



**EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING SHIFTING OF CRITICAL PATIENT AMONG AMBULANCE HEALTH CARE TEAM MEMBERS**

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**Abstract:**

**Introduction:** The aim of transferring critical patient to hospital was providing highest specialized care and maintain the optimal health of patient. **Aim of the study:** To assess the effectiveness of information booklet on knowledge regarding shifting of critical patient among ambulance health care team members from selected hospitals. **Material and method:** Quantitative research approach and quasi experimental pre-test post-test control group design was used. 120 ambulance health care team members were selected by purposive sampling technique. 60 samples were in experimental and 60 samples were in control group. Data collected through structured questionnaire. **Result:** Majority of samples (56.7%) were from 21-30 age group in experimental group and (41.7%) were from 31-40 age group in control group. Maximum of samples (66.7%) and 51.7% were male in both group. Majority of ambulance health care team members had 1-5 years of experience in both group. Maximum ambulance health care team members were of nurses i.e 25% , doctors M.P.W.& drivers respectively. In pre-test majority of participant had average knowledge in both group, whereas post-test 95%) of samples had good knowledge in experimental and 78.3% had average knowledge in control group. The p value was <0.0001. So, result is significant at p<0.05 level of significance. Hence, Information booklet was effective in improving the knowledge regarding shifting of critical patient. There is no association between knowledge and demographic variable expect designation of sample. **Conclusion:** The study concluded that there is improvement in knowledge after administration of information booklet regarding shifting of critical patient in experimental group.

**Key Words:** knowledge, shifting, critical patient.

**Introduction:** Critical ill patient was a person's baseline state of health has significantly changed and their life is at risk as a result of an illness and injury. Critically ill patient is those who at high risk for actual and potential life-threatening health problems. Critical patient is transported to another location to acquire for emergency & additional care. The care can be technical or procedural which is not available at current location for providing emergency and additional care. The patient may require transfer for diagnostic department, operating room or specialized care unit within the hospital or outside the hospital.

The patient transfer is routine procedure and it can be occurring between one hospital to another hospital, from hospital to hospital in different department and from non-medical place to nearest medical setting.<sup>1</sup>

In India Ambulance is a vehicle specially designed for taking patient to the hospital in emergency situation. Ambulance operating services are available at every hospital and private emergency medical services. They provide adequate ambulance transport services to offers immediate medical care for patients.<sup>3</sup> Transportation of critically ill patients between hospital required highly specialize skill full ambulance health care team members including ambulance driver, nurses, multi-purpose workers and doctors. Ambulance health care team members play an important role in shifting of critically ill patient. Ambulance workers provide emergency health care services to patient who are injured, sick, infirm otherwise physically or mentally impaired prior to or during transport to medical facilities.<sup>2</sup>

**Need of the study:** The aim of transferring critical patient to hospital providing highest specialized care and maintain the optimal health of patient. In pandemic, we had seen that there was a tremendous need of ambulance transport services required for shifting of the patient. Patient first came in contact with ambulance health care team members prior to hospital. There was a chances of deteriorating hemodynamic parameters of the patient during shifting. Majority of complications being cardiac arrest, hypertension, hypotension, hypoxia and fall due to improper handling of the patient while shifting.<sup>3</sup>

According to Maharashtra transport government services report, availability of ambulance in Maharashtra are 9455, Pune district 2672 to provide transportation to patient for shifting from home to hospital, hospital to home, hospital to hospital.<sup>5</sup>

As per national health mission annual report, under national ambulance services government of India supply technical and financial support for medical emergency services in states. These national ambulance services are connected with centralized toll-free number 108/10. Whenever people face any medical emergency situation, they can directly contact to 108 for ambulance services patient to

hospital. The national ambulance services are designated to attend the patients for critical care trauma, accident etc.<sup>3</sup>

The study aimed to investigate their knowledge regarding shifting and assess effectiveness of information booklet on knowledge regarding shifting of critical patient among ambulance health care team members.

**Aim of the study:** To assess the effectiveness of information booklet on knowledge regarding shifting of critical patient among ambulance health care team members from selected hospitals in Pune city.

**Research Methodology:** A quasi experimental pre-test post-test control group design was used. 120 ambulance health care team members were selected by purposive sampling technique with objectives of to assess knowledge on shifting of critical patient among ambulance health care team members in experimental group before and after administration of information booklet, to assess the knowledge on shifting of critical patient among ambulance health care team members in control group before and after, to compare the knowledge on shifting of critical patient among ambulance health care team members in experimental group and control group and to assess effectiveness of information booklet on knowledge on shifting of critical patient among ambulance health care team members in experimental group. 60 samples were in experimental group and 60 samples were in control group. Sampling criteria Inclusion Criteria: Sample who are Physician, staff nurse, driver and M.P.W. as ambulance health care team members. Staff posted in emergency medicine department and Staff working on ambulance. Variable under study independent variable was Information booklet for ambulance health care team members. Dependent Variable Knowledge on shifting of critical patient. Population Ambulance health care team members. sample Ambulance health care team members working on ambulance of selected hospitals. Tool Data collected through structured questionnaire. SECTION I-comprises demographic data such as age gender education experience and designation. SECTION II-Self structured questionnaire for assessment of knowledge on shifting of critical patient among ambulance health care team members. Information Booklet: Researcher was provided information booklet about shifting of critical patient to the ambulance health care team members. Validity Tool was submitted to 23 experts for content validity. Tool was valid. Reliability was done by using test retest method using Karl Pearson formula and tool was found reliable. After pilot study proved that tool was feasible to conduct main study.

