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RESEARCH ARTICLE

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School nurse and COVID-19 response

Ball State University, Muncie, Indiana, USA

Correspondence

Constance E. McIntosh, School of Nursing, Ball State University, Health Professions Bldg, Muncie, IN 47306, USA.

Email: cemcintosh@bsu.edu

Abstract

The role of the school nurse should not be understated when addressing the Covid-19 pandemic and its effects on children and families. Knowledge surrounding this virus is rapidly changing and quick adaptation within the school system is required. In addition to the provision of direct care and education to students, school nurse responsibilities include the development and implementation of new policies; consideration of social and emotional well-being; and effective communication with students, families, teachers, administrators, and community stakeholders. This article addresses current evidence related to the coronavirus disease 2019 (COVID-19) pandemic and the evolving role of the school nurse. A case study incorporates tips and suggestions for school nurses who will deliver professional care during this COVID-19 crisis.

KEYWORDS

COVID-19, responsibilities, school nurse

1 | INTRODUCTION

The coronavirus disease 2019 (COVID-19) is an illness caused by a virus that is spread through close person-to-person contact. Similar to severe acute respiratory syndrome coronavirus 2 (SARS-COV 2), which caused severe respiratory distress in humans, COVID-19 spreads even faster than SARS-COV 2. The virus spread throughout the world and resulted in the worst pandemic ever seen with some five million deaths and with numbers continuing to increase (World Health Organization [WHO], 2021). In the United States, there are currently 48.1 million schoolaged children from kindergarten to 12th grade (National Center for Educational Statistics [NCES], 2020). Due to the virus being spread through airborne particles and droplets including sneezing, coughing, or, talking, many schools across the country had to go to a virtual learning platform rather than traditional face-to-face instruction (U.S. Census Bureau, 2022). At the peak of the pandemic (January 2021) over 55.1 million students were affected by

school closures which translated to roughly over 120,000 public and private school closures (Education Week [EW], 2021). Once schools re-opened to in-person teaching, this created a slew of new challenges for school nurses across the country. This paper will discuss school nurses' responsibilities when providing care to students (strategies to avoid spreading the virus), the implementation of new policies due to COVID-19, and the role of the school nurse when intervening with students that may be experiencing social and emotional issues. This paper will discuss the importance of communication between the school nurse and students, parents, caregivers, teachers, and administrators. Lastly, a case study will be provided to incorporate thoughtful consideration and implementation of the aforementioned while also sharing helpful tips and suggestions.

National Association of School Nurses (National Association of School Nurses [NASN], 2021a, 2021b, 2021c, 2021d, 2021e) identifies the school nurses' role as assessment, intervention, and implementation to provide for the students' physical, mental-emotional, and social health needs. As the school's healthcare professionals, school nurses are responsible for vaccination records. Before the COVID-19 pandemic, documentation of records included measles, chickenpox (varicella), influenza, hepatitis A, and hepatitis B, to name a few. Vaccination records are a tedious process that includes science-based reasoning, detailed record-keeping, and thoughtful timely communication with students' parents or guardians and primary caregivers. The importance of up-to-date vaccination record keeping cannot be underscored enough. Viruses' spread very quickly and can create an outbreak (e.g., the sudden increase in a small geographic area) when not tracked and contained appropriately. Now, with the widely available COVID-19 vaccine, school nurses are responsible for tracking these vaccinations—including two different injections and boosters—on top of their already long list of obligations.

The Centers for Disease Control and Prevention (Centers for Disease Control & Prevention [CDC], 2018, 2021a) recognizes the growing impact that school nurses have on mitigating the COVID-19 virus. For example, school nurses can evaluate students (frequently) for COVID-19 symptoms including fever, cough, fatigue, muscle aches, headache, sore throat, and runny nose. Although these symptoms can mimic influenza symptoms, the school nurse can differentiate the two diagnoses, as COVID-19 can come with difficulty breathing and loss of taste and smell. The CDC (2021a) encourages school nurses to be flexible in how they provide school health services for students including in-person and remote assessments and interventions. Even in an ever-changing environment, the school nurse is tasked with the health communications that flow through the school clinic. Health information must address what impact the issue will have in the classroom, amongst staff, and with students. Also, communication must address parents' responsibility and any role the larger community may play including care providers, school boards, and the public health department. This communication means explaining healthcare policies that may be challenging to come to understand and implement.

