



To assess the knowledge regarding skin banking among nurses of selected hospital Indore

Deepa PD

Assistant Professor, Department of Medical Surgical Nursing, Bombay Hospital College of Nursing, Indore, Madhya Pradesh, India

Abstract

Background: Donor skin and dermal grafts are used in several types of loss of substance for different clinical purposes. As biological physiological medication, donor skin grafts can promote re-epithelization, shorten healing time, alleviate pain and protect dermal and subcutaneous structures such as cartilage, tendons, bones and nerves. Though a great variety of dermal matrices and skin equivalents, both synthetic and semisynthetic, are now available for wound treatment, viable human skin allografts remain an important therapeutic choice for extensive deep burns and hard-to-heal wounds. In such cases, viable skin allografts have significantly better clinical outcomes than unviable human-derived allografts or synthetic medications. The demand for human-derived skin bioproducts continues to be a reason for the existence of skin banks. Skin bank organization is complex and requires continuous updating. Careful donor selection, thorough microbiological and serological donor screening for transmissible diseases and rigorous quality control during tissue preparation are necessary to minimize the risk of transmission of pathogenic agents. Skin banks must also observe standardized reproducible procedures to ensure tissue traceability and biological safety in all phases of processing and to avoid new biological contamination. Constant training and periodic checks are needed to keep skin bank operators attentive and responsible. Finally, skin banks should guarantee collection and storage of highly viable skin. Here, we discuss available tissue storage methods and the different types of skin bioproducts.

Aim: Assess the knowledge regarding skin banking among nurses of selected hospital Indore.

Objectives: 1. to assess the knowledge score regarding skin banking among staff nurses.

2. To find out the association between knowledge score with their selected socio-demographic variable. **Methodology:** The quantitative non-experimental descriptive research design was used to describe the knowledge of staff nurses regarding skin banking. Staff nurses were selected by convenience sampling technique and sample consists of 40 staff nurses. 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 staff Nurses. Descriptive and Inferential statistics were used to analyze the collected data in terms of Frequency analysis and chi-square test.

Results: In the test majority 90% of staff nurses had average knowledge and 10% had poor knowledge. There was no association between the knowledge score with their selected demographic variables.

Keywords: regarding, demographic, majority, analyze, demographic

Introduction

In a human body, there are various tissues and organs which can be donated either post brain death or natural death. While all the organs and skin can be donated after brain death, only eyes and skin can be donated after natural death. Coming to skin donation, skin is the largest human organ which protects us from heat, cold, UV rays, and bacteria and enables us to have our sense of touch. Our skin is capable of mending itself from regular wear and tear. But when it is badly burnt or damaged, it is unable to repair itself and in such cases, skin transplant is preferred, as a way to promote healing. Also, under major burn cases, we cannot take skin from another area of the body as it is prone to infections. Anyone above the age of 18 years can donate skin. Also, every person who donates eyes can donate skin. But there is no mandate that if you are donating eyes then you have to donate skin or only then you can donate skin. It is a personal choice. Please note, individuals having diabetes or hypertension can also donate their skin. Deceased person should not be suffering from any diseases like AIDS, HIV, Hepatitis B and C, Tuberculosis, Jaundice,

Sexually Transmitted Diseases, skin cancer, active skin disease and septicemia. Anyway, before harvesting the skin, a blood sample is taken for necessary tests. Unlike kidney transplant, in skin transplant, there is no blood or tissue matching between donor and recipient required. Anyone's healthy skin can be put on any one. The first skin bank in India – National Burns Centre was commissioned on October 5, 2001 in Mumbai and for a long time it was the only skin bank in India until Ganga Hospital Skin Bank in 2015 came into existence, promoting the cause of skin donation. Further clinical indications for skin bank bioproducts include orthopedic trauma with bone-tendon exposure, dental surgery, maxillo-facial reconstruction, reconstruction of critical areas of the face, nasal septum or tympanic reconstruction, chronic full-thickness ulcers, posttraumatic and surgical wounds and pressure ulcers, autoimmune and infectious skin loss, pyoderma gangrenosum and Mohs surgery. This explains the increased demand for homologous skin/dermis from tissue banks. This demand for human-derived skin bioproducts continues to support the existence of skin banks.

Need for the Study

Knowledge on skin banking is important for nurses in treating critically ill patients of burn as it plays a significant role in the treatment of burn patient.

Statement of the Problem

A descriptive study to assess the knowledge regarding skin banking among nurses of selected hospital Indore.

Objectives of the study

1. To assess the pre-test knowledge score regarding skin banking among staff nurses.
2. To find out the association between pre-test knowledge score with their selected socio-demographic variable.

Assumption

The study assumes that staff nurses will have some knowledge about skin banking.

Hypothesis

H1: There will be a significant association in the pretest knowledge score with their selected socio-demographic variable.