**Results:****Section I: Analysis of data related to demographic variables of the experimental and control group.**

The demographic characteristics of experimental group and control group. In the experimental group majority of ambulance health care team members (56.7%) were from 21-30 years of age group. Maximum (66.7%) were having male ambulance health care team members. All ambulance health care team members residing from different education qualification. Majority (15%) nurses had completed G.N.M. Majority (25%) of doctors were MBBS. Maximum (30%) were M.P.W. and drivers were completed secondary education. Majority (66.7%) ambulance health care team members had been between 1-5 years of working experience, among all ambulance health care team members (25%) of nurses, doctors, M.P.W. and drivers respectively.

The control group, majority of ambulance health care team members (41.7%) were from 31-40 years of age group. Maximum (51.7%) were having male ambulance health care team members. All ambulance health care team members residing from different education qualification. Majority (15%) nurses had completed A.N.M. Majority (25%) of doctors were B.A.M.S. Maximum (30%) were M.P.W. and drivers were completed secondary education. Majority (66.7%) ambulance health care team members had been between 15-20 years of working experience, among all ambulance health care team members (25%) of nurses, doctors, M.P.W. and drivers respectively.

**SECTION – II: Analysis of data related to knowledge regarding shifting of critical patient among ambulance health care team members in experimental and control group before and after administration of information booklet**

(A): Assessment of pre-test and post-test knowledge regarding shifting of critical patient among ambulance health care team members in experimental and control group.

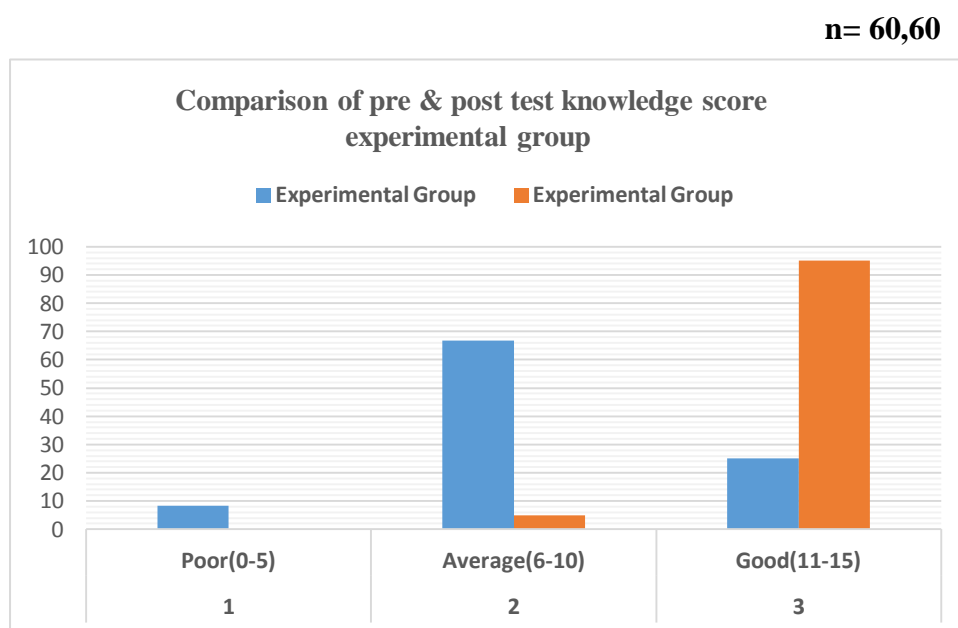
**TABLE NO: 1****n = 60,60**

Knowledge level	Exp Grp		Control Group	
	Pretest	Post test	Pretest	Post test
Poor	8.3	0	23.3	15
Average	<b>66.7</b>	5	<b>75</b>	<b>78.3</b>
Good	25	<b>95</b>	1.7	6.7

Table No. 1 shows that pre-test and posttest knowledge score of experimental and control group. In pretest majority (66.7%) ambulance health care team members had average knowledge whereas in post test majority (95%) ambulance health care team members had good knowledge experimental group. Inpre-test control group majority (75%) and in post-test (78.3%) ambulance health care team members had average knowledge.

**SECTION – III Analysis of data related to comparison of the knowledge on shifting of critical patient among ambulance health care team members in experimental group and control group.**

**(A):** Comparison of pre-test and post-test knowledge on shifting of critical patient among ambulance health care team members in experimental group.



**Figure No: 1**

Above figure shows that comparison between pre-test and post-test knowledge score of experimental group. Majority (66.7%) of ambulance health care team members had average knowledge before intervention. whereas, (95%) of ambulance health care team members had good knowledge after intervention in experimental group.

