



## Using Elementary Schools for Pediatric Practicum: An Alternative Approach

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### ABSTRACT

Securing clinical sites that facilitate achievement of nursing skills to competently care for children is often challenging for nursing faculty. An additional challenge is helping nursing students learn the importance of conceptually driven practice and its application in the delivery of high quality care. This manuscript describes an alternative pedagogical approach that utilizes elementary schools for *pediatric* practicum, which is framed by the Whole School, Whole Community, Whole Child Model. Our model driven approach not only provides a framework by which baccalaureate nursing students gain the skills necessary to interact with, educate, and care for children, but also one in which they can gain a greater understanding of how the home, school and community influence the overall health and well-being of children. Subsequently, this pedagogy serves as an exemplar of how an alternative site can be utilized to successfully educate nursing students regarding the care of children.

### Introduction

Securing clinical sites that facilitate the achievement of cognitive, affective, and psychomotor nursing skills, particularly those related to the care of children, is often challenging for nursing programs. An additional challenge is created by the short duration that children are currently hospitalized (McCarthy & Wyatt, 2014). Paralleling these challenges are those faced by nursing faculty who are charged with assuring that nursing students learn the importance of conceptually driven practice and its utilization in providing high quality care to their patients (McEwen, 2014). An alternative pedagogical approach to address these challenges and assure that baccalaureate prepared nursing students enrolled in pediatric courses have sufficient experience to competently care for children has been to place them in elementary, middle, and high schools. The purpose of this manuscript is to describe a pedagogical approach using elementary schools as clinical sites for *pediatric* practicum by the University of Illinois at Chicago College of Nursing (UIC CON) on the Urbana-Champaign campus. This pedagogical approach is guided by the Whole School, Whole Community, Whole Child Model (WSCC) (ASCD and Centers for Disease Control and Prevention, 2014; Chiang, Meagher, & Slade, 2015).

### Background

Despite the speculated number of nursing programs that utilize schools for clinical practicum, only eight articles have been published

in the past 36 years describing the utilization of schools as *pediatric* clinical practicum sites for baccalaureate and graduate entry nursing students. Scholastic settings reported in these publications included Head Start, primary or elementary schools, middle schools, and high schools (Kulewicz, 2001; Kushto-Reese, Maguire, Silbert-Flagg, Immelt, & Shaefer, 2007; Lieber, 1997; Lough, 1999; Ogenchuk, Spurr, & Bally, 2014; Rossman, Dood, & Squires, 2012; Schmidt, 1981; Schwartz & Laughlin, 2008).

Seven of the eight clinical practica were guided by conceptual frameworks. Nearly half ( $n = 4$ ) of the practica were driven by service-learning (Kulewicz, 2001; Kushto-Reese et al., 2007; Rossman et al., 2012; Schwartz & Laughlin, 2008). Two practica were framed by experiential models (Lieber, 1997; Ogenchuk et al., 2014). Experiential based practica utilized inter-professional education, and Melander and Robert's clinical teaching associate model (Lieber, 1997) to frame their practicum. One practicum was modeled after “a clinic without walls” (Lough, 1999). No publications presented that described using the WSCC model to guide a *pediatric* nursing practicum.

Activities performed by nursing students during these pediatric clinical practica included obtaining anthropometric measurements (Kulewicz, 1999; Kushto-Reese et al., 2007; Lieber, 1997; Ogenchuk et al., 2014; Schwartz & Laughlin, 2008); conducting lead, hemoglobin, vision, and scoliosis screenings (Kushto-Reese et al., 2007; Lough, 1999; Ogenchuk et al., 2014; Schmidt, 1981; Schwartz & Laughlin, 2008); and managing common childhood illnesses and minor injuries (Lieber, 1997; Ogenchuk et al., 2014). Nursing student assignments consisted of

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delivering health education and safety lessons to children and teachers, developing handouts for parents, conducting population assessments, writing reflective journals, and formulating nursing care plans (Kulewicz, 2001; Lieber, 1997; Lough, 1999; Ogenchuk et al., 2014; Rossman et al., 2012; Schmidt, 1981). One school-based practicum included home visits (Schmidt, 1981).

Evaluation of using schools for *pediatric* practicum in these publications addressed two major outcomes: (1) achievement of pediatric course objectives, and (2) health outcomes of school students. Achievement of pediatric course objectives was measured by examining course evaluations, nursing student journals, and comments from teachers, school officials, parents, nursing faculty, and nursing students (Kulewicz, 2001; Kushto-Reese et al., 2007; Lieber, 1997; Lough, 1999; Ogenchuk et al., 2014; Rossman et al., 2012; Schmidt, 1981; Schwartz & Laughlin, 2008). Health outcomes of school students were assessed by determining the number of (a) injuries that children incurred, (b) referrals that were made, (c) medications that were administered, (d) children who were ill, and (e) students who were absent. Evaluation of health outcomes also included health knowledge attained by students, parents, and teachers (Kushto-Reese et al., 2007; Lough, 1999; Rossman et al., 2012).

### Pediatric nursing practicum at UIC CON on the Urbana-Champaign campus

Utilization of elementary schools for *pediatric* practicum at the UIC CON on the Urbana-Champaign campus is guided by the Whole School, Whole Community, Whole Child Model (WSCC) to provide a holistic and global approach in learning about caring for children. Developed by the Association of Supervision and Curriculum Development (ASCD) and the Centers for Disease Control, the focus of the WSCC model is to use the school environment as a means to provide and incorporate health services and programs to children and youth with the intent of raising academic achievement and improving learning. To accomplish these goals, the community, school and health sectors are encouraged to come together for the benefit of students (ASCD and Centers for Disease Control and Prevention, 2014; Chiang et al., 2015; Morse & Allensworth, 2015). The model further specifies ten health related topics to be addressed. These topics include health education; physical education and physical activity; nutrition environment and services; health services; counseling, psychological and social services; social and emotional climate; physical environment; employee wellness; family engagement; and community involvement (ASCD and Centers for Disease Control and Prevention, 2014; Galemore, Bowlen, Combe, Ondeck, & Porter, 2016; Rooney, Videto, & Birch, 2015).

The aim of our *pediatric* practicum is twofold. Nursing students learn to a) use the WSCC model in guiding their assessment of health and safety related issues for students within individual classrooms and the entire school environment, and b) apply the nursing process in developing interventions consistent with the WSCC model to address these issues. For example, nursing students develop health lessons to address specific health and safety related issues for children in their assigned classroom. Nursing students also use a) the WSCC model to assess the health and safety issues faced by the school and community environments, and b) the nursing process to formulate nursing diagnosis related to these issues, and recommendations to improve the functioning of the school system in tackling the health and safety needs of students within the community. These objectives are achieved through clinical assignments.

### Implementation

For the practicum, four groups of six to eight senior nursing students are assigned to elementary schools (i.e., kindergarten thru fifth grade) surrounding the Urbana-Champaign campus. Each student is assigned to a classroom for one-half day for seven consecutive weeks where they

become engaged in the environment. This strategy allows nursing students to build rapport with the teacher and students in the classroom, and enables them (nursing students) to identify the health and safety related issues of students in their designated classroom.

Assignments designed to meet practicum learning objectives include classroom observation, pick and play, four health lesson plans, and an assessment of the school and community. During the first day of clinical, nursing students observe the classroom. Nursing students determine the total number of students assigned to a classroom, the number of male and female students, and the ethnicity and race of the students. Nursing students also assess how the teacher interacts with the children and manages the classroom, as well as how the children interact with each other, their attire, and the foods they eat for snacks and lunch. The classroom assignment not only serves to identify the composition of the audience to whom nursing students will be presenting health lessons to and strategies to manage the classroom, but also serves as an initial assessment of various physical, social, and emotional aspects of the school environment. The assignment also parallels the comprehensive approach used in the WSCC model to identify and remediate health related issues.

