"To Assess the Level of Anxiety & Depression among the Post Burn Client Admitted In Pravara Rural Hospital, Loni Bk"

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Abstract:

Background of study: The estimated annual burn incidence in India is approximately 6-7 million per year. The high incidence is attributed to illiteracy, poverty and low-level safety consciousness in the population. The goal of National programme for prevention of burn injuries (NPPBI) would be to ensure prevention and capacity building of infrastructure and manpower at all levels of health care delivery system in order to reduce incidence, provide timely and adequate treatment to burn patients to reduce mortality, complications and provide effective rehabilitation to the survivors. This study was conducted mainly focusing on psychological issues of burn patients. **Objectives of the study** 1. To assess the level of anxiety & depression among the post burn client. 2.To find out co-relation between anxiety & depression. 3. To compare and co-relate the anxiety & depression with selected demographic and clinical variable. **Materials and methods:** Descriptive research design was used. The purpose of the study was to assess the level of anxiety and depression among the post burn client admitted in, PRH Loni Bk. The collected data was analyzed by using descriptive and inferential statistics. **Result:** Aspect wise anxiety score of burn client mean is 11(59.99%) with the standard ± 1.91. Aspect wise depression score of burn client mean is 9.72 (83.33%) with standard deviation ± 1.92. To find out co-relation between anxiety and depression Karl Pearson coefficient of co-relation technique was used. The correlation score (R) was 0.167 it shows that there is mild positive co-relation between anxiety and depression.

Conclusion: Finding of present study shows that maximum number of burn clients having moderate anxiety and depression and the correlation score (R) was 0.167 it shows that there is mild positive co-relation between anxiety and depression.

Keywords: psychological problems, Assessment, compare, co-relate.

I. INTRODUCTION

A burn is a type of injury to skin, or other tissues, caused by heat, cold, electricity, chemicals, friction, or radiation. 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 in some areas, risk is related to use of open cooking fires or unsafe cook stoves. Among men, risk is related to the work environments.

Alcoholism and smoking are other risk factors. Burns can also occur as a result of self-harm or violence between people [1].

Burns that affect only the superficial skin layers are known as superficial or first-degree burns. They appear red without blisters thickness or third-degree burn; the injury extends to all layers of the skin. Often there is no pain and the burnt area is stiff. Healing typically does not occur on its own. A fourth-degree burn additionally involves injury to and pain typically lasts around three days. When the injury extends into some of the underlying skin layer, it is a partial-thickness or second-degree burn. Blisters are frequently present and they are often very painful. Healing can require up to eight weeks and scarring may occur. In a full-deeper tissues, such as muscle, tendons, or bone. The burn is often black and frequently leads to loss of the burned part. Burns are generally preventable. Treatment depends on the severity of the burn. Superficial burns may be managed with little more than simple pain medication, while major burns may require prolonged treatment in specialized burn centers [2].

Cooling with tap water may help pain and decrease damage; however, prolonged cooling may result in low body temperature. Partial-thickness burns may require cleaning with soap and water, followed by dressings. It is not clear how to manage blisters, but it is probably reasonable to leave them intact if small and drain them if large. Full-thickness burns usually require surgical treatments, such as skin grafting. Extensive burns often require large amounts of intravenous fluid, due to capillary fluid leakage and tissue swelling. The most common complications of burns involve infection. Tetanus toxoid etc. burn occurs when some or all of the different layers of cells in the skin are destroyed by a hot liquid (scald), a hot solid (contact burns) or a flame (flame burns) [3].

The estimated annual burn incidence in India is approximately 6-7 million per year. The high incidence is attributed to illiteracy, poverty and low level safety consciousness in the population. The goal of National programme for prevention of burn injuries (NPPBI) would be to ensure prevention and capacity building of infrastructure and manpower at all levels of health care delivery system in order to reduce incidence, provide timely and adequate treatment to burn patients to reduce mortality, complications and provide effective rehabilitation to the survivors [4].

Shankar Gowri (2012) stated that burns constitute a major public health problem, especially in low and middle income countries where over 95% of all burn deaths occur. Fire related burns alone account for over 3 lakh deaths per year. However, deaths are only part of the problem, for every person who dies as a result of their burns; many more are left with lifelong disabilities and disfigurements [5].

Morten Kildal (1999) in his investigation reported that normal skin protects us from invasive infection by microorganisms, prevents fluid losses, and helps regulate body temperature. These protective properties are destroyed after burn injury, and without proper treatment the natural prognosis for extensive burns is poor because of burn shock, multiorgan failure and sepsis [6].