(B): Comparison of post-test scores of knowledge on shifting of critical patient among ambulance health care team members in experimental group and control group.

n= 60,60

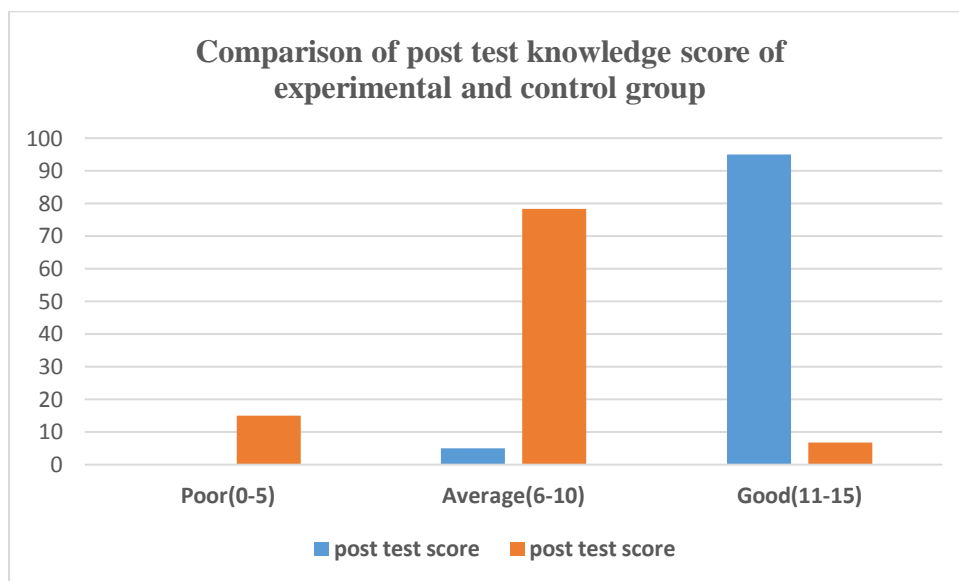


Figure No: 2

Above figure shows that comparison between post-test knowledge score of experimental group & control group. Majority (95%) of ambulance health care team members had good knowledge score after intervention in experimental group. whereas, Maximum (78.3%) of ambulance health care team members had average post-test knowledge score in control group.

#### SECTION – IV Analysis of effectiveness of information booklet on knowledge on shifting of critical patient among ambulance health care team members in experimental group.

#### Effectiveness of information booklet on knowledge of shifting of critical patient among ambulance health care team members

Table No: 2

n=60,60

Variable	Mean	SD	t-Value	t- table value	df	p-value	Remark
Pretest Experimental Group.	7	2.54		2	59	0.0001	significant
Post-test Experimental Group	12.03	1.47	24.13				
Variable	Mean	SD	t-Value	t- table value	df	p-value	Remark
Post-Test Experimental Group	12.03	1.47	14.34	1.98	118	0.0001	Significant
Post-Test Control Group	7.32	2.08					

Table no. 2 shows that effectiveness of information booklet on knowledge of shifting of critical patient in the experimental group and control group. The knowledge of shifting of critical patient in experimental group was analyzed by paired t-test. The value of 't' was 24.13. The p-value was 0.0001 which is less than 0.05 level of significance so, it suggests that reject null hypothesis. The knowledge of shifting of critical patient in experimental and control group was analyzed by unpaired t-test. The value of 't' was 14.34. the p-value was 0.0001 which is less than 0.005 level of significance so, it suggests that reject null hypothesis. There is difference between pre-test & post-test score of knowledge after administration of information booklet regarding shifting of critical patient among ambulance health care team members.

**SECTION: V Analysis of data related to association between knowledge before administration of information booklet and selected demographic variables of experimental and control group.**

The p-value is more than 0.05, so there is no association between knowledge before administration of information booklet and in age, gender, and year of experience in experimental group at 0.05 level of significance. except designation of sample. There is no association between knowledge before administration of information booklet and selected demographic variables in control group at 0.05 level of significance.

**DISCUSSION:**

The similar study conducted by MD. Najamoddin Quazi on effectiveness of video assisted teaching on knowledge and practice regarding patient safety during transportation among transporters. Purposive sampling technique was used. A sample size is 60. Data collected through structured questionnaire and observation checklist. Data analyzed using descriptive and inferential statistics. The study result shows that knowledge there was improvement in knowledge and practices after video-assisted teaching. Experimental group pre-test score of knowledge was average whereas post-test score of knowledge was good. Practice score also improved in transporters. It shows that video assisted teaching effective in both knowledge and practice regarding patient safety during transportation.<sup>15</sup>

**CONCLUSION:**The finding of study shows that knowledge of ambulance health care team members was improved. Hence, information booklet was found effective in improving knowledge regarding shifting of critical patient among ambulance health care team members. There was no association found in pre-test score and demographic variable expect designation of experimental group. Thus, this was helpful for providing the care to patient while shifting.

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