

ORIGINAL ARTICLE

Detecting signs of mental health problems in secondary school-aged youth

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ABSTRACT

Objective: The study purpose was to describe secondary school nurses', subject teachers', special needs teachers', study counselors' and school social workers' (n = 60) experiences of stressors that contribute to the development of mental health problems in secondary school pupils. Another purpose was to describe the professionals' educational needs regarding mental health problems of secondary school pupils. The study aimed at producing information that can promote the detection of mental health problems and facilitate early interventions in secondary schools. The information collected came from the professionals only, not from the pupils or their parents.

Methods: Data were collected in Finland using a Webropol online survey and analyzed by inductive content analysis.

Results: According to the results, secondary school pupils' mental health problems are associated with physical and psychosocial stressors, and with stressors pertaining to learning and studying, lifestyle, family, friend relationships and socioeconomic factors. In addition, the pupils' mental health problems are associated with stressors pertaining to social media. Professionals working at secondary schools need education on how to identify pupils' mental health problems, how to take up the concern with the pupil and parents, and how to support and counsel youth with a mental health problem.

Conclusions: Although information packages, recommendations, materials and tools are available, encouragement and more specific and concrete mental health education for both pupils and professionals is required. New structures and practices, and possibly re-allocation of resources, may be necessary. The teachers' role in mental health promotion and prevention of mental health problems should be supported and resourced more effectively. Psychiatric nurses should be employed at schools.

Key Words: Experience, Mental health, Youth

1. INTRODUCTION

This qualitative study deals, first, with stressors that contribute to the development of mental health problems in secondary school aged adolescents. The terms youth, young people, adolescents and pupils are used in this study to refer to the 13-15-year-old pupils at secondary schools. In addition, "mental health issues" and "mental health problems" are the preferred terms in the authors' own contributions. Secondly, the study presents school and school health profes-

sionals' needs for education on young people's mental health problems. The study was conducted in Finland.

According to WHO, half of all mental health problems start before the age 14.^[1] In many countries, self-reported mental health problems are more common in the young compared to other age groups,^[2,3] and it has been estimated that mental ill-health is at least as prevalent among the young as among the adult population.^[4] Anxiety and depression are the two most common forms of mental health problems, and they

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seem to be more prevalent among young women,^[5] compared to young men. Attention-deficit/hyperactivity disorder and conduct disorders are common in early adolescence, especially in boys, whereas anxiety is the most common mental health problem in older adolescents.^[6] Suicide is globally one of the most common causes of death in young people.^[1]

Finland has the highest prevalence of mental health problems in proportion to the population (5.5 million) in the European Union,^[7] and mental health issues constitute the most common health problem among school-aged children and young people.^[8] Both the number of diagnosed psychiatric disorders, the need for mental health services^[9] and self-reported mental health symptoms have increased in the past few decades.^[8] A growing number of young people retire on mental health grounds, which is a massive loss to the individual, society and national economy.^[10] It has been estimated that 20%–25% of young people in Finland live with mental health problems, most commonly with anxiety, depression, behavioral disorders or intoxicant use and eating disorders.^[11] The latest school health promotion survey of the Finnish Institute for Health and Welfare, covering over 260,000 children and young people^[12] showed a deteriorating of mental health compared to the previous survey in 2019, with girls reporting more school burnout, anxiety and loneliness than boys. The latest statistics from the Social Insurance Institution in Finland revealed a marked increase since 2016 in anxiety in particular.^[10] Looking at the statistics, it must be borne in mind that the increase could partly be explained by the destigmatization of mental health and by the growing awareness and reporting. The threshold of seeking help seems especially low for young women.^[10] It is possible that girls are more prepared to recognize their emotions or to share their experiences.^[13]

A number of factors have been linked to the development of mental health problems in young people. Depression has been associated with the family's situation; parents' mental health problems and low educational and socioeconomic status.^[14] Physical or psychosocial maltreatment, the parents' unemployment and alcohol problems and limited family communication have been found to be linked with the child's depression.^[15,16]

