Assessment of Psychiatric Illness in Burnt Patients

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Abstract

Background: Psychological distress is among the most frequent and debilitating complications post-burn injury. The present study was conducted to assess psychiatric illness in burnt patients.

Materials and Method: The present study was conducted on 102 burn patients of both genders. Incidence of pre-morbid psychopathology, marital status, education and employment status was recorded.

Results: Out of 102 patients, males were 60 and females were 42.67 patients were married and 35 were unmarried, 38 were skilled and 64 were semi skilled, 42 had primary, 35 had secondary and 25 were uneducated. The difference was significant (P< 0.05). Major psychiatric illness were depression in 32, personality disorder in 10, schizophrenia in 5, substance disorder in 7 and Posttraumatic stress disorder in 12 cases. The difference was significant (P< 0.0 5).

Conclusion: Authors found high incidence of psychiatric illness such as depression, personality disorder, schizophrenia and substance disorder in burn patients.

Keywords: *Burn, Depression, Schizophrenia.*

Introduction

Psychological distress is among the most frequent and debilitating complications post-burn injury. 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.[1] In addition, psychological distress of in-patients of the hospital predicted significantly greater physical impairment for at least 1 year post-burn.[2] Clinically significant psychological distress also accounted for substantial variance in concurrently assessed quality of life at 2 (58%), 6 (68%) and 12 (51%) months post-burn injury. Severe psychological distress is an important secondary complication of major burn injuries, with long-term consequences.[3]

The treatment of burns injuries commences with a period of specialized intensive care during wound care and surgical treatment are carried out when necessary. Management of pain and anxiety related to the accident and to burn care procedures such as surgery, are main challenges during this phase of care. For the severely injured, this first period is just the beginning of a long journey involving adaptation to post burn life.[4] Rehabilitation of the patients starts on the day of injury and comprises measures that are also undertaken during the phase of very specialized and technologically focused intensive care. Active surgical treatment of wounds and scars, as well as physiotherapy and occupational therapy continue long after the patient has left the intensive care unit and are part of the process of regaining functional capacity.[5] The present study was conducted to assess psychiatric illness in burnt patients.

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Materials and Method

The present study was conducted at Krishna Institute of Medical Sciences Deemed to be University, Karad, Maharashtra, India. It comprised of 102 burn patients of both genders. Ethical approval was obtained from institute prior to the study. All patients were informed regarding the study and written consent was obtained.

General information such as name, age etc. was recorded. All patients were managed in the department. Incidence of pre-morbid psychopathology, marital status, education and employment status was recorded. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

Results

Table I Distribution of patients

Total- 02		
Gender	**Males**	**Females**
Number	60	42

Table I shows that out of 102 patients, males were 60 and females were 42.

Table II Demographic parameters

Parameters	Number	P value
Marital status		
Married	67	0.01
Unmarried	35	
Employment		
Skilled	38	0.02
Semi skilled	64	
Education		
Primary	42	0.05
Secondary	35	
Uneducated	25	

Table III Incidence of pre-morbid psychopathology

Psychiatric illness	Number	P value
Depression	32	0.01
Personality disorder	10	
Schizophrenia	5	
Substance abuse	7	
Posttraumatic stress disorder	12	

Table II shows that 67 patients were married and 35 were unmarried, 38 were skilled and 64 were semi skilled, 42 had primary, 35 had secondary and 25 were uneducated. The difference was significant ($P< 0.05$).

Table III, shows that major psychiatric illness were depression in 32, personality disorder in 10, schizophrenia in 5, substance disorder in 7 and Posttraumatic stress disorder in 12 cases. The difference was significant ($P< 0.05$).

Discussion

Distress may be manifested in other forms as well. Body image dissatisfaction appears common in patients with burn injuries. Sleep disturbances occur frequently among in-patients with burns, e.g., nightmares in 39% and significant sleep problems in 75%. Furthermore, many adult Swedish and US burn survivors continue to report nightmares (30–43%) and insomnia (37%) between 1 and 11 years post-burn. Sleep problems, PTSD symptoms and scar-related problems were highly intercorrelated in a Dutch sample.[6] The present study was conducted to assess psychiatric illness in burn patients.

