

# School Nurse Perceptions of Student Anxiety

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## Abstract

Anxiety disorders are common in youth. Because somatic complaints are a hallmark feature of anxiety, these students frequently visit their school nurse, creating an ideal opportunity for nurses to identify and assist them. In an effort to better understand current practices, we surveyed a large sample ( $N = 93$ ) of school nurses. Results indicated that the majority of nurses perceived anxiety as the most prevalent mental health issue in their students. Moreover, the majority of nurses reported that they did not use any formal screening tool or intervention protocol and stated wanting to expand their training in anxiety intervention. These data suggest that school nurses identify anxiety as a top problem but do not receive adequate training to address it. Data from this survey may be used to plan how best to fill gaps in nurse training and practices that can enhance nurses' capacity to optimize outcomes for anxious students.

## Keywords

child anxiety, school nursing, brief interventions, training needs

Anxiety disorders affect approximately 10–20% of youth, representing the most common psychiatric condition in this population (Copeland, Shanahan, Costello, & Angold, 2011; Costello, Egger, & Angold, 2005). Excessive symptoms of anxiety that are distressing and impairing but do not meet diagnostic thresholds are also very common (Rapee, Bögels, van der Sluis, Craske, & Ollendick, 2012). Excessive anxiety negatively affects the child's family, social, and school functioning (Langley et al., 2014). With respect to school functioning, anxious students perform poorer in school than their nonanxious peers (Jones & Suveg, 2015; Jones, West, & Suveg, 2017): They are more likely to experience grade retention, poor attendance and grades, and disciplinary referrals (Nail et al., 2015). Additionally, anxious, compared to nonanxious, youth have a more negative attitude toward their teachers and school (McGovern, Lowe, & Hill, 2016) and are viewed as academically impaired (i.e., not working as hard, not learning as well, and not performing as well in the classroom) by their parents and teachers (Alfano, 2012; Mychailyszyn, Mendez, & Kendall, 2010). Thus, anxious children are at higher risk of academic failure (Wingate & Tomes, 2017).

Unfortunately, the majority of anxious youth are not identified and do not receive the support they need (Costello et al., 2014; Lawrence et al., 2015; Merikangas et al., 2011). Specifically, it is estimated that only 30% of anxious youth receive professional help (Chavira, Stein, Bailey, & Stein, 2004; Jensen et al., 2011). When untreated, excessive anxiety tends to be chronic (Broeren, Muris, Diamantopoulou, & Backer, 2013; Scholten et al., 2013) and predicts

downstream disability such as adult psychiatric disorders and early school dropout (Butterworth & Leach, 2017; Ingul, Klöckner, Silverman, & Nordahl, 2012).

Several barriers account for the gap in service utilization, including the high cost of treatments and limited health-care insurance, inadequate access to specialty mental health providers, perceptual barriers (stigma), and transportation obstacles (Gopalan et al., 2010; Reardon et al., 2017). To address the barriers to evidence-based mental health services, researchers and policy experts have recommended (1) offering mental health services in community settings where children frequent (e.g., schools, primary care), (2) enhancing the capacity of existing community providers who interact with youth (e.g., school clinicians, primary care providers) to deliver mental health interventions, and (3) improving early identification and intervention in community settings to reduce the need for specialty mental health treatment.

In response to these recommendations, a number of school-based anxiety interventions have been developed. School-based interventions have unique benefits in that

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there are no transportation or cost barriers and interventions are delivered in an authentic setting where students have opportunities to practice their developing skills in actual anxiety-provoking situations with teachers and peers (Powers, Swick, Wegman, & Watkins, 2016; Werner-Seidler, Perry, Calear, Newby, & Christensen, 2017). To date, these interventions have focused on training school clinicians (Ginsburg, Becker, Kingery, & Nichols, 2008; Herzig-Anderson, Colognori, Fox, Stewart, & Masia Warner, 2012; Masia Warner et al., 2016). However, school clinicians are often in short supply, have large caseloads, and prioritize children with disruptive behavior and learning disorders, highlighting the need for additional school providers. Because a hallmark symptom of anxiety is somatic complaints, such as headaches and stomachaches (Ginsburg, Riddle, & Davies, 2006), school nurses are often the first to identify anxious students and are in an ideal position to conduct early identification and intervention. Indeed, school nurses often face a perplexing subgroup of students who utilize school health services due to frequent, vague physical complaints as a result of excessive anxiety. However, school nurses do not currently receive adequate training in evidence-based strategies to address anxiety. The National Association of School Nurses (NASN) reported that 53% of school nurses specified that their primary training needs involved learning strategies to address mental health issues in their students (Bergren & Monslave, 2012).

