



A study to assess psychosocial problem among burn patients admitted at Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, Ioni Bk

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Abstract

Background of study: Burns are a global public health problem, accounting for an estimated 265 000 deaths annually. In India, over 1 000 000, people are moderately or severely burnt every year. Psychological and psychosocial problems are common after burn injury. As equal to psychological issues psychosocial issues also important in post burn phase. In this study investigator tried to explore psychosocial issues like body appearance, perceived social stigma and body self esteem among burn patients. **Objectives:** To assess psychosocial problems among burn patients admitted at Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, Ioni Bk To find out correlation between psychosocial problems of burn admitted at Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, Ioni Bk **Materials and methods:** Descriptive study design with cross sectional survey approach was used to assess psychosocial problems of burn patient by non probability sampling method. **Result:** Mean score of patient about satisfaction with body appearance was 70.30 ± 5.23 . it is suggest that burn patient were not satisfied with the their appearance after burn injury, Perceived social stigma mean score was 82.53 ± 5.78 and body self esteem score was 79 ± 3.55 . It shows burn patient having dissatisfaction with their appearance, social stigma and low self esteem after burn injury. Change in satisfaction with one's body appearance is also affect on perceived social stigma behavior of burn patient. Both are directly proportional to each other. **Conclusion:** Psychosocial issues were common among patients after burn injury.

Keywords: Assess, psychosocial problem and burn patients

.I Introduction

Burn injury is defined as loss of epithelium and varying degree of dermis layer of skin due to exposure to physical form of energy, certain chemical, radiation, over exposure to sun and electrical contact, ultimately resulting in tissue damage to skin and may involve other organs of the body. The term burn means more than burning sensation it is associated with injury and characterized by severe skin damage that causes affected skin cells to die¹

Burns are a global public health problem, accounting for an estimated 265 000 deaths annually. The majority of these occur in low- and middle-income countries and almost half occur in the WHO South-East Asia Region. In India, over 1 000 000, people are moderately or severely burnt every year.¹

The estimated annual burn incidence in India is approximately 6-7 million per year². In Bangladesh, Colombia, Egypt and Pakistan, 17% of children with burns have a temporary disability and 18% have a permanent disability. Burns are the second most common injury in rural Nepal, accounting for 5% of disabilities.¹ Nearly 10% of these are life threatening and require hospitalization. Approximately 50% of those hospitalized succumb to their injuries. Nearly 1 to 1.5 lac people get crippled and require multiple surgeries and prolonged rehabilitation.²

Preliminary reports using the Burn Model System (BMS) dataset indicated that one-third of patients with major burns had clinically significant psychological distress at the time of discharge, and the mean level of psychological distress in the BMS sample was significantly higher than that reflected in published data from a normative sample.⁴

In addition, psychological distress of in-patients of the hospital predicted significantly greater physical impairment for at least 1 year post- burn. some studies show that the rate of PTSD among burn victims can be as high as 35% at 2 to 4 months after the initial injury.⁴

Depression is a major implication of burns, experienced by the majority of burn patients. Moi et al. (2008) in a qualitative study discuss the findings of their 20 open, in depth interviews with burn survivors. Women are at a greater risk for depression in most epidemiology studies around the world (Andrade et al. 2003), thus it is remarkable that there was no difference in gender in relation to depression. There were only three previous studies exploring the frequency of depression symptoms 1 year after discharge, among burn victims.⁵

Anxiety in burn patients may occur due to psychosocial matters, such as grieving over the loss of their previous appearance or troubled by reactions of others.⁶

The psychological and emotional aspects of burns patients are largely ignored, while care is concentrated on physiological recovery process. The different stages of adjustment and psychological challenges, burns patient experiences are highlighted in various studies. This involves a complex interplay of patient's characteristics before injury, moderating environmental factors and the nature of injury and ensuing medical care. With this concept in mind, it is apt to assess systematically two major aspects like anxiety and depression, present either before or thereafter with proper objective evidence based scoring system. Proper rehabilitation into their social, occupational and family situation will be more easily achieved and emotional needs of the patient can be handled more effectively by this approach.⁷

Along with the psychological issues psychosocial issues also common in burn patient. In this descriptive research study investigator tried to explore common psychosocial issues like perceived social stigma, low self esteem and decrease in satisfaction with appearance after burn injury.

I.1. Statement of problem

A study to assess psychosocial problems among burn patients admitted at Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, loni Bk,

I.2. Objectives

1. To assess psychosocial problems among burn patients admitted at Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, loni Bk

2. To find out correlation between psychosocial problems of burn admitted at Dr. Vitthalrao Vikhe Patil, Pravara Rural Hospital, Loni Bk

II Methodology

II.1 Research design and approach

Descriptive study design with cross sectional survey approach was used for the present study.

II. 2 Setting of the study

Burn wards of Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital. Dr. Vitthalrao Vikhe Patil Pravara Rural Hospital is a 1275 bedded multispecialty trust hospital at Loni village. There are two burn wards, one for males and one for females. The bed strength of male and female burn wards is 8 each respectively.

