

“Efficacy of patients’ safety guidelines during patient’s transportation among ward attendants in terms of knowledge and practice”

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Abstract:

Patient’s safety means avoiding mistakes, complications, and prevention of harmful effects.¹ it is mandatory for hospital to ensure patient’s safety during the hospitalization of patient. Patients who are admitted in intensive care unit are at risk of any hazardous event especially during transportation of patient.²

Methodology: Quasi experimental study with two group pre- test post-test design was adopted to assess the effectiveness of patients’ safety guidelines in terms of knowledge and practice among ward attendants. Total eighty-seven ward attendants were selected by simple random sampling technique from a tertiary care hospital of Dehradun further divide into experimental and control group. Data was collected by self-structured knowledge questionnaire and observation practice checklist.

Result: The overall mean post-test knowledge score of experimental groups (24.02±2.873) was higher than the post-test mean score of the control group (19.95±3.408). Mean difference was 4.07 which was significant (t=3.49) at p<0.05. The post-test level of practice in experimental group (28.80±1.812) was higher than the post-test mean score of the control group (21.01±1.806), mean difference was 7.79 which was significant (t=3.49) at p<0.05. **Conclusion:** This study concluded that after intervention significant improvement in knowledge and practice of ward attendants in experimental group has been noted.

Key terms: Effectiveness, Patients’ safety guidelines, Intra hospital transportation, ward attendants, Knowledge, and Practice.

Introduction

Patient’s transportation is a very complex procedure, consisting of three phases within the hospital setting: preparation for transfer (pre); transportation of patient (intra) and handing over of the patient to the receiving staff (post). Intra facility transportation of patients’ is termed as transfer of patients within the hospital, reason may vary, it may be for investigative or restorative functions or their transfer to specialized units of the hospital.³

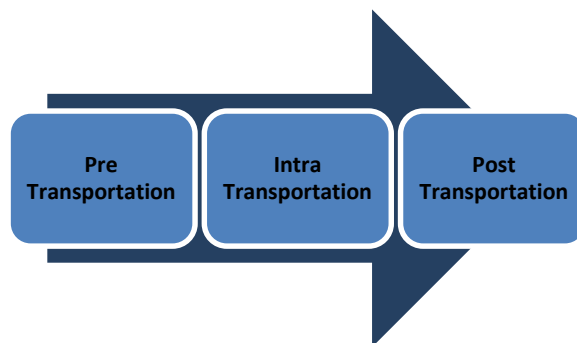


Figure 1: Phases of Intra hospital Transportation Process

Ward assistants/attendant are mainly responsible for the transportation of patients. Transfer process requires adequate preparation prior to transport. Each stage of intra-hospital transportation requires special attention for achieving safe transportation of patients. Before shifting the patients, all needed equipment’s need to be checked properly for their functioning such as: oxygen source for adequate supply, medical electrical gadget for its functioning and battery life,

proper fixing of the side rails of stretcher etc. Prior to shifting proper communication should be maintained between relieving and receiving staff about the patient’s condition and required setting, relative of patients should be explained about the purposes and reason of shifting.⁴ These steps should be followed to maintain the safe transportation of patients. Present study aim was to determine the effectiveness of patient’s safety guidelines during intra hospital transportation among ward attendants in terms of knowledge and practice.

Material and methods

Study design and setting

Quasi experimental study with two group pre and post design was conducted in multispecialty hospital of Dehradun. After receiving all the administrative and ethical approval, 90 ward attendants were enrolled by using simple random sampling technique (experimental group-44, and control group-43). Two participants from control group and one from experimental group were not reported for posttest. Purpose of the study was explained to the participants and written consent was obtained. Pretest data was collected by administering self-structured knowledge questionnaire and practice was observed. Then intervention (Patient’s safety during intra hospital transportation) was administered after that post assessment was done by using same tools.

Inclusion and exclusion criteria:

Those participants were included in the who gave their consent, working in general wards of selected hospital and involved in patient’s transportation. The participants who were not present during data collection period were excluded from the study.