2 | POLICY DEVELOPMENT AND IMPLEMENTATION

School nurses face many challenges with the ever-changing recommendations and lack of policies when assessing, treating, and mitigating the spread of COVID 19. Adaptation is not a new practice for school nurses but given the unfamiliarity of COVID-19, this creates many obstacles when making efforts to keep students and staff safe. School nurses are taking on COVID-19 specific roles in advising, planning, and implementation (Johnson & Johnson, 2021).

According to the CDC (2021c), school nurses, along with other health care personnel, are responsible for providing a safe school environment for in-person learning. Additionally, it is stated that school nurses have an important responsibility to collaborate with others to implement prevention strategies, maintain clinics, evaluate and manage symptoms, implement testing procedures, contact trace, and provide support to not only the students but to their families and the school staff. Nurses are required to complete these tasks without solid policies. The CDC provides guidelines on prevention strategies, quarantine, isolation, screening, testing, and contract tracing but due to the vast difference in each school situation, there are no concrete policies provided by the CDC. The NASN also provides references and resources, but again, no concrete policies. NASN has a resource page available to its

members that contain evidence-based information to assist school nurses in their collaborative response to the pandemic (NASN, n.d.). Topics include school reopening/closing, screening students and staff, hygiene, personal protective equipment, social and emotional health, healthy environments, screening and immunizations, special populations, testing and vaccinations, operating virtually, and data collection. It is clearly stated that these references are not intended to be guidelines but simply resources as the nurse uses clinical judgment to make decisions and plan for quality improvement during the pandemic. This page further states that school nurses are always responsible to abide by applicable local, state, and federal laws, as well as nursing standards of practice. This is indicative of the need for nurses to stay current with the unfolding nature of the pandemic, in addition to other health issues, and to be informed of legal policies affecting the individual school community. A nurse's use of clinical judgment, prioritization, and problem-solving skills is influenced by current evidence and assessment of the situation at hand. In an article written by Howard (2021) from CNN, Linda McCauley, dean of the Nell Hodgson Woodruff School of Nursing at Emory University, stated "You can't really say anything in general about the role of the school nurse during the epidemic, because of the variability from one district to another." Nationwide, policies vary drastically. Some schools mandate that students and staff wear masks, but others do not. One school may require anyone exposed to the coronavirus to quarantine, another will not. And still, one school may require staff to be fully vaccinated to help protect students who are unable to be vaccinated, while another does not. While policies vary, so do the responsibilities of the school nurse due to this inconsistency. In addition, if mitigation policies are not being followed or enforced a school nurse's risk of exposure to the virus can increase, as well as put many others at risk (Howard, 2021). This exemplifies the importance of collaboration with fellow health care providers and area schools. A school nurse from New York explained the impact of Covid-19 to her job by describing the need to collaborate with her colleagues to create a hybrid model of learning and to understand guidelines that were continuously changing (Johnson & Johnson, 2020). She needed to move from her one-room clinic office to a threeroom area that allowed for triage, treatment, and isolation. She assisted in the creation of forms and spreadsheets for documenting student and employee screenings, quarantine, and symptom management. Worksheets and "cheat sheets" were created to breakdown guidelines and symptoms and to help administrators answer questions. She noted that nurses were sharing best practice ideas including policies, training material, flowsheets, videos, and presentations, and were professionally stronger for the networking.