A.H.Konstantatos,M.Angliss,V.Costello,H.Cleland,S.Starface(2005)had conducted a prospective randomized clinical trial in a burn injury patients conducted during dressing to compare pain .total 88

eligible burn patient divided into two groups .Group I having intervention that is virtual reality relaxation & intervention morphine PCA(patient control analgesia).Group II having morphine PCA infusion alone study finding shows that the group I who having virtual reality relaxation plus morphine PCA infusion , having higher pain intensities during dressing (mean – 7.3) as compare to group who having or receiving morphine PCA experienced significant pain as compare to those patient having morphine PCA infusion alone [7].

Sandip, K.P (1997) in their study had another aspect to consider in burn injured patients, psychological factors such as depression or anxiety become a part of the experience of pain, particularly if pain medication was not initiated prior to the unpleasant procedures. It was also recognized that anxiety can worsen acute pain." Burn patients experience various forms of psychological symptoms or disorders during early trauma, 30 to 40% of patients continue to suffer significant long-lasting [8].

Lawrence JW (1998) had accumulating evidence which suggests that psychological distress symptoms have a short-and long-term impact on health, function, and quality of life. Prolonged functional impairment has been associated with sleep disturbance, sub syndrome PTSD, depression, body image dissatisfaction, and syndrome PTSD. The presence of such a wide range of symptoms and syndromes is not at all unexpected, given the plethora of stressors for patients with burns(e.g.,burn event, losses, pain, repeated painful procedures, disfiguring injury, and unfamiliar surroundings) [9].

Fauerbach JA (2007) in their investigation found much greater variability when outcomes beyond survivability are considered [10].

Ware L.(2012)in a systematic review demonstrated that most studies have shown that unrelated to the traumatic event, additional risk factors for developing PTSD include younger age at the time of the trauma, female gender, lower social economic status, lack of social support, premorbid personality characteristics and preexisting anxiety or depressive disorders increase the risk of PTSD [11].

BriegerGH (1991) has reported that; on daily ward rounds many patients describe problems with nightmares and itching of the newly healed skin and scars .They feel tired and frustrated because itching or nightmares have interrupted their sleep, resulting in a lack of tolerance and motivation to comply with the strenuous and often painful rehabilitation [12].

Kornhaber , in an integrative review on patients' experience, it was concluded that among other types of supports, peer supports event and by reinforcing feelings of self-esteem .Both condition are associated with the reduction of negative effect from exposition to physical or emotional trauma [13].

Klinge K, et al. J Adv nurs. (2009). They had preburn personality and coping stratergies can influence long term psychological adjustment ,the relationship between postburn adjustment and burn size and severity ,and gender are poorly understood [14] .

Wiechman Setal ,J burn care (2016) conduct a study evidence to support the use of measure of depression for adult with burn injuries the goal of study to identify the most reliable, valid and efficient means of identifying adults with symptoms of depression including symptoms of depressive disorder. This

study highlights the deficiencies of validated measure of depression in the field of burn recovery and provides specific recommendation for both clinicians and researchers to advance the knowledge of depression following a burn injury [15].

Blackeney and W.J.Meyer (1996) have found in their study that the growing number of individuals surviving such devesting burn injuries has prompted an increased focus on problems of rehabilitation, independence and psychosocial adjustment the psychological consequences of sustaining burn injuries are minor to severe [16].

McNulty (2002) had estimated that one half of all burn patients becomes permantly disabled with a large segment having psychological impairment. Psychological sequel that impairs function includes fear, anxiety, stress, disorder, and behavior regression. This article reviews the various psychological issue one confronts when treating burn patients with burn injuries .a wide range of factors influence recovery and rehabilitation from adult burn. The role of family members, family dynamics, parenteral reactions, parenteral psychiatric illness, and pre-morbid psychiatric illness in the burn are important factors [17].

II. Methodology

Research Approach: Quantitative evaluative research study approach was adopted for the present study.

Research design: The descriptive cross-sectional study design was adopted for the present study.

Variable

a) Research variables: -For the present study research variables were Anxiety and Depression among post burn clients.

b) Extraneous variables: -For the present study the extraneous variables include were,

Socio-Demographic variables includes age, gender, marital status, education, occupation, religion, type of family, area of living and total family income.

Clinical Variable includes cause of burn or type of burn, percentage of burn, degree of burn, duration of hospital stays, presence of care giver, relationship with client, nature of burn, site of burn, place of burn, any other disease and any history of addiction.

Setting of the study

Physical location and condition in which data collection takes place in study.

The study was conducted in the burn ward, PRH Loni Bk village. It is Multispeciality Hospital in Ahilyanagar District of Maharashtra.

Population

The population includes clients who are admitted in (burn area PRH Loni Bk.

Sampling

Non-probability purposive sampling was used for the present study.

Sample

Sample for the present study was post burn clients admitted in burn ward willing to participate in study and fulfilling inclusion and exclusion criteria.

Sample size: The sample size for study was 30 burn clients admitted in PRH Loni Bk.