Result:

Table No 1: Sample Characteristics of participants (N = 87)

S.No	Variables	Groups		χ^2	df	p Value
		Experimental (n=44) f (%)	Control (n=43) f (%)			
1.	Age (In Years)	23-40	33 (75)	0.036	1	1.00
		41-47	11 (25)			
2.	Gender	Male	32 (73)	0.032	1	1.00
		Female	12 (27)			
3.	Educational Qualification	Secondary	31 (71)	0.029	1	1.00
		Graduate/ Above	13 (29)			
4.	Wards	Medical Wards	40 (91)	0.0013 [#]	1	1.00
		Surgical Wards	04 (9)			
5.	Experience (In Years)	0-9	24 (52.2)	0.734	2	0.693
		10-18	16 (36.4)			
		19-27	04 (11.4)			
6.	Previous knowledge	Yes	03 (6.8)	0.55 [#]	1	0.459
		No	41 (93.2)			

$\chi^2 = 3.84$ at df -1, χ^2 Yates Correction[#]

Table no 1 show that statistically both the groups were homogenous as chi square value was not statistically significant.

Table No 2: Pretest and posttest score of participants (N=87)

Knowledge score	Pre test (Mean ± SD)	Post test (Mean ± SD)	Mean Difference	df	Paired 't' Value	p Value
Experimental group (n= 44)	20.77±3.124	24.02±2.873	3.25	43	6.093	.000*
Control group (43)	20.23±3.315	19.95±3.408	0.28	42	0.466	.643

$t_{43/42} = 3.49$ at $p < 0.05$ * Significant

The data presented table no.2 shows that in experimental group mean posttest knowledge score (24.02 ± 2.873) of participants were higher than the pretest knowledge score mean (20.77 ± 3.124) and the mean difference was 3.25 which was found significant (6.093). In control group mean posttest knowledge score (19.95 ± 3.408) was slightly lower than the pretest knowledge mean score (20.23 ± 3.315) and the mean difference (0.28) was found non-significant (0.466) at $p < 0.05$.

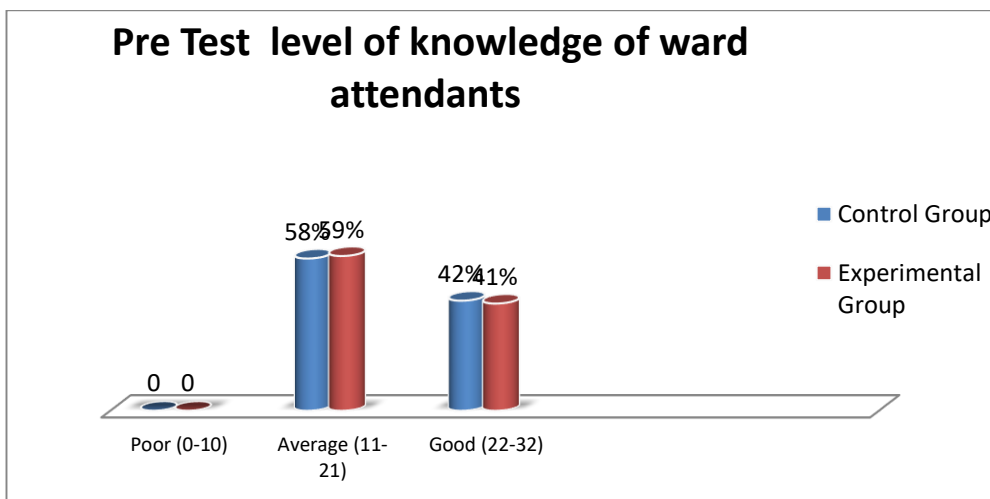


Figure 2: Comparison of Pretest level of knowledge of ward attendants in Control & Experimental group