To address this need, our team has received federal funding to develop a brief school nurse administered intervention for child anxiety. An important step to optimize the feasibility and uptake of new intervention is to understand the current needs and practices of school nurses. The current study presents results of a survey administered to school nurses and school nurse supervisors that assessed their practices, needs, and perceived barriers to implementing interventions for child anxiety.

## Method

### Participants

An anonymous in-person survey was administered to 93 school nurses and/or school nurse supervisors (elementary through high schools) who participated in a school nurse conference in a New England state.

### Measure

A 14-item survey was developed by the research team to assess the nurses' perceptions of (1) prevalence of mental health issues and anxiety specifically, (2) the use of assessment tools for student anxiety, (3) exposure to and use of evidence-based psychosocial interventions for mental health problems, and (4) the interest and perceived barriers for training and delivering a brief intervention for anxious youth.

**Table 1.** Percentage of Nurses Reporting the Two Most Common Psychiatric Issues of Students Who Present to Their Office.

Mental Health Disorder	#1 (%)	#2 (%)
Anxiety	76.3	16.1
Attention deficit hyperactivity disorder	16.1	36.8
Autism spectrum disorder	4.3	9.2
Depression	2.2	31.0
Trauma	1.1	6.9

**Table 2.** Percentage of Nurses Reporting the Use of Screening and Intervention Tools.

Current Practices	% No
Do you formally screen/assess for anxiety?	94.6
Do you currently use a manualized protocol to reduce anxiety?	79.6

## Procedures

The survey was reviewed by the university's institutional review board. The survey was distributed in paper copy to all the attendees and returned on the same day. Approximately 120 school nurses were expected to attend the annual conference, and 93 returned the completed survey indicating an estimated response rate of 77.5%. Respondents were assured that answers would be kept anonymous and no personal information was collected. Data were entered and analyzed in IBM SPSS Statistics Version 23 by the research staff.

## Results

### Prevalence of Excessive Anxiety

The majority of the nurses (76.3%) indicated that anxiety was the most common mental health issue among students who visit their office; 16% rated attention deficit hyperactivity disorder as the most common mental health issue (see Table 1). Among all the children who visit their office, nurses reported that approximately 10% (range: 0–70%;  $M = 10.61$ ,  $SD = 14.45$ ) show excessive symptoms of anxiety.

### Use of Assessment Tools and Evidence-Based Interventions for Anxiety

Nurses were surveyed about the use of screening/assessment for anxiety. The majority of school nurses (94.6%) reported that they do not use any formal assessment tools nor do they use an evidence-based protocol to intervene on anxious youth (see Table 2). An open-ended question asked nurses to list the instruments/strategies they used. While none of the nurses reported using a manualized intervention, those who replied ( $n = 19$ ) indicated using breathing exercises or other relaxation strategies (e.g., guided imagery), calming

**Table 3.** Nurses' Perceived Importance and Needs in Addressing/Reducing Anxiety in Students.

Survey Question	% of Nurses
How important is it to address/reduce anxiety among your students? ( <i>N</i> = 93)	
Very important	74.2
Important	22.6
Moderately important	2.2
Slightly important	1.1
Not important	0
Have you ever received previous training in cognitive-behavioral therapy (CBT) to reduce anxiety? ( <i>n</i> = 92)	
Yes—a lot	3.3
Yes—some	10.9
Yes—a little	21.7
No	64.1
Would you like to receive training in evidence-based anxiety reduction skills? (Yes; <i>n</i> = 87)	94.2

**Table 4.** Nurses' Perceived Feasibility and Availability to Deliver a Brief Anxiety Reduction Intervention.

Survey Question	% Yes
Do you think it is feasible for nurses to implement a brief intervention to help anxious students during the school day?	96.4
How many total weekly meetings with the student do you think would be feasible (0–10)? ( <i>n</i> = 81)	
0	35.8
1–3	44.5
4–6	16
7–10	3.7

strategies (e.g., soothing musing, resting, using cold packs), talking with the student about anxiety, and referring student to the school counselor.

