

## Self-esteem in severely burned adults

Syed Muhammad Imran Haider Zaidi,<sup>1</sup> Nazia Yaqoob,<sup>2</sup> Sidra Noreen<sup>3</sup>

### Abstract

A cross-sectional study was conducted to investigate the level of and gender difference in self-esteem among adult victims of severe burn injuries. Severely burned adults aged 20 to 40 years participated in this investigation from March 2015 to April 2016 in five hospitals of Faisalabad and Lahore. Purposive sampling technique was used and a self-esteem scale was used to assess different dimensions of self-esteem. Out of 40 patients, there were 25 men (62.5%) and 15 women (37.5%) with mean age of  $28.28 \pm 4.60$  years (range: 20-40 years). A significant positive relationship between subscales of self-esteem scale were found: self-acceptance and self-competence  $r=0.55$ ,  $p<0.01$ ; self-acceptance and academic self-competence  $r=0.47$ ,  $p<0.01$ ; self-acceptance and social and physical acceptance  $r=0.57$ ,  $p<0.01$ ; self-competence and academic self-competence  $r=0.48$ ,  $p<0.01$ ; self-competence and social and physical acceptance  $r=0.50$ ,  $p<0.01$ ; academic self-competence and social and physical acceptance  $r=0.45$ ,  $p<0.01$ ). Independent sample t-test indicated a significant difference between self-competence among severely burned men and women ( $t=2.18$ ;  $p<0.05$ ). A significant gender difference indicated higher affected levels specifically in the self-competency component of self-esteem among women victims.

**Keywords:** Self-esteem, Self-competency, Adults, Severely burned, Pakistan.

### Introduction

Burns are one of the most common household injuries, illustrated by severe skin damage.<sup>1</sup> Over 96% of fatal fire-related injuries occur in low- and middle-income countries, also result in many disabilities and disfigurements, leading to social stigma.<sup>2</sup> Around 10-15,000 burn-related injuries occur in Germany annually out of which one-third of the cases need serious attention due to severity.<sup>3</sup> In the United States, burn injuries are one

of the foremost causes of injury, causing 3,275 deaths per year<sup>4</sup> and 40,000 annual hospitalisations in diverse health centres.<sup>5</sup>

Noticeable burn scars may have an impact on an individual's behaviour leading to social withdrawal.<sup>6</sup> Ones unpleasant physical appearances can have negative impact on one's self-esteem<sup>7</sup> that is an emotional estimation of one's personal worth.<sup>8</sup> Burn injuries can be a distressing experience, possibly leading to disabilities and have a pessimistic impact on different facets of life.<sup>9</sup>

The susceptibility model states that people with near to ground self-esteem are expected to underestimate themselves and might seek out negative comments from others to authenticate their negative self-concept.<sup>10</sup> Facial burns may increase vulnerability of worse reactions from other people that can contribute in negative influence on self-esteem and may lead to depression.

The current paper is an effort to measure the level of self-esteem among severely burned adult patients. A further aim was to find the existence of difference in self-esteem among men and women victims.

### Methods and Results

A cross-sectional study was conducted from March 2015 to April 2016. Purposive sampling technique was used and in-patients five different public and private hospitals of Lahore and Faisalabad were approached, including Allied Hospital, Faisalabad; DHQ Hospital, Faisalabad; Jinnah Hospital, Lahore; Ganga Ram Hospital, Lahore; and Shafe Burn Care, Lahore. Verbal informed consent was obtained from the participants prior to the study. A total of 40 patients with third-degree burns, with age ranging from 20 to 40 years were included in this survey. Unavailability, difficulty to approach and refusal of consent by several participants restricted the sample size to this minimal value.

The Urdu version of the 29-item self-esteem scale developed by Rifai F was used to quantify self-esteem.<sup>11</sup> The overall self-esteem can be computed using the whole score, while four sub-scales, namely self-acceptance, self-competence, social and physical self-acceptance, and academic self-acceptance, can be calculated using the different items of the 29-point scale. The score was scaled

.....  
<sup>1</sup>Department of Psychology, Government Municipal Degree College, Faisalabad, <sup>2</sup>Department of Applied Psychology, Government College Women University, Faisalabad, <sup>3</sup>Department of Applied Psychology, Government College University, Faisalabad, Pakistan.

