

A study to assess the effectiveness of planned teaching program on knowledge regarding nursing management of burn patients among staff nurses working in SKIMS, Soura, Srinagar, Kashmir

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Abstract: Burns are one of the most devastating conditions encountered in nursing practice. Burns are the fourth most common type of trauma worldwide, following traffic accidents, falls, and interpersonal violence. Burn complications like breathing problems, hypovolemia, hypothermia and severe wound infections are a major cause of illness and death among burn patients. The nurse who cares for a patient with a burn injury requires a high level of knowledge about the physiologic changes that occur after a burn, as well as assessment process to detect subtle changes in the patient's condition. Considering this area of demand, this study was conducted with the aim of assessing the effectiveness of planned teaching program on knowledge regarding nursing management of burn patients among staff nurses working in SKIMS, Soura, Srinagar, and Kashmir. A quantitative research approach with pre-experimental one group pre-test post-test design was used for this study. Convenience sampling technique was used to collect data from the 60 staff nurses using self-structured knowledge questionnaire. The post-test (Mean \pm SD) knowledge score (51.20 \pm 10.01) was found to be higher than pre-test (Mean \pm SD) knowledge score (36.35 \pm 11.47) which was found to be statistically significant at 0.05 level of significance. The researcher reported that there was a significant association between the pre-test knowledge score and demographic variables professional qualification ($p < 0.001$), place of posting ($p = 0.005$), years of experience ($p = 0.021$) and in-service education program attended ($p = 0.014$).

Keywords: Effectiveness, Planned Teaching Program, Knowledge, Burn patient.

Introduction

Burn is an injury to the skin or other organic tissue primarily caused by heat or due to radiation, radioactivity, electricity, friction or contact with chemicals. Skin injuries due to ultraviolet radiation and the respiratory damage resulting from smoke inhalation, are also considered to be burns. Burn injuries occur when energy from a heat source is transferred to the tissues of the body. The depth of injury is related to the temperature and the duration of exposure or contact.^{1,2}

Most burns are due to heat from hot liquids, solids, or fire. While rates are similar for males and females the underlying causes often differ. Among women, risk is work environments. Alcoholism and smoking are other risk factors. Burns can also occur as a result of self-harm or violence between the people.³

Burns are one of the most devastating conditions encountered in medicine. The burn injury represents an assault on all aspects of the patient, from the physical to the psychological. It affects all ages, from young age to elderly people, and is a problem in both the developed and developing world. Burns represent a diverse and varied challenge to medical and paramedical staff. Efficient management requires a skilled multidisciplinary approach that addresses all the problems faced by a burn patient.⁴

As per WHO report August 2017, burn is a global public health problem accounting for an estimated 180,000 deaths annually. The majority of burns occur in low-and-middle income countries and almost two thirds occur in WHO African and South-East Asia regions. In the United Kingdom about 250,000 people are burnt each year. Of these, 175,000 attend accident and emergency departments, and 13,000 of these are admitted to hospital. With this, on average 300 burn deaths occur per year in United Kingdom. These UK figures are representative of most of the developed countries, although some, such as the United States, have a higher incidence.^{1,4}

Southeast-Asian countries share a big burden of burn injuries, among which estimates in Nepal revealed 55,000 burn cases and 2100 deaths in 2008. Nepal has about 1700 burn deaths a year for a population of 20 million, giving a death rate 17 times that of United Kingdom. Over two million population receive burn injuries each year in India. This shows that mortality in the developing world due to burns is much higher as compared to developed countries.⁴

The nurses play an important role in the overall management of a burn patient. Optimal care of the burn patient requires a distinctive multidisciplinary approach. Positive patient outcomes are dependent on the composition of the burn care team and close collaboration among its members. At the centre of this team is the nurse specialized in burn unit, who must possess a broad-based knowledge of critical care techniques. The assessment, observation and evaluation of the patients response to interventions done by a specialized burn care nurse is crucial for preventing the burn associated complications.⁸

The investigator during her clinical experience found that bed side nurses dealing with burn patients had knowledge deficit regarding the appropriate measures of preventing burn complications. So, the investigator felt the need to update the knowledge of nurses which can be utilized by them for an effective management of burns and for preventing various complications of burn patients such as hypothermia, fluid and electrolyte imbalance, difficult breathing problems, infection and even death.