Sampling techniques: Non-probability purposive sampling techniques were used for recruiting the samples to be included in the present study on the basis of inclusion and exclusion criteria.

Criteria for sample selection

Inclusion Criteria:

The burn clients, who were

- Above 18 years of age.
- Clients who are willing to participate in this study.
- Both male and female.
- 20 to 65%burn cases.
- Understanding the language of communication.
- Clients were included in study when they were hemodynamically stable, planed for discharge or during the follow up visits.

Exclusion Criteria:

- The burn clients, who were
- Pediatric clients.
- Severe burn clients.
- Acutely ill and unable to respond to tool.
- **Development of tool**

The tool consisted of three sections.

Section A: Socio-demographic data:-It consist of 9 items like age, gender, marital status, religion, Education, occupation, income, type of family and total family income of post burn client.

Section B: Clinical variable:- It consists of 11 items like cause of burn or type of burn, percentage of burn, degree of burn, duration of hospital stay, presence of care giver, relationship with client, nature of burn, site of burn, place of burn, any other disease and any history of addiction among post burn client.

Section C: Hamilton Anxiety and Depression Scale: - Hamilton Anxiety and Depression scale consists of 14 items where 7 items for anxiety and 7 items for depression.

In Hamilton Anxiety and Depression Scale total 7 items for Anxiety where o-suggest no anxiety, 1-mild, 2-moderate, 3-severe and 4-very severe.

In Hamilton Anxiety and Depression Scale total 7 items for Depression where 0-suggest no anxiety, 1-mild, and 2-moderate, 3-severe and 4-very severe.

Both Anxiety and Depression overall minimum score was 0 and maximum possible score was 28.

Planed for data analysis

Descriptive and inferential statistics was used for data analysis. The collected data was organized, tabulated and analyzed by using descriptive statistics i.e. frequency, frequency %, mean, mean % and standard deviation. Karl person co-efficient and co-relation used to find out co- relation between Anxiety and Depression.

III. RESULT

The following result were drawn from the study finding

1. The majority finding of the demographic variables

Majority of the respondent in the presence study 36.66% in the age group of 18 to 30 years were as 23.33 % in age group of 41 to 50 years. Majority of the respondent 66.33% female were as 36.66% male in the present study. The majority of the respondent in the study 86.66% belonging from Hindu religion. Maximum number of respondent in the present study 76.66% were married. Majority of respondent 53.33% in the present having secondary education. Majority of respondent 56.66% burn clients are self-employed. Majority of respondent 76.66% from rural area. Maximum number of burn client 53.33% with presence of care giver.

2. The majority finding of the clinical variables

Maximum number of respondent 33.33% burn client having thermal type of burn injury. Majority of 60% having 11 to 40% of burn injury. Maximum number of burn client 63.33% were in second degree burn. Maximum number of burn clients 56.66% stay more than one month. Majority of burn client 86.66% having accidental burn injury. Maximum number of burn clients 30% burn injury in upper extremity. Majority of burn client 76.66% having burn injury at home. Maximum number of burn client having 90% addiction.

3. Aspect wise assessment of level of Anxiety- Aspect wise anxiety score of burn client mean is 11(59.99%) with the standard ± 1.91.

4. To compare and co-relate anxiety with selected demographic variable-

Maximum number of clients in the age group of 18-30 years is 8 (10.62±2.05) having moderate of anxiety. In gender wise analysis shows that females 12(11.41±1.84) are having moderate anxiety and 4 females with the mean score (16±0.7) having severe anxiety.

Maximum number of burn married clients 17 (11.11 ±1.9) we having moderate anxiety and 2 unmarried burn clients with the mean score (16) having severe anxiety.

Maximum number 12 (11.25±1.71) in the secondary educational qualification having moderate anxiety. Income wise analysis of burn in (6001-9000/year) high economic status shows that 8 clients (11.12±1.49) having moderate anxiety.

Maximum number 12 clients (10.69±1.31) having moderate anxiety and 4 client (16±0.7) having severe anxiety clients living in rural area

Maximum number 7 clients (10.14±2.21) were chemical cause of burn &7clients (11.42±1.58) were thermal burn clients having moderate anxiety. Percentage wise analysis shows that maximum number 14 clients (11.57±1.24) having moderate anxiety. Degree wise analysis of shows that maximum number 12 clients (11.41±3.74) having moderate anxiety.

Maximum number 7 clients (10.14±1.95) burn were in upper extremity &5 clients (11.6±1.85) burn were in lower extremity having moderate anxiety.

Maximum number 17 clients (11.11 ±1.9) were not consuming any type of substance they having moderate anxiety and 4 clients (16±0.7) having severe anxiety.

5.Aspect wise level of depression - Aspect wise depression score of burn client mean is 9.72 (83.33%) with standard deviation ± 1.92.