**Correspondence:** Syed Muhammad Imran Haider Zaidi.  
 Email: imran\_zaidi\_1@yahoo.com

**Table-1:** Demographic characteristics and frequency and percentages proportion of injury area and injury type among severely injured adult victims of burns.

Demographic Characteristics	Frequency	Percentage	
Age, years	< 30	18	45
	≥30	22	55
Gender	Men	25	62.5
	Women	15	37.5
Education	Matriculation	8	20
	Higher Education	32	80
Profession	Government	7	17.5
	Private	33	82.5
Living Area	Faisalabad	20	50
	Lahore	20	50
Marital Status	Married	20	50
	Unmarried	20	50
Birth Order	1st	9	22.5
	2nd	9	22.5
	Middle	16	40
	Last	6	15
Injured Area proportion	Face and chest	7	17.5
	Hand and chest	23	57.5
	Different body parts	10	25
Injury type	Fire	27	67.5
	Hot water	13	32.5

on a 5-point Likert scale, as described in other study.<sup>11</sup>

SPSS version 21 was used for data analysis, and Pearson product-moment correlation and independent sample t-test was used for evaluating data.

Out of a total of 40 patients, 25 (62.5%) were men and 15 (37.5%) were women with a mean age of 28.28±4.60 years (range 20-40 years). A total of 32 patients (80%) had received a university degree, while 8 patients (20%) were only educated up to Matriculation level. Table-1 notes the further demographic details of the patients. Face and chest were affected in 7 (17.5%) patients while the body, excluding the face, was burned in 33 (82.5%) patients. A total of 27 (67.5%) patients were injured by fire while 13 (32.5%) were injured with hot water.

A positive co-relation was found between different sub-scales of self-esteem: self-acceptance and self-competence  $r=0.55$ ,  $p<0.01$ ; self-acceptance and academic self-competence  $r=0.47$ ,  $p<0.01$ ; self-acceptance and social and physical acceptance  $r=0.57$ ,  $p<0.01$ ; self-competence and academic self-competence  $r=0.48$ ,  $p<0.01$ ; self-competence and social and physical acceptance  $r=0.50$ ,  $p<0.01$ ; and academic self-

**Table-2:** Summary of association between the four sub-scales of self-esteem scale.

Variables	Self-acceptance	Self-competence	Academic Self-competence	Social and Physical Acceptance
Self-acceptance	1	0.55**	0.47**	0.57**
Self-competence		1	0.48**	0.50**
Academic Self-competence			1	0.45**
Social and Physical Acceptance				1
M(SD)	45.55(6.63)	21.93(4.22)	20.27(2.83)	27.38(4.26)

df=38, \*\*p< 0.01

M= Mean ; SD= Standard Deviation.

**Table-3:** Mean, standard deviations, t and p values of subscales of self-esteem scale in severely burned adult patients.

Variable	Gender	N	Mean(SD)	T	p
Self-acceptance	Men	25	46.20(6.26)	0.79	0.55
	Women	15	44.47(7.29)		
Self-competence	Men	25	23.00(3.25)	2.18	0.03*
	Women	15	20.13(5.10)		
Academic Self-competence	Men	25	20.92(2.31)	1.93	0.06
	Women	15	19.20(3.34)		
Social & Physical Acceptance	Men	25	27.84(3.77)	0.89	0.19
	Women	15	26.60(5.02)		
Self-esteem Total	Men	25	113.21(2.34)	1.53	0.29
	Women	15	106.34(16.77)		

df =38, \*p<0.05 is significant.

M= Mean; SD= Standard Deviation.

competence and social and physical acceptance  $r=0.45$ ,  $p<0.01$ . Table-2 demonstrates this relation.

A significant difference between men and women was found in self-competence aspect of self-esteem ( $t=2.18$ ,  $p<0.05$ ), demonstrating that severely burned men have higher self-competence compared to severely burned women. However, no significant gender difference was found with regards to self-acceptance, academic self-competence, and social and physical acceptance (Table-3).

Overall, no significant difference in self-esteem was observed with reference to age, education, marital status, profession, birth order, living area, proportion of injured area, and injury type.