In this study, out of 102 patients, males were 60 and females were 42. We found that 67 patients were married and 35 were unmarried, 38 were skilled and 64 were semi skilled, 42 had primary, 35 had secondary and 25 were uneducated. Madianos et al[7] in their prospective study of 45 patients with burn injuries explored the prevalence of psychological and psychiatric disorders among burn survivors. Psychological impairment was found to be 45.5 and 40% at the baseline and follow-up assessments, respectively. The extent of burns was found to be associated with psychological impairment. The prevalence of psychiatric disorders (any DSM-III nosological entity) reached 46.6% at both baseline and follow-up examinations. Posttraumatic stress disorder was diagnosed in 17.8 and 20.0% of burn survivors at the baseline and the 12-month follow-up assessments, respectively. Logistic regression analysis revealed that face disfigurement was the only burn characteristic significantly associated with the presence of psychiatric morbidity.

We found that major psychiatric illness were depression in 32, personality disorder in 10, schizophrenia in 5, substance disorder in 7 and Posttraumatic stress disorder in 12 cases. Ramchandran et al[8]in their study, 114 patients admitted with suicidal burns above the age

of 15 years were included in the study. The patients were mostly married females in the 2nd to 3rd decade of life. Most of them had some form of pre-morbid psychopathology. 60% of patients had >50% burns and only 17% were survivors. After 1 year of psychotherapy, most patients had returned to normalcy.

Mechanisms of injury also vary widely among different countries and communities depending on factors like the way food is prepared, heating system, industrial environments and general living conditions. Males are strongly over-represented in burn statistics all over the world with India as the only exception; children are also at high risk, both in developed and in less developed countries.[9] Psychosocial factors are clear risk factors for burns. The risk factors leading to individuals to burns are lower socioeconomic groups, financial loss, unemployment, illiterate, marital disputes, extremes of age groups (geriatric), sexual abuse, rape, substance use disorders and alcoholism, illnesses like diabetes, epilepsy, chronic disability, chronic pain, cancer and preexisting psychiatric illness like depression and PTSD.

Vlaeyen and Morley[10] have noted that co-occurring pain and depression may activate cognitive processes that guide a person towards completing or terminating a task. For example, a person may terminate a functional activity as soon as he or she no longer enjoys the task, perhaps due to pain perceptions. Understanding associations between pain, depression and physical functioning is critical because burn survivors have considerable difficulties in returning to personal, social and community roles after their injuries have healed.

Conclusion

Authors found high incidence of psychiatric illness such as depression, personality disorder, schizophrenia and substance disorder in burn patients.

Conflicts of Interest: The author declare that there is no conflict of interest regarding the publication of this paper.

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References

1. Fauerbach JA, McKibben J, Bienvenu OJ, Magyar Russell G, Smith MT, Holavanahalli R, et al. Psychological distress after major burn injury. Psychosomatic Medicine. 2007;69(5):473-82.
2. Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, et al. Lifetime and 12- month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. Arch Gen Psychiatry. 1994;51:8-19.
3. Kringlen E, Torgersen S, Cramer V. A norwegian psychiatric epidemiological study. Am J Psychiatry. 2001;158:1091-8.
4. Subrahmanyam M. Epidemiology of burns in a district hospital in Western India. Burns. 1996;22:439-42.
5. Bilwani PK, Gupta R. Epidemiological profile of burn patients in LG Hospital Ahmedabad. Indian J Burns. 2003;11:63-4.
6. Jayaraman V, Ramakrishnan MK, Davies MR. Burns in Madras, India: An analysis of 1368 patient in one year. Burns. 1993;19:339-44.
7. Madianos MG, Papaghelis M, Ioannovich J, Dafni R. Psychiatric disorders in burn patients: a follow-up study. Psychotherapy and psychosomatics. 2001;70(1):30-7.
8. Ramachandran M, Durairaj AR, Rao SVRM, Sundaramurthy N. Analysis of psychiatric problems in burn patients in a tertiary burn unit: a prospective study. Int Surg J 2017;4:4015-21.
9. Patterson DR, Tininenko J, Ptacek JT. Pain during burn hospitalization predicts long-term outcome. J Burn Care Res. 2006;27:719–26.
10. Vlaeyen JW, Morley S. Active despite pain: The putative role of stop-rules and current mood. Pain. 2004;110:512–6.