Further factors contributing to young people's depression and other mental health problems include the young person's earlier mental or somatic illness^[15] and early losses.^[14] Loneliness and being bullied at school are also a significant risk to young people's mental health.^[12] Part of the mental health problems may be associated with learning difficulties and school stress.^[8] In the Finnish school health survey from 2021, over 20% of secondary school pupils reported

school burnout and nearly 40% had learning difficulties.^[12] Poor school attendance has internationally been associated with low academic performance, drop-out, unemployment and mental disorders.^[17,18] In contrast, school engagement and attendance are protective factors. Behavioral school engagement and emotional attachment to school may predict a lower risk of delinquency and substance use,^[19] and school engagement may be associated with a lower level of alcohol and cannabis use.^[20] Since school attendance problems commonly emerge already in primary school,^[21] intervening early is instrumental in mitigating absenteeism and the associated negative outcomes.^[22]

Researchers recommend paying special attention to risk groups among the young people. For example, the risk factors are estimated to be 2-5 higher for young people having a disability, living in foster care or being of foreign origin.^[23] Some young people and their families have several simultaneous health and social service needs requiring repeated appointments and assessments. It has been proposed that they should be immediately offered a multiprofessional initial assessment, followed by a multiprofessional appointment to coordinate the services required.^[24]

There is also evidence that game addiction, which is more common in boys than girls, is associated with depression and anxiety^[25,26] Internet and game addictions, as well as social isolation have increased in the past few years,^[27] along with sleeping, nutrition, emotional and relationship problems.^[28] Excessive use of smart phones may increase sleep disorders and depression.^[29,30] In Finland, young people do not follow the guidelines on sleep and physical exercise adequately. More than third of secondary school pupils refrained from eating the (free) school lunch, according to the latest school health survey.^[12]

In the past few years, young people's mental health problems have been exacerbated by socioeconomic factors, ecological anxiety and the COVID-19 pandemic.^[31] The media has most probably had a role in affecting young people's mental health and view of the world.^[10]

Research indicates that the mental health problems in families in general have increased over the course of the pandemic, especially in low-income families, in families with pre-existing mental health issues and in families, whose children have special education needs.^[32–34] The prevalence of loneliness, anxiety and depression rose significantly among young people in 2020-2021, and it seems to have remained higher than before the pandemic, compared to the adult population. This could be partly explained by the more limited access to mental health services and by the impact of school closures. The weakening of protective factors, for example

daily routine and social interaction, has particularly affected young people from disadvantaged backgrounds.^[2,3] Smoking and intoxicant use in young people also seem to have increased during the COVID-19 pandemic.^[35,36]

Given the seriousness of the situation, it is alarming that the mental health services seem currently unable to respond to children's and young people's needs adequately. Several reports in Finland have confirmed that the services are fragmented and not equally accessible to all, and that the cooperation between schools and health and social services is uncoordinated and insufficient.^[12,24] According to the latest school health survey, a significant percentage of secondary school pupils had not received the support they had sought from school nurses, social workers or psychologists.^[12] The limited accessibility and/or efficiency of the mental health services is an international problem. For example, half of the 18-29-year-olds in the European Union area apparently have not received the help they required for mental health problems.^[31]

This is not to say that the scope of the challenge has not been recognized. The World Health Organization has presented four key strategies for decreasing risks and enhancing protective factors. They are: policies and laws (less than half of WHO Member States had a child or youth mental health strategy in 2020); support to caregivers; school-based programs; and the quality of environments in communities and digital spaces. Especially the social and emotional learning opportunities provided by schools are thought to be effective strategies for countries at all income levels. The WHO also runs a Helping Adolescents Thrive Initiative with UNICEF, providing guidelines and a Toolkit on mental health interventions to support young people, their caregivers, and to improve their living environments.^[6]