One of the most time-consuming and challenging roles of the school nurse is contact tracing. School nurses are consumed in spreadsheets and different systems that aim to track all students and staff that have tested positive for COVID-19 as well as those they may have been in close contact with. After reviewing individual vaccination status, each student's parent must be contacted and informed about what action needs to be taken next, how long to quarantine, as well as what signs and symptoms to look for in their child; all while maintaining confidentiality (CDC, 2021b). On an already busy day, the extended amount of time it takes to track all this data, as well as contacting parents of children that had been in contact with someone who tested positive for COVID-19, and providing the steps to take for quarantine, can be overwhelming. The National Association of School Nurses (NASN) conducted a survey in April 2020 to learn what key activities school nurses were providing during the COVID-19 crisis (NASN, 2021e). In this study, it was found that 54% of the nurses used the time to reach out to students at risk.

Cohort groups have been utilized in schools. These are groups of students, and sometimes teachers or staff, that stay together throughout the school day to minimize exposure for students, teachers, and staff across the school environment. This practice is used to help mitigate the spread and to keep contact tracing less complex. It also allows for less testing, quarantine, and isolation of a single cohort instead of school-wide measures in the occurrence of a positive case (CDC, 2021b). However, because of these cohort groups, students are limited to when and where they can be in the school at any given time, including the restroom, cafeteria, and even recess. Problems can arise if a school creates a schedule for bathroom breaks so that students are not in contact with other students outside of their cohort. Teachers may deny students the privilege of using the restroom because it is not the scheduled time for their cohort. School nurses know this can have many negative impacts on a student including anxiety, urinary tract infections (UTI), and constipation. Additionally, when assigning cohort groups there needs to

be consideration of the school's responsibility to warrant that cohorts are done in an impartial manner that does not encourage academic, racial, or another tracking, as described in the U.S. Department of Education Handbook (CDC, 2021b).

Another challenge for the school nurse is creating a secluded area for students that have suspected COVID-19 to be seen while still performing all the other daily tasks such as following medication and treatment regimens and treating injuries. It has been necessary for school nurses to convert a room in their school building, ideally near the clinic office, or to create a secluded area inside their office to use for students with possible COVID-19. According to NASN (2021a), a school nurse needs to minimize exposure to COVID-19 by screening all students, whether they are symptomatic or not. If symptomatic, care should not be provided in the general clinic space, but students should be moved and treated in an isolation area. The nurse also must properly clean and disinfect the health clinic office after each encounter with a sick student and also consider proper ventilation not only in the clinic office but throughout the school building (CDC, 2021c). Individuals can become infected if they encounter contaminated surfaces and then touch their nose, mouth, or eyes. Providing separate spaces and disinfecting helps to safeguard high-risk students such as chronically ill students or students who struggle with following the mitigation policies such as young children and children with developmental delays or disabilities (NASN, 2021a).

Cleaning and disinfecting also become an overwhelming task for the nurse. According to the NASN (2021e), 45% of nurses reported spending significant time educating staff on infection control measures. The school nurse, with the help of administration and staff, ensures all areas of the school are being cleaned properly and often. School nurses and staff may be required to clean more frequently if there are high transmission rates in the community, a low number of people wearing masks or incorrect mask usage, lack of hand hygiene, or if the space is being used by students that are high risk for severe illness (NASN, 2021a). This creates an issue of having adequate supplies to frequently clean and disinfect. Schools often rely on donations of cleaning supplies from students. In underserved areas, this can become very difficult. Purchasing supplies and equipment needed for proper cleaning, ventilation, hand hygiene, and sanitation can become very expensive. Additionally, to maintain student hydration, bottle refill stations may be considered to replace water fountains but is a larger expense.

Consistent and correct mask use is another obstacle for the school nurse. Teachers, staff, and students should consistently and correctly wear a mask to protect themselves and others (CDC, 2021b). Educating students and staff on proper mask usage and ensuring everyone is following this education can become exhausting. COVID-19 has become very politicized with mask-wearing often a central component. Studies have shown that data supports community masking to help reduce the spread of COVID-19 among adults and children (CDC, 2021d). It has also been found that masks are safe and are not correlated with clinically significant effects on respiration or gas exchange in most situations, except for intense exercise. Studies show that wearing masks by both the infected and uninfected person gives the uninfected person the most protection (CDC, 2021e). Yet, some parents argue that it is the right of the parent and student to decide if wearing a mask is the best practice for them, thereby creating problems with policy implementation and enforcement. This becomes a very difficult and challenging situation for school systems, school nurses, parents, and children.

