

**THE RELATIONSHIP BETWEEN SELF -ESTEEM AND
DEPRESSION AMONG PATIENTS OF SPINAL
CORD INJURY**

Khalid Mahmood

Government College University, Faisalabad

&

Rehana Noor

NIHD, Islamabad

ABSTRACT

The current study was conducted to find out the relationship between self-esteem and depression among patients of spinal cord injury (SCI) during rehabilitation, after one and half year of earthquake October, 2005 in Pakistan. A total number of 67 spinal injured (paraplegic) patients 27 men and 40 women with age range between 15 to 26 year from rehabilitation centers and hospitals of Islamabad and Rawalpindi were taken as sample by using purposive sampling technique. The participants were administered Beck Depression Inventory-II (1996) and Rifai Self-esteem Scale (1999) to measure their level of depression and self esteem. Pearson's Product Moment Correlation and t-test were used for the statistical significance of the data. It was found that there was a significant relationship ($r = -0.68, p < .01$) between self esteem and depression. This also indicates that there is a high negative correlation between the self esteem and depression. Moreover a significant difference was found between men and women on depression and self-esteem scores, which indicated that men have higher level of self-esteem and low depression than women. Keeping in view the above findings it is suggested that if psychologists use proper strategies and psychotherapeutic interventions to enhance the self-esteem of these patients that will help to improve their depressive symptoms.

Email: drkhalid30@hotmail.com

INTRODUCTION

Traumatic events play an important role in human life. They affect the whole person emotionally, socially and physically. Natural disasters are observed to be the worst of the disasters, because of their effects like feelings of uncertainty, suddenness, unpredictability and unmeasured force. Earthquakes are the best example of such a destructive force of nature. The Spinal cord injury (SCI) patients those affected by these disaster can develop PTSD, depression, anxiety and other psychological disorders.

An earthquake, measuring 7.6 on the Richter scale struck Pakistan on the 8th of October 2005, its epicenter was in Azad Jammu and Kashmir and some upper part of the country. The estimates were of over 73,000 dead, more than 75,000 severely injured. There were in excess of 2 million homeless and 4 million populations affected by the earthquake in one way or the other (Rana, Ali, Yusufi & Shah, 2006).

While working with patients in rehabilitation centers two types of symptoms are seen in SCI patients; those that are affected by the disaster biologically or physically and secondly psycho-socially. Biological symptoms include physical handicapped, paralysis, spinal cord injury, digestion problems, sexual dysfunctioning, breathing problems loss of feelings and muscle weakness. Psycho-social symptoms include anxiety, depression, shock, fear of death, low self-esteem, worthlessness, suicidal ideation, poor interpersonal relations, guilt, lower social support, sexual violence and sleep disturbances. This study however is focused on psychological and emotional problems seen in the patients of SCI during rehabilitation services after one and a half year of the earthquake 2005 in Pakistan.

The term “depressed mood” refers to a state of dysphoria that occurs routinely and is a normal process (Elliott & Frank 1996). In contrast, a diagnosable “depressive syndrome” refers to a constellation of observable affective, cognitive and neurovegetative symptoms of sufficient frequency and severity to have a negative impact upon an individual’s functioning. The Diagnostic and Statistical

BAHRIA JOURNAL OF PROFESSIONAL PSYCHOLOGY

Manual of Mental Disorders (DSM-IV-TR 2000) is frequently cited classification system for establishing diagnoses of various depressive and other mental disorders. For example, a diagnosis of Major Depressive Disorder in an adult requires at least a two-week period of five or more symptoms, with at least one either depressed mood or a loss of interest or pleasure in almost all activities. Further, symptoms may include weight changes, changes in sleep, psychomotor agitation or retardation, fatigue, feelings of worthlessness or guilt, indecisiveness or decreased concentration, and/or thoughts of death or suicide. Symptoms together must result in impairment in functioning (social, occupational or other) and are not caused due to the direct physiological effects of a substance or medical condition.

Self esteem, is the evaluative aspect of the self concept and therefore the evaluation of a person's own characteristics (Berk, 2003) and significantly impacts individual attitudes, emotional experiences, future behaviour, & long term psychological adjustment (Berk & Brandden, 1969, Judge, Erez, & Bono, 1998; Rugel, 1995; Williams, 2001). It actually influences the way in which each person experiences his or her world as well as his or her ambition & decisions to be made during important life moments, such as the choices of profession & life partner & his or her functioning at work place as well as decisions to take risks to protect himself or herself against unnecessary threats and traumas.

Eysenck, (2001) reported that our self-image and self-esteem depends much more on how we perform social roles of central importance to us than on how we perform those of minor significance. Beck, (1960) found that low self-esteem is a characteristic feature of depression.

The aim of the current study is to find out the relationship between depression and self esteem among patients of SCI both men and women in-earth quake October, 2005 Pakistan.

