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" A Study to assess the effectiveness of structured teaching programme on stump care among patients who underwent amputation in SMVMCH, Puducherry".

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I. INTRODUCTION

"People presume my disability has to do with being an amputee, but that's not the case; our insecurities are our disabilities"

- Aimee Mullins .

Amputation is derived from the Latin word, "amputer" means "to cut away" from amb (about) and putare (to prune). Amputation is the oldest operation known to man, existing before recorded history. Early amputations were done as punishment for crime. Today's amputations are used to treat injuries, cancers, overwhelming limb gangrene, and limb-threatening arterial disease or rest pain. Amputation is common, nearly 2 million people in the United States have undergone amputations. In the United States, the majority of new amputations occur due to complications of the vascular system (the blood vessels), especially from diabetes. In 2005, just in the US, there were 1.6 million amputees. In 2013, US had 2.1 million amputees. Approximately 185,000 amputations occur in the United States each year. There will be an estimated 3.6 million people in the US living with limb loss by 2050.

II. REVIEW OF LITERATURE :

Yoo Jin Choo et al. (2022) conducted a study on amputation stump management. The main objective of the study was to provide an overview of amputation stumps management. A narrative review was used to overview stump management. It helps to optimize the physical abilities of the amputees through postoperative rehabilitation, desensitization, continuous application of soft or rigid dressing for pain reduction and stump shaping. Prosthesis may be worn to promote stump maturation. Continuous exercises improves muscle strength that helps to perform activities of daily living. Clean wound or edema management of stump prevents problems associated with prosthesis.

STATEMENT OF THE PROBLEM :

"A Study to Assess the Effectiveness of the Structured Teaching Programme on Stump Care among Patients who underwent Amputation in SMVMCH , Puducherry."

OBJECTIVES:

- To assess the level of knowledge regarding stump care among patients who underwent amputation.
- To assess the effectiveness of structured teaching programme on stump care among patients who underwent amputation.
- To associate the level of knowledge regarding stump care with their selected demographic variables.

HYPOTHESIS:

H1 : There will be a significant difference in the level of knowledge regarding stump care before and after structured teaching programme among patients who underwent amputation**.**

H2 : There will be a significant association between level of knowledge regarding stump care among patients who underwent amputation with their selected demographic variables.

ASSUMPTIONS:

- Patients who underwent amputation may have inadequate knowledge regarding stump care.
- Structured teaching programme may improve the knowledge regarding stump care among patients who underwent amputation.

III. MATERIALS AND METHODS :

This chapter describes the research methodology followed to assess the Effectiveness of the Structured Teaching Programme on Stump Care among Patients who underwent Amputation in SMVMCH, Puducherry.

Section A : This section includes demographic data such as age group, gender, religion, educational status, monthly income, marital status, type of family, dietary pattern, occupational status, bad habits.

Section B : Structured knowledge questionnaires used to assess the knowledge regarding stump care among patients who underwent amputation. There were 25 items. Each items has 4 options with one accurate answer. The score for each correct response was one and incorrect response was zero. Thus for 25 items the maximum obtainable score was 25 and minimum score was zero.

SCORING INTEPRETATION:

KNOWLEDGE	SCORING INTEPRETATION
1 – 8	Inadequate knowledge
9 – 16	Moderate adequate knowledge
17 – 25	Adequate knowledge

RESEARCH APPROACH:

A Quantitative research approach is adopted for this study.

RESEARCH DESIGN:

Pre experimental research design with one group pretest post test research design is adopted for this present study.

STUDY VARIABLES:

Dependent variables: Level of knowledge

Independent variables: Structured teaching programmer on stump care.

SETTINGS:

The study setting is SMVMCH. Sri Manakula Vinayagar Medical College and Hospital is an ultra modern, multi specialty tertiary care hospital with medical and research facilities. The hospital has an inpatient capacity of more than 900 beds with exclusive 100 critical care beds in different specialties.

POPULATION:

The target population of this study was all patients who underwent amputation at hospitals.

SAMPLE:

The sample of this study consists of patients who underwent amputation at SMVMCH and fulfils inclusion criteria.

