

Researcher: Elias Lozano

**Question:**

In critical trauma adults, how does the role of emergency nurses in the hospital compare with not having an ED nurse correspond to how it will affect the patient's chance of survival during their treatment in the emergency department?

**Summary:**

Emergency nurses are an important element to survival success during hemorrhagic shock of a patient, especially when "Hemorrhagic shock is the most common cause of potentially preventable death after traumatic injury in both the civilian setting and combat environment. According to research provided by *The American Journal of Surgery* Resuscitation of the critically ill patient with fluid and blood products is one of the most widespread interventions in medicine. (Chipman, A. M., Jenne, C., Wu, F., & Kozar, R. A.) As claimed by *Advanced Emergency Nursing Journal*, use of whole blood presents opportunities for improved patient care on the part of both advanced practice nurses and staff nurses. According to their research, it is suggested that "for staff nurses, the use of WB theoretically improves patient safety through a number of mechanisms. First, use of WB decreases the number of safety checks that require two licensed providers, thereby decreasing staff nurses' workload by two-thirds." (Jones, A. R., Miller, J. L., Jansen, J. O., & Wang, H. E, 2021). These are the critical nursing interventions that are implemented under the supervision of Health care providers that ultimately save lives. In *The New England Journal of Medicine*, it is suggested that "in patients with hypovolemic shock, achieving a balance between vital organ perfusion and hemostasis is critical. The use of fluid resuscitation for hemorrhagic shock requires meticulous consideration based on the patient's age, the severity of shock, the mechanism of injury, and possibly the estimated time to surgical intervention. Currently, the Advanced Trauma Life Support (ATLS) guideline of the American College of Surgeons advises "balanced resuscitation" with an initial 1 to 2 liters of crystalloid before definitive surgical intervention, regardless of the mechanism of injury." (Lee, S. W., & Shin, S. W.) Furthermore, this emphasizes the key components of treatment, treatment that although may start within the ambulance with EMTs, may also be continued with the help of RNs ensuring that patient is receiving adequate fluids, blood, oxygen, and other support needed for survival. The interventions of blood and fluid administration to the patient experiencing trauma due to hemorrhagic shock, can be carried out by the Nurse and their knowledge to safely administer these products and help achieve a positive outcome.

## **Conclusion:**

In conclusion, after reading considerable research about the nurse's role with trauma patients and how it will affect the patients, staff and ultimately that patient's chance of survival, there is indeed a direct relationship between the role of the nurse and trauma hemorrhagic patient survival success outcomes. The role of nurse in treating hemorrhagic shock trauma patients include blood and fluids resuscitation, the main intervention that helps oxygenate all vital organs of the body, thus increasing that person's chance of survival. Having that ED Nurse as part of the interdisciplinary team, provides the patient with a team member to safely administer the much-needed products for a positive outcome, while alleviating other members of the ED such as the health care providers, EMTs, and other health care team members. With the ED Nurse knowledgeable about blood products, this helps identify adverse events and risks that come with the use of blood transfusions as well. "The majority of transfusion reactions are minor; however, they must be evaluated promptly, as some may be life threatening or fatal." (Chipman, A. M., Jenne, C., Wu, F., & Kozar, R. A. (2020) Further adding that extra level of reassurance when the Nurse is administering such products. Therefore, the interventions define the role of nurse, the positive outcome of survival depends on the proficiency of care provided by the nurse than having one less health professional manage the care of the trauma adult patient.

## **Work Cited:**

### **Primary Article**

Chipman, A. M., Jenne, C., Wu, F., & Kozar, R. A. (2020). Contemporary resuscitation of hemorrhagic shock: What will the future hold?. *American journal of surgery*, 220(3), 580–588. <https://doi.org/10.1016/j.amjsurg.2020.05.008>

### **Secondary Article**

Jones, A. R., Miller, J. L., Jansen, J. O., & Wang, H. E. (2021). Whole Blood for Resuscitation of Traumatic Hemorrhagic Shock in Adults. *Advanced emergency nursing journal*, 43(4), 344–354. <https://doi.org/10.1097/TME.0000000000000376>

### **Tertiary Article**

Lee, S. W., & Shin, S. W. (2018). Hemorrhagic Shock. *The New England journal of medicine*, 378(19), 1851–1852. <https://doi.org/10.1056/NEJMc1802361>