

Knowledge Regarding Skin Banking among Student Nurses

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Abstract:-

➤ Background

Burn's care is a great challenge both to the medical profession and to the society. In such situations the donor skin comes as a great boon for large burns. The Skin bank is a beneficial fortune for providing cadaveric allograft skin. A lack of awareness becomes a major obstacle for donor skin and shortage of donor skin in skin banking.

➤ Methods

The quantitative non experimental descriptive research design was used to describe the knowledge of student nurses regarding skin banking. Student nurses were selected by convenience sampling technique and sample consists of 30 student nurses in Vivekanandha College of nursing at Namakkal, Tamilnadu. Semi structured knowledge questionnaire was used, consists of 30 items of knowledge questions regarding skin banking. The researcher obtained the validity and reliability of tool. The Semi Structured Knowledge questionnaire was administered to the student Nurses. Descriptive and Inferential statistics were used to analyze the collected data in terms of Frequency analysis and chi-square test.

➤ Results

The analysis reveals that, out of 30 student nurses 25(83%) had inadequate level of knowledge, 5(17%) had moderate level of knowledge and none of them had adequate level of knowledge regarding skin banking. The study elicit no association between the knowledge score and selected demographic variables of student nurses like Age, Gender, Religion, Place of residence, Type of family, Income per month, Educational status, Aware of skin banking, Source of information, Registered for organ donation, Have donor card.

➤ Conclusion

The findings of the study indicate there is a lack of sufficient knowledge of skin banking and shortage of banked skin will be solved by raising the willingness of the population to donate skin in skin banking. Health care professional have a fundamental role in raising the public awareness programme and need of skin banking.

Keywords: - Skin Banking, Student Nurses

I. INTRODUCTION

“When you donate eyes, you give sight when you donate skin, you give life“

Organ donation is an asset to medical Profession as it gifts a life of patients suffering from end stage of organ failure. There is a great for the transplants and the gap between organs available for transplantation is widening globally. There are several types of organ and tissue donation. The most popular organ donation in terms of life saving is blood and eye donation. The next achievable organ donation will be skin.

Skin is the largest organ which is the first line of defence in our body, act as a water proof and prevent infection from entering the body. The most common cause of skin damage is burns. When severally damaged due to severe burns the defence mechanism breakdown to the patient, if untreated finally the victim dies. The extensive burns will be treated by skin allograft.

Skin donation is relatively new approach to Indian society to save lives of extensively burns victims where as donation of eyes is fast becoming popular, every individual is aware to donate eyes after death. Skin donation is an action that gives a skin to a person in death. Skin is removed from a dead person and grafted onto a severe burns victim is the best covering for the victim but not enough skin is being donated to meet the need.

One Burn's victim requires skin from 2 donors. India with such a huge population will have no dearth of skin, Large number of precious lives would be saved if people would come forward in large numbers for skin donation. The demand for human skin to be a reason for the existence of skin bank.

Skin banking is a process involving skin collection from eligible deceased donor which is then processed, preserved and distributed as international protocols. Collected and processed Skin can be stored in the skin bank at 4-8 C up to 5 year

Patient can be saved if we have enough skin in skin bank. It prerequisite to have an extensive supply of skin donation for burns patient in mass disaster situation as there is no blood group matching required in skin grafting. Skin bank entertain to coordinate all their activities including procurement, data recording, processing, storage, distribution and import and export of tissues,

according to written operating procedures detailed in technical guidelines. Half of burns patient can be saved if enough skin banks established in our country. Health care professional have vital role of spreading of awareness related to skin donation and skin bank to saves life's of burns victims.

II. LITERATURE REVIEW

Gokul sarveswaran 2017 had conducted survey study on Knowledge, attitude and practice regarding skin donation in skin banking for adult population in urban pudhucherry. The study participants of 257 were selected by randomly in selected urbans of pudhycherry. Community-based cross-sectional study was conducted during April to May 2017. Data were collected by using the semi-structured knowledge questionnaire and likerts scale. The result revealed that 90% of urban people were not heard about skin banking where as 58% had negative attitude towards skin banking .In case of practice regarding registration for skin donation in skin banking was only 1.3%. Knowledge regarding skin banking was less among combined family and less socioeconomic status. Negative attitude was more among those who were educated above secondary and less among Muslim/Christian religion.

Van, Baare. J. &Pipping D (2016) investigated the study on knowledge about skin banking with medical students in Kerala. The knowledge and attitude of medical students regarding skin banking is quintessential for the success of the skin donation program in a country. Objectives of the study to assess the knowledge of medical students regarding skin banking at Government Medical College, Trivandrum, and Kerala, India. The tool administered for this cross-sectional study was self-administered questionnaire from 194 final-year medical students during 2016, which were selected by convenient sampling. The questionnaire had three sections to gather information of sociodemographic details of the students, knowledge on skin banking, and the attitude toward skin banking. The study showed that a many of the students were in inadequate knowledge regarding skin banking, but it is not translated into their willingness for skin donation – both cadaveric and live. The study reiterates the need for educational interventions for medical students which cut across various disciplines to make them understand the nuances of the issue in a holistic way.

