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Abstract Title:

EMS and Trauma Bay Intubation: Is there a clinical difference in patient outcomes?

Authors:

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Background & Purpose:

Emergent intubation for critically injured trauma patients is a complex clinical procedure that saves lives. Advanced Trauma Life Support (ATLS) mandates a patent airway and breathing as the first two clinical priorities for every trauma patient. The ability to perform timely intubation when appropriate is essential. The physical location and practitioners performing intubation can vary. Purpose: to identify factors associated with trauma patient intubation and positive patient outcomes. Hypothesis: the controlled setting of the trauma bay with physician providers results in better patient outcomes and less clinical complications than EMS intubations in the field.

Study/Project Design:

Retrospective, trauma registry, observational study.

Setting:

Four accredited trauma centers (three level 1 and one level 2) in an urban and semi-rural setting.

Sample:

All trauma patients over the age of 18 that were intubated by EMS or in the trauma bay from January 1, 2012 to March 31, 2014.

Procedures:

Four trauma registries were retrospectively reviewed and 905 patients were intubated, 231/25.5% by EMS and 674/74.5% in the trauma bay. Examples of data points: mechanism of injury, TRISS, Injury Severity Score (ISS), and general demographic data. Examples of outcome data: ventilator days, intensive care unit length of stay (ICULOS), hospital length of stay (HLOS), clinical complications, and discharge destination. Mann-Whitney U and Kruskal Wallis tests were performed to identify significant differences in outcomes between the two groups. Data were analyzed unmatched and matched. Matched data included: age, initial EMS and trauma bay systolic blood pressure, initial EMS and trauma bay Glasgow Coma Score, EMS scene time, EMS transport mode, post ED destination, type of injury, and ISS.

Findings/Results:

Overall trauma bay intubation had better patient outcomes. Before matching, trauma bay intubation had lower HLOS, ICULOS, ventilator days, less likely to die, and more likely to be discharged home (all $p < .05$). After matching, 231 (33.3%) were intubated by EMS and 462 (66.7%) in the trauma bay. Trauma bay intubation had shorter ventilator days ($p = .002$), less likely to die ($p < .001$) and more likely to be discharged home ($p < .001$). When matched, trauma bay intubation demonstrated better outcomes for the following: lower median ventilator days (3 versus 4), lower mortality rate (19.3% versus 35.1%), and more likely to be discharged home (42.4% versus 31.7%). Clinical complications such as pneumonia, acute respiratory distress syndrome, and acute respiratory failure were not statistically significant.

Discussion/Conclusions/Implications:

In the review of the data, trauma bay intubations demonstrated better patient outcomes. This was statistically significant for lower HLOS, ICULOS, ventilator days, and to be discharged home. This leads to additional questions regarding the skill level of the provider, mechanism of injury (blunt versus penetrating), and EMS transport times (semi-rural versus urban) and how this may impact the decision to intubate or have EMS scoop and run. The next step will be to include additional trauma centers and EMS providers to review who performs the intubation, what was the clinical decision making process regarding intubation, and how does the Golden Hour for trauma patients apply to EMS intubation.

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Abstract Title:

A Narrative Inquiry into the experience of being a Victim of Gun Violence: stories from the Victims

Authors:

Mary Francis PhD, RN, ACNP-BC

Background & Purpose:

Gun violence is a major social and health concern for all Americans. Gun violence affects everyone; not only those who are victims and perpetrators, but everyone whose schools, neighborhoods, and communities are no longer considered safe as a consequence of gun violence. Recent research has clearly documented the problem of gun violence in society today; however, the voice of the gun victim has been silent in the literature. The research question for this study was "What is the story of being a victim of gun violence from the perspective of the victim?" The purpose of this study was to describe and gain an understanding of gun violence from the perspective of the victim.

Study/Project Design:

Narrative inquiry methodology was used with purposive sampling. Victims of gun violence were interviewed.

Setting:

The interviews were completed at one hospital and outpatient clinic.

Sample:

There were 16 participants in the study, age 18 and over.

Procedures:

The method of research was a narrative inquiry. It is a qualitative approach that allows participants to tell their story. One of the goals of qualitative research is to gain understanding of the experience from those who have lived it. The participants were all victims of gun violence, no limitation of the timeframe of being shot, both male and female were included. Inclusion criteria, stated they must be over the age of 18 and must be fluent in English language. Interviews were conducted by the researcher. Interviews were open ended and allowed the participant to describe in their words the experience of being a victim of gun violence. The researcher did ask probing questions for elaboration or clarification of statement. Data collection ended when saturation of data occurred.