Operational Definitions

Descriptive study: Descriptive research is used to describe characteristics of a population or phenomenon being studied.

Knowledge: Fund of information that students has in memory about BLS.

Staff nurse: Staff nurses working in that hospital.

Delimitation

This study is delimited to 40 B.Sc Nursing students of Bombay Hospital College of Nursing, Indore.

Review of Related Literature

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.

Research Methodology

For any research work the methodology of investigation is of vital importance. Research methodology is a way to solve problems. It is systematic procedure in which the research starts from initial identification of the problems to final conclusion. Research methodology includes research approach, research design, setting, the population, sample, criteria for sample, method of sample selection, description of tool, testing of the tools, pilot study, procedure for data collection, plan for data analysis. Evaluative approach helps to explain the effect of independent variable on the depended variable. Descriptive survey design was adopted for this study.

Variables under study are

Dependent variable (DV) knowledge

Setting: The study was conducted in Bombay Hospital (Indore M.P).

Population: The target population in this study was staff nurses.

Sample and sample size 40, Sample technique: convenient sampling is done in this study.

Sampling criteria

Inclusive criteria

Staff who all are,

- Staff of Bombay Hospital Indore MP.
- Willing to participate in this study.
- Present at the time of study.

Exclusion criteria

Students who are staff of other hospital.

Description of the tool

The following instruments tools were developed in order to generate data.

1. Demographic data.
2. Structured knowledge questionnaire to assess the knowledge of staff regarding skin grafting.

Data Collection

The staff nurses who met the criteria were included for the study. Data collection was started after obtaining permission from the hospital Authority. Written informed consent was obtained from all the staff nurse participated in the study. The socio demographic data and knowledge was obtained using structured questionnaire. The data was analyzed using descriptive and inferential statistics.

Results

Distribution of Socio- Demographic Variable

The analysis of demographic data of the sample is described in terms of age, religion, educational background, registered for organ donation, organ donation card using frequency and

percentage. Pre-test score with selected demographic variable association was analyzed using chi-square.

1. Description of The Sample According to The Demographic Variables

Table 1: Frequency and Percentage Distribution of Sample Characteristics

Demographic variables		N	%	Significance
Age in years	20-25	28	70	X ² =0.75 NS
	26-30	5	12.5	
	31-35	5	12.5	
	36-40	2	5	
Religion	Hindu	10	25	X ² =3.02 NS
	Christian	25	62.5	
	Muslim	2	5	
	Other	3	7.5	
Educational background	GNM	2	5	X ² =0.75 NS
	Bsc	38	95	
Attended any programme regarding skin banking	yes	3	7.5	X ² =0.75 NS
	no	37	92.5	
Registered for organ donation	Yes	0	0	X ² =1.75 NS
	No	30	100	
Have Donar card	Yes	0	0	X ² =0 NS
	No	30	100	

The above table describes the following findings

- Majority of (70%) staff nurse were in the age group of 20-25 yrs, 12.5% were in the age group of 26-30 and 30-35 years and 5% were in age group of 36-40.
- Majority of the staff nurse were Christians, 10% were hindu and 5%, 3% were Muslims and others respectively.
- 95% of the staff nurses educational background were BSc nursing and rest 5% were GNM.
- 92.5% of the staff nurse have not attended any programme related to skin banking and 7.5% staff nurse has attended programme related to skin banking.
- All staff nurses have not registered as donar and also not having donar card.

2. Assessment of Level of Knowledge of Staff Nurse

This section deals with the assessment of level of knowledge of staff nurse. The level of knowledge is divided under following heading - poor, average, good.

Table 2: Distribution of level of knowledge of staff nurse. N=40

Scores	F	%	Mean	SD
Poor	29	72.5	14.10	2.81
Average	11	27.5		
Good	0	-		

In the test majority 90% of staff nurses had average knowledge and 10% had poor knowledge.

Implications of the study

1. Specialized teaching modalities can be made for the enhancement of knowledge level of the staff Nurses.
2. Teaching methods like Structured Teaching Programme can increase the level of confidence and skills of the staff Nurses in their practical field.
3. Skilled practitioners can provide better care by reducing complications
4. Senior Nurses can pass on the knowledge gained to the next generation Nurses and thereby, improving their knowledge.
5. Findings of this study can be utilized for conducting

research on various aspects related to skin banking.

6. This study can motivate other researchers to conduct similar researches on staff Nurses to assess knowledge on a large sample basis.
7. This study can encourage other researchers to prepare new strategies for improving the level of knowledge of staff Nurses on various complicated procedures.

Recommendations

1. The study can be replicated on larger sample in different setting so that the findings can be generalized to larger population.
2. A comparative study can be conducted to assess the knowledge of other hospital staff nurses.

Conclusion

By this study we came to know that there is no association between the demographic variables and the knowledge of the staff nurse are not having good knowledge related to skin banking.

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