Why Nurses Competency was Low during Emergency Management of Patients with Acute Myocardial Infarction

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OUTLINES

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INTRODUCTION &RATIONAL

Nursing competence has become a controversial issue in health care. An acute myocardial infarction (AMI) is an emergency situation which requires immediate diagnosis, treatment and competence nursing care [1, 2, 3, 4,5]. Competence is defined as knowledge and performance combined with psychomotor and clinical problem-solving skills and a responsive attitude [6].

A report of American College and various strategies have been employed to minimize the delay between diagnosis and initiation of thrombolytic. Previous analytical studies showed a significant improvement in door-to-needle times are achieved by administration of thrombolytic within the emergency department. This can be facilitated by an experienced cardiology nurse [7,8,9]. Some institutions developed best practice recommendations for ACS management in nursing to improving quality, efficiency, access and equity in delivery of the continuum of cardiac services to ensure best practices [10].

AIM OF THE STUDY

The aim of this study was to detect the factors that lead to decline of nurses' competence during an emergency management of patients with acute myocardial infarction.

RATIONAL

- Increasing number of cases of AMI lead to focus in quality of care the problem which requires life-saving intervention [12,13,14,]
- Benefiting from nurses competences lead to improved quality of care and satisfaction of patients[15].
- The standards requirements that qualify nurses must keep their knowledge and skills up to date

MATERIALS AND METHODS

- It was descriptive hospital based study design. It conducted at Khartoum state, Sudan 2013.
- Probability sampling technique was used to cover 139 sample size whom fulfilling the selecting criteria.
- Interviewing technique for data collection using standardize questionnaire.
- Most questions are multiple choice, each question item scoring based on multiple Likert scale [17,18].
- The questionnaire reviewed by expert for information quality and legitimacy also internal consistency was tested using Cronbach's alpha test; then pre- tested before the survey and corrections arising were made.
- Data analyzed used SPSS version 19 and excel Microsoft programs [19].
- Statistical test was running using chi-square, binomial and ANOVAs test, P-value of <0.05 considered statistically significant.
- Permission was granted by the ethics and research committee of the college of medical and health sciences at Al Neelain University, ministry of health, hospitals and studied subject .
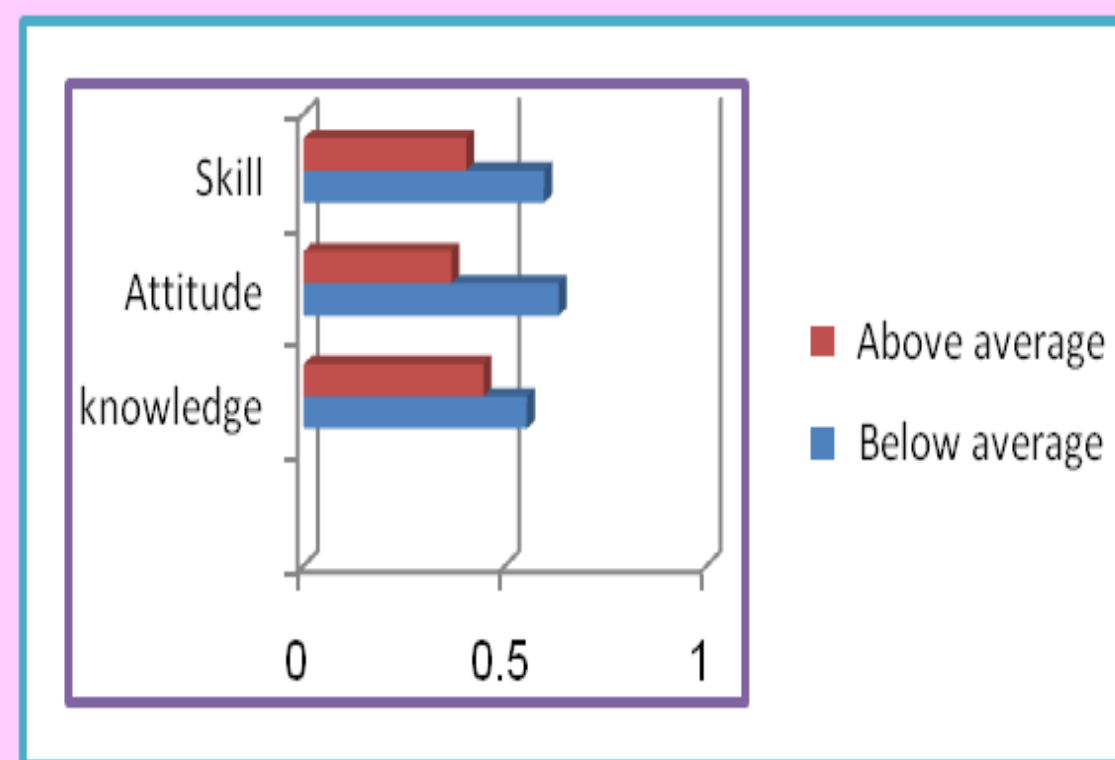
RESULTS AND DISCUSSION