SAMPLE SIZE:

Sample size consists of 30 patients who underwent amputation.

SAMPLING TECHNIQUE:

Convenience sampling technique was appropriate for this present study.

SAMPLING CRITERIA:

Inclusion criteria:

- Patients both male and female.
- Patients who underwent amputation

Exclusion criteria:

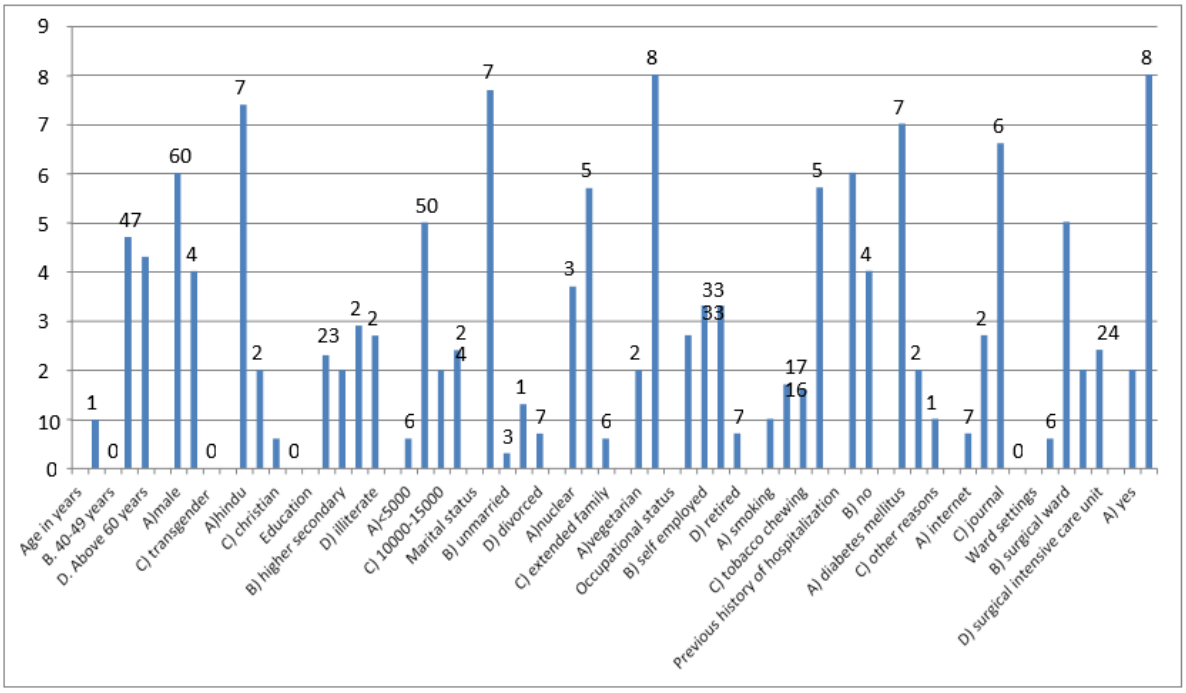
- Patients who are attending SMVMCH- OPD.
- Patients who are not present during the period of data collection
- Patients who are not willing to participate in the study.

IV. RESULTS :

In pre-test, the mean value is 4.40 with the standard deviation of 2.48. Whereas in post-test, the mean value is 17.96 with the standard deviation of 4.20. The paired 't' test value is 20.709 which is found to be significant at the level of $p<0.001$. Association with the pre-test level of knowledge regarding stump care among patients underwent amputation with their selected demographic variables. Among 15 demographic variables none of them found to be significantly associated at the level of $p<0.05$. Association with the post-test level of knowledge regarding stump care among patients underwent amputation with their selected demographic variables.

Among 15 demographic variables use of prosthesis variable were found to be significantly associated at the level of $p<0.05$.

Figure : Percentage wise distribution of demographic variables among patients underwent amputation.



Frequency and percentage wise distribution level of knowledge regardingstump care among patients underwent amputation.