In Europe, the European Commission supports national policies and finances best practices implementation related to mental health.^[37] An ambitious theoretical framework has been published by the European Union on how a whole-school system can promote pupils' mental health and wellbeing in collaboration with the community.^[38]

In Finland, the protection of children's and young people's mental health is one of the focal areas in the National Mental Health Strategy and Program for Suicide Prevention 2020-2030.^[8] The mental health services for secondary school pupils include the prevention of mental health and intoxicant problems, the identification of early signs, the treatment of mild and moderate problems and referral to further care.^[39] The current Pupil and Student Welfare Act^[40] stresses the importance of focusing on a preventive approach in the school community, instead of reactive, curative treatment. The Na-

tional Core Curriculum for Basic Education^[41] contains the recommendations that pupils should feel listened to, appreciated and cared for, and all the structures and practices in daily school life should promote pupil welfare. The school community is also obliged to enable the development of pupils' emotional and interaction skills, as suggested in the European Union Systemic Whole-School Approach.^[38] Similarly, Burns and Gottschalk,^[42] for example, advocate the promotion of mental health through resilience building, including social and emotional skills in curricula. Paakkari et al.^[43] argue that mental health competence is based on health literacy.

Every municipality in Finland provides school health care services for pupils in grades 1–9 free of charge.^[44] Schools have a nurse and a social worker physically present or available, and some municipalities also hire psychiatric nurses for schools.^[45] Supporting pupils' mental health is an essential part of school nurses' work. Their task is to identify mental health problems, provide brief interventions and support the pupils.^[46] School nurses have been found to have an adequate level of information and skills for supporting pupils' mental health, but they lack time, tools and resources.^[47] If psychiatric nurses were placed into permanent roles at schools, they could help lonely and socially withdrawn individuals by seeking to promote their self-confidence and strengthen their feeling of success. Psychiatric nurses could also support teachers deal with hyperactivity and behavioral problems in the classroom.

Studies on the work of psychiatric nurses at schools in the United Kingdom have shown that their interventions have been effective in dealing with eating disorders, depression and self-harm behaviors.^[48] A study in Finland revealed that psychiatric nurses employed at secondary schools had used psychoeducation (teaching the pupils about the nature of their illness), motivational interviewing, short therapy interventions, behavioral activation, information and various materials to support the pupils.^[49] Secondly, a model developed and piloted in the west of Finland had involved pupils visiting the school psychiatric nurse ten times for assessment and planning of interventions. The pupils had seen the psychiatric nurse out of their own wish or when referred by parents, teachers or the schools nurse. The sessions had involved discussion and behavioral activation, and their purpose had been to stimulate the young people's thinking, help them set aims of their own and look for means to reach these aims.^[50]

Much depends on the school resources and on the role of the school director in making the whole-school visions and objectives visible. Teachers, especially subject teachers, do

not always consider monitoring or supporting pupils' mental health issues to be part of their role.^[51] Many teachers report being stressed^[52] and part of them think they do not have the competence to engage in pupils' mental health work.^[53,54] To reduce resistance among teachers, the European Union Systematic Whole-school Approach recommends allocating teachers the responsibility for constructivist collaborative pedagogy, including role-modeling of social and emotional competences.^[38] A few organizations, for example MIELI Mental Health Finland, support school professionals and parents by providing training, materials and tools.^[55] In addition to this, increasing the amount of mental health education in teacher training has been argued for.^[54] School-based mental health programs should always be linked with other mental health services.^[6] More effective co-operation between teaching staff, parents and school health services is also considered necessary.^[24]

Schools can either undermine or promote wellbeing and mental health. At best, schools can provide a safety net, respond to the young peoples' social, emotional and physical needs, and equip pupils with the information and competencies they need to thrive.^[6] Professionals working with young people have an opportunity to contribute to various protective factors for young people's mental health on a daily basis. These factors include, but are not limited to, social interaction and daily routine,^[2,3] school engagement and attendance^[20] and a healthy lifestyle.^[56-58]

Aim

This qualitative study aims at producing information that could promote the identification of mental health problems and facilitate early interventions in secondary schools. The study describes secondary school nurses', subject teachers', special needs teachers', study counselors' and school social workers' experiences and views of stressors that contribute to the development of mental health problems in secondary school aged pupils. Another purpose of the study was to describe the professionals' mental health education needs. The information collected came from the professionals only, not from the pupils or their parents. The participants were not asked to define mental health problems, only to describe their experiences and views of stressors as potential contributors to mental health problems in young people.