### Training in Anxiety Interventions

Nurses' responses to three questions about training (see Table 3) indicated that the majority of nurses reported that addressing anxiety was important, that they had not received training in evidence-based strategies for anxiety, and most were interested in receiving such training. Table 4 presents data on nurses' perceptions of whether they had time to implement a brief intervention to reduce anxiety symptoms and their potential availability to implement it. Overall, 64.2% of nurses reported that they could meet an average of 3.23 (*SD* = 2.30; range = 1–10) times a week with an individual anxious child and that they could spend approximately 8 min (range: 0–30; *M* = 8.81, *SD* = 8.30); the remaining 35.8% of respondents stated that it would not be

**Table 5.** Nurses' Perceived Potential Barriers to a Brief Intervention Implementation.

Barriers	% Yes
Too many competing demands	78.5
No uninterrupted time	78.5
No private space	43
No comfortable dealing with mental health issues	6.5
Other	
No teacher support (to allow student to be out of class)	4.3
Other staff not recognizing this is an area of nursing	2.1
Parents' awareness	2.1

feasible to meet weekly with an individual child in order to implement an anxiety reduction intervention.

### Perceived Barriers to Implementing a Brief Intervention for Anxious Youth

Nurses were asked to indicate potential barriers to delivering a brief anxiety reduction intervention. Four options were provided and a fifth one was open for nurses to report any other barrier. The two most frequently endorsed barriers were having too many competing demands and not having uninterrupted time to be able to meet individually with an anxious child. Table 5 summarizes their responses.

## Discussion

The aim of this study was to examine school nurses' perception of the prevalence of excessive anxiety among the students who visit their office, their use of assessment tools for anxiety, and the use of evidence-based psychosocial interventions for anxiety. We also assessed their interest in receiving training and perceived barriers for delivering a brief intervention to anxious students.

### Prevalence of Mental Health Issues

The majority of the nurses reported anxiety as the top mental health problem in their students, affecting approximately 10% of their caseload. These data are consistent with prevalence rates of pediatric anxiety disorders in epidemiological studies (Copeland et al., 2011; Costello et al., 2005); however, it may indicate that nurses are underreporting the number of students with excessive anxiety given the higher number that are likely to visit the school nurse. It is possible that school nurses only identify the most severe cases (those that present to their offices regularly or with severe symptoms), while the majority of children who show mild and moderate symptoms but are still impaired go underidentified. We currently lack a more extensive understanding of school nurses' knowledge in differentiating anxiety from other mental health illnesses: It is possible that nurses identify anxiety only after ruling out other medical conditions based on their previous medical training. Enhancing the

school nurses' knowledge of child anxiety symptoms, combined with their ability to differentiate medical illnesses from anxiety symptoms, may increase early and accurate identification of pediatric anxiety and increase awareness among schools and families.

### *Use of Assessment Tools and Evidence-Based Interventions*

Although anxiety was listed as the most common mental health issue in their students, nurses did not report using formal anxiety screening tools. This is consistent with the fact that screening for mental health issues is not a routine practice in the United States despite the fact that screening has been recommended by several agencies including the American Academy of Child and Adolescent Psychiatry (2007). Because school nurses are often the first people to encounter anxious youth, providing them with standardized tools to screen for anxiety could have several benefits. Early screening might increase resources to help anxious students before they utilize more costly services in the school and in the community as well as avoiding unnecessary physical testing and consequently delay appropriate interventions. Noteworthy, free, brief, easy to score, standardized screenings for anxiety are available to the public and can be used by trained professionals without additional cost to the school or families. Despite the limitations associated with school screening (e.g., stigma of being labeled, lack of a follow-up plan, false positives), giving school nurses tools to screen for anxiety might increase the identification of anxious students who would otherwise go unrecognized.