## Discussion

The current study was an effort to assess the gender difference in self-esteem among severely burned adult patients. A significant difference was noted among men and women on the self-competence sub-scale of self-esteem. The result is consistent with an earlier study conducted in Karachi which indicated existence of higher self-esteem in male victims of burn injuries.<sup>12</sup> Another study noted that male burn injury patients had higher scores of self-evaluation, social capacity, and appearance, as well as wider ranging scores compared to females.<sup>13</sup> A study conducted in Brazil reported higher self-esteem scores among men compared to women.<sup>14</sup>

## Recommendations

The medical practitioners must focus on the psychological state of the Burn-related patients while dealing with their physical state. Identification of self-esteem with reference to more specific skin diseases can be considered. Further its explorability to identify the causes of insignificant difference between self-esteem and demographic variables.

## Limitations

This study is less generalizable due to limited sample from two cities only. An adapted scale used for assessment, that should replace with indigenous.

## Conclusion

Moderate level of self-esteem was observed on the overall self-esteem score including all the four sub-scales among severely burned victims. A significant gender difference

was noted on the self-competency sub-scale of self-esteem.

**Disclaimer:** None to declare.

**Conflict of Interest:** None to declare.

**Funding Disclosure:** None to declare.

## References

1. Khan A, Solan M. Burns: types, treatments, and more. [Online] 2016 [Cited 2016 May 20]. Available from URL: <http://www.healthline.com/health/burns#ReadThisNext0>.
2. Violence and Injury Prevention: Other Injury topics: Burns. [Online] [Cited 2016 June 1]. Available from URL: [http://www.who.int/violence\\_injury\\_prevention/other\\_injury/burns/en/](http://www.who.int/violence_injury_prevention/other_injury/burns/en/).
3. Spanholtz TA, Theodorou P, Amini P, Spilker G. Severe burn injuries: acute and long-term treatment. *Dtsch Arztebl Int* 2009; 106: 607-13.
4. National Fire Protection Association: Fire Loss in the U.S. [Online] [Cited 2016 Aug 2]. Available from URL: <http://www.nfpa.org/research/reports-and-statistics/fires-in-the-us/overall-fire-problem/fire-loss-in-the-united-states>.
5. National Inpatient Sample (HCUP-NIS: 2010 data); National Hospital Discharge Survey (2010 data); recent 100% hospitalization data from several states. [Online] [Cited 2016 Aug 2]. Available from URL: [http://www.ameriburn.org/resources\\_factsheet.php](http://www.ameriburn.org/resources_factsheet.php).
6. Pope SJ, Solomons WR, Done DJ, Cohn N, Possamai AM. Body image, mood and quality of life in young burn survivors. *Burns* 2007; 33: 747-55.
7. Swann WB, Bosson JK. Self and identity. In: Fiske ST, Gilbert DT, Lindzey G, (eds). *Handbook of Social Psychology*. 5th ed. Hoboken, NY: Wiley; 2010, pp 589-628.
8. Hewitt JP. The social construction of self-esteem. In: Snyder CR, Lopez SJ (eds). *The Oxford Handbook of Positive Psychology*. New York, NY: Oxford University Press; 2009, pp 217-24.
9. Ciofi-Silva CL, Rossi LA, Dantas RS, Costa CS, Echevarria-Guanilo ME, Echevarria-Guanilo ME, et al. The life impact of burns: the perspective from burn persons in Brazil during their rehabilitation phase. *Disabil Rehabil* 2010; 32: 431-7.
10. Sowislo JF, Orth U. Does low self-esteem predict depression and anxiety? A meta-analysis of longitudinal studies. *Psychol Bull* 2013; 139: 213-40.
11. Rifai F. Development and validation of self-esteem scale. [thesis]. Islamabad, Pakistan: National Institute of Psychology, Quaid-i-Azam University; 1999.
12. Faisal A, Hussain N, Jawed H. Self-esteem in male and female Patients of facial burn injuries In Karachi. *Pak Business Rev* 2015; 17: 648-62.
13. He M1, Feng ZZ, Zhang DJ, Yang ZC. [Investigation and analysis of the self-esteem level and social adaptation ability of hospitalized burn patients]. *Zhonghua Shao Shang Za Zhi* 2006; 22: 288-90.
14. do Amaral Zorita L1, Blanes L, Francescato Veiga D, da Silva Augusto F, Masako Ferreira L. Health-related Quality of Life and Self-esteem Among Burn Patients. *Wounds* 2016; 28: 27-34.