health is the family because their possibilities to well-being and quality of life are mediated through the family (3). In the present study, the school nurses saw the family situation as an important factor that referred to schoolchildren's health. Psychosocial ill-health is increasing among schoolchildren (1, 2) and the findings in this study showed that the school nurses believed that families characterized by mutuality promote health and that disrupted families could cause psychosocial ill-health among the schoolchildren. Also children, who are moving between cultures and especially girls from other ethnic backgrounds, were pointed out as a vulnerable group. Another growing problem described by the school nurses was physical health problems related to a changed lifestyle. The SHS is one important part of the safety net of the society, which ought to be close to children and families. The SHS can be seen as a resource to handle different circumstances, which support respectively threat parents' opportunities to provide for children's needs and thereby form the children's growing conditions (3). In nursing, as early as Florence Nightingale (22) the family has been seen as a vital importance for health and well-being of its members. According to Wright and Leahy's ill-health can be seen as a family affair and when one family member expresses ill-health it can affect the others too (23). The nurses can probably make a contribution by focusing the interaction and reciprocity between health, ill-health and the family function/situation within the SHS. Involving family members and focusing on the whole family as a unit, concentrating on both the individual and the family simultaneously (22), is probably of especial importance when working with schoolchildren's psychosocial problems. According to Moules, families are sometimes unconscious of their own resources and strengths (24). It might be fruitful to see the families as experts on their own situation and that they are probably an underestimated resource that has to be taken into account in SHS. Several theorists mean that family health care nursing represents the future practice of all nurses

(22, 25, 26). Further research is needed to gain knowledge about the needs for and consequences of a family centred approach in school health nursing.

Another important factor that referred to schoolchildren's psychosocial health was the school environment. Samdal (1998) studied the school environment as a risk or resource for students' well-being and found that satisfaction with school was correlated to their opportunities to influence regulations in school as well as feeling safe and having supportive teachers (27). In this study, the school nurses described the school situation as stressful with increasing violence, disturbance and in higher ages non-attendance. As children spend more than 15 000 hours in school it appears to be valuable to reduce and/or prevent school-related stress (28). In a report by Bremberg it is suggested that health promotion in school environment should focus on teaching methods as well as increased student and parent influence (28). The school nurse's knowledge of schoolchildren's health can be valuable when dealing with school-related stress. It is important to initiate collaboration and network building with other professionals as well as with the schoolchildren and their parents and thereby reduce stressful situations and prevent problems later on.

The base of the SHS follow-ups and evaluating directed to the individual pupil is the documentation in the SHR. Documenting schoolchildren's psychosocial health seemed, however, to be a challenge for the school nurses in this present study. Already in 1988, Rydell and Sundelin (15) found that most information of psychosocial health was missing in the SHR. Also the findings from this study indicate that this documentation still is missing and that the nurses have a negative attitude to document psychosocial ill-health. These findings are remarkable and have to be taken seriously! Nurses in the present study expressed hindrances related to ethical considerations as well as tradition, time and structure. An ethical dilemma expressed was that documenting psychosocial problems could mean a risk for stigmatizing the child in the future. Another ethical dilemma was the fact that parents might request to read the SHR. One explanation to the nurses' negative attitude to not documenting can be that the nurses' saw themselves as advocates for the child. This role can be confronted. Acting in the best interest of the child (29) is probably not to neglect documenting in the SHR. There is an obvious risk that not documenting can lead to delayed efforts to intervene in cases with suspect maltreatment at home or in the school. Not documenting could also mean that valuable information about the child is missing and follow-ups get complicated. The SHR in this connection shows a false picture of the children's health and this is not acting for the child's own good. Good nursing includes documenting all aspects of schoolchildren's health.

Follow-ups, evaluating and developing the local SHS is based on actual directions for quality systems and enclose,

e.g. the routines and methods of the SHS. The present study shows that one reason, why most of the nurses expressed difficulties to document psychosocial health and ill-health in the SHR, might be lack of routines and methods in this area (30). Physical examinations have a long tradition in the SHS, routines and methods are well developed. As psychosocial ill-health is increasing among Swedish schoolchildren it seems necessary to elaborate routines and guidelines for measuring these aspects as well. Lack of time was highlighted in this present study as a reason that hinders managing and developing work. An innovative study from the Swedish National Board of Health and Welfare showed that the resources in the SHS differ between the communities' (31). Sufficient and equivalent conditions, i.e. time, routines and methods to document in the SHR are of importance to manage a qualified and well-developed School Health Service. This, in turn, might lead to a more appropriate follow-up and evaluating of schoolchildren's health.