➤ Statement of the Problem

“ A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE REGARDING SKIN BANKING AMONG STUDENT NURSES IN SELECTED COLLEGE IN NAMAKKAL DISTRICT, TAMILNADU ”

➤ Objectives

- To assess the level of knowledge regarding skin banking among student nurses
- To find out the association between level of knowledge with their selected demographic variables

III. METHODOLOGY

Non experimental quantitative descriptive research study had conducted to assess the Knowledge of skin banking with the student nurses in government district head quarter's hospital namakkal, the study was carried out after approval by head of the department and informed consent of student nurses. The study samples of III year B.sc nursing students were selected by convenience sampling method. **Selection and Development of Tool:** Semi structured knowledge questionnaire was used as a research tool in this study .Interviewing the study participants concerning with their socio demographic variables, current insight of skin banking. The instrument was selected based on the various review and consultation with experts hence the tool was considered to be most appropriate to elicit the response from study participants. **Pilot study** was conducted at vivekanandha college of Nursing, Namakkal. 5 student nurses were selected by Non Probability sampling technique after obtaining permission from the higher authority. Knowledge questions were used to Know the knowledge level on skin banking with student nurses. The mean knowledge score were higher it shows the results of the data revealed that the tool was feasible to conduct the study. **Data collection Procedure:** The investigator obtaining the written consent from subjects followed by detailed explanation of the study guidelines. Student nurses were assured that anonymity of each individual would be maintained. After obtain consent from student nurses, Researcher administered the semi structured knowledge questionnaire to study participants for 20 minutes. Per day 5 to 6 student were selected from the morning and afternoon for one hour period.

IV. RESULTS

	LEVEL OF KNOWLEDGE	STAFF NURSE (NO)	STAFF NURSE PERCENTAGE
1.	Inadequate <50%	25	83%
2.	Moderate 50-75%	5	17%
3.	Adequate >75%	0	0
TOTAL		30	100%

Table 1:- Distribution of Student Nurses According to their Knowledge Level Regarding Skin Banking

Table 1 and Figure 1 represents the knowledge level of student nurses in skin banking, 25 (83%) had inadequate level of knowledge, 5 (17%) had moderate and no one of them had adequate knowledge level of skin banking.

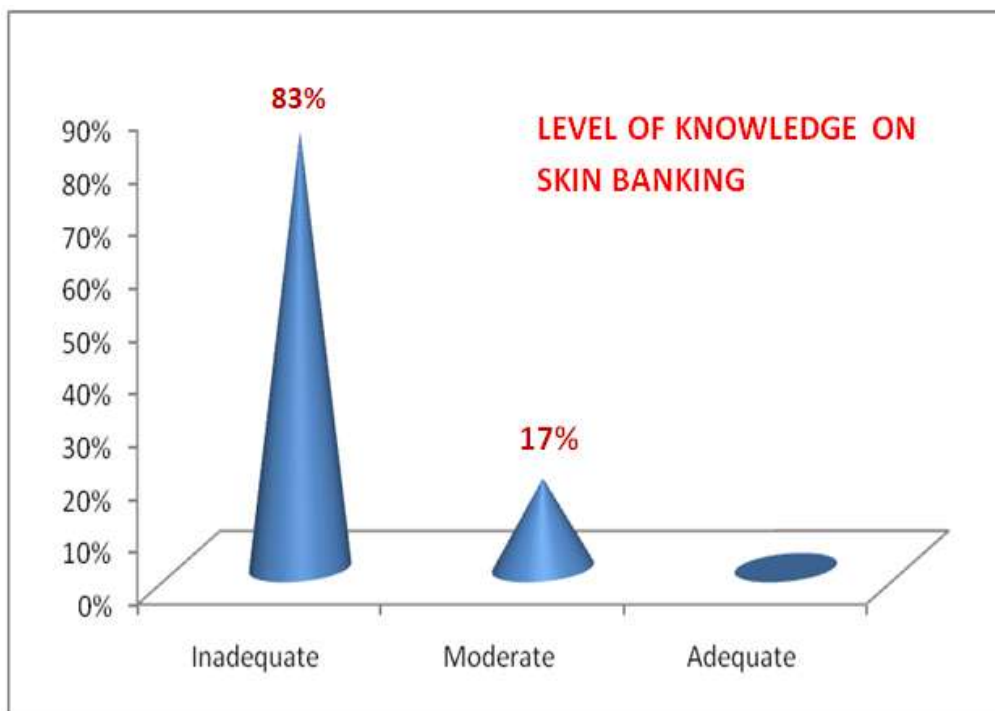


Fig 1

Aspects	Max score	Range score	Nursing student knowledge		
			Mean	Mean%	SD
Knowledge	30	9 - 22	14	46.7%	3.98

Table 2:- Mean Knowledge Score Regarding Skin Banking among Student Nursing

Table 2 illustrates that the mean score of Study Subjects on skin banking it's found to be 14 (46.7) with SD value of 3.98.

