

Retrospective Study for Burn Associated Depression at Royal Rehabilitation Center Burn Unit

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Abstract: Burn injury can predispose the patient into depression; The Objective of this study was to review prevalence of burn associated depression. We examined the prevalence of post burn depression in an opportunity sample of 34 adults admitted to burn unit, IRB and informed consent obtained from each participant, we used the arabic adaptation of Becks depression inventory to evaluate depressive symptoms, demographic data collected for the study included gender age TBSA, suicidal attempts, previous history of depression and age above 65 years were excluded. Very Saver depressive symptoms was reported in 16 (47%) patients, severe depression was identified in 9 (2.6%) patients, moderate depression was identified in 5 (1.4 %) patients, mild depression was identified in 1 (0.02 %) and not depressed patients were 3 (0.08 %) female to male ratio 1.61:1 mean TBSA 18.5%. Screening for depression and other psychiatric conditions has a great influence on reducing patient's length of stay as well as physical and mental health status, early recognition and referral to specialists are crucial.

Keywords: Major Burn, Depression associated with burn, mental health status, becks depression inventory.

INTRODUCTION

Traumatic Burn injuries are unpredictable, acute, and devastating; affecting the victims in both the physical and psychological aspects as well as the financial burden associated with such injury [1]. With advancement of medical care, burn injury is no longer doomed by death; many patients survive acute phase of recovery and are left to deal with the long-run physical and psychological sequels of burns, which are complex and vary from patient to patient.

Burn injury can predispose the patient into a variety of psychological conditions such as pain, depression, post-traumatic stress disorder (PTSD), anxiety, isolation and financial load due to prolonged hospitalization and treatment modalities required. Pain and depression being the most commonly noted in preceding literature [2]. Psychological and physical problems affecting patients post burn injury resolution are a priority of care that will influence a greater enhancement of the client quality of life and wellbeing [3]. [4] Great emphasis is placed on the psychological wellbeing of any Clint so burn injury that already places the client in the high alert zone of progress requires special focus and ongoing assessment of psychological state as well as prompt intervention to prevent chronic complications.

This study is designed to permit an insight on the current psychological standing regarding depression to be specific in patients treated for burn injury whom are admitted to the royal rehabilitation center burn unit – Amman / Jordan.

METHODS

This cross sectional descriptive study was located in the royal medical services (RMS) a military based health service provider in Jordan that attends for the needs of public health sector in Jordan the royal rehabilitation center (RRC) a tertiary hospital under the umbrella of the RMS that specialize in orthopedic and reconstructive surgery contains the burn unit that provides a highly esoteric care for burn patients.

The institutional review board approval (IRB) was obtained before data collection as well as a signed informed consent form from all participants of the study.

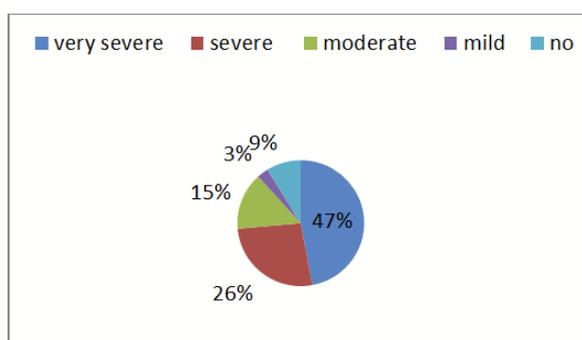
Clients of age above 13 years [5] and no older than 65 years of age [6], of either sex admitted to the burn unit and with Total Body Surface Area (TBSA) of burn $\geq 10\%$ and freshly burned; within 48 hours of admission were included, while clients with previous history of depression, history of chronic disease [7], suicidal attempts and permanent disability and disfigurement were excluded [8].

Arabic adaptation of Becks Depression Inventory (BDI) [9] was submitted to participants of the study an opportunity sample of patients admitted to the burn unit data collected included the questioner results as well as demographical data on the client. Statistical analysis of data collected was performed using Microsoft Excel 2010.

RESULTS

Total number of participants over the 2 months period of data collection was 34 patients whom

| Category | # | % |
|------------------------|----|------|
| Very severe depression | 16 | 47 |
| Severe depression | 9 | 26.5 |
| Moderate depression | 5 | 14.7 |
| Mild depression | 1 | 2.9 |
| No depression | 3 | 8.8 |



91% of participants screened positive for depression of which most clients (47%) reported very severe depression, 26.5% of them reported severe depression while only 8.8% reported absence of depression, and mean of scores was 32.7 which is inebriated by the scale as severe depression. High rates of depression reported were expected due to the nature of the injury, referral to psychotherapy was conducted to insure early follow-up and prevent complication [2].

DISCUSSION

Burns are responsible for a large proportion of unintentional injuries, hospital admissions and deaths, leading to a large burden on the healthcare system [1, 10], incidence of burn injuries caused by flame was the

consented to provide information and submitted the inventory, of which 21 females and 13 male; making the female: male ratio 1.61:1 Age of participants ranged from 13-63 years; mean of 28.3, the burn Total Body Surface Area (TBSA) measured using the Lund Browder chart ranged from 10_54% at a mean of 18.5%, Majority of cases were caused by direct flame 21 cases compositing for 61.7% of the sample 5.8% were due to electrical burn, rest of cases were scalds.

Becks depression inventory (BDI), the Arabic adaptation used is a self-report assessment tool to detect depression was originally designed and published by Aron beck in 1988 [5] and was translated and tested for psychometric properties by abdel-khaleq 1998 [9] assuring this tool was viable to test for depression in Arabic language.

Scoring model of this tool divides results in five categorize; very severe, severe, moderate, mild and no presence of depression look table 1 to see participant's results.

highest 61.7% which goes with data from published epidemiological studies [11-14] mean TBSA of participants was 18.5% which is higher than similar studies [15-17] female: male ratio 1.61:1 has a higher female involvement in the screening this result is inconsistent with findings of patterns of injury studies that places the ratio to be closer [12, 11, 13], and the higher than usual female involvement is partially responsible for higher depression rate in the study, females are feeble to psychological squalls post traumatic injury [18].

Professionals as primary care clinicians would be aware of distress among patients without screening. Rather, professionals may have valid information that

raise suspicion on the screening data utility, the necessity for intervention, and the efficiency of implemented intervention and followed up [19]. Investigating depressive symptoms with burns is the aim of this study, to encourage development of psychological screening culture in patients with burn, results show that 91% of participants with burn injuries had depressive symptoms as reported by self-measurement tool BDI, most of them (47%) reported high levels of depressive symptoms this result how shockingly agreed with previous studies that showed two thirds of burn survivors suffered of chronic psychiatric disorders major depression being responsible for 41% of the total [16, 17] while other studies identified major depressive disorder after burn injury in only 4% of cases [20] the systemic review illustrated that the use of becks depression inventory is responsible for higher depressive symptoms return when compared to other screening tools such as the hospital anxiety and depression scale while this scales returned rates of depression from 4%- 13% the BDI returned rates up to 54% [20].

The finding alert for the importance of depression screening along with other potential psychiatric sequels on the victims of burn injury for its impact on health trajectory of the patient and reducing burden on the health care system in areas such as length of stay[21]. Also Chronic depression and stress been linked with immunity, and a possible negative influence on physical health [22, 23].

CONCLUSION

The results highlight the importance of screening for psychopathology in patients who suffers from burn, to reduce complication and chronic psychological conditions, referral as soon as possible to psychosocial thereby is crucial.

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