Some threats to the credibility of a study of this kind should be mentioned. The schoolchildren's health is described by nurses and not by the children or their parents. A risk might be the lack of depth in the interviews. Another problem concerns how the interviewer and the interviewees engage with and understand each other. Perhaps the interviewer was too superficial in performing the interviews, or, that the nurses were not used to reflect on their practice. The interviews were, however, both substantially rich and nuanced. The interviewer's further experience of being a school nurse and thus familiar with the context may contribute to forming a basis of understanding in the interview context. On the contrary, this previous experience of working as a school nurse might, in the text analysis and interpretation process, have made her more sensitive and open-minded about the school nurses' situation. This could mean that the analyst notices things that were not clearly expressed in the text. It could also have affected the interpretation of the text negatively if this experience made the author less sensitive and open-minded about revealing something new during the interpretation process. This drawback was assumingly compensated by the application of a strict analysis method and by the fact that the co-analysts and authors (AB and KP) had no experience of working in SHS. In a sense, the interpretation reflects not only on the text but also the school nurses' and the authors' understanding of the field. The first (EC) and the last author (AB) carried out the analysis and the interpretation process independently, but continuously had a discussion with each other until agreements of possible interpretations occurred, and it is reasonable to assume that this contributed to the credibility. The second author (KP) verified the interpretation. Statements from the original text are presented in the result section and will contribute further to the credibility.

Conclusions

It would have been interesting to observe how the school nurses handle schoolchildren's psychosocial health and document it in the SHR. It would also have been interesting to investigate the school nurses' opinions and experiences of involving the family in the SHS. In order to promote, protect and recover schoolchildren's health, more research is needed about how beliefs, experience, ethical consideration and resources influence the school nurse's daily work with schoolchildren's health.

Acknowledgements

Kristianstad University, Department of Health Sciences, supported this study. We are grateful to school nurses for their participating and to Ms Eva Falk revising the English.