Not only has the issue of masking been politically charged, but so has the overall status of vaccinations. COVID-19 vaccination is a critical piece to safe in-person learning and is the leading public health strategy to end the pandemic (CDC, 2021b). The CDC (2021b) tells us that individuals who are fully vaccinated are less likely to become infected or develop symptoms, are at the lowest risk for severe infection if contracting the illness, and are less likely to die from Covid-19 as compared to the unvaccinated. School nurses play a large part in the promotion of the COVID-19 vaccine. Collaborating with school and community officials to educate and discredit false information regarding the vaccine is very important. Schools can provide information and data regarding COVID-19 vaccination, encouraging vaccine trust and confidence. Schools must consider that the community impacts of COVID-19 vary greatly. They also must be culturally sensitive to some communities that might have had negative experiences that impact their trust and confidence in the healthcare system. Establishing trust as well as supportive policies and practices that make getting vaccinated easy and convenient can have a positive impact on vaccine promotion (CDC, 2021b).

For many students, especially those from single-parent families, school nurses are one of the primary care providers. Students and parents come to the school nurse with medical problems and questions because they feel that the school nurse is someone they can trust. A school nurse from New Jersey identified that for families who routinely live in crisis, the pandemic exacerbated an already critical situation (Johnson & Johnson, 2021). As the nurse, she was now providing needed supplies such as diapers and formula, coordinating Covid-19 tests, and providing education about the virus (trying to dispel misinformation). She further addressed that some families did not trust or understand telehealth and were confused by social distancing and masking guidelines, especially if they were more culturally accustomed to the metric system. This is one example of why a school nurse plays such a vital role in overall community health. Nurses are trained to consider cultural circumstances and socioeconomic issues as they routinely care for individuals from varying backgrounds. For schools that remain remote, school nurses may have to take on a new task that isn't as familiar to them: monitoring student health, safety, and wellbeing from a distance, typically from behind a computer screen. It is a vital role of the school nurse to recognize and respond to many childhood issues discovered in school, including mental health issues, food instability, as well as child abuse, and neglect. Learning to assess these situations through a computer can be very difficult (Johnson & Johnson, 2021).

School nurses are required to implement multiple prevention strategies simultaneously to keep students and staff safe during the COVID-19 pandemic. Screening, testing, ventilation, handwashing, mask-wearing, staying home when sick and getting tested, contact tracing in combination with quarantine and isolation, and cleaning and disinfection are all important measures to keep students and staff safe (CDC, 2021b). The strain that this puts on the school nurse, all while still attending to students that acquire injuries, need daily medications or medical care, is overwhelming.

Lastly, often school nurses are part of a team that is involved in developing state and district level COVID-19 policies. Participation in these teams allows nurses to share their own experiences, data, outcomes, and observations from their specific population (Maughan et al., 2021). School nurses often have significant input when school administration is creating and adjusting plans. The data collected and shared by nurses is a great resource for local decisions and evidence of developing trends. NASN found that 78% of school nurses used time to review their data to see new trends and 66% participated in special training sessions to stay current on key health issues. School nurses are always working to keep students and staff healthy, safe, and ready to learn (NASN, 2021e).

3 | SOCIAL AND EMOTIONAL ISSUES

Health ramifications surrounding COVID-19 continue to unfold as the duration of the pandemic extends with each passing day. The unknowns and uncertainty of life exacerbate social and emotional issues that evidence tells us are already heightened. In this fluid situation, school nurses are uniquely positioned to help not only with their local school plans, but also to assist in addressing the overall emotional health of their communities, states, and the nation.