6. To compare and co-relate depression with selected demographic variable-

Majority of burn client 9 in the age group18-30years with the mean score (9.22±1.86) having moderate depression. The gender wise analysis shows that females 17 (9.94±4.49) are having moderate depression and 8 males (9.62±2.11) having moderate depression. Maximum married client 19 with the mean score (9.94±2.35) having moderate depression.

Maximum number the 13 clients (9.92±2.32) having moderate depression in secondary educational qualification burn clients and income wise analysis shows that low socioeconomical income were maximum number 11clients with the mean score (8.9±1.77) having moderate depression.

Majority of burn clients living in rural area 20 (9.25±2.01) having moderate depression and the clients living in urban area maximum number of clients 5 (9.6±2.05) having moderate depression.

Maximum number 8 client (9.12±1.36) were in chemical type of burn having moderate depression &9 client (9.88±2) were in thermal type of burn.

Percentage wise analysis shows that maximum number 17 clients (9.7±1.83) were in 11-40% of burn, having moderate depression. And in the degree wise analysis of the maximum number 18 clients (9.27±2.27) were in 2degree of burn, having moderate depression.

Maximum number of burn clients 6(9.16±1.21) burn in chest & abdomen they having moderate depression and 10(10.4±3.26) burn in upper extremity they having moderate depression.

Majority of clients who were not consuming any type of substance 23(9.73±2) having moderate depression and the burn client who consume tobacco 2 (9.5±0.5) having moderate depression.

7. To find out co-relation between anxiety and depression –

The correlation score (R) was 0.167 it shows that there is mild positive co-relation between anxiety and depression.

IV. Discussion

A descriptive design was used to assess the level of anxiety depression among the post burn clients. Data was collected from 30 burn patients by purposive sampling technique using the tools the structured interview schedule the collected data was analyzed by using descriptive and inferential statistic, and presented in the form of table and graph or diagram.

The chapter attempt to discuss the finding of the study as per objectives. The study finding are discussed under the following headings.

- Description of demographic variables and clinical characteristic of burn clients.
- Assess the mean and SD of anxiety and depression in post burn clients.
- To find out co-relation between anxiety & depression.

A). Description of demographic variable and clinical variable of burn clients

1. Description of demographic profile- Finding of present study shows that Majority (63.33%) of clients were female and the remaining (36.66%) were male.

2. Clinical variable of burn patients: Finding of present study shows that people injured with thermal burn the higher percent (33.33%) where as 30% chemical & electrical burn and remaining 10% other burn injury.

B. The aspect wise mean and SD of anxiety in post burn patients.

1. Assessment of anxiety-

The aspect wise mean score and standard deviation of anxiety .Total number of 8 burn clients are normal with the mean score (5.5 ±1.58), whereas 18 burn clients were having moderate anxiety with the mean score (11±1.91) & 4 burn clients having severe anxiety with the mean score (16±0.70).

C. To compare and co-relate anxiety with selected demographic variable- Maximum number of client in the age group of 18-30 years is 8 (10.62±2.05) having moderate of anxiety. In gender wise analysis shows that females 12(11.41±1.84) are having moderate anxiety and 4 females with the mean score (16±0.7) having severe anxiety.

Maximum number of burn married clients 17 (11.11 ±1.9) we having moderate anxiety and 2 unmarried burn clients with the mean score (16) having severe anxiety.

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Maximum number 7 clients (10.14±1.95) burn were in upper extremity &5 clients (11.6±1.85) burn were in lower extremity having moderate anxiety.

Maximum number 17 clients (11.11 ±1.9) were not consuming any type of substance they having moderate anxiety and 4 clients (16±0.7) having severe anxiety.

B. Aspect wise mean and SD of depression in post burn patients.

2. Assessment of depression-

The aspect wise mean score and standard deviation of depression .Total number of 5 burn clients are normal with the mean score (4.8±1.6), whereas 25 burn clients were having moderate depression with the mean score (9.72±1.92) .

C. To compare and co-relate depression with selected demographic variable-

Majority of burn client 9 in the age group18-30years with the mean score (9.22±1.86) having moderate depression. The gender wise analysis shows that females 17 (9.94±4.49) are having moderate depression and 8 males (9.62±2.11) having moderate depression. Maximum married client 19 with the mean score (9.94±2.35) having moderate depression.

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To find out co-relation between anxiety and depression

To find out co-relation between anxiety and depression Karl Pearson coefficient of co-relation technique was used.

Overall response about anxiety the burn client considered as (X) anxiety &overall response about depression of burn client considered as (Y) depression by using Karl Pearson coefficient of co-relation between anxiety(X) and depression (Y) .The correlation score (R) was 0.167 it shows that there is mild positive co-relation between anxiety and depression .

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