II.3 Sample: Burn Patients admitted at burn wards of P.R.H.Loni and who fulfill inclusion and exclusion criteria.

II.4 Sample size: Sample size for present study was 94

II.5 Sampling technique: Non probability purposive sampling technique was used for the present study.

II.6 Sampling procedure: Samples were screened for eligibility of inclusion and exclusion criteria. Eligible and willing to participate patients were included in the study.

II.7 INCLUSION AND EXCLUSION CRITERIA:

Inclusion criteria:The burn clients who are

1. Above the age of 18 years.
2. 15-70 % of burn injury.
3. Willing to participate with informed consent.
4. Able to follow and willing to undergo Nursing rehabilitation programme.

Exclusion criteria: The burn patients who are;

1. Having co-morbid medical illness.
2. Diagnosed of psychiatric disorder and neurotic disorder.
3. Acutely ill and unable to respond to tool.

II. 8 TOOLS AND TECHNIQUES

Semi structured interview schedule, which consists of following sections were used for the present study,

Section A: Socio Demographic Data: It consists of a) Socio demographic variables b)Clinical characteristics.

a)Socio demographic variables: Age, gender, religion, marital status, types of family, income, occupation, education and residence

b) Clinical characteristics - Type of burn, degree of burn, percentage of burn, site of burn, cause of burn, place of burn, Co morbid illness, substance use, surgical management and immunization

Section B. Psychosocial problems

1. **Body appearance:** Body appearance will be assessed by Satisfaction With Appearance Scale (SWAP), given by Lawrance (1998). It is 14 item scales. Each item score from 1-7, strongly agrees to strongly disagree. **The scale was further divided in to four factors as follows** 1. **Factor I-** Subjective satisfaction-facial characteristics, 2. **Factor II-** Subjective satisfaction-body parts, 3. **Factor III-** Social discomfort, 4

.Factor IV- Perceived social impact. As per standard tool instructions while writing score minus 1 from each item obtained score in write score as per scale instructions.

2. **Perceived Social stigma:** Perceived social stigma will be assessed by Perceived stigmatization questionnaire (PSQ). It consist of 21 items divided in to the three domains namely absence of friendly behaviour, confused behaviour and hostile behaviour. The individual must indicate how often experiences such behaviour on a scale with response alternatives 1-5 (never, almost never, sometimes, often, always).
3. **Body Self-esteem:** Mendleson&White self-esteem scale for burn client 1997. Score of body self esteem 0-40 further divided in to low, moderate and high body self esteem.

II.9 Data collection procedure

1) Ethical Aspects

a) **Ethical Clearance:** Proposal was presented before Institutional Ethics Committee and Institutional Research Committee of P.I.M.S. (DU), Loni and ethical clearance was obtained.

b) **Permission from Concerned Authority:** Written permission was obtained from Medical Superintendent of the Dr. Vitthalrao Vikhe Patil Pravra Rural Hospital(Dr. VVP PRH) Loni Bk

c) **Informed Written Consent:** Explanations regarding study and its objectives was given to study subjects. Subjects were assured for anonymity and confidentiality of data given by them. Written consent was obtained for participation in the study.

2. **Data collection:** After self introduction purpose of the study explained to the burn patients, those fulfilling inclusion and exclusion criteria and willing to participate in the study, the written informed consent obtained from the study participants and included in the study.

II. 10 Data analysis: Descriptive and inferential statistics was used for data analysis.

Demographic and clinical variable were analysed by using frequency and percentage. Psychosocial problems were assessed by using mean & standard deviation as per aspect and level of problems. Correlation between satisfaction with appearance (SWAP), perceived social stigma and self esteem assessed by Karl Pearson coefficient of correlation.

III Results

III. 1 Assessment of socio-demographic characteristics of burn patients

Majority of study participants 38(40.42%) were in the age group of 18-29 years followed by 28(29.78%) were belongs to age group of 30-39 years of age. Gender wise distribution shows that 55(58.51%) were male followed by 28(29.78%) were female. Majority of study participants 34(36.14%) were having secondary education followed by 24(25.53%) were having primary education. Majority of study participants 30(31.91%) were homemaker where as 23(24.46%) were farmer. About half of the study population 30(31.91%) and 39 (41.48%) were belongs to monthly income of Rs 6327-18949; this indicates farmers belongs to the upper lower to lower middle socio economic class. 83(88.29%) were Hindu by religion shows that population. Majority of study participants 73(77.65%) were married and same number participants were belongs to joint family. Majority of study participants 84(89.36%) were residing in rural area.

III. 2 Assessment of clinical characteristics of burn patients

Clinical variables

Majority of study participant 80(85.10%) were having thermal burn followed by 10(10.63%) were having electrical burn, 92(97.87%) were having second degree of burn and 62 (65.26%) had 26-50 % body surface area of burn.