S.NO	DEMOGRAPHIC VARIABLES	CATEGORY	Inadequate		Moderate		X2 value
			No	%	No	%	

1.	Age	20-25	1	3%	2	7%	4.03 Df= 3 (t=7.82) NS
		26-30	7	23%	1	3%	
		30-40	8	27%	4	14%	
		Above 40 years	6	20%	1	3%	
2.	Gender	Male	1	3%	2	7%	2.72 Df=1 (t=3.84) NS
		Female	21	70%	6	20%	
3.	Religion	Hindu	15	50%	5	17%	0.213 Df=3 (t=7.82) NS
		Christian	7	23%	3	10%	
		Muslim	-	-	-	-	
		Anyother	-	-	-	-	
4.	Residence	Rural	16	53%	4	13.5%	1.5 Df=2 (t=5.99) NS
		Semi-urban	-	-	-	-	
		Urban	22	20%	4	13.5%	
5.	Type of family	Joint family	10	33%	3	10%	3.53 Df=2 (t=5.99) NS
		Nuclear family	12	40%	5	17%	
		Extended	-	-	-	-	
6.	Income per month	15,000-25,000/-	6	20%	3	10%	0.861 Df=3 (t=7.82)
		25,000-30,000/-	8	27%	3	10%	
		30,000-40'000/-	2	6%	-	-	
		Above 40'000/-	2	6%	1	4%	
7.	Aware of skin Banking	Yes	22	67%	5	27%	0.27 Df=1 (t=3.84) NS
		No					
8.	Source of Information	Mass media	-	-	-	-	3.46 Df=1 (t=3.84) NS
		Peer group	-	-	-	-	
		Health	2	6%	3	10%	
		Professional	20	67%	5	17%	
9.	Registered for Organ donation	Yes	9	30%	1	3%	3.08 Df=3 (t=7.84) NS
		No	13	43%	-	-	
10.	Have donar card	Yes	3	10%	1	3%	1.07 Df=1 (t=3.84) NS
		No	19	63%	6	21%	

Table 3:- Relationship of Knowledge Findings and Selected Variables of Subjects

Table 3 presents substantive summary of chi-square analysis deliver the relationship of knowledge findings and selected variables of subjects. Findings reveals that no significant association found with the socio

demographic variables of age, gender, religion, residence, type of family, income , aware of skin banking, source of information, registered for organ donar, have donor card regarding skin banking.

V. RESULT AND DISPUTE

Discovery of findings was presented on the purpose of the study:

A. To Determine the Knowledge Level on Skin Banking with Student Nurses:

The awareness on skin banking with student nurses was assessed by using of semi structure knowledge questionnaire. The total sample size was 30. The majority of 25(83%) had inadequate level of knowledge, 5(17%) sample was moderate and none of them had adequate knowledge level. This study was supported by **Nikhil Panse et al (2014)** carried a study on Knowledge and awareness in skin banking with medical students. Structured pre-test knowledge questionnaire information leaflet and then a post-test questionnaire on the knowledge of skin banking were administered to 150 final year medical students and responses elicited. Although the evaluation demonstrated significant improvement in knowledge ($P < 0.0001$) after the post-test questionnaire, it is important to know that the preliminary knowledge regarding skin banking of these students was very poor.

B. To Estimate the Relationship of Knowledge Score with their Selected Attributes:

The analysis showed that there was no significant association of their selected variables of age, gender, religion, residence, type of family, income, working, aware of skin banking, source of information, registered for skin donation, have donar card regarding skin banking. This study was supported by **Majumdar.B.k, (2013)** conducted a nonexperimental study to determine the cadaveric skin allograft in management of deep burn among second degree burns patient with the sample size of 15. By using convenient sampling method the sample were selected. The use of cadaveric skin graft of deep burns is a newer concept in burn management. The purpose of the study was to establish for essentials of early cover to the burn wound with cadaveric graft. So, it can be concluded that cadaveric skin graft is very good and safe biological dressing for deep burns.

VI. OUTCOME

The knowledge of skin banking is poor among nursing students. Awareness about skin donation is unfortunately low with general population. Health care professional have a fundamental role in raising the public awareness of skin donation and skin banking. The study reiterates adequate knowledge regarding skin banking of health care professionals especially nurses in emergency and burns units help the burns patients to recover quickly.

RECOMMENDATION ON THE STUDY

- The comparative study between two different district nursing colleges.
- The study can be replicated on larger samples; there by findings can be generalized to a larger population
- A quasi experimental study can be conducted with video teaching programme on skin banking
- A study can be carried to assess the practice of student nurses regarding skin donation & skin banking.

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