

Shaken Baby Syndrome (SBS) and its effects

Posted on September 17, 2018

Shaken baby syndrome(SBS), sometimes known as abusive head trauma (AHT), is characterized by intracranial and retinal bleeding of an infant without injury evidence and with a normal coagulation profile. The main causes of the disorder include physical abuse, neglect, sexual harassment, and emotional abuse. The newborns subjected to numerous types of abuse develop physical, emotional, and cognitive conditions. In most instances, the magnitude of child abuse is underestimated due to their tender age or the child abuse sequelae, which make the victims unable to articulate their problems.

A minimum of 40 cases of AHT occur annually in Canada, and research shows that eight children die in the Canadian state, 18 infants experience neurological injury necessitating the need for life-long care, and 17 are taken into foster care. The statistics show that AHT is a disorder of economic importance, and this raises an alarm to the concerned people, who need to address it with immediate effect. SBS has serious effects on neurological functions and sometimes has multiple impacts on neurocognitive functions.

The disease was first discovered by Guthkelch in 1971. The initial name used to describe SBS was 'Whiplash-shaken infant syndrome.' AHT is frequent in children of 2 years of age and below, but the condition can also affect kids of up to 5 years of age. The paper will discuss SBS and its effects, which cannot be underestimated because the disease leads to neurological injury and death in severe cases. Besides, the paper will also define and comment on Bevis tools, such as caring, teaching, and advocacy, related to the information in the articles.

Literature Review

Prevention of Abusive Head Trauma

Abusive head trauma (AHT), also known as shaken baby syndrome (SBS), is a type of traumatic injury of the brain that was initially discovered by neurosurgeons in the early 1970s (Barr, 2012). The disease is characterized by intracranial and retinal bleeding of a newborn in the absence of evidence of external injury and with a normal coagulation profile. The violence resulting from such types of injuries is severe, dangerous, and sometimes can lead to the death of the child, as pointed out by a report released by the American Academy of Pediatrics Committee of Child Abuse and Neglect. Unfortunately, AHT is a significant problem in Canada, which has a minimum of 40 cases annually. The effects of AHT are extremely adverse, with research pointing out that eight children out of these 40 cases meet their untimely death, 18 children suffer from neurological injury necessitating the need for lifelong care, and 17 children end up spending their lives in foster care settings.

SBS does not only cause cognitive damage but also results in lifelong financial challenges, with research pointing to an average cost of \$210 012 per baby for less serious injuries and \$1 272 900 for every fatal injury (Barr, 2012). According to research conducted by Barr (2012), the United States spends an approximate financial expense of \$124 billion on the prevention, treatment, and caring of the victims of AHT. The signs and symptoms of AHT include irritation, vomiting, fever, lethargy, apnea, tremors, excessive crying, and delays in development. The infants usually portray signs of injuries in the abdomen, long-bone and rib fractures, and patterned bruises.

There are several ways of preventing AHT according to research. The best method of reducing SBS is by educating the parents, teachers, healthcare specialists, and members of the community. The maternal-child nurses, emergency department specialists and other healthcare specialists are some of the important positions since they help in the early recognition and execution of methods of prevention.

Implications for Practice

There are various tools applied by nurses in the output stage that help the nurses in planning and providing care geared towards achieving a variety of client-centered care goals. Some of these tools include caring, teaching, and empowerment for self-responsibility & advocacy. The most suitable Bevis tool for the prevention of abusive head trauma article described above is the caring tool. Caring manifests itself in four stages, namely, attachments, assiduity, intimacy, and confrontation. The carving tool creates a sense of self-awareness and other people and transcends illness limits, optimizing the actualization of potential in human beings. It is most appropriate in the research because the training of healthcare professionals, parents, and members of the community portrays a high degree of caring who will, in turn, apply the knowledge gained in the care of victims of SBS.

A nationwide nurse training program for a hospital-based infant abusive head trauma prevention program

AHT is the primary cause of traumatic death and injuries common in infants who are one year of age and below. There is a high probability of a newborn contracting AHT in the first year of life, usually 34 per 100 000 infants. One of the activities that trigger the shaking of a baby is inconsolable or excessive crying of the infants. The crying of infants sometimes becomes a frustrating issue among parents and other caregivers who fail to understand that crying is a normal stage in the development of a child and declines as the baby grows old.

Currently, the common AHT prevention method is the hospital-based universal AHT prevention program. The programs are usually delivered to parents during the postpartum period. Evidence shows that 23 states of the U.S. have implemented legislation that makes it mandatory for concerned healthcare specialists to offer education to all new parents about SBS and the risks associated with the shaking of the baby. The majority of the programs provide all new parents with knowledge

concerning the normal crying of infants and the dangers of shaking, although their content, methods of delivery, and quality of the information offered vary. According to research, the cases of SBS have decreased due to the implementation of hospital-based education programs for new parents.