According to the Mayo Clinic Staff (2021), some of the emotional and social issues connected to the pandemic for adults include stress, anxiety, depression, worry, fear, sadness, and loneliness. This is in addition to potential increased substance use, isolation, and loss of control. Students also note feeling stressed, anxious, depressed, uncertain, and lonely (Besser et al., 2020). Lessard and Puhl (2021) tell us that students' relationships with teachers and peers have been strained, therefore resulting in feeling unsupported both academically and emotionally. With all the disruptions and the differing abilities of students, one thing has become certain during the pandemic, connection—feeling seen and heard—is a key component to a person's emotional health (Besser et. al., 2020).

It is evident that the role of the school nurse is changing and that communication methods should be adjusted to provide the most benefit to families and staff in need (Hoke et al., 2021). School nurses should be advised to utilize the Whole School, Whole Community, Whole Child (WSCC) model (CDC, 2021f; NASN, 2016) and the Framework for 21st Century School Nursing Practice (NASN, 2016) for guidance as they strategically navigate the emotional health fallout associated with the pandemic.

While nurses are trained to work autonomously to prioritize care and make clinical judgment decisions, school nurses also need to be prepared to work collaboratively within the academic realm and as a community partner to provide student-centered care (CDC, 2021f). The school nurse must be seen as a vital member of the team who can contribute to the development of plans and education of students, families, and employees (Rothstein & Olympia, 2020). He/she needs to build a trusting relationship with educators and school administrators discussing their role not only as someone who addresses a health concern after diagnosis but who is qualified to assist in preventing health complications in the future (Maughan et al., 2021). This includes being proactive in sharing current, evidenced-based data to key stakeholders.

Besser et al. (2020) note that stressful situations lead to medical conditions such as increased anxiety and depression, as well as safety risks. They also state that individuals who have a positive sense of self, are optimistic, and who feel like they are seen and heard tend to adapt better to changing situations. Adaptability matters. Connection to others and being able to interact with peers is important for mental health. School nurses can encourage safe connections to optimize mental health. They should educate on the importance of self-care for body and mind, typical versus atypical stress/behavior, and the importance of developing support systems (Mayo Clinic Staff, 2021). According to the CDC (2021c), school nurses can assist children in making sense of what they hear and even help families learn to cope with pandemic stressors by being honest and factual and providing prevention strategies.

Revisiting the issue of connection, Lessard and Puhl (2021) further address the fact that not only are students feeling an emotional weight during the pandemic, but teachers who normally are available to console students experiencing tragedy, are themselves dealing with challenges within their own families as well as adjusting to new ways of meeting student needs. School nurses, while providing information on mental health strategies for students and educators, need to be aware of their own limitations (Maughan et. al., 2021). In addition, school nurses that are overworked and constantly serving others need to know they have support (Hoke et al., 2021).

One thing every school nurse can do is embrace the five-step nursing process (American Nurses Association, n.d.), relating it to social and emotional health. This process consists of assessment, nursing diagnosis, outcome planning, implementation, and evaluation.

3.1 | Assessment: collect data

School nurses should assess the atmosphere of their individual school or corporation. They should be collecting data as they can to help them address the health needs of those entrusted to their care. Following, are some questions school nurses should be asking. What do administration, faculty, staff, students, and their families already know? Where does the most tension appear to be coming from? Where is the education or knowledge gap? What information, that is medically factual, can the nurse provide information about? What are students and faculty saying about academic or home issues? How many students are being seen daily in the clinic with anxiety, depression, or stress-related issues? How many students are seeking assistance from counseling services? What resources are available to help students and families cope with emotional stress? Who can the school nurse collaborate with to improve outcomes? What is the best way to communicate with families?

3.2 | (Nursing) diagnosis: identify the problem

Once data are collected, the school nurse can narrow down the most pressing problems facing the student body and community. Prioritizing care is a key role of a nurse and is important when addressing emotional health needs. At this stage having the assessment documentation, readily available will help make problem identification easier.



3.3 | Outcomes/planning: how will the problem be managed?