Nurses did not report the use of any evidence-based interventions for reducing anxiety. A small growing body of studies indicate that school nurses can be trained in delivering psychosocial interventions for youth with several mental health issues (Attwood, Meadows, Stallard, & Richardson, 2012; Houck, Darnell, & Lussman, 2002; Houck, King, Tomlinson, Vrabell, & Wecks, 2002; Houck & Stember, 2002). With respect to anxiety specifically, a study conducted by Stallard, Simpson, Anderson, Hibbert, and Osborn (2007) trained school nurses to deliver a universal, manualized cognitive-behavioral therapy (CBT)-based, prevention program for child anxiety (FRIENDS; Barrett & Turner, 2001) to 106 children aged 9–10 years. Results were promising in terms of symptoms reduction, but several limitations (e.g., number and duration of meetings) make this intervention challenging to implement. Taken together, these studies suggest that school nurses can be successfully trained to deliver interventions for anxious students. If school nurses are offered training in evidence-based interventions, they may be in an ideal position to reduce student's distress and lower their own case-loads, by decreasing the number of children that they recurrently encounter.

### *Interest in Receiving Training*

Despite the fact that the vast majority of the surveyed nurses considered anxiety important to address among their students, most of them never received any training in anxiety reduction skills. Previously, a survey from the NASN (2011), reported that over half of the nurses identified mental health issues as their higher priority on continuing education programs. Similarly, the vast majority of the nurses participating in our survey indicated interest in receiving specific training in anxiety reduction strategies. Our data highlight an important gap in what school nurses do as part of their daily responsibilities (facing a large proportion of anxious students) and the training received. With the expanding role of school nurses, and with excessive anxiety being the main mental health issue in their students, providing school nurses with specific training has potential to optimize school resources and care. Our own work, currently underway, is examining the feasibility of a six-session school nurse delivered intervention for anxious children based on the core components of CBT (Drake, Stewart, Muggeo, & Ginsburg, 2015). Preliminary data on the feasibility and acceptability of the intervention (referred to as Child Anxiety Learning Modules [CALM]) indicate that school nurses found CALM helpful and were able to meet individually with students despite their competing demands (with administrative support). Additionally, reduction in anxiety symptoms following the intervention was reported by evaluators, parents, and children (Muggeo, Stewart, Drake, & Ginsburg, 2017). These preliminary data based on an open trial indicate that training school nurses in delivering a brief intervention for anxious youth may benefit both nurses and students.

### *Perceived Barriers for a Brief Intervention for Anxious Youth*

Several barriers to intervention implementation were specified including competing job demands and a lack of uninterrupted time to meet with the students. From a school nursing practice perspective, this indicates the need to restructure their eclectic working day, in order to reserve private time and space. If nurses can be useful school resources to address anxiety symptoms in students, they should also be provided with the working conditions to implement this service. Overall, these data suggest that administrative/principal support is a key factor to facilitate the uptake or adoption of any school nurse administered intervention for anxious students and it is consistent with the literature indicating that organizational support is necessary to promote changes (Shea, Jacobs, Esserman, Bruce, & Weiner, 2014; Weiner, Lewis, & Linnan, 2008).

### **Limitations**

This survey lacked demographic information about the participating nurses. It is possible that nurses participating at the conference differ from other nurses in terms of education and

perceived need in implementing evidence-based practices and consequently are not representative of the school nurse population in New England and nationally. School nurse practices differ based on state laws, geography, and responsibilities (Mangena & Maughan, 2015), factors that are likely to influence the nurses' perceived needs in terms of training and intervening on mental health issues in their students. Additionally, the study lacks a more comprehensive examination of current practices and their effectiveness in reducing student anxiety. Follow-up questions and qualitative data will be necessary in future surveys to gather a better understating of school nurses' current practices and needs.

## Conclusion

Excessive student anxiety is common but often goes under-identified and undertreated. Because anxious youth frequently visit their school nurse with somatic complaints, nurses may be in an ideal position to assist these youth. Findings from this survey suggest that school nurses perceive anxiety as a top problem but do not receive sufficient training in evidence-based practices to screen or reduce anxiety symptoms in their students. While the intent is not to replace the role of mental health providers, giving school nurses tools to screen and intervene early with anxious youth may represent an effective way to decrease their burden in the long term as well as contributing to the well-being of their students.

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