Findings/Results:

Stories from the victims revealed insight into this current day epidemic of gun violence. Analysis of stories revealed four themes. Relevant sections of the text that emerged from their stories have been included. Participant were given an alias to protect their identities. After careful analysis of the interviews four themes emerged: 1) Prevailing nature of everyday violence ; 2) Feeling abandoned by the institutions of society; 3) Living in a context of reactive violence fueled by poverty, lack of employable skills and education; 4) Evolving psychological effects following gun violence. Participants spoke a great deal about a low commitment to school, poverty and exposure to everyday violence. Many of the participants reported that it was very easy to gain access to firearms. They stated that guns were readily available and anyone at any age could access a gun. Participants reported that a gun in the hands of a young man empowered him. Much has been learned by listening to the stories from the victims, one lesson is the toxic environments and also the interventions to assist with processing the traumatic experience.

Discussion/Conclusions/Implications:

The magnitude of the gun violence epidemic encompasses the lives of the participants. Participants described social situations of unemployment, homelessness, and everyday violence. The participants' lives were chaotic, unsettled, and dangerous. Many of the participants shared feelings of hopelessness, they recognized the need to change their situation but lacked the resources to do so. Several participants described feeling degraded because they were still dependent on their mothers for money or unable to give their children presents at Christmas. Gun violence is a multifaceted issue of violence and hopelessness. It is challenging to create appropriate and realistic interventions for this population. It is a population lacking in finances, appropriate ongoing health care, and knowledge on how to access available resources. A socioeconomic disparity exists for this population and many of their overall health care needs are left unmet. Realistic interventions that are accessible to a deprived populations needed to be developed and attainable.

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Abstract Title:

Compassion Fatigue, Moral Distress, and Work Engagement in Trauma SICU Nurses: A Pilot Study

Authors:

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Background & Purpose:

SICU nurses caring for trauma patients are at risk for compassion fatigue (CF) and moral distress (MDS) due to the impact of sudden, tragic outcomes and may leave the ICU prematurely. Retaining experienced nurses is imperative to successfully precepting new ICU nurses. Preparation for replacing the nurses retiring in the next few decades is essential to patient outcomes. Nursing care potentially influences UTIs, pneumonia, shock, longer hospital stays, failure to rescue, and 30-day mortality. Compassion Satisfaction enriches nurses offering help to people in life-threatening crisis. The purpose of this study is to examine the effects of compassion fatigue, moral distress, and work engagement.

Study/Project Design:

This pilot study is a partial replication of a non-experimental, descriptive, correlational design.

Setting:

All nurses were currently working in a SICU in an urban hospital with a Level 1 trauma center.

Sample:

A convenience sample of 26 out of 34 eligible SICU trauma nurses responded to this survey, which is a 77% response rate

Procedures:

Questionnaires were sent electronically via nurses' work e-mails. Anonymity was maintained by typing answers to avoid the possibility of handwriting recognition. All 3 instruments: the 30-item Professional Quality of Life Scale (ProQOL-5); the 9-item Moral distress subscale: 'Not in patient's best interest' factor, shortened version 2005; and the 9-item Work and Well-being Survey or UWES-9 Work Engagement Scale (UWES) shortened version 2008, demonstrated adequate reliability and validity. Data analysis included descriptive statistics and Spearman correlation coefficients between scales. Krippendorff's content analysis which determines the presence of themes within communicative language; and quantifies the presence of themes, was applied to this study's questions with an audit trail.

Findings/Results:

On the CS subscale 73% of nurses scored average and 27% high. No one scored low. Nurses scored 58% average and 42% low on the Burnout subscale. Nurses scored 62% low and 38% average on the STS subscale. No one scored high on either CF subscale. The mean MDS subscale score was 3.4. The mean Utrecht Work Engagement score of 3.8. Significant positive correlations between Work Engagement and ProQOL-5 Compassion Satisfaction Subscale ($r = 0.49, p < 0.05$) were demonstrated. Significant negative correlations between work engagement and ProQOL-5 burnout subscale were demonstrated ($r = -0.49, p < 0.05$).

Discussion/Conclusions/Implications:

Moral distress is supported as a clinically significant issue for nurses. Significant positive correlations show that as Work Engagement increases, Compassion Satisfaction increases. Significant negative correlations show that as Work Engagement increases, Burnout decreases. Summary of question "Worst Experiences of Distress?" revealed: Role Conflict with Management/Rules, Death and Suffering end-of-life decision making, Dealing with Violence in the ICU, Dealing with Family, Powerlessness-Moral Distress, Physical Distress and Medical versus Nursing Values-Moral Distress as in Lawrence's findings. Content analysis of "What Do You Like about Nursing?" revealed: caring, helping families, longtime interdependent supportive relationships of colleagues, and satisfaction. Summary of "How Do You Replenish Yourself?" revealed: Self-care, Relationships of Professionals, and Compassion/Empathy. Future recommendations include replication in larger samples to identify additional variables.