Once priority problems are identified, it is necessary to plan how to manage the issues. Who should the nurse collaborate with? How will information be distributed? What is the goal when tackling this issue? Is the goal specific and measurable? How will you know if the plan is working?

3.4 | Implementation: take action

At this phase, the nurse implements the plan. Paperwork, newsletters, automated phone messages, or e-mail messages may be sent to students and families, stress balls may be given to students, or a stress-relief room may be set up and opened for use. Posters related to coping skills or listing resources may also be displayed.

3.5 | Evaluation: is this working?

It is always important to evaluate if the action put into place is working. Should it be continued, changed, or ended? Was it a one-time distribution of information? If so, did the method for sending the information work? Can it be used again to send different information? Was a display board effective?

Putting it together using the nursing process: (example)

Assessment	Diagnosis	Planning	Implementation	Evaluation
Current COVID-19 numbers in the county Average absences Number of clinic visits for stress issues	Knowledge deficit	Families will receive information regarding coping skills and resources available for social/emotional wellbeing	Newsletter sent to all families and school employees. Include: Community resources Online resources	Did families acknowledge receipt of the newsletter and take advantage of resources as needed?
Data shared by the school counselor			Coping strategies and techniques	
Available resources			Tips to maintain physical health which will enhance emotional health	

4 | COMMUNICATION

The importance of good communication cannot be underestimated. The National Association of School Nurses (NASN) has stated the school nurse should be identified as an expert in school health being, "a leader and integral partner with school staff and outside agencies in developing comprehensive school plans/procedures" (NASN 2019, para 4). When working with students and parents/caregivers communication may be challenging due to varying educational levels, language barriers, and the Health Insurance Portability and Accountability Act (HIPPA) rules.

The COVID-19 pandemic has highlighted the need for expert communication to ensure the correct information is being communicated to all stakeholders at an appropriate level and language of understanding. This will require the school nurse to know what the language needs are in each school, how best to disseminate information for short- and long-term use, and ensure accurate and current information is being addressed. In addition to the

traditional vaccination and individual medications records for students, the school nurse is also responsible for maintaining COVID-19 vaccines and boosters verifications, along with assessments of illness symptoms, contact tracing, and verifications of when a student may need to be sent home or return to school (Faherty et al., 2019, Pressley, 2021). The school nurse has an important role in developing prevention strategies to reduce the spread of infections, especially to children with increased health risks. According to CDC (2021a), specific strategies should be developed and implemented in every school such as the use of appropriate masks, personal protective equipment (PPE), maintaining social distancing, ensuring proper handwashing, and the use of hand sanitizers, and proper personal coughing and sneezing etiquette (CDC, 2021a). In addition, the school must have appropriate cleaning and disinfecting protocols, good ventilation, a policy for contact tracing, and a determination if the school nurse will be testing students and staff (CDC, 2021a).

To ensure students with any disabilities are also protected their Individual Education Plans (IEP) or Section 504 plans must be updated to guarantee preventive measures or alternatives strategies are included (CDC, 2021a). The CDC (2021a) has developed a COVID-19 Mitigation Toolkit accessible to school nurses at https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/FINAL-0321420_B_K-12_Mitigation_Toolkit508.pdf The CDC Mitigation Toolkit is a valuable resource for the school nurse and administrator to establish protocols for safety in the school environment and on transportation vehicles (e.g., school bus, school-owned vehicles) and can be tailored to the specific needs of each school. The American Nurse Association (ANA) has also created an online COVID-19 Resource Center with information to help nurses better protect and educate people (ANA, 2021).

In 2014–2015, there were over 4,800,000 children in U.S. schools learning the English language, most likely this number is higher in 2022 and substantiates the importance of appropriate communication with non-English speaking families (Department of Education, 2017). To ensure COVID-19 protocols are being comprehended by parents/caregivers, the information must be written at a universal comprehension reading level, most adults read at an 8th-grade level and compounding the issue many parents/caregivers may be non-English speaking and may have limited, if any, English reading skills (Marchand, 2017; Strauss, 2016). The dissemination of important COVID-19 information to students must be age-appropriate and non-threatening. For elementary-age children, the school nurse may want to use visual props and images to convey the proper use of masks and other types of PPE, proper handwashing, and pictures of how coughing and sneezing spread droplets and demonstrating how to properly prevent the droplets from spreading are appropriate.