With the increasing prevalence of mental health issues, there is an urgent need to explore the topic for this age group. For school and school health professionals to be able to support their pupils and refer them to other professionals when required, they need to be able to identify risk factors and early signs of mental health problems in the young people. The research questions are:

(1) What kind of experiences do secondary school nurses, subject teachers, special needs teachers, study counselors and school social workers have of stressors that can contribute to mental health problems in school-aged young people?

(2) What kind of education would these professionals need on young people's mental health problems?

2. METHODS

This is a qualitative study involving 60 professionals working with secondary school-aged young people in Finland. The findings are based on inductive content analysis of the participants' responses to two open questions. The terms adolescent and young person or young people are used to refer to the 13-15-year-old pupils of secondary schools.

2.1 Participants and data collection

Municipal school and school health services in 18 localities in western Finland were contacted with a request to study the identification of mental health problems in secondary schools. Permission to study the topic was granted by nine municipalities. The target group members received a link to an electronic Webropol survey and an e-mail with information about the voluntary and anonymous nature of the study. They were also informed that they could discontinue their participation at any time without suffering negative consequences.^[59]

The participants were 11 secondary school nurses, 32 subject teachers, 8 special needs teachers, 4 study counselors and 5 school social workers ($n = 60$) in a western region of Finland. They had a median work experience of 10 years. There were 50 women and 9 men. The teachers represented various subjects, for example mathematics, history or languages, but they were not asked what subject they taught. One participant did not indicate their gender. The data were collected using an online survey tool called Webropol in November and December 2022.

In all, the questionnaire consisted of five background questions, 28 Likert-type questions and nine open questions. It was decided that the quantitative data was too limited to allow any generalization. Therefore, this study deals the qualitative data only, i.e., with the responses to two of the open questions: (1) Based on your experience, how would you describe stressors which contribute to secondary school-aged young people's mental health problems, and (2) What kind of education would you like to have on secondary school-aged young people's mental health problems?

2.2 Data analysis

Table 1 provides an example of how the analysis proceeded. Inductive content analysis was used to study participants' re-

sponses to the two open questions on secondary school-aged young people’s mental health problems.^[60] Single clauses, phrases and sentences representing answers to the research questions were picked out and reduced, while paying attention to not losing their essential content. These units, 138 as a response to the first question, and 78 to the second question, were divided into sub-categories and labeled. Similar sub-categories were then combined into 10 and three generic categories respectively.

2.3 Research ethics and rigor

The study was conducted in accordance with the ethical guidelines of the Finnish National Board on Research Integrity TENK,^[59] paying attention to research integrity, meticulousness and openness. Participation was voluntary and anonymous, and the participants could discontinue their participation at any time without suffering negative conse-

quences.^[56]

The investigators paused to reflect on whether the study was credible and confirmable. They also assessed the transferability of the findings and discussed reflexivity or the potential influence of their beliefs and judgments on the study.^[60] The credibility of the findings is supported by direct participant quotes and by the fact that the analysis was regularly discussed by the research team. A careful description of the data analysis and the example given in Table 1 increase the confirmability of the findings. The researchers acknowledge that during their careers, they have encountered young people with mental health problems, which may have resulted in preconceptions of the topic. The findings are transferable at least to other secondary schools in Finland. At the minimum, the study will give international readers perspectives to reflect on.