Objectives

1. To assess the pre-test knowledge scores regarding the nursing management of burn patients among staff nurses.
2. To assess post-test knowledge scores regarding the nursing management of burn patients among staff nurses.
3. To evaluate the effectiveness of planned teaching program on knowledge regarding the nursing management of burn patients among staff nurses by comparing pre-test and post-test knowledge scores.
4. To associate pre-test knowledge scores of staff nurses with their demographic variables (professional qualification, place of posting, years of experience and in-service education program attended).

Hypotheses

H₁: There is significant increase in mean post-test knowledge score as compared to mean pre-test knowledge score regarding the nursing management of burn patients among staff nurses after the administration of planned teaching program at 0.05 level of significance.

H₂: There is significant association of pre-test knowledge score of staff nurses with their demographic variables (professional qualification, place of posting, years of experience and in-service education program attended) at 0.05 level of significance.

Variables:

Independent variable: Planned teaching program on nursing management of burn patients.

Dependent variable: Knowledge of staff nurses regarding nursing management of burn patients.

Demographic variables: Professional qualification, place of posting, years of experience and in-service education program attended.

Conceptual framework: The conceptual framework for the present study is based on Ludwig von Bertalanffy System Model developed by WHO SEARO publication No.61985, Year-1986

Review of literature

Nadkarni M , Silva VP , Dias¹⁶- 2017 conducted a descriptive study on prevalence of burn cases at a tertiary care hospital, Goa, India. The medical records of burn patients admitted to the burns unit of Surgery Department from January 2016 to December 2016 were reviewed. Results revealed that there were 170 patients with burn injuries. Prevalence of suicidal burns was 12.9% and of accidental burns was 87.1%. Most common victims were females (67.1%) in the age group of 26-50 years. Nearly 77.6% of burn patients were from rural areas.

Latif M, Rashid W, Ajaz S, Mir AM, Banday SZ, Rashid A¹⁷ - 2016 conducted a retrospective study on 42 autopsycases brought to the Department of Forensic Medicine, Maharishi Markandeswar Institute of Medical Sciences and Research, Mullana, over a period of six years. Out of total 42 cases, 30 (71.43%) were females and 12 (28.57%) were males. Among females, (13.34%) were <18 years, (53.33%) were between 18 and 30 years, and (33.33%) were >30 years of age. Among males, (10%) were <18 years, (58%) were between 18 and 30 years, and (32%) were >30 years of age. Most common cause of burns was accidental (83.34%) followed by homicidal (16.66%). Flame burns were the most common (84.50%) followed by electrical burns (14.5%) and scalds (1%).

Sarwar M, Mir MM, Rashid H, Ganai, Ahmad T¹³ - 2015 conducted a prospective study in Accident and Emergency department of Sheri Kashmir Institute of Medical Sciences (SKIMS), Srinagar, a tertiary care teaching center from October 1st 2014 to September 30th 2015. The objective was to study the pattern of distribution of burn injuries in relation to various epidemiological, demographic, and socio cultural aspect. A total of 101 burn patients with burn injury presenting to Accident and Emergency Department were included in the study. The information regarding the cases was collected from the medico legal register and case sheets of the patients. Demographic variables (residence, socioeconomic status), cause of injury, source of heat, manner of incident were recorded as per pretested and predesigned proforma. Details of clinical examination like general condition, clinical assessment of depth of burns an associated illness were also noted. Results of the study revealed that out of 104 burn patients who were received in Accident and Emergency Department during the study period, majority were females (63%) because females are usually involved in domestic works like cooking, etc. and are most common victims of domestic violence. (23%) patients were males. Flame burn was commonest mode of burn. Patients from rural population (77%) contributed for larger proportion of burn patients.

Weaver, Rittenberger, Patterson, Entire, Corcos, Ziembicki,²¹ et al - 2014 conducted a prospective study on risk factors for hypothermia in EMS (Emergency Medical Services) treated burn patients directly transported to an accredited burn centers in US. Body temperature at hospital admission ≤ 36.5 °C was defined as hypothermia. Forty-two percent of sample was hypothermic. Burns of >20 – 39% of TBSA were associated with hypothermia. Hypothermia was also associated with age >60 years. The study showed that a substantial proportion of burn patients demonstrate hypothermia at hospital arrival leading to increased mortality among burn patients.

Diler B, Dalgic N, Karadag CA, Dokucu AI²² - 2012 In this study the aim was to review the specific infections in a specialized Burn unit during 3 years. During this period 175 children were evaluated retrospectively in term of epidemiological features and infection status. 34 infections were documented in 29 (16.6%) of 175 burn patients. 21 (61.7%) of the total infection were wound infections, 8 (23.5%) were bloodstream infections and 5 (14.7%) were urinary tract infections. The authors reported that damaged tissues in burn patients were highly susceptible to infection and suggested that treatment of burn cases requires a multidisciplinary and meticulous approach especially in pediatric patients.