Majority study participant 93(98.93%) reported that they had accidental burn, 64 (68.08%) were burn at home whereas 17(18.08%) had burn at workplace. Majority of study participant 45(47.87%) were underwent excision and debridement process followed by 31 (32.97%) were had debridement. Majority of study participant 73(77.65%) immunized for TT vaccine whereas 21(22.34%) immunized for hepatitis B and TT vaccine. 61(64.89%) were did not had any co-morbid illness whereas 18(19.14%) were suffering from hypertension, 43(45.74%) were did not having any substance use whereas 21(22.34%) had tobacco use and 16(17.02%) were using tobacco and alcohol.

III Assessment of psychosocial issues in burn patient

Table. 1 Assessment of psychosocial problems in burn patient.

n= 94

SN	Psychosocial problems	Score	Mean	Standard deviation
1	Body appearance (swap)	14-98	70.30	5.23
2	Perceived social stigma	21-105	82.53	5.78
3	Body self esteem	0-40	5.79	3.55

Table 1 Shows the mean score of psychosocial problem of burn patient admitted for burn care. Mean score of patient about satisfaction with body appearance was 70.30 ± 5.23 . It suggest that burn patient were not satisfied with the their appearance after burn injury, Perceived social stigma mean score was 82.53 ± 5.78 and body self esteem score was 5.79 ± 3.55

Table 2 Aspect wise assessment of satisfaction with body appearance of burn patient.

SN	Aspect wise assessment of body appearance	Mean	Median	Standard deviation
1	Factor I: Subjective satisfaction-facial characteristics	18.19	18	± 2.66
2	Factor II: Subjective satisfaction with body parts	21.33	22	± 2.20
3	Factor III- Social discomfort	15.92	16	± 1.22
4	Factor IV- Perceived social impact	14.95	15	± 1.56
	Over all	70	71	± 5.23

Table 2 shows the Aspect wise assessment of satisfaction with body appearance of burn patient, subjective satisfaction-facial characteristics mean score was 18.19 ± 2.66 and median value 18, Subjective satisfaction with body parts mean score was 21.53 ± 2.20 and median value 22, Social discomfort mean score was 15.92 ± 1.22 and median value 16 and perceived social impact mean score was 14.95 ± 1.56 and median value was 15.

Table 3 Aspect wise assessment of perceived Social stigma in post burn patient

SN	Perceived Social stigma	Mean	Median	Standard deviation
1	Absence of friendly behavior	31.82	32	±2.23
2	Confused behavior	32.92	33	±2.90
3	Hostile behavior	17.77	18	±1.68
	Over all	82.53	82.5	±5.78

Table 3 shows the aspect wise assessment of perceived Social stigma in post burn patient, Absence of friendly behavior mean score was 31.82 ± 2.23 and median value was 32, Confused behavior mean score was 32.92 ± 2.90 and median value was 33 and hostile behavior mean score 17.77 ± 1.68 and median value was 18.

Table 4 Aspect wise assessment of self body esteem in post burn patient

SN	Self body esteem	Frequency	Mean	Standard deviation
1	High body self esteem (30-40)	00	00	00
2	Moderate body self esteem (16-29)	01	17	00
3	Low body self esteem (0-15)	93	5.67	± 3.39
	Over all	94	6.27	± 3.71

Table 4 shows the aspect wise self body esteem score in burn patient, majority study participant of 93 having low self body esteem with mean score 5.67 ± 3.39 .

IV To find correlation between psychosocial variables.

Table 5 correlation between psychosocial variables

Psychosocial variables.	Satisfaction with appearance	Perceived social stigma	Self body esteem
Satisfaction with appearance	NA	0.603891	-0.4836
Perceived social stigma	0.603891	NA	-0.36218
Self body esteem	-0.4836	-0.36218	NA

Table 5 shows that satisfaction with body appearance had moderately positive correlation with perceived social stigma and moderately negative correlation with self body esteem, perceived social stigma having mild negative correlation with self body esteem and self body esteem having mild negative correlation with satisfaction with body appearance and perceived social stigma.

IV Discussion

Mean score of patient about satisfaction with body appearance was 70.30 ± 5.23 . It suggests that burn patients were not satisfied with their appearance after burn injury. Perceived social stigma mean score was 82.53 ± 5.78 and body self-esteem score was 79 ± 3.55 . It shows burn patients having dissatisfaction with their appearance, social stigma and low self-esteem after burn injury.

Change in satisfaction with one's body appearance also affects perceived social stigma behavior of burn patients. Both are directly proportional to each other.

V Conclusion

The findings of the study show that in burn patients psychosocial issues were more common after burn injury. Change in body appearance often leads to dissatisfaction with one's appearance, perceived social stigma and low self-body esteem. Site of burn injury, percentage of burn and complication of burn often affect psychosocial issues of burn patients.

VI References

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