Table 1. Inductive content analysis (example)

Reduced expression	Sub-category	Generic category
The experience of not belonging to the community The feeling of not belonging to the group Lack of friends The experience of loneliness Being ignored and not being heard	The feeling of being left outside	Stressors related to friend relationships
Challenging and stress-inducing friend relationships Joining the wrong gang Fear and anxiety induced by belonging to a group Problems with human relations at school Lack of common interests The experience of being bullied	Challenges with friends	
Friends turning their back The experience of being rejected The experience of being discriminated against	Being bullied, rejected and discriminated against	

3. RESULTS

This section first introduces the school and school health professionals’ ideas of stressors associated with secondary school pupils’ mental health problems, and then moves on to present the professionals’ needs for mental health education.

3.1 Stressors associated with secondary school pupils’ mental health problems

Table 2 shows an overview of the study participants’ ideas of stressors associated with secondary school pupils’ mental health problems. These stressors, listed under the title Generic category in Table 2 and marked in bold in the text, involved several sub-categories, which are presented in ital-

ics below. Evidence is presented by direct quotes from the participating professionals. The quotes were translated from the Finnish language by one of the researchers.

3.1.1 Genetic stressors

In the experience of the study participants, mental health disorders running in the family or genetic predisposition was to some extent evident in secondary school pupils they met in their work. Depression especially was seen to be transmitted across generations. Young people had a higher risk of mental health problems, if both parents were affected by a mental health problem, commonly depression. To quote a participant, “Hereditary factors increase the probability of illness”.

Table 2. Stressors associated with secondary school pupils' mental health problems

Sub-category	Generic category	Main category
Genetic predisposition Mental health disorders running in the family	Genetic stressors	Stressors associated with secondary school pupils' mental health problems
Pressures associated with adolescence and identity development Problems with self-esteem Undeveloped emotional intelligence skills	Psychosocial stressors	
Learning difficulties Mismatched expectations Current learning practices	Stressors associated with school and learning	
Poor sleep quality and rhythm Nutritional problems Intoxicant and drug use	Lifestyle stressors	
Concerns related to parents Parents' harmful attitudes Lack of parental attention and safety	Family stressors	
Deficient home conditions Family's economic problems	Socioeconomic stressors	
The feeling of being left outside Challenges with friends Being bullied, rejected or discriminated against	Stressors associated with friend relationships	
Pressures created by social media Excessive time spent in social media	Stressors associated with social media	

3.1.2 Psychosocial stressors

Psychosocial stressors in this study refer, first, to pressures associated with adolescence and identity development. According to the study participants, some young people excessively compared themselves to others and set too-high expectations for themselves, which could affect their mental health. Several study participants mentioned body appearance pressures. They also said that part of the young people had difficulty accepting the physical changes brought on by adolescence. In the participants' own words, "appearance pressures, a distorted self-image", and "Gender identity causes mental health problems to an increasing number of people".

Secondly, the study participants reported a great deal of problems with self-esteem and feelings of inferiority in young people. They suggested that the problems might be a result of the young person not feeling accepted or not having received positive feedback. As an example, "Lack of self-confidence, self-esteem problems and eating disorders" were mentioned.

Third, secondary school-aged pupils' undeveloped emotional intelligence skills were mentioned in this study as factors that could contribute to the development of mental health problems. Some young people had difficulty dealing with stress, disappointments and other negative emotions; they "had life traps". According to the study participants, undeveloped emotional intelligence was associated with poor interaction

and lacking social skills. The participants said, for example, "No ability to deal with disappointments, poor emotional skills", and "Their ability to deal with stress, anxiety and low mood has deteriorated".

3.1.3 Stressors associated with school and learning

The study participants pointed out that with the increasing numbers of young people needing additional support, school professionals did not have adequate time resources for individual pupils. Learning difficulties, which could be attributed to a number of reasons, were mentioned as stressors that could affect both school performance and mental health. Reading and writing disabilities or attention deficit disorders were mentioned as common factors underlying learning difficulties. Undiagnosed neuropsychological problems could sometimes cause learning difficulty. In addition, some pupils with a diagnosed mental health problem seemed to use the diagnosis as an excuse when faced with challenges; according to the participants, they "expected special treatment". On the other hand, such a diagnosis could result in fear of stigma and in problems coping with emotions. One of the study participants said, "For part of the young people, normal everyday problems seem to be overwhelming, and learning new things is difficult".

