



Introduction

The Emergency Severity Index (ESI) is

- ❖ A method of standardization of patient's acuity in the United States
- ❖ Five-level ED triage system and algorithm
- ❖ Help identify patients who cannot wait to be seen
- ❖ Centered around right patient to the right resources at the right place and the right time
- ❖ Increase in the ED wait times and over crowdedness
- ❖ Affordable Care Act (ACA).
- ❖ Expansion to Medicaid and uninsured
- ❖ Increased ED visit by over 140 millions patients a year
- ❖ The patients receiving Medicaid increase from 26 to 34%
- ❖ Increase triage error due to increase demand and over crowdedness
- ❖ Delay in patients treatment and revenue loss to hospitals

EMTALA: Emergency Medical Treatment and Labor Act 1986

- ❖ Medical screening to all patients regardless of insurance status
- ❖ Social Determinants of Health
- ❖ Lack of preventive care
- ❖ Poverty, and other social factors
- ❖ ED as a safety net for the entire population including the uninsured.

Background and Significance

- ❖ One in five Americans visit the Emergency Department at least once per year.
- ❖ The visits ranges from urgent to non-urgent. Factors like EMTALA, ACA other social determinants of health has increased the numbers of patients visiting the ED.
- ❖ As a result of the upsurge, the ED continues to face a problem of over crowdedness and thus must adopt an efficient method to sort and treats patients in order of severity.
- ❖ The ESI is a unique triage tool that helps to mitigate against the unwanted delays in the ED and helps connect patients to resources, places and time.
- ❖ Improving ESI is important in providing patient's safety and outcome

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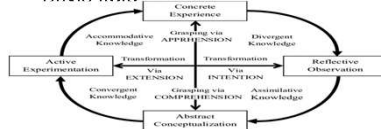


Methodology

- ❖ This DNP project is a quality improvement assessment designed to evaluate if ESI education improves nurse's knowledge and confidence level.
- ❖ Using a standardized test survey and confidence questionnaires.
- ❖ After securing Institutional Review Board (IRB) approval, ESI education was provided to emergency care students in DNP program.

Framework

- ❖ theory of experiential learning proposed by David Kolb



Project Design: This project utilized a quality improvement design to evaluate change in practice.

- ❖ This QI project is based on the presumption that knowledge of ESI level will improve nurses triage level.

Setting : This QI project will take take in one of the largest urban institute of higher learning located in norther New Jersey.

Study Population: Participants for this QI project is primarily the students enrolled in an advanced degree program in Family Nurse Practitioner emergency care (FNP-EC).

- ❖ These students are also work as emergency department Nurses in their various place of employment.
- ❖ The demographics information about these students are not part of this project. A convenience sample of the students were utilized for this study.

Study Interventions: This quality improvement project provided two interventions for the student.

- ❖ 11 DNP/ED nurses randomly participated.
- ❖ Participants were anonymous
- ❖ 20 standardized case base scenario on ESI

- ❖ Online lecture provided after pretest
- ❖ Same questions provided after training
- ❖ Confidence scale used to measure confidence in pretest and posttest.

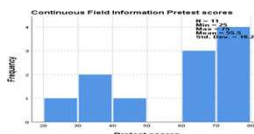
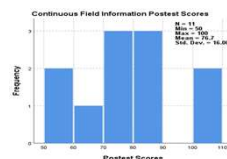
Outcome Measures: The outcome measures of this project was focus on evidence of increased learning based on ESI level education provided to advanced degree FNP-EC students and evidence of compliance with the use of the ESI triage level tool. The purpose of this QI initiative project is to increase nurse's confidence and knowledge through ESI education.

Tools/Instrumentation.

Two tools were used in this quality improvement project to measure outcomes; the ESI level tool developed by ESI experts of AHRQ and the NASC-CDM questionnaire for confidence level.

Data Analysis

- ❖ Wilcoxon Signed Rank Test
- ❖ Paired T test to analyze frequency, mean and SD
- ❖ SPSS and Excel for data analysis
- ❖ Chat graded after completion of training
- ❖ Chat recorded in Qualtrics



Results/ Anticipated Results

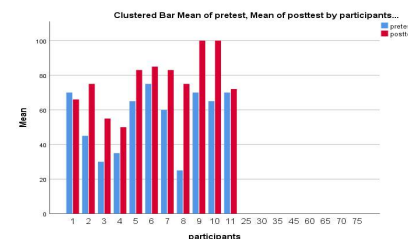
- ❖ Statistically significant difference with a P-value of 0.002P<0.05
- ❖ Null hypothesis rejected.
- ❖ Results shows increase in ESI education will increase ESI accuracy.
- ❖ No significance changes in Confidence level.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest scores	55.45	11	18.228	5.496
	Posttest Scores	76.73	11	16.001	4.824

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest scores	4.85	20	1.387	.310
	Posttest score	5.00	20	.324	.073



Discussion/Implication

- ❖ Training and continuing education of ESI – triage is necessary.
- ❖ Translation of implementation to practice
- ❖ Additional training tool to increase nurses confidence in triage is necessary
- ❖ Improve knowledge will lead to safer practices
- ❖ Training of nurses and knowledge testing before assigning to triage.
- ❖ Decrease rate of errors, by ongoing ESI education.
- ❖ Areas of further studies in triage on how to improve nurses confidence.

References

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