Mahmood & Noor

Depression is common in people with spinal cord injury although not as common as in multiple sclerosis (Shnek, et al., 1997). Ê Krause, et al. (2000) suggests that 48% of patients with spinal cord injury in 1997 had clinical symptoms of depression at a year or more after injury.

Craig, Hancock and Dickson (1994) conducted a longitudinal investigation into anxiety and depression in the first two years following a spinal cord injury. This study is a one year extension of a controlled one year follow up study of spinal cord injured persons. The study assessed the extent of SCI persons' depression and anxiety in comparison with an able bodied control group matched for age, sex, education and as far as possible, occupation. Psychological adjustment to SCI was assessed in terms of scores on the Trait Anxiety Inventory and the Beck Depression Inventory. Results obtained at the two year follow up were not significantly changed from those obtained over the first year. There was no significant improvement in anxiety and depression scores in the SCI group two years post injury. Examination of the SCI scores on anxiety and depression suggests that psychological morbidity was confined to a group of approximately 30% of persons, whilst the remaining persons were not severely anxious or depressed. The findings of study did not support the idea that passage of time is associated with better adjustment as suggested by traditional model of adjustment to SCI.

Kemp & Krause (1999) compared depression and life satisfaction amongst people with spinal cord injury, post-polio syndrome, and non-disabled population. The post-polio group tended to score better on both depression and life satisfaction; only 22% of the post-polio group had depressive symptoms compared to 41% of the spinal cord injury group and 15% of the non-disabled group.

Like other Asian countries in Pakistan there is a joint family system and family members have strong emotional attachment and are dependent on each other. So any traumatic event affects almost every area of life of the whole

BAHRIA JOURNAL OF PROFESSIONAL PSYCHOLOGY

family, especially when the damage is irreversible. It is therefore important to study the factors that create depression and other emotional problems in the sufferers of the disasters, so that the proper strategy for interventions can be made to help these individuals. This will also help to improve and promote the effectiveness of the rehabilitation services.

Hypothesis:

1. There will be a negative correlation between self esteem and depression.
2. Female patients of SCI will show low scores on self-esteem and high scores on depression than male patients.

METHOD

The 67 patients of SCI those who were affected by the disaster of earthquake 2005 both women and men age range between 15 to 26 years were selected from National Institute of Rehabilitation Medicine (NIRM), Pakistan Institute of Medical Sciences (PIMS) of Islamabad, Armed Forces Institute of Rehabilitation Medicine (AFIRM) and Central Government Hospital (CGH) from Rawalpindi. The purposive sampling technique was used to collect the data from the desired participants. The sample of study consisted of 40 women and 27 men with SCI in disaster of earthquake 2005. The Participants of present study were taken from all kinds of socio-economic status (lower, middle and upper class).

MEASURES

Beck Depression Inventory Khan, 1996 (Translated)

The Beck Depression Inventory (BDI) is a 21 item self-report instrument for measuring the severity of depression in adults and adolescents aged 13 years and older. The version of the inventory was developed for the assessment

Mahmood & Noor

of symptoms corresponding to criteria for diagnosing depressive disorder. During the last 35 years, the BDI has become the most widely accepted instruments for assessing the severity of depression. The scoring was done according to the scoring manual. A total depression score is obtained by summing the rating of the 21 items, yielding scores that range from 0-63. The average co-efficient alpha of BDI for psychiatric patients is high at .80 (Khan, 1996).

Self-esteem Scale (Rifai, 1999)

The Self-esteem Scale by Rifai (1999) was used to assess the self-esteem of the participants. This scale consists of 29 statements, with five response categories. Five of the statements from original scale of self esteem items No. 4, 15, 20, 24 and 28 were excluded from the questionnaire used in this study, which were measuring the self esteem by academic self-competence since those statements were not relevant to the present study. As most of the participants of present study were illiterate and were not highly qualified, so the scale administered to the sample in the study consisting of 24 items. The scale was of five point Likert scale ranging from extremely true, somewhat true, neither true nor false, somewhat false, and extremely false. These response categories were scored as 5, 4, 3, 2, and 1 for positively phrased items and were reversed for the negative items. Thus a high score on the scale reflects a high level of self-esteem. This 24 item scale was already correlated positively with the scores of original scale with an average correlation of .42 and alpha coefficient value of .82 which shows that the scale is internally consistent and reliable.

PROCEDURE:

After one year of disaster 67 patients (40 women & 27 men) patients of SCI were selected as participants for the study. They were contacted from above mentioned rehabilitation institutes of the twin cities of Islamabad and Rawalpindi

BAHRIA JOURNAL OF PROFESSIONAL PSYCHOLOGY

during rehabilitation services. The purpose of the study was explained to the concerned authorities of the institutions and after their approval the sample was selected. Participants were individually approached at their rehabilitation institutions and hospitals. Informed consent was taken and the rationale of the study was explained to the participants. Brief instructions about questionnaires were given to participants on first page. It was made clear that all the information would be kept confidential and would be utilized only for research purpose. They were requested to complