

The Ripple Effect of Trauma: Secondary Traumatic Stress in the School Nurse

I disclose the absence of personal financial relationships with commercial interests relevant to this educational activity within the past 12 months.

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Introduction

Secondary traumatic stress (STS) is a syndrome where the caregiver experiences a variety of negative physical and psychological symptoms similar to those in post-traumatic stress disorder (Figley, 1995).

Research has shown that individuals caring for those experiencing trauma are at risk for STS due to indirect exposure to trauma (Barr, 2017; Beck et al., 2020).

More than 10 million US children have a traumatic experience each year, while one-quarter experience a highly traumatic event by age 16 (CDC, 2019; SAMHSA, 2014).

School nurses (SN) are exposed to a variety of traumatic experiences in students and communities, including but not limited to ACES, terroristic threats, natural disasters, and suicides. One-third of health office visits are related to student mental health issues (Maughan, 2018). SNs build rapport with students, and students report feeling comfortable sharing difficult and sensitive information with the SN (Kvarme et al., 2019; Hamilton, et al., 2004; Sherwin, 2016).

A literature review was conducted to identify and examine research re STS in the SN.

Method: Literature Review

- Data Sources: CINAHL, ProQuest Central, PubMed, ScienceDirect, PsycINFO, & Journal of School Nursing
- Initial Search: STS, secondary trauma, and school nurse (SN), school health nursing, or school nursing. Results: 0
- Secondary Search: STS, secondary trauma, and nurse, nurses or nursing
- Tertiary Search: STS, secondary trauma and school staff, school personnel, educators, or teachers
- Inclusion criteria: peer reviewed, English language
- Abstracts/studies screened for relevance and only studies with a primary focus of STS included in review

Results

A lack of clarity in terminology was found throughout studies where STS, compassion fatigue, burnout and vicarious trauma were frequently used interchangeably (Beck, 2011; Figley 1995, 2002; Sabo, 2006). Concept analyses can be found in the literature that define and support STS as a distinct and separate concept (Arnold, 2019; Beck, 2011; Sprange et al., 2019).

Results of the studies below found that nurses and school personnel experienced varying levels of STS.

Rates of STS in Reviewed Studies								
Author	Beck (2015)	Beck (2012)	Kellogg (2018)	Dominguez - Gomez (2009)	Morrison (2016)	Begic (2015)	Borntrager (2012)	VanBergeijk (2006)
Role	Labor & Delivery Nurses	Certified Nurse Midwives	Pediatric Nurses	ER Nurses	ER Nurses	Home Visitors	School Personnel	School Personnel
STS	35% *	42% *	50% *	33% *	39% *	69% ^	75% *	≅75% °

STS = moderate or greater levels of STS self-reported via Secondary Traumatic Stress Scale (Bride et al., 2004) *, ProQOL (Figley & Stamm, 1996)^, and interview °.

- Findings were inconsistent between STS and age and between STS and years of work experience (Beck & Gable, 2012; Beck et al., 2015; Dominguez-Gomez & Rutledge, 2009; Kellogg et al., 2018).
- Factors associated with an **increased risk for STS** included personal history of trauma and unhealthy work culture, including lack of support, poor pay, high needs workload, and/or poor work hours (Beck & Gable, 2012; Beck et al., 2015; Begic et al., 2019; Caringi et al., 2015; Kellogg et al., 2018).
- Factors associated with **lower levels of STS** included social support, use of coping and self care behaviors, participation in stress management activities and a supportive work environment (Beck & Gable, 2012; Begic et al., 2019; Caringi et al., 2015; Morrison & Joy, 2016; VanBergeijk & Sarmiento, 2006).
- **Occupational consequences** of STS included negative effects on job performance and satisfaction, and increased thoughts of quitting or changing jobs or careers (Beck & Gable, 2012; Beck et al., 2015; Borntrager, et al., 2012; Caringi et al., 2015).
- **Suggested Interventions** include:
 - Education regarding STS through higher education programs and professional development opportunities
 - Provision of a supportive and positive work culture including techniques such as peer support, supportive supervision, promotion of self-care, counseling service, and efforts at work-life balance

School nurses (SN) are health experts in the school setting, providing for the physical and socioemotional needs of students, families and communities in dual roles as nurse and educator. Although no data was found regarding STS in SN, it is reasonable to conclude that the SNs caregiving, proximity, and exposure to children and families experiencing trauma would put them at risk for STS.