Smaller groups of children for these demonstrations are best and allow for the children to demonstrate their understanding. This strategy may need to be repeated every couple of months and spontaneous spot checks are a good strategy to check student compliance. Middle and high school students will benefit from visual aids as well as printed material they can keep for reference. There should be signage through the buildings including the cafeteria, restrooms, hallways, classrooms, and school-owned vehicles. Appropriate strategies for teenagers should also include the reasons for PPE, social distancing, and contact tracing.

Students not obtaining a vaccine or booster will need additional support and mandatory testing on a regular schedule established by the school system or county/state mandates. Strict record keeping will need to be maintained as any COVID-19 symptoms and or confirmed positive testing will need to be reported to local, county, and state health departments.

The school nurse is in a good position to educate students, teachers, staff, and parents/caregivers on the benefits of obtaining the vaccine and boosters. The information should be presented in a non-judgmental manner using the science behind vaccine development and benefits as well as any side effects. Because some people may not be educated on the differences between COVID-19 and influenza it would be helpful to provide the symptoms of influenza in comparison to the COVID-19 symptoms.

The school nurse might develop a short video or newsletter located on the school website for easy access to all people. The information should be regularly updated as new information is disseminated to the nurse. There should also be an option for people to have contact with the school nurse for questions or concerns. This information must be concise, at an appropriate reading level and available in languages represented in the demographic area. Refrain

from sending important COVID-19 information home with younger school children as there is always the potential for the documents to get lost.

When checking students or staff for COVID-19 symptoms the CDC recommends using their algorithm including assessing for a 100 degree or higher fever, recent dry cough, change or difficulty in breathing or respiratory pattern, a sore throat, any loss of taste or smell, and recent vomiting or diarrhea (CDC, 2021a). The CDC recommends if one of these symptoms is present the individual should be sent home and instructed to obtain a COVID-19 test, instructions should also follow the district, local, and state mandates. If sending a student home, the school nurse should telephone or directly discuss with the parents/caregivers explaining why the child is being sent home, guidance on next steps, and allow a period for questions. There should also be printed information in a language understood with instructions provided to the parent/caregiver including contact information for any needed clarification. The goal for good communication is to educate students, teachers, staff, parents, and caregivers on the COVID-19 virus, symptoms, and prevention strategies. This should be done in a non-judgmental way using age-appropriate teaching and learning methods in a language and comprehension method understood and to evaluate and make necessary changes as appropriate.

4.1 | Case study

Ann, a junior in high school, is one of four children in a nuclear family. Her eldest sibling is a sophomore in college, while the younger siblings are students in middle and elementary schools. Both parents are teachers in the local school system. The entire family adapted in response to the COVID-19 pandemic by participating in virtual engagement during the 2020–2021 school year.

Despite having adequate access to basic resources and necessary technology, Ann struggled during this period of change. Normally a strong student with a 3.7 GPA, Ann's grades slipped due to missing and late assignments. All in-person, school-related clubs and activities were canceled. Following CDC guidelines, the family practiced social distancing and stayed home as advised. Ann's social interaction with peers decreased significantly. She engaged in increased passive screen time and spent longer periods of time lying in bed. When questioned by her parents, Ann cited a general disconnect from her teachers, classmates, and coursework, resulting in uncertainty and a lack of motivation to complete her coursework.