Lam NN, Huong HT, Taun CA - 2018²⁵ conducted a descriptive study on assessment of knowledge of emergency management for burn and mass burn injuries among staff nurses (n= 353) in Emergency and Trauma department of district hospital, Vietnam. A self-structured questionnaire was used to collect the data. The findings revealed that (49%) of study subjects were graduate nurses while (52%) were diploma nurses; (57%) of study subjects had working experience < 5 years and (43%) had working experience > 5 years ; (89.8%) of study subjects had not attended any in-service education program while as (10.2%) had attended in-service education program. Only (15.3%) of study subjects correctly answered over 50% of the items. The average percentage of correct answers was (39.7%) with (Mean±SD) score of (45.5± 10.5). There was significant association with pre-test knowledge score with demographic variable like in-service education program attended (p<0.01).

Mogileswari P, Ruth Grace M²⁶ - 2016 conducted a descriptive study on knowledge regarding fluid and electrolyte replacement therapy for patient with burns among (n=100) staff nurses working in Narayana Medical College hospital, Nellore, Andhra Pradesh, India. Findings revealed that (15%) of nurses had adequate knowledge, (62%) had moderately adequate knowledge and (23%) had inadequate knowledge regarding fluid and electrolyte replacement therapy in patients with burns. The nurses knowledge was significantly associated with educational qualification, years of experience and place of posting with p<0.001.

Ahmed HM, Mohammed SA²⁹ - 2016 conducted an intervention study on evaluation of nursing performance among staff nurses (n=55) at pediatric burn unit in teaching hospitals of Behna city. The aim of the study had three

olds; to compare the nurses' performance with burn-injured children at pediatric burn unit before/after the program. Assessing barriers facing nurses in burn unit from a holistic view. To identify the relationships between selected nurses demographic characteristics and their level of knowledge and performance. Results of the study revealed that majority of the study subjects (34.9%) had working experience of 5-9 years. 87.3% (48) of study subjects had attended education program related to management of burns while as 12.7% (7) had not attended any education program. Before the implementation of the program, 7 (12.7%) of nurses had good knowledge, 11 (20%) of nurses had average knowledge and 37 (67.2%) of nurses had poor knowledge about management of burns in the burn care unit. After the implementation of the program, 30 (54.5%) of nurses had good knowledge, 17 (30.9%) of nurses had average knowledge and 8 (14.5%) of nurses had poor knowledge about management of burns in the burn care unit. Thus, there was significant difference between nurses' level of knowledge before and after the implementation of the program at $p < 0.05$.

Olszewski, Yanes, Stafford, Greenhalgh, Palmieri, Sen⁹, et al - 2015 conducted a study on assessment of fundamental burn nursing knowledge (fluid management, burn pathophysiology, burn-related procedures, wound care, infection control) among clinical nurses ($n=59$) at an academic medical center, University of California. Pre-education knowledge survey was conducted on 46 burn nurses electronically. The experienced nurse clinician team developed a 51-page handbook focusing on knowledge of burns. This book was disseminated to staff as required reading. Post-educational survey was conducted on the same nurses who completed the initial survey. Results revealed that the pre-test (Mean \pm SD) knowledge score was (55.9 \pm 11.0) while as the post-test (Mean \pm SD) knowledge score was (69.68 \pm 11.0), 46 nurses (78.0%) completed the survey with a (Mean \pm SD) of (55.9 \pm 11.0) of questions being answered correctly. A significant increase in correctly answered questions in the post-survey intervention was observed with $p < 0.01$.

Methodology

Research approach and design

A quantitative research approach with pre-experimental one group pre-test post-test design was used to assess the effectiveness of planned teaching program on knowledge regarding nursing management of burn patients among staff nurses working in SKIMS, Soura, Srinagar, Kashmir.

Population: In the present study, the population consisted of the staff nurses working in SKIMS, Soura, Srinagar, and Kashmir.

Sample and sampling technique

The sample size for the present study comprised of 60 staff nurses of SKIMS, Soura, Srinagar Kashmir. The sampling technique used for the study was convenience sampling technique.