References

- 1 Marklund U. *Skolbarns hälsovanor under ett decennium Tabellrapport: 1996:110. (Health Behavior in School-Aged Children – A WHO Collaborative Study. Table-report – the Institute for Public Health)*. 1997, Folkhälsoinstitutet, Stockholm.
- 2 Danielsson M, Marklund U. *Svenska skolbarns hälsovanor 1997/98 Tabellrapport: 2000:5. (Health Behaviour in School-Aged Children – A WHO Collaborative Study. Table-report – the Institute for Public Health)*. 2001, Folkhälsoinstitutet, Stockholm.
- 3 Socialstyrelsen. *Skolhälsovården. (National Board of Health and Welfare. School Health Service)*. 1998, SoS, Stockholm, 10.
- 4 Berntsson LT, Köhler L, Gustafsson JE. Psychosomatic complaints in schoolchildren: a Nordic comparison. *Scand J Public Health* 2001; 29: 44–54.
- 5 Berntsson LT, Köhler L. Longterm illness and psychosomatic complaints in children aged 2–17 years in the five Nordic countries. Comparison between 1984 and 1996. *Eur J Public Health* 2001; 11: 35–42.
- 6 Brattberg G. Back pain and headache in Swedish schoolchildren: a longitudinal study. *The Pain Clinic* 1993; 3: 157–62.
- 7 Berg Kelly K. Self-reported health status and use of medical care by 3500 adolescents in Western Sweden. II – Could clustering of symptoms and certain background factors help identify troubled young people? *Acta Paediatr Scand* 1991; 80: 844–51.
- 8 Natvig GK, Albrektsen G, Anderssen N, Qvarnström U. School-related stress and psychosomatic symptoms among school adolescents. *J School Health* 1999; 69: 362–8.
- 9 Schneider MB. Stated and unstated reasons for visiting a high school nurse's office. *J Adolesc Health* 1995; 16: 35–40.
- 10 SFS. *Utbildningsdepartementet Skollagen. SFS; 1985:1100. (The Ministry of Education. The School Law)*. 1985.
- 11 Socialstyrelsen. *Socialstyrelsens föreskrifter och allmänna råd om tillämpning av patientjournalagen inom skolhälsovård. SOSFS; 1989:12. (The National Board of Health and Welfare: Patient Record Act applied in The School Health Care)*. 1989.
- 12 Socialdepartementet. *Patientjournalagen: SFS: 1985:562. (The Ministry for Social Affairs; Swedish Code of Statutes, The Patient Record Act)*. 1985, Svensk Författningssamling, Stockholm.
- 13 Socialdepartementet. *Sekretesslagen: SFS 1980:100. (The Ministry for Social Affairs. Swedish Code of Statutes, the Secrecy Law)*. 1980, Svensk Författningssamling, Stockholm.
- 14 Köhler L, Jakobsson G. *Barns hälsa i Sverige- en översikt (Children's Health in Sweden: An Overview. The National Board of Health and Welfare)*. 1991, Socialstyrelsen, SoS, Stockholm, 12.
- 15 Rydell A-M, Sundelin C. Pojkars och flickors hälsa speglad av skolhälsovården: fakta, förklaringsmodeller och implikationer. *Socialmedicinsk tidskrift (Boys and Girls Health Mirrored by the School Health Care. J Soc Med)* 1988; 10: 490–7.
- 16 Polit DF, Hungler BP. *Nursing Research – Principles and Methods*, 6th edn. 1999, Lippincott, Philadelphia, USA.
- 17 Kvale S. *InterViews - An Introduction to Qualitative Research Writing*. 1996, Sage, Thousand Oaks.
- 18 Burnard P. A method of analysing interview transcripts in qualitative research. *Nurse Educ Today* 1991; 1: 461–6.
- 19 Woods NF, Cantanzaro M. *Nursing Research – Theory and Practice*. 1988, Mosby, Washington, 438–9.
- 20 Cavanagh S. Content analysis: concepts, methods and applications. *Nurse Researcher* 1997; 3: 5–16.
- 21 Burnard P. Interpreting text: an alternative to some current forms of textual analysis in qualitative research. *Soc Sci Health* 1995; 1: 236–45.
- 22 Hanson Harmon SM. *Family Health Care Nursing—Theory, Practice and Research*, 2nd edn. 2001, FA Davis, Philadelphia, USA.
- 23 Wright LM, Leahey M. *Nurses and Families: A Guide to Family Assessment and Intervention*, 3rd edn. 2000, FA Davis, Philadelphia.
- 24 Moules NJ. Stories of suffering, stories of strength: narrative influences in family nursing. *J Family Nursing* 1997; 3: 365–77.
- 25 Bomar PJ. (ed.) *Nurses and Family Health Promotion. Concepts, Assessments, and Interventions*. 1989, W.B. Saunders company, Philadelphia, USA.
- 26 Friedman M, Bowden VR, Jones EG. *Family Nursing – Research, Theory and Practice*, 5th edn. 2003, Prentice Hall, New Jersey, USA.
- 27 Samdal O. The School Environment as a Risk or Resource for Students' Health-related Behaviours and Subjective Well-being. Doctoral Thesis, University of Bergen, 1998.
- 28 Bremberg S. (ed.) *Evidence-based Health Promotion for Children and Adolescents in Stockholm County*. 1999, Child and Adolescent Public Health Unit, Stockholm, 6.
- 29 Krantz M. *The Nursing Profession in Public Schools from a Swedish Perspective. MPH 1998:8. The Nordic School of Public Health, Göteborg, Sweden*.
- 30 National Institute of Public Health. *Conference Report. Measurement and Monitoring of Mental Health in Children and Adolescents*. Report No. 2002, 23.
- 31 Socialstyrelsen. *Hur bedrivs Skolhälsovård idag – förutsättningar och hinder. En studie omfattande nio kommuner 2003. (The National Board of Health and Welfare: How is School Health Services Managed Today – Conditions and Hindrance. A Study Comprehending Nine Municipalities 2003)*. Report No. 2003, 109–10.