Secondly, mismatched expectations could affect learning and cause stress to the pupils. The study participants described

competitive situations with too high objectives, which could lead to exhaustion in the young people. Sometimes the pupils' resources did not match the workload at school, but they were still unwilling to take part in remedial education, or their parents could not come to terms with the need for extra support. Some parents expected little, because they had not performed well at school themselves. According to the study participants, the pupils could be burdened by conflicting attitudes and expectations from teachers and parents. To quote, "High expectations from parents or alternatively, no expectations at all."

Last, in the analysis of the participants' contributions, some current learning practices emerged as potential stressors to the pupils. It seemed that the performance demands may have grown, while the number of classroom hours has decreased and the amount of independent work increased. Having schools tests concentrated within a short period of time could be particularly stressful for slower learners in need of much repetition.

3.1.4 *Lifestyle stressors*

The study participants indicated that a number of lifestyle stressors could be associated with secondary school pupils' mental health problems. Poor sleep quality and rhythm was a common problem, and it led to tiredness and concentration problems in the classrooms. Some pupils had an irregular circadian rhythm or they did not get adequate sleep. The study participants assumed the sleep problems to be due to the family's lifestyle, late evenings spent with friends or game and social media addictions.

Nutritional problems were also reported by the study participants. Part of the young people consumed unhealthy diets, ate irregular meals or had various "eating disorders, especially girls". Skipping school meals and replacing them with crisps, sweets and energy drinks was typical behavior in part of the young people.

Intoxicant and drug use, especially binge drinking and experimenting with drugs had become more common in secondary schools, according to the study participants. They thought that the young people used intoxicants and drugs to try to escape anxiety-inducing things.

3.1.5 *Family stressors*

The study participants listed a number of concerns related to parents, which were likely to affect the young people's mental wellbeing. The participants referred to acute or unexpected events, for example a parent's severe illness or death, or the parents' separation. Divorce could cause sorrow and feelings of guilt; the young people could ask themselves if they had contributed to the parents' concerns and con-

flicts. Some young people worried, because their parents were unable to attend to their daily responsibilities. Domestic violence and the parents' use of intoxicants and drugs were likely to cause continuous, long term stress in the young people. To quote, "Worrying about domestic matters, big changes in life like a parent's death, an acrimonious divorce".

Secondly, parents' harmful attitudes emerged in the analysis of the participant contributions. Some parents fostered "too high" expectations for their children's daily coping and school achievement, while others were indifferent towards how their children were managing. At worst, parents had no interest in their child.

Last, lack of parental attention and safety could predispose a young person to severe mental health problems. The study participants described a lack of parental presence and support, with the young people feeling that they were not heard, understood or accepted. Lack of boundaries and lack of love, as well as neglect to attend to the youth's needs, were considered to be risks to the young person's mental health. According to the study participants, "getting anything you want" from parents, who were unable to set boundaries, could also lead to problems. Other causes for concern included problems in family communication, decreased interaction and lack of mutual time in the family. Some young people lacked attachments that promoted mental health. The study participants said, for example, "The home atmosphere – they feel that they are not seen and not heard, and the parents are not interested in their lives" and "The parents are unable to create/maintain a pattern of routines in the family".

3.2 *Socioeconomic stressors*

In the experience of the study participants, deficient home conditions, caused by the family's irregular lifestyle, lack of safe routines or similar factors, were another risk to the secondary school-aged young people. Unstable family relationships and lack of a safe adult could make the young person feel insecure and rootless. To quote, these young people "had unstable conditions, broken homes". The family's economic problems were a potential explanation for the deficient home conditions. According to the study participants, some young people could become targets of bullying, if their parents could not afford to buy them the same kind of clothes or devices that their peers had.