Implications for Practice

The most suitable Bevis tool for application in the above article on hospital-based education programs is the teaching tool. Teaching is an activity developed to facilitate the learning process. It is a process of creating a setting where learning can take place, and this has been done in 23 states in the United States. All the new parents are taught about the normal crying of the infants and the potential risks associated with baby shaking. The teaching and learning become shared and reciprocal between the nurse, health team, and the client.

The Role of a Nurse Practitioner in Diagnosing Child Abuse

It is important for a nurse specialist to be familiar with the deficiencies that negatively impact the health of children, adults, and adults. All types of child abuse have detrimental effects, and thus, healthcare providers should be aware some of the abuses exist alone, whereas others exist in combination when performing patient evaluations. Therefore, making an accurate diagnosis is vital since some infants exhibit a vast range of symptoms after abuse. Some of the symptoms of child abuse include vomiting, abdominal distention, irritation, anemia, lethargy, and shock. Other signs of sexual abuse include sleep disorders, phobias, and changes in behavior. Sometimes a healthcare practitioner may establish a vague complaint such as sleep disturbance, or sexually transmitted disease in the diagnosis of a victim of child abuse.

Implications for Practice

The most suitable Bevis tool for linking the role of a nurse practitioner in diagnosing child abuse is empowerment for self-responsibility and advocacy. In this case, nurses work hard in the healthcare setting with the proper direction of resources, personnel, processes, and tools at their disposal to attain optimal health and well-being. The whole process of empowerment for self-responsibility and advocacy is portrayed in the nurses who are always committed to their roles of diagnosing child abuse cases. Empowerment and self-responsibility succeed in cases where there is hope and optimism.

Conclusion

In conclusion, the study of SBS came up with various findings. Some of the negative impacts of AHT are cognitive damage to the infant and financial strain on the parents. The education of parents,

healthcare practitioners, teachers, and members of the community is the best method of minimizing the incidence of AHT. Hospital-based AHT intervention programs provide new parents with knowledge about normal infant crying and the dangers associated with baby shaking. The programs have proved effective in reducing the cases of SBS. The nurse specialist needs to be careful to make an accurate diagnosis because some infants show a varied range of symptoms after child abuse.

Network Security and Administration Principles

Type of Security Issue	Solutions and Technology used	Network Administration Principles
1. Denial of service attack-	Use Anti-Dos attack technology such as ASIC Dos Mitigation Engines and Network Behavioral Analysis (NBA).	• Rule-based management
2. Traffic spike	Install server-side caching plug-ins and extensions to cope with traffic. You can also get a better server or make sure the content is rendered quickly. You can also use a Content Delivery Network(CDN) technology	• Firewall rules
3. Reflective/amplified attack	Close down your DNS resolvers, implement BCP38, or ask the upstream provider to implement it. You can also deploy DNS rate limiting on authoritative DNS servers as a technology (Abbasi, 2014).	• V-Local area Network management
4. Smurfing Attack	Shut off the broadcasts addressing features of the external router and firewall. A vantage system is a technology developed that monitors the network for attacks.	• Secure router configuration
5. Physical attack	Use surveillance systems such as CCTV cameras. Use access control, meaning doors and locks and multiple alarms (Haggerty & Ericson, 2000).	• Access control lists
6. ARP cache poisoning	Configure your switch to use private VLANs (PVLANS) for optimal security.	• Port security

7. Packet sniffing attack	Use secure protocols, such as HTTP and SSH, for a start. Build the network with a switch technology rather than hub technology.	• Flood guards
8. Spoofing-	Configure the firewall and routers correctly to restrict forged traffic from the Internet. You can also implement authentication and encryption mechanisms to reduce the threat capability.	• Loop protection
9. Rogue access point attack-	Hide behind an Ethernet hub to detect the attack. You can also configure the rogue AP as 802.1x supplicant.	• Implicit deny
10. Wardriving-	Encrypt the wireless interaction and filter the Mac address that is capable of connecting to the router.	• Network separation • Log analysis • Unified threat management

References

- Abbasi, S. (2014, September 14). *Investigation of Open Resolvers in DNS Reflection DDoS Attacks*. Retrieved from Universite Laval: <http://theses.ulaval.ca/archimede/fichiers/31367/31367.pdf>
- Haggerty, K. D., & Ericson, R. V. (2000). The surveillant assemblage. *The British Journal of Sociology*, 51(4), 605-622. doi:10.1080/00071310020015280