Sampling criteria

The following criteria was set for the selection of study subjects:

- a) **Inclusion Criteria:** Staff nurses working in SKIMS, Soura, Srinagar, Kashmir who were (i) willing to participate in the study, (ii) available at the time of data collection.
- b) **Exclusion Criteria:** Staff nurses working in SKIMS, Soura, Srinagar, Kashmir who were (i) not willing to participate in the study, (ii) not available at the time of data collection.

Ethical consideration

Prior permission was obtained from the concerned authorities of MMINSR, SKIMS, Soura Srinagar to conduct the study. Permission was also accorded from the concerned authorities of the SKIMS hospital to conduct the study. After seeking ethical clearance from Institutional Ethical Committee (IEC) SKIMS the final research study was conducted. The purpose of the study was informed and explained to the staff nurses working in SKIMS Srinagar

Kashmir and permission was obtained by taking informed consent from each one of them. Prior to the main study privacy, confidentiality and anonymity was maintained.

Data collection tool and technique:

After taking informed consent, the pre-test data was collected through 65 itemed self-structured knowledge questionnaire which took an average of 45-50 minutes per subject. A comprehensive planned teaching program on knowledge regarding nursing management of burn patients was administered through power point presentation (lecture cum discussion). The time duration for intervention was 50-55 minutes. The subjects were post-tested on every 7th day of intervention following the same procedure as in the pretest. The time duration for the post-test per subject was 40-45 minutes. The same procedure was followed for the remaining subjects till the data was completed from all 60 subjects.

Results:

Table 1: Distribution of staff nurses according to professional qualification

(n=60)

Professional qualification	Frequency (f)	Percentage (%)
M.Sc. Nursing	7	11.7
B.Sc. Nursing	42	70.0
General Nursing and Midwifery (GNM)	11	18.3
Total	60	100

Table 2: Distribution of staff nurses according to place of posting

(n=60)

Place of posting	Frequency (f)	Percentage (%)
Burn unit	6	10.0
Surgical ICU	12	20.0
General medicine ward	10	16.7
General surgery ward	10	16.7
Post-operative ward	10	16.7
Pediatric ward	12	20.0
Total	60	100

Table 3: Distribution of staff nurses according to years of experience

(n=60)

Years of experience	Frequency (f)	Percentage (%)
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1-5	28	46.7
6-10	25	41.7
> 10	7	11.7
Total	60	100

Table 4: Distribution of study subjects according to in-service educational program attended

(n=60)

In-service educational program attended	Frequency (f)	Percentage (%)
Yes	3	5.0
No	57	95.0
Total	60	100

Table 5: Distribution of staff nurses according to their pre-test knowledge score

(n=60)

Pre-test Knowledge Level	Pre-test Knowledge Score	Frequency(f)	Percentage (%)
Inadequate	0-21	8	13.3
Moderately Adequate	22-43	37	61.7
Adequate	44-65	15	25.0

Table 6: Distribution of staff nurses according to their post-test knowledge score

(n=60)

Post-test Knowledge Level	Post-test Knowledge Score	Frequency	Percentage (%)
Inadequate	0-21	0	0.0
Moderately Adequate	22-43	15	25.0

Adequate	44-65	45	75.0
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Table 7: Comparison between pre-test and post-test (Mean± SD) knowledge scores

(n= 60)

Knowledge score	Mean	Median	SD	Min	Max	Mean difference	Paired 't' test	P-value
Pre-test	36.35	36.0	11.47	14	56	14.85	18.59	<0.001*
Post-test	51.20	55.0	10.01	29	62			

*Statistically significant (p≤0.05)

Table 8: Distribution of staff nurses according to pre-test and post-test knowledge score

(n=60)

Level of Knowledge	Pre-test Knowledge Score		Post-test Knowledge Score	
	Frequency (f)	Percentage (%)	Frequency (f)	Percentage (%)
Inadequate	8	13.3	0	0.0
Moderately Adequate	37	61.7	15	25.0
Adequate	15	25.0	45	75.0

Table 9: Area wise pre-test and post-test (Mean±SD) knowledge scores of staff nurses.