(N=30)

Level of knowledge	**Pre-test**		**Post-test**	
	N	**%**	**N**	**%**
Inadequate	28	93	1	3
Moderately adequate	02	07	9	30
Adequate	0	0	20	67

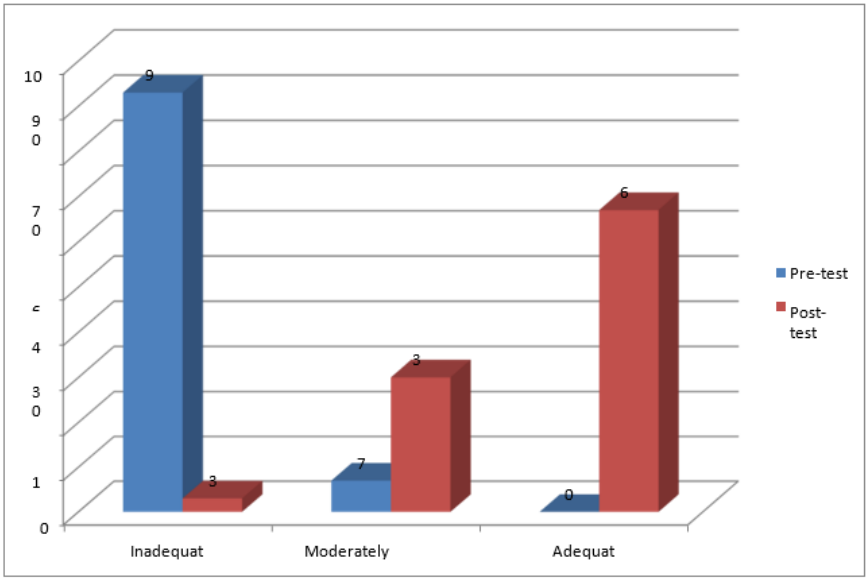


Figure : Percentage wise distribution level of knowledge regarding stump care among patients underwent amputation.

Mean and standard deviation regarding stump care among patientsunderwent amputation.

(N=30)

	Mean	**Std. Deviation**	**'t' test**
Pre-test	4.4000	2.48582	**20.709****
Post-test	17.9667	4.20577	

*****p<0.001 - highly significant***

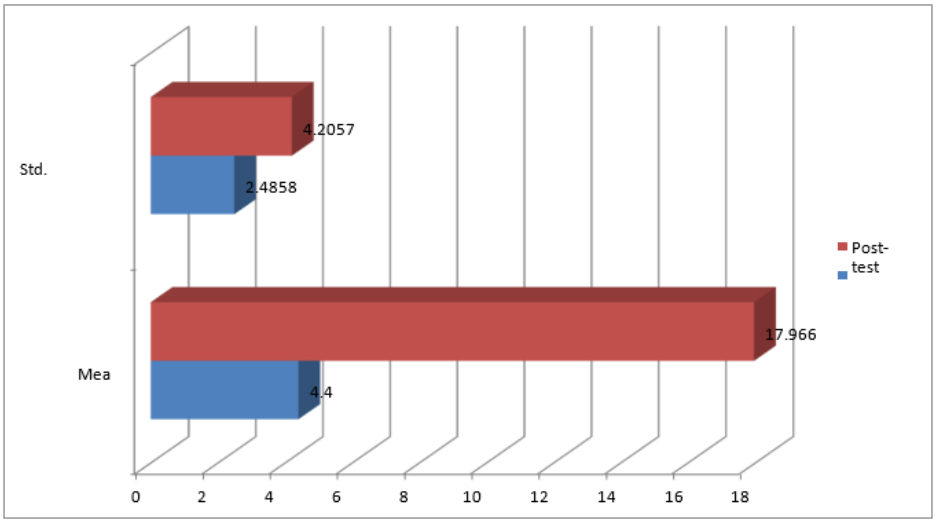


Figure : Mean and standard deviation regarding stump care among patients underwent amputation.

Association with the pre-test level of knowledge regarding stump care among patients underwent amputation with their selected demographic variables.