Fig (I): Level of the Studied subjects' competency regard emergency care of patient with acute myocardial infarction (n=139)

Non-parametric test

Table (1): level of studied subjects competency regard emergency care of patient with acute myocardial infarction

Items	Chi-Square	Df.	Asymp. Sig.
knowledge	87.748	33	0.000
Attitude	94.250	16	0.000
Skill	50.606	8	0.000

- The results revealed that the majority of the studied subjects' competency was 'below the average" and there were highly significantly differences between knowledge, skill and attitude (Fig i & table1). The result also reflected that the studied subjects who received training or used protocol and guidelines were low and was significant based on Z Approximation (fig ii &table2).
- In pan American prioritize a series of interventions adherence of uses protocol and guidelines and nurses training to improve the quality of care [21] Also; the cohort study carried out in Kuwait; described temporal changes in the utilization of evidence-based therapies early in the course of acute myocardial infarction (AMI), with a significant decrease in the in-hospital mortality and recurrent ischemia[22].
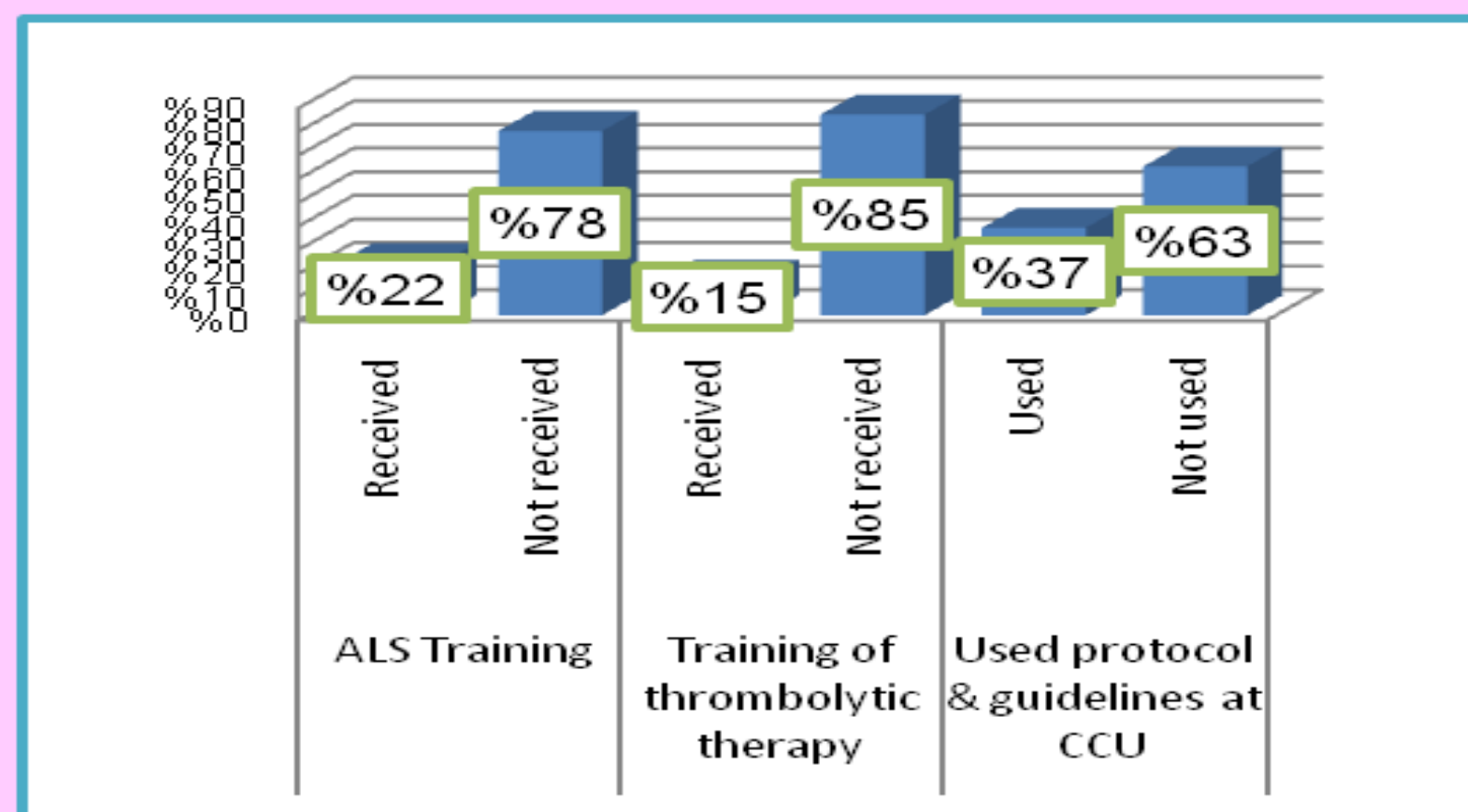