References 1. Arnold, T. C. (2020).An evolutionary concept analysis of secondary traumatic stress in nurses. Nursing Forum, 55, 149– 156. 2. Barr, P. (2017). Compassion fatigue and compassion satisfaction in neonatal intensive care unit nurses: Relationships with work stress and perceived social support. Traumatology, 23(2), 214-222. *Beck, C. T. (2011). Secondary traumatic stress in nurses: A systematic review. Archives of Pediatric Nursing, 25(1), 1-10. *Beck, C. T., & Gable, R. K. (2012). A mixed methods study of secondary traumatic stress in labor and delivery nurses. Journal of Obstetrics, Gynecological & Neonatal Nurses, 41(6), 747-60. *Beck, C. T., LoGiudice, J., & Gable, R.K. (2015). A mixed-methods study of secondary traumatic stress in Certified Nurse-Midwives: Shaken belief in the birth process. Journal of Midwifery & Women's Health, 60, 16-23. Beck, C. (2020). Secondary traumatic stress in maternal newborn nurses: Secondary qualitative analysis. Journal of the American Psychiatric Nurses Association, 26(1) 55-64. *Begic, S., Weaver, J. M., & McDonald, T. W. (2019). Risk and protective factors for secondary traumatic stress and burnout among home visitors. Journal of Human Behavior in the Social Environment, 29(1), 137-159. *Borntrager, C., Caringi, J. C., van den Pol, R., Crosby, L., O'Connell, K., Trautman, A., & McDonald, M. (2012). Secondary traumatic stress in school personnel. Advances in School Mental Health Promotion, 5(1), 38-50. *Caringi, J. C., Stanick, C., Trautman, A., Crosby, L., Devlin, M., & Adams, S. (2015) Secondary traumatic stress in public school teachers: contributing and mitigating factors. Advances in School Mental Health Promotion, 8(4), 244-256. *CDC. (2019). About adverse childhood experiences. Retrieved from <https://www.cdc.gov/violenceprevention/childabuseandneglect/aces/about/aboutace.html>. Dominguez-Gomez, E., & Rutledge, D. N. (2009). Prevalence of secondary traumatic stress among emergency nurses. Journal of Emergency Nursing, 35(3), 199–204. *Figley, C. R. (1995). Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized. New York: Brunner/Mazel. *Figley, C. R. (2002). Compassion Fatigue: Psychotherapists chronic lack of self-care. Psychotherapy in Practice, 58(11), 1433-1441. *Hamilton, G., O'Connell, M., & Cross, D. (2004). Adolescent smoking cessation: Development of a School Nurse intervention. The Journal of School Nursing, 20(3), 169-174. Kellogg, M. B., Knight, M., Dowling, J. S., & Crawford, S. L. (2018). Secondary Traumatic Stress in Pediatric Nurses. Journal of Pediatric Nursing, 43, 97–103. *Kvarme, L. G., Misvar, N., Valla, L., Myhre, M. C., Holen, S., & Sagatun, A. (2019). Bullying in school: Importance of and challenges involved in talking to the School Nurse. The Journal of School Nursing, *Maughan, E. D. (2018). School nurses: An investment in student achievement. Phi Delta Kappan, 99(7), 8-14. *Morrison, L. E. & Joy, J. P. (2016) Secondary traumatic stress in the emergency department. Journal of Advanced Nursing 72(11), 2894– 2906. *SAMHSA. (2014). SAMHSA's concept of trauma and guidance for a trauma-informed approach. HHS Publication No. (SMA) 14-4884. Rockville, MD: SAMHSA. *Sherwin, S. (2016). Performing school nursing: Narratives of providing support to children and young people. Community practitioner: The Journal of the Community Practitioners' & Health Visitors Association, 89(4), 30–34. *Sabo, B. M. (2006). Compassion fatigue and nursing work: Can we accurately capture the consequences of caring work?. International Journal of Nursing Practice, 12, 136-142. *Sprang, G., Ford, J., Kerig, P., & Bride, B. (2019). Defining secondary traumatic stress and developing targeted assessments and interventions: Lessons learned from research and leading experts. Traumatology, 25(2), 72–81. *The Treatment and Services Adaptation Center. (n.d). Secondary traumatic stress. Retrieved <https://traumaawareschools.org/secondaryStress>. *VanBergeijk, E. O., & Sarmiento, T. L. (2006). The Consequences of reporting child maltreatment: Are school personnel at risk for secondary traumatic stress?. Brief Treatment and Crisis Intervention, 6(1), 79-98.

Recommendations for Future Research

- Prevalence of STS in SN, nursing specialties and education staff
- Effect of personal characteristics such as trauma history and years of experience, on development of STS
- STS risks and protective factors
- Interventions specific to STS
- Longitudinal studies to assess effect and change over time
- Qualitative studies to provide unique data regarding the lived experience

What You Need to Know

Symptoms of STS include:

- Physical: low energy/fatigue, sleep disturbances
- Emotional: feeling overwhelmed, numb or detached, negative beliefs or emotions
- Behavioral: hypervigilance, irritability, increased startle response, self-destructive behaviors, decreased interest in usual activities
- Cognitive: distressing memories, dreams, or flashbacks, difficulty concentrating or making decisions, impaired memory, confusion
- Interpersonal: avoidance of thoughts, people or work related to trauma, withdrawal from family, friends and/or coworkers.

Preventative strategies include:

- Ongoing education regarding STS
- Maintenance of healthy work-life balance
- Practicing self care: Exercise, good nutrition, rest and stress reduction activities
- Work strategies: self-report assessments, caseload balancing, flexible scheduling, peer support, debriefing, employee assistance and wellness programs/ counseling services, self-care accountability buddy system

(Beck, 2020; The Treatment and Services Adaptation Center, n.d.)





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Factors associated with an **increased risk for STS** included:

- Personal history of trauma
- Unhealthy work culture (incl, lack of support, poor pay, high needs workload, and/or poor work hours)

Factors associated with **lower levels of STS** included:

- Social support,
- Use of coping and self care behaviors, participation in stress management activities
- A supportive work environment

Occupational consequences of STS included:

- Negative effects on job performance and satisfaction,
- Increased thoughts of quitting or changing jobs or careers

Suggested Interventions include:

- Education regarding STS through higher education programs and professional development opportunities
- Provision of a supportive and positive work culture, such as peer support, supportive supervision, promotion of self-care, counseling service, and efforts at work-life balance

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Although no data was found regarding STS in SN, it is reasonable to conclude that the SNs caregiving, proximity, and exposure to children and families experiencing trauma would put them at risk for STS.



Recommendations for Future Research

- Qualitative studies to provide unique data regarding the lived experience
- Prevalence of STS in SN, nursing specialties, and education staff
- Effect of personal characteristics, such as trauma history and years of experience, on development of STS
- Interventions specific to STS
- Longitudinal studies to assess effect and change over time



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