[N=30]

S.NO	**DEMOGRAPHIC VARIABLES**	**Inadequate**		**Moderately Adequate**		**X^2**
		N	**%**	**N**	**%**	
1	Education					
	A) graduate	5	17	2	7	7.041 Df=3 0.071
	B) higher secondary	6	20	0	0	
	C) primary school	9	30	0	0	
	D) illiterate	8	27	0	0	
2	Monthly income per month					
	A)<5000	2	7	0	0	7.041 Df=3 0.071
	B)5000-10000	15	50	0	0	
	C) 10000-15000	6	20	0	0	
	D) above 15,000	5	17	2	7	
3	Marital status					
	A) married	22	73	1	3	6.592 Df=3 0.086
	B) unmarried	1	3	0	0	
	C) widower	4	13	0	0	
	D) divorced	1	3	1	3	

****p<0.05- Significant; **p<0.001 - highly significant***

Table 5 reveals that association with the post-test level of knowledge regarding stump care among patients underwent amputation with their selected demographic variables. Among 15 demographic variables use of prosthesis variable were found to be significantly associated at the level of $p<0.05$.

[N=30]

S.NO	DEMOGRAPHIC VARIABLES	Inadequate		Moderately Adequate		Adequate		X^2
		N	%	N	%	N	%	
15	Use of prosthesis							6.656 Df=2 0.038*
	A) yes	1	3	0	0	5	17	
	B) no	0	0	9	30	15	50	

p<0.05- Significant; **p<0.001 - highly significant

V. CONCLUSION AND RECOMMENDATIONS:

This study was conducted to assess the effectiveness of the structured teaching programme on stump care among patients who underwent amputation in SMVMCH , Puducherry. The total number of 30 patients who underwent amputation were selected for this study. The level of knowledge regarding stump care were assessed by self structured questionnaire. The study had assessed the level of knowledge regarding stump care and the scores were categorized in the interpretation. This implies that on the content of study investigator have assessed the level of knowledge regarding stump care among patients underwent amputation. It is concluded that the structured teaching programmed improves the knowledge regarding stump care and it is found be an effective method in imparting knowledge to patients who underwent amputation.

NURSING IMPLICATION:

The study may help the amputation patients to improve the knowledge regarding stump care.

NURSING PRACTICE:

- The nurse working in the hospital, clinical setting and in community should practice health education as integral part of nursing profession.
- The study can also be used by the nurse to educate and instruct about the ways of amputation related complications.
- This method will improve the health- seeking behaviour of staff nurses those who are working in critical care units.

NURSING EDUCATION:

- Effort should be made to improve and expand nursing curriculum to provide more content in the area of stump care.
- Conference, Workshops and Seminars can be given for nurses and student to impact the education towards the importance of stump care.
- Students should be provided with adequate opportunities in developing skills in handing such scenarios and how to identify their difficulties and help them to promote comfort and well-being.
- Curriculum needs to strengthened to enable the nursing students how to handle patients underwent amputation.
- Nursing educators need to strengthen the evidence-based nursing practices among the Undergraduate and Post Graduate Nursing Students.

NURSING ADMINISTRATION:

- Nursing administration can make necessary policies to implement awareness regarding ways of managing amputation patients.
- This study provides an opportunity for nursing administrators to conduct in- service education program to the staff nurse in hospitals regarding ways of caring patients with amputation.
- Nurses administrator should arrange seminars, conference, workshops, related stump care and how to improve amputation patient care.
- Nursing administrator should take part in health policy making, developing protocols related to stump care for staff nurses.

NURSING RESEARCH:

- The findings of the study help the nurses and students to develop the inquiry by providing baseline.

- Nursing researcher should encourage clinical nurses to apply the research findings in their daily nursing care activities and can bring out new innovative findings.
- Nurses researchers can promote many studies on this topic.
- The researcher should conduct periodic reviews of research findings and disseminate the findings through conferences, seminars, publications in journals and on the worldwide web.

RECOMMENDATIONS:

- Similar study can be conducted in different settings.
- The same study can be conducted with a true experimental research design.
- The same study can be replicated on a large sample.
- A similar study needs to be conducted in other private and government hospitals in order to draw a generalisation.
- A Similar study can be conducted in other parts of the country

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