Fig (II): Number of studied subjects' who received training, used of protocol and guidelines.

Fig (III): Level of the studied subjects 'competency regards management of AMI versus ALS training

Items	Category	N	Observed Prop.	Test Prop.	Sig. (2-tailed)
ALS	Not received training	109	.78	.50	.000
	Received training	30	.22		
Thrombolytic agents	Not received training	118	.85	.50	.000
	Received training	21	.15		
Protocol and guidelines	Not used	88	.63	.50	.002
	Used	51	.37		

Table (2): Studied subjects' who received training or used of protocol and guideline
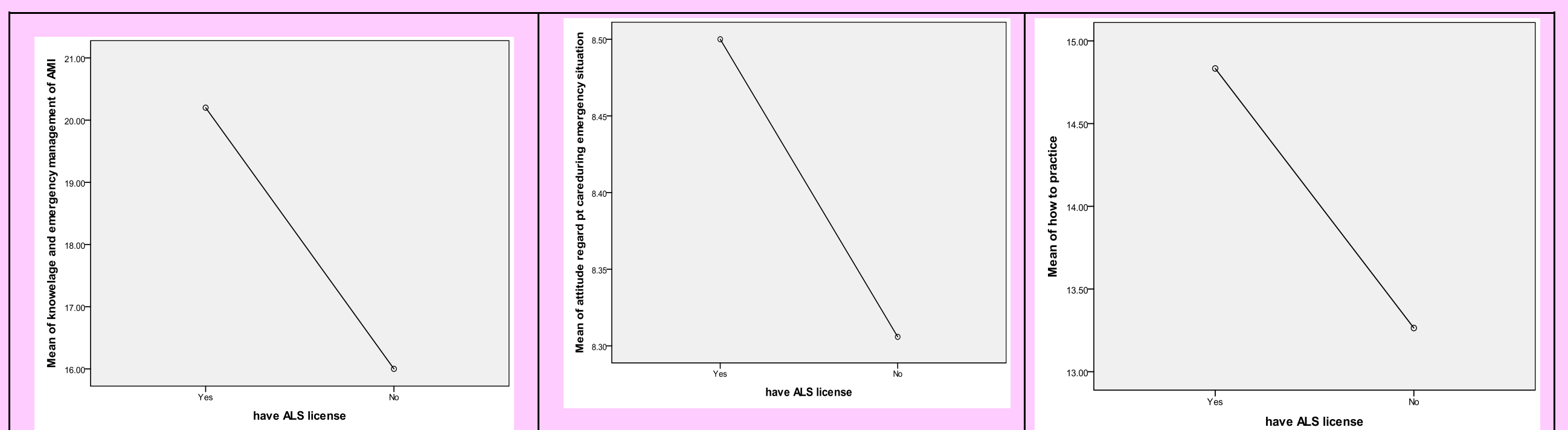(Based on Z Approximation ; Using of binomial test)

Knowledge ,attitude and skill were revealed high among studied subject who received training as top of regression while non received training at the bottom ; as well as used protocol and guidelines [table 3]. In New Zealand, nursing competence became a topic of intense, and a rapidly changing health care environment led nursing to continue its efforts to create safe environments for patients (4)

CONCLUSION

Nurses' competence leads to improved quality of care and satisfaction of patients. The standards requirements must be needed for nurses to be qualified. Continuous training uses protocol and guidelines at the field of the work as well as nurses must keep their knowledge and skills up to date.