S. No.	Area of Knowledge	Mean±SD		Mean Difference	P-value
1	Concept of burns	Pre-test	5.05±1.94	2.35	<0.001*
		Post-test	7.4±1.44		

2	Classification of burns	Pre-test	7.33±2.74	3.43	<0.001*
		Post-test	10.77±2.07		
3	Pathophysiology Of burns	Pre-test	2.65±1.29	1.03	<0.001*
		Post-test	3.68±0.97		
4	Immediate and delayed problems of burns	Pre-test	6.60±2.24	2.18	<0.001*
		Post-test	8.78±2.17		
5	Nursing management of burns	Pre-test	14.67±5.31	5.85	<0.001*
		Post-test	20.57±4.93		

*Statistically Significant (p-value≤0.05)

Table 9: Association of pre-test knowledge score of staff nurses regarding the nursing management of burn patients with their selected demographic variables

Variable		Level of Knowledge			Chi-square	df	p-value
		Inadequate	Moderately Adequate	Adequate			
Professional qualification	M.Sc. (N)	0	1	6	45.74	4	<0.001*
	B.Sc. (N)	1	34	7			
	GNM	7	2	2			
Place of posting	Burn unit	0	0	6	24.21	10	0.005*
	Surgical ICU	3	7	2			
	General medicine ward	2	6	2			
	General surgery ward	1	6	3			
	Post-operative ward	1	8	1			
	Paediatric ward	1	10	1			
Years of experience	1-5Years	3	21	4	11.42	4	0.021*
	6-10 Years	5	14	6			
	>10 Years	0	2	5			
In-service education program attended	Yes	0	0	3	9.47	2	0.014*
	No	8	37	12			

* =Significant (p≤0.05)

Discussion

Findings of the present study revealed that most of study subjects i.e. (70%) were B.Sc. Nursing, and (18.3%) were General Nursing and Midwifery (GNM) and (11.7%) were MSc. Nursing.

These findings are supported by the findings of a study conducted by Lam, Huong, Taun²⁵ in 2018 (N= 353) to assess the nurses knowledge of emergency management for burn and mass burn injuries .The study revealed that (49%) were graduate nurses while (52%) were diploma nurses.

Findings of the present study revealed that (20%) of staff nurses were from Surgical ICU, (20%) of staff nurses were from Pediatric ward, (16.7%) of staff nurses were from General medicine ward, (16.7%) of staff nurses were from General Surgery ward, (16.7%) of staff nurses were from Post-operative ward and (10%) were from Burn unit .

The results of the present study show that (46.7%) of the staff nurses had 1-5 years of experience, (41.7%) of the staff nurses had 6-10 years of experience, while as (11.7%) of the staff nurses had >10 years of experience.

These findings are consistent with the findings of a study conducted by Lam, Huong, Taun²⁵ in 2018 (n= 353) to assess the nurse knowledge of emergency management for burn and mass burn injuries. The study revealed that (57%) of staff nurses had working experience < 5 years and (42.5%) had working experience > 5 years.

The results of the present study revealed that majority of the staff nurses i.e, (95%) had not attended any in-service education program and (5%) of the study subjects had attended in-service education program.

These findings are comparable to the findings of a study conducted by Lam, Huong, Taun²⁵ in 2018 (n= 353) to assess the nurse knowledge of emergency management for burn and mass burn injuries. The study revealed that majority of staff nurses i.e, (89.8%) had not attended any in-service education program and (10.2%) of the study subjects had attended in-service education program.

The pre-test knowledge score (Mean±SD) of the study subjects was (36.35± 11.47). In the pre-test, most of the staff nurses i.e. (61.7%) of the study had moderately adequate knowledge, (25%) had adequate knowledge and (13.3%) had inadequate knowledge regarding nursing management of burn patients.

These findings are supported by the findings of a study conducted by Mogileeswari, Ruth Grace²⁶ in 2016 (n =100) on knowledge regarding fluid and electrolyte replacement therapy for patient with burns among staff nurses working in Narayana Medical College hospital, Nellore, Andhra Pradesh, India. Findings of the study revealed that (15%) of nurses had adequate knowledge, (62%) had moderately adequate knowledge and (23%) had inadequate knowledge regarding fluid and electrolyte replacement therapy for patient with burns.

In another study conducted by Lam, Huong, Taun²⁵ in 2018 (n= 353) to assess the nurse knowledge of emergency management for burn and mass burn injuries revealed that knowledge score (Mean±SD) of the study subjects was (45.5 ±10.52).

The post-test knowledge score (Mean±SD) of the study subjects was (51.20 ± 10.01). In the post-test, most of the subjects i.e. (75%) of the study subjects had adequate knowledge, (25%) had moderately adequate knowledge and (0%) had inadequate knowledge regarding nursing management of burn patients.