3.3 *Stressors associated with friend relationships*

The study participants stressed how important it was for young people to belong to a peer group. The feeling of being left outside could lead to absenteeism, loneliness, social withdrawal and mental health problems. The participants wrote about pupils suffering from the "feeling of not belonging to

the group and not having friends". Being bullied, rejected or discriminated against could make the young people feel "different and abnormal" and have a profound effect on their self-confidence and mental health. The participants used terms like "being bullied, school bullying, being jeered".

On the other hand, the study participants also mentioned different kinds of challenges with friends. Keeping "the wrong kind of company in a gang" could involve seeking acceptance by experimenting with alcohol and drugs. The participants added that some friend relationships could cause fear and anxiety. Lack of meaningful activities could lead to harmful, even criminal behavior.

3.3.1 Stressors associated with social media

In the opinion of the study participants, young people's use of social media had many adverse effects. Secondary school-aged youth had a great need to be socially accepted, and they tried to conform to the appearance and body image ideals, and other pressures created by the social media. The culture in social media also involved a great deal of bullying and negative pressure. One of the participants wrote, "The social environment (social media, comparing oneself to others, bullying)".

According to the study participants, it was common for young people to spend excessive time in social media; it captivated their attention in several ways. Excessive screen time, the increased use of smart devices and game addiction could lead to sleeping problems, long-term tiredness, anxiety, restlessness and loss of concentration. To quote, "Game addition and staying awake because of that, headaches", and "Increased use of smart devices – sleeping problems".

3.4 Professionals' needs for mental health education

Irrespective of their educational backgrounds, the study participants reported similar needs for education on mental health issues. They suggested more education on how to detect signs of mental health problems, how to bring up the topic and how to support and counsel the young person. The participants also wished for more effective use of experts.

3.4.1 Early detection and bringing up the topic

The study participants felt the need for education on the early detection of mental health problems. So far it had been challenging for them to identify signs of mental health problems in the pupils, and they wished for more general information about young people's mental health problems and symptoms. Secondly, the study participants wanted to be trained on how and in what kind of situations to bring up the mental health problem with the pupil. They asked, to quote, "How to bring up the mental health problems, how to identify the pupil's anxiety in time?" They reflected on how to address the topic

in time but discreetly, so that the pupil did not feel stigmatized. Bringing up the topic with the pupil's parent was also considered difficult. They participants wrote, for example, "If a pupil stays at home, how to deal with it in time?" and "How to bring it up if it's not just a headache/stomach pain but something else, and how to help parents see the situation and their role without making them feel guilty?" The participants needed education on how to encounter the parents and how to build up a trusting relationship and co-operate with them in order to help the pupils. They also mentioned the need for education on ethical issues related to addressing the topic.

3.4.2 Support and counseling

Further needs listed by the study participants involved, first, education on how to identify pupils' need for support and counseling and, secondly, learning support and counseling interventions. The participants wished for concrete instructions and training on the identification of pupils' need for emotional and social support. They were interested in learning concrete support and counseling interventions. To quote, "Practical instructions on how to help, support and refer them further".

3.4.3 Effective use of experts

The participants suggested lectures from psychiatrists and other healthcare professionals to gain more information about mental health problems, attention deficit disorders and about their effects on the pupils' learning and needs for support. They said, for example,

"Training from psychiatric specialists and healthcare professionals on how mental health disorders are visible at schools and how to best deal with them."

"Information about the various phenomena associated with mental health disorders and about how to support pupils' coping in the school setting."

"An expert to tell us what services are available to young people and how to seek them."

The study participants suggested obligatory education on mental health problems for teachers and more specific education for school nurses. The focus in this education should be on concrete action and instructions. Dealing with various situations should be practiced in multiprofessional groups to increase co-operation.