For the pick and play assignment, nursing students select a game, toy, or song that is appropriate for the children in their classroom. Nursing students analyze how the item or activity facilitates language and/or sensory-motor development, as well as how the item or activity promotes social interaction. Nursing students also determine the developmental appropriateness of the item or activity, and its affordability. Analysis of the item or activity is submitted as a written assignment and presented to fellow classmates and nursing faculty during post-conference. The pick and play assignment not only helps students identify developmentally appropriate activities and strategies that can be used in their health lessons, but also facilitates their understanding of the importance of and choosing learning activities that keep school children engaged in learning; a key principle in the WSCC model (ASCD and Centers for Disease Control and Prevention, 2014; Galemore et al., 2016).

Nursing students develop four health lessons based on their observations and assessment of the classroom, as well as in collaboration with classroom teacher. These health lessons are consistent with health and safety issues presented in the WSCC model, e.g., nutrition, health education, physical education and activity, and the education plan for the classroom. Nursing diagnoses are then used to identify knowledge deficits related to these health and safety topics, such as hand washing, bullying and oral hygiene, and are supported by student observations, teacher input, and evidence in the literature. Goals for health lessons, both short- and long-term, are written using Bloom's Taxonomy (Su, Osisek, & Starnes, 2004) and SMART criteria, i.e., specific, measurable, achievable, relevant, and timely (Bowman, Mogensen, Marsland, & Lannin, 2015; Buckworth, 2016). Content of the health lesson is outlined and the amount of time allocated to discuss the material is specified. Nursing students evaluate the effectiveness of their health lesson by documenting the number of students who participated in the health lesson, the number of students who responded correctly, and the students' reaction to the health lesson (see Health lesson).

Health lessons also include a brain-break. Brain-breaks are usually physical activities, which are done over a short period of time, to not only improving circulation, but also learning and retention of information (Bobe, Perera, Frei, & Frei, 2014; Jensen, 2000). As such, brain-break activities help children to release pent-up energy and maintain their focus on the health lesson. Brain-break activities are also consistent with the physical activity component of the WSCC model (ASCD and Centers for Disease Control and Prevention, 2014; Galemore et al., 2016).

Nursing students' final assignment culminates with a presentation of their critical appraisal of the school environment and surrounding community to principals, teachers, their fellow classmates, and nursing faculty. Nursing students utilize the nursing process to formulate

nursing diagnoses and recommendations consistent with the WSCC model to address the holistic health needs of the school, community, and children. Recommendations proposed by nursing students have included physical activity and nutrition programs to promote health, as well as programs to equip students with effective communication skills and strategies to address bullying.

During their last day in the classroom, nursing students read a reflective letter that they have written to the teacher and students. This letter summarizes and reflects the health lessons that the nursing student taught the class and the lessons that the nursing student learned from the students and teacher. Nursing students bring their relationship with the students and teacher to a close by thanking the class for having had this opportunity and extending well wishes to the students and teacher.

Nursing faculty are present at each school to a) oversee nursing students' interaction with elementary school students, b) facilitate nursing students' assessment of the school and community, and c) assist with activities in health lessons, such as hand washing. Nursing faculty also guide nursing students in the development of their health lessons during office hours. Since nursing faculty are present in classrooms, they are able to evaluate nursing students' performance in delivering health lessons and their interaction with elementary students. Nursing faculty also facilitate nursing students' integration of pediatric content as it relates to the developmental level of children in each of the classrooms, as well as the application of critical reasoning and thinking in performing their assessments and developing classroom specific, and school and community interventions during post-conferences.

#### *Classroom experience*

Nursing students report that when they enter their assigned classrooms, elementary students often find their presence and attire “novel” and gravitate to them. Nursing students also relate that once their “newness” wears off, elementary students come to recognize nursing students as adult authoritative figures and turn to them to share their personal experiences. By the third week, nursing students convey that they no longer focus on their personal goals, but focus on those of the children in the classroom as they are no longer influenced by distractions in the classroom during presentation of their health lessons. More importantly, nursing faculty observe that nursing students have learned to modify their teaching strategies to meet the students' needs, i.e., the lesson plans are presented at a developmentally appropriate level and conclude that these experiences provide opportunities for nursing students to develop confidence in their teaching abilities and interacting with children. Moreover, nursing students' accomplishments are reflected in their presentation of health lesson, and the content of their reflective letters to the class.