These findings are consistent with the findings of a study conducted by Olszewski, Yanes, Stafford, Greenhalgh, Palmieri, Sen⁹ et al in 2015 (n= 46) . The objective of the study was to evaluate burn nursing knowledge at an academic medical center, University of California. The findings of the study revealed that the post-test knowledge score (Mean±SD) of the study subjects was (69.8 ± 8.7) with p value<0.001.

The post-test knowledge score (Mean±SD) was (51.20±10.01) which was found to be significantly higher than the pretest knowledge score (Mean±SD) (36.0± 11.47). The knowledge gain was found to be statistically significant (p<0.001) at 0.05 level of significance so it can be inferred that the mean difference of 14.85 or increase in post-test knowledge was likely due to the intervention. This indicates that the 'Planned teaching program' was effective in increasing the knowledge scores regarding nursing management of burn patients among staff nurses.

These findings are supported by the findings of a study conducted by Olszewski, Yanes, Stafford, Greenhalgh, Palmieri, Sen and Tran⁶ in 2015 on assessment of fundamental burn nursing knowledge (fluid management, burn pathophysiology, burn-related procedures, wound care, infection control) among clinical nurses (n=46) at an academic medical center, University of California. The study revealed that the knowledge score (Mean±SD) of

nurses was significantly increased from (55.9±11.0) to (69.6±8.7) with ($p < 0.001$) in the post-intervention was observed.

The findings of the present study revealed that there was a significant association between the pre-test knowledge score and demographic variables professional qualification ($p = 0.001$), place of posting ($p = 0.005$), years of experience ($p = 0.021$) and in-service education program attended ($p = 0.014$). The calculated chi-square values were less than the table value at the 0.05 level of significance.

In a study conducted by Lam, Huong, Taun²⁵ in 2018 ($n = 353$) to assess the nurse knowledge of emergency management for burn and mass burn injuries. The findings showed that there was statistically significant association of the pre-test knowledge scores with the demographic variables like in-service education program attended (< 0.01). No significant association was found with years of experience.

In another study conducted by Mogileswari P, Ruth Grace M²⁶ in 2016 on knowledge regarding fluid and electrolyte replacement therapy for patient with burns among ($n = 100$) staff nurses working in Narayana Medical College hospital, Nellore, Andhra Pradesh, India, the findings showed there was statistically significant association of the pre-test knowledge scores with the demographic variables like educational qualification, years of experience and place of posting at $p < 0.001$.

Conclusion

The study concluded that staff nurses lacked adequate knowledge regarding nursing management of burn patients and there was a need for educating the staff nurses. The mean knowledge scores improved after implementation of the planned teaching program indicating that the planned teaching program was effective in increasing the knowledge scores. Therefore, the study concluded that Planned Teaching Program (PTP) was effective in increasing the knowledge of staff nurses regarding nursing management of burn patients.

Nursing Implications:

The finding of the present study has following implications in the field of nursing education, nursing practice, nursing administration and nursing research.

Nursing education

- To prevent complications associated with burn injuries in burn patients, the nurses need to be equipped with up to date knowledge regarding nursing management of burns.
- To provide efficient health care services in various health settings nurses need to be given in service education to update the knowledge regarding nursing management of burn patients.
- The findings of the study can serve guidelines for the nurse educators for planning and conducting educational programs for the staff nurses so that they can provide effective nursing care to the burn patients, thereby preventing them from vulnerable complications.

Nursing Practice

The clinical nurse plays an important role in the health care delivery system. The nurses can visit the community to recognize the problems of the burn population. Burn patients are prone to develop breathing problems, hypothermia, electrolyte imbalance, infection and delayed complications like contractures; the nurse should utilize the opportunity by giving prompt and adequate information regarding management of these complications.

Nursing administration

- The nursing administration should take an initiative in creating health policy and developing protocols regarding nursing management of burn patients.
- The nurse administrator should plan for budget and utilize the resources for training of staff to update knowledge with newer advancements in management of burns.

Nursing research

- The nurse researcher may effectively use the results of the study for conducting new study in different settings.
- More research is needed in the area to prevent complications related to burns.

Recommendations

- The study can be replicated on a larger sample of staff nurses in different setting for making broad generalization.
- A descriptive study can be carried out to identify the obstacles faced in nursing management of burn patients among staff nurses.
- A descriptive study can be conducted to assess the knowledge and practice regarding nursing management of burn patients.
- A longitudinal study to determine the long-term effectiveness of planned teaching program over a period of time may be conducted among staff nurses.
- The study can be replicated by using different teaching modalities such as video assisted teaching program.

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