Using experts by experience, with their genuine first-hand experience, was proposed to gain insight into mental health problems. This experiential knowledge could be useful in encountering and supporting pupils with mental health problems. One of the study participants wrote, "Experts by ex-

perience to give lectures, discussion on the topic, authentic stories". Last, parents' reports were mentioned as an important source of information. The parents' reports could be used to gain an overview of the effects their child's mental health problems had on the daily life of the family. They could also be used to learn parents' opinions about the kind of support they thought their child required at school.

4. DISCUSSION

This study presents school nurses', subject teachers', special needs teachers', study counselors' and school social workers' (n = 60) experiences of stressors that contribute to the development of mental health problems in secondary school pupils. The findings reveal a great variety of factors associated with the risk of mental health illness and support earlier research, which links mental health problems with genetic, family related, psychiatric, psychological, social and cultural factors.^[61] It is the accumulation of such stressors, whether concurrent or sequential, that can lead to mental health illness and self-destructive behavior.^[62]

In this research, secondary schools constituted the study setting. Many of the stressors mentioned by the study participants occur and can be addressed in the school context, where the young people spend a major part of their waking hours. Besides the most obvious school-related stressors (learning difficulties, mismatched expectations and current learning practices), various problems in friend relationships and psychosocial stressors are also evident and could be partly dealt with in the school context. Furthermore, lifestyle and social media education fall under the realm of school and school health professionals today. In contrast, family stressors and socioeconomic stressors are mostly outside the responsibility of schools, and genetic factors cannot be changed.

It seems that both teaching and health and social service professionals in this study are well aware of stressors jeopardizing young people's mental health. They suggested more education on the detection of mental health problems, on bringing up a mental health concern and on supporting and counseling pupils. The possibly obligatory education should focus on concrete action and instructions and it should involve practice in multiprofessional groups. A British one-year project testing a whole school approach to mental health found it promising. Every adult in seven schools was trained, and they reported greater awareness and literacy around pupils' mental health, greater confidence in dealing with mental health problems, and an increase in their supportive behaviors. The most valuable thing had been the opportunity to come together and reflect on what could be done to turn a rhetorical commitment into a lived reality. It seemed that

the exact content of the training sessions mattered less than the process itself. Importantly, the participants signed up to a joint commitment to putting students' mental health and wellbeing at the heart of what they did. The project resulted in new policies, classroom routines, clubs and themed days, implemented through teaching resources produced.^[63]

Based on the literature review, it seems that both national and international information packages, recommendations, materials and tools are already available. The health education given to all secondary school pupils based on the national core curriculum also addresses relevant mental health topics.^[41] What commonly seems to be missing, however, is resources,^[46] encouragement and more extensive, specific and concrete mental health education for school and school health professionals, so that they can integrate all the information and materials into their daily practice.

New structures and practices under the leadership of a dedicated director, and possibly re-allocation of resources, may be necessary before this objective can be reached. For example, recent research on the effectiveness of some of the current learning practices should be considered seriously. Frequent use of self-directed learning or digital materials may be associated with secondary school pupils' weaker learning outcomes in several knowledge domains, especially in young people with background risk factors.^[64] Teachers might feel encouraged by the thought that investing in the pupils' mental health will facilitate their work and promote their coping.^[52] Placing psychiatric nurses into permanent roles at schools can also be recommended.

The study has a limitation of being based on subjective experiences and opinions of a relatively small number of participants (n = 60). The qualitative results cannot be generalized, but they can provide interesting insights into the topic. The findings could be tested in other contexts with larger numbers of participants.

5. CONCLUSION

The existing research information and learning material on mental health should be used more effectively at schools. A whole school approach involving mental health education focusing on concrete action, protective factors, tools and materials can be recommended for all professionals working at secondary schools. The teachers' role in mental health promotion and prevention of mental health problems should be supported and resourced more effectively. Schools would also benefit from the employment of psychiatric nurses.

CONFLICTS OF INTEREST DISCLOSURE

The authors declare they have no conflicts of interest.

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