Faced with the challenge of managing their new employment obligations to develop online classrooms, as well as their other children attending virtual classes, Ann's parents felt pressure to ensure an improvement in Ann's grades but reported limited capability as well as uncertainty related to appropriate methods to motivate Ann during this unprecedented period. As educators and as parents, both Ann's mother and father were familiar with comprehensive educational constructs emphasizing the importance of holistic rather than sole academic success (Wortham et al., 2020). Ann's father assigned daily dog-walking duties to the children in an attempt to increase physical activity and provide outside stimulation while adhering to recommended COVID-19 precautions. Ann's mother sought professional resources online but struggled to sort through the vast amount of information, noting it was particularly challenging to discern reliable information from politically biased or motivated information with the current political climate in the United States.

Meanwhile, Collette, the lead Registered Nurse in the corporation where Ann and her siblings attend school, has been busy adapting to the daily nursing challenges presented by the pandemic. The corporation includes one high school, two middle schools, and three elementary schools, each staffed with a licensed practical nurse or a nurse's aide. As the Covid-19 pandemic unfolded, challenges mounted for Colette. In addition to her routine duties of maintaining general school health, like managing vision screenings and vaccinations while collaborating with and overseeing the LPNs and aides, new responsibilities developed for Collette. She attended meetings with the health department and school administrators and was a key player in developing ongoing school updates and policies. As the school system transitioned back to in-person classes, Colette became responsible for conducting contact

tracing. During her contact tracing calls, Collette provided guidance on reliable resources for current Covid-19 guidelines, but was often faced with explaining the guidelines, answering questions from scared and uncertain family members, as well as push-back from disgruntled family members.

Soon after the transition to in-person classes began, Ann was exposed to a Covid-19 positive classmate. Collette spoke with Ann's mother as she conducted the routine contact tracing call. In a moment of fear and frustration, Ann's mother tearfully expressed her concerns about not only Ann's exposure and required quarantine, but also her academic struggles. Collette listened carefully and provided therapeutic communication while recognizing many familiar themes similar to other phone calls she had made. As the conversation continued, Collette and Ann's mother identified a need for resources.

In response, Collette began networking with the school administration and community stakeholders to create a COVID-19 Toolkit link on the corporation website. The COVID-19 Toolkit included national, state, and local information, with CDC and state department of health links to continuously updated COVID-19 information, including local community resources and vaccination sites. In addition to these COVID-19 resources, Collette coordinated with local PhysicalEducation (PE) teachers for physical activities, Home Economics teachers for athome healthy snack ideas, counselors for stress-reducing resources, and dietary staff for information about access to free meals for students.

Recalling the conversation with Ann's mother, Collette identified a need for a homework help hotline, as students, parents, and teachers each faced challenges and had a need for assistance in this area. She determined a need for a section of the toolkit to include resources for overwhelmed families/caregivers, as well as resources for school faculty and staff. Collette collaborated with the lead faculty member in each educational department at the school, as well as the school corporation counselors and administrators to identify resources for the homework help hotline, overwhelmed families, and faculty/staff members.

Development of the online toolkit required collaboration with school IT professionals. Collette recognized the importance of disseminating information about the online COVID-19 Toolkit and worked with school administrators to develop special announcements regarding the toolkit resource dedicated to faculty, staff, and families in the school community. Electronic surveys sent to these stakeholders to gain feedback and evaluate the effectiveness of the toolkit. Preliminary results were positive, and Collette received positive verbal feedback when conducting the contact tracing calls and during general communications with community members.

5 | CONCLUSION

The school nurse has always served an important role within the school systems in the United States. However, the COVID-19 pandemic has made people more aware of the importance of the school nurse to the implementation and enforcement of healthcare safety policies, education for students, families, and teachers and a safety net for students' physical, emotional, and social well-being. The school nurse may be the one person who can shift through the mountain of information, break it down into understandable languages, and disseminate it to groups of people with language barriers, learning challenges, and underserved in an unbiased manner to best meet the needs of the population served. The individual school nurse is in a unique position to help people within their districts to navigate the physical health, emotional well-being, and social challenges COVID-19 has presented to be better educated and make appropriate personal health decisions based on scientific facts.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

ORCID

Pamela K. Brelage http://orcid.org/0000-0001-9684-9129

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