#### *Strengths*

Strengths of our pedagogical strategy include that the practicum is grounded in the WSCC model: a framework that emphasizes the importance of collaboration between the school and community to promote optimal outcomes for children enrolled in school. This pedagogical approach not only provides nursing students the opportunity to view health care of children from a more global perspective than an individualistic approach as delivered in the acute care setting, but also a structure for novice learners to think about contextual factors and develop relevant interventions (ASCD and Centers for Disease Control and Prevention, 2014). In other words, clinical experiences that are guided by a framework facilitate the development of and the application of critical thinking skills and engage students in contextually based learning (Benner, Sutphen, Leonard, & Day, 2010). Our pedagogical approach regarding nursing students activities and assignments extends beyond data collection and the development of psychomotor skills, such as obtaining height, weight, and calculating body mass index, and

review of immunization records. We, the nursing faculty, expect nursing students to apply the nursing process to the context of the school and surrounding socio-economic-political community to promote health, and to translate findings from their assessment of the school, classroom, and children in developing recommendations. As such, this pedagogical approach is consistent with the current emphasis in addressing the health care needs of the whole community, while simultaneously meeting the individual student's health and safety needs. Lastly, although nursing students are present only for 4 h one day per week, their presence aligns with the American Academy of Pediatrics goal of having a nurse in every school (Pohl, Jarvill, Akman, & Clark, 2017). Many of these schools do not have a full time school nurse on site.

Another strength of our clinical practicum is that teachers in the schools enjoy and appreciate having nursing students in their classrooms. Teachers acknowledge that nursing students not only participate in providing health information to children in their classrooms and meeting their health related goals, but also help individual children learn classroom content. Moreover, teachers comment on the level of knowledge and expertise of the nursing students, the organization of their health lessons, and their ability to build rapport and engage elementary school students in learning. Teachers also note that having nursing students in their classroom heighten the children's awareness of health. Subsequently, teachers frequently request that a nursing student be assigned to their classroom during the next semester.

Consistent with the literature, nursing students also report that they come to realize that there is “more” that goes into educating children than providing information. This epiphany includes how to manage a classroom and an appreciation for the impact that social factors have on the ability of children to learn. Nursing students also verbalize that there is “more” to the school setting than the classroom environment and school personnel, i.e., home environment and community as reflected in the WSCC model. Lastly, nursing students' state that they come away feeling better equipped to work with and teach children when they are hospitalized.

#### *Limitations*

Similar to limitations noted in the literature, school nurses were often not readily available to serve as role models for nursing students. Another limitation was the amount of time that nursing students spent in the classroom was limited to 4 h in the morning or afternoon. The amount of time that nursing students spent in the classroom during their seven weeks was also limited as they rotated to pediatric outpatient specialty clinics for one clinical day. What appeared to be another limitation was feedback from nursing students suggesting that they did not appreciate what the school setting could offer them in caring for children compared to that of being in an acute care setting. However, after the practicum was completed, nursing students reported gaining a broader understanding of the daily challenges children face given their living environment and community, as well as daily challenges that teachers, school administrators, and school nurses face in promoting the health and well-being of children. Lastly, as for many nursing faculty, gaining access to schools, securing contracts, conducting background checks, assuring that teachers were available, and ensuring topics selected for health lesson were acceptable, were ongoing concerns to be addressed to support the continued use of elementary schools for *pediatric* practicum settings.

#### **Conclusion**

Placement of nursing students in elementary schools for *pediatric* practicum provides an alternative clinical setting for students to learn about the growth and development of children and their health needs, as well as equip nursing students with the necessary cognitive, affective, and psychomotor skills to interact with and educate children. This

pedagogical approach is not only effective in facilitating the attainment of pediatric course objectives, but also helps nursing students gain an appreciation for conceptually driven practice and how the WSCC model (ASCD and Centers for Disease Control and Prevention, 2014) guides pediatric nursing practice in the elementary school setting. Another advantage of this approach is that students have a greater understanding of how the home, school, and community influence the overall health and well-being of children. Understanding gained from this experience allows nursing students, new graduates, and school nurses to develop novel interventions that promote the health of each individual child and children within the community.

#### Declaration of interest

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