

Effect of an Educational Program on Nurses' Performance during the Golden Hour of Care for Traumatized Patients.

Protocol

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ABSTRACT

Trauma is the leading cause of mortality in young adults. Many such deaths are preventable if patients are treated effectively. The term "golden hour" is commonly used to characterize the urgent need for the care of trauma patients. **This study aimed** to evaluate the effect of an educational program on nurses' performance during the golden hour of care for traumatized patients and assess relative outcome of an educational program on traumatized patient condition after golden hour. Data were collected from one setting; the emergency departments unite of El-Sahel Teaching Hospital. The study was conducted on forty adult patients Post Trauma in the Golden hour after admission to hospital and forty Emergency nurses from the same hospital setting which have been selected to the program pre, post and follow up. **Data were collected through:** (1) A Questionnaire sheet to assess the nurse's knowledge about traumatized patients. (2) An Observational checklist to assess the nurse's performance pre, post and follow up of the training program. (3) Likert scale sheet to assess the nurse's attitude toward traumatized patients. (4) Patient assessment sheet to assess the patient's condition post trauma. (5) An educational program for nurses along side with a Arabic Book let around all sessions of the training program. **Results** of this study showed that, there is significant difference between the pre, post and follow up period interaction to nurse's knowledge and performance regarding Post traumatic patients. The physical and psychological conditions had been affected by disease, but they had improved more among the study group after implementation of training program than the nurses under study post training program. So this study **concluded** that an educational program that improved the nurses' knowledge, performance and their attitude toward traumatized patient, also improved the patient outcome in relation to decrease incidence of complication and decrease their mortality rate. Increasing the number of highly qualified and specialized nurses was highly **recommended** to accompany the rapid increasing number of traumatized patients.

Key words: Trauma. Injuries. Golden Hour. Trauma nursing. On job training

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LIST OF ABBREVIATIONS

ABCs	Airway, Breathing, and then Circulation
ABG	Arterial Blood Gases
ACHS	Australian Council on Healthcare Standards
ALS	Advanced Life Support
ATLS	Advanced Trauma Life Support
C-Spine	Cervical-spine
CT	Computerized Tomography
CVP	Central Venous Pressure
DVT	Deep Venous Thrombosis
E	Evaluation
ED	Emergency department
EMST	Early Management of Severe Trauma
EsTC	Essential Trauma Care
ET	Endotracheal Tube
GCS	Glasgow coma scale
ICP	Intra Cranial Pressure
ICU	Intensive Care Unit
ISS	Injury Severity Score
IV	Intravenous line
JVP	Jugular Venous Pressure
MeTS	Metropolitan Trauma Services

MTS	Major Trauma Services
NRTAC	National Road Traffic Advisory Council
PIS	Primary Injury Service
PTSD	Posttraumatic stress disorder
RACS	Royal Australasian College of Surgeons
RACS	Roads and the Royal Australasian College of Surgeons
RTS	Regional Trauma Services
RTS	Revised trauma score
START	Simple Triage and Rapid Treatment
STC	State Trauma Committee
TC	Trauma center
TRACS	Trauma Registry of the American College of Surgeons
TS	Trauma System
TS	Trauma Services
TS	Trauma score

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CONCLUSION

Based on the findings of this study, the following can be concluded:

From the result of present study it was concluded that, the traumatic nurse showed inadequate knowledge and performance before the program. Meanwhile the majority of the nurses, had got improved knowledge and performance regarding caring of traumatized patients after implementation of the designed educational program.

Also, the majority of nurses in the hospital under study, had a positive attitude towards the traumatized patients after program implementation.

One important findings of this study revealed a lacks in the trauma system and insufficient facilities needed for caring of the traumatized patient.

In spite of the fact that usual standard facilities have not always been available, the complication and mortality rates among traumatized patients decreased with the improved knowledge, attitude and performance. As a result of program exposure.

The effect of nursing in-service education among the traumatized patient condition in this study showed that improvement in relation to decrease incidence of complication (After the golden hour) when comparing registered/recorded

data regarding outcome of traumatized patient during previous 6 month data to the data of the present study.

Also, an educational program achieved to improve traumatized patient's outcome in relation to decreasing their mortality rate.

RECOMMENDATIONS

Based on the main results of the present study, the following are recommended for the health care settings, education and the total Community;

- Establishment of a process for the prehospital triage and transfer of trauma patients to the most appropriate hospital within an appropriate timeframe. This will involve ambulance bypass of some hospitals.

In services:

- Establish guidelines for the Interhospital transfer of trauma patients. These guidelines establish a standard for ensuring that trauma patients are managed at the most appropriate hospital for the type and severity of injury within an appropriate timeframe.
- Establish designation of health services to fulfill specific roles within the system. In particular, the establishment and designation of major trauma services at the all hospitals. These hospitals will have a statewide responsibility for trauma care.
- Enhancement of the role of medical retrieval services, in particular, a streamlining of the activation processes.

- A process of audit and quality assurance that will provide ongoing monitoring of outcomes from trauma care. It will provide the hospital with the best framework and measures for optimizing the management of trauma.

In education

- Use of advanced practice providers, provides consistent and quality management. Employment of these practitioners may be a safe and reasonable solution for staffing trauma centers Emergency nurses.
- Staff members express a revived excitement about their profession and energy for teaching and lifelong learning.
- This study provides an update on developments in emergency nursing and identifies key components of role development for enhanced nursing practice within an emergency patient.
- A focused needs-assessment guide for managers is provided with examples from practice to outline specific patient caseloads and illustrate the variety of roles that exist.
- Enhanced nursing roles are of critical importance to support the Health Service Executive's plans to enhance care delivery in the emergency department.

- Increasing the number of highly qualified and specialized nurses, was highly recommended to accompany the rapid increasing number of traumatized patients.

In community:

- Development of nursing practice should be in the context of multi-disciplinary, multi-skilled teams. National, regional and local guidelines and frameworks, should provide the process and clinical standards required for best practice by all members of the multi-disciplinary team.
- Set up a project that aims to improve traumatized patient care by implementing evidence based practice
- Further researchers it is envisaged that this study will assist in identifying opportunities for the appropriate strategic progression of a range of posts and enhanced roles within emergency department.
- Replicate of the study using a larger sample size of patients recruited from different geographical areas all over Egypt.