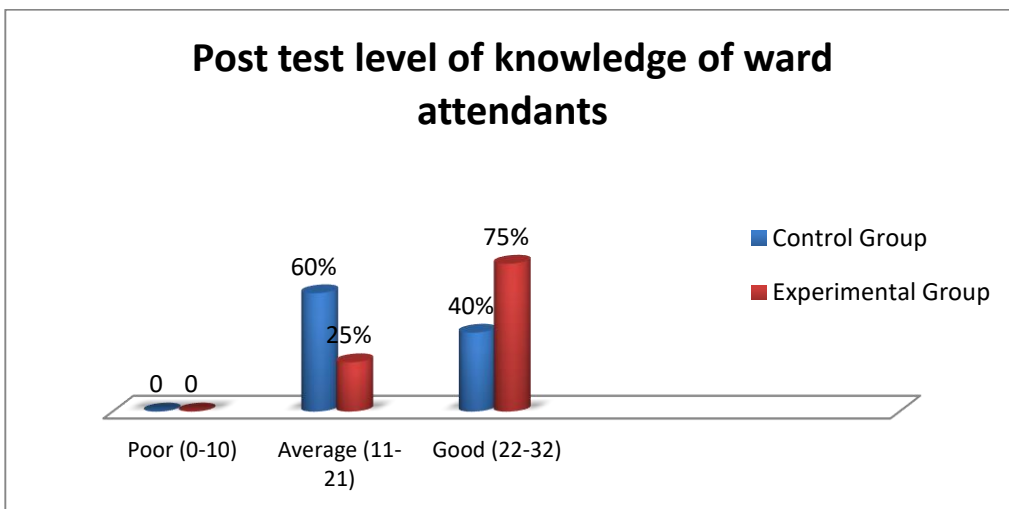


Figure 3: Comparison of Post-test knowledge of ward attendants in Control & Experimental group

Table No 3: Pre and post test practice score of participants (N=87)

Practice score	Pre test (Mean ± SD)	Post test (Mean ± SD)	Mean difference	df	Paired 't' Value	p Value
Experimental group (44)	18.11±3.006	28.80±1.812	10.69	43	18.01	.000*
Control group (43)	19.95±2.734	21.01±1.806	1.06	42	1.973	.055

$t_{43/42} = 3.49$ at $p < 0.05$ Significant*

The data presented in table no. 3 shows that in experimental group, mean posttest practice score (28.80 ± 1.812) of participants were higher than the pre-test practice score mean (18.11 ± 3.006), mean difference was 10.69 which was found significant (18.010). In control group mean post-test practice score (21.01 ± 1.806) was slightly higher than the

pretest practice mean score (19.95±2.734) and the mean difference was 1.06 which was non-significant (1.973) at $p < 0.05$.

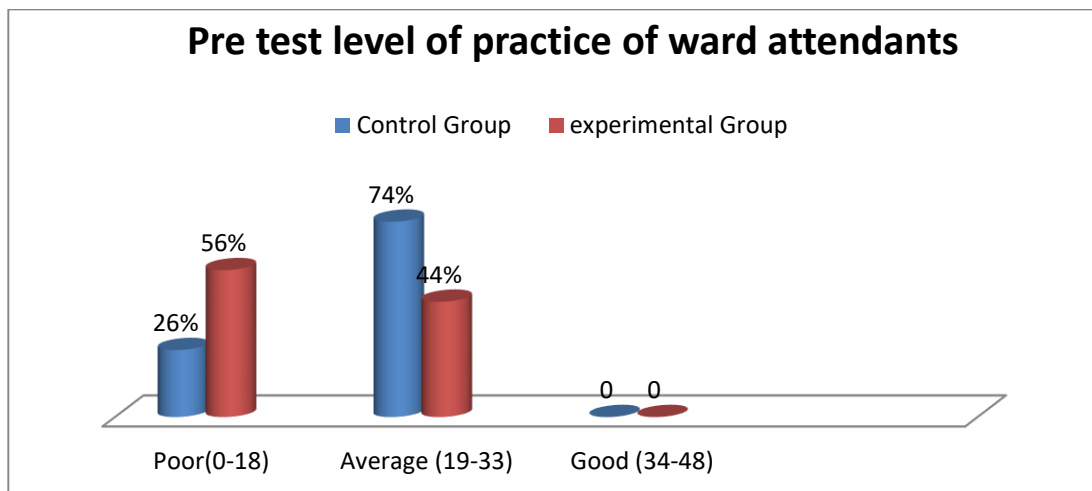


Figure 4: Comparison of Pretest level of Practice of ward attendants in Control & Experimental group

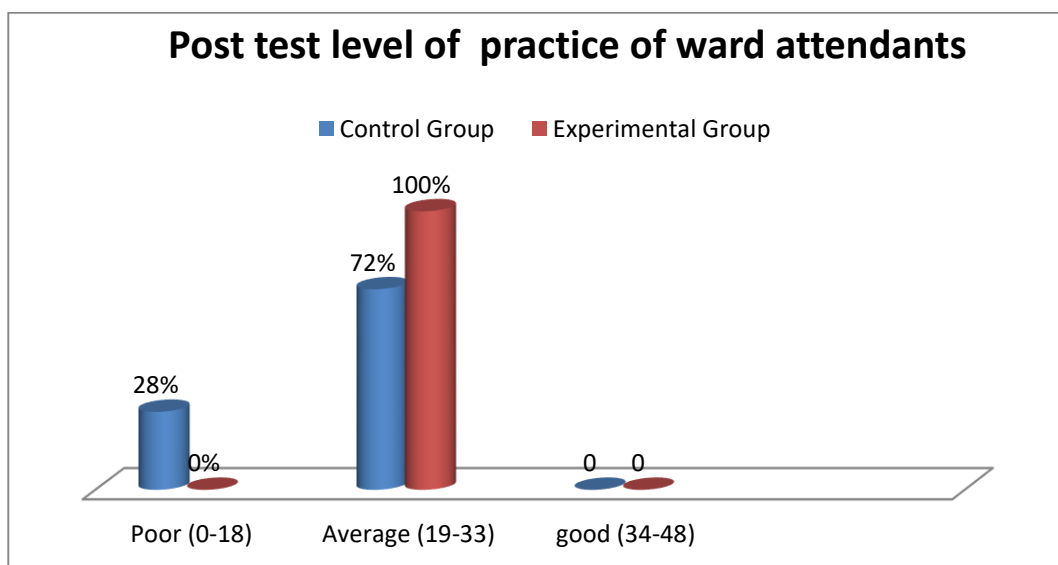


Figure 5: Comparison of Posttest Practice of participants' of Control & Experimental group

Table no 4: Comparison of post -test knowledge of participants of experimental and control group (N=87)

	Experimental Group (n1=44) Mean ± SD	Control Group (n2=43) Mean ± SD	Mean Difference	Independent t Value	p Value
Post test	24.02 ± 2.873	19.95 ± 3.408	4.07	6.026	0.001*

$t_{85} = 1.664$ at level of < 0.05 Significant*

Table no 4 shows significant difference in post test knowledge of participants between control and experimental group. Result shows significant improvement in knowledge of ward attendants in experimental group after the intervention as compared with control group.

Table no 5: Comparison of post-test practice of participants in experimental and control group (N=87)

	Experimental Group (44) Mean ± SD	Control Group (43) Mean ± SD	Mean Difference	Independent t Value	p Value

Post test	28.80 ± 1.812	21.01 ± 1.806	7.79	20.04	0.001*
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$t_{85} = 1.664$ at level of $p < 0.05$ Significant*

Table no 5 shows significant difference in post test practice of participants between control and experimental group. Result shows significant improvement in practice of ward attendants in experimental group after the intervention as compared with control group.



Figure6: Correlation between knowledge and practice score

Figure No 6 Shows the positive correlation ($r = 0.541$) between post test knowledge and post test practice score regarding patient safety during intra hospital transportation.

Discussion

The aim of the present study was to evaluate the effectiveness of patient’s safety guidelines during intra hospital transportation among ward attendants in terms of knowledge and practice. Sample comprises 87 ward attendants who were involved in transportation of patients’ from one place to another; they were randomly divided in to experimental and control groups.

If the mean pre and post test knowledge and practice scores of the participants were compared between the experimental and control group, they were found statistically significant at $p < 0.05$ level of significant, which show that given intervention was effective in improving knowledge and practice of the participants. Knowledge and practice score were positively correlated.

Quazi and Apte had conducted a study and results showed great improvement in knowledge and practice after video assisted teaching as most of the participants had average knowledge and practice before intervention and in post-test most of them had good knowledge and practice.⁵

Brunsveld et al conducted a study in an intensive care unit to ensures the continuity of care to improve the protection of vulnerable people.⁶

In this study significant positive correlation ($r = 0.541$) between pretest and posttest knowledge score and practice score was found. **Quazi and Apte** studied the effectiveness of video assessed teaching among transporters. Study result shows Knowledge and practice are positively correlated to each other at < 0.05 level of significance ($r = +0.433$).⁵

Conclusion

On the basis of the findings, it can be concluded that the intervention regarding patient safety guidelines during intra hospital transportation shows the great improvement in knowledge and practice of ward attendants in experimental group as compared to Control group. Updated knowledge of the participants will be helpful in safe transportation of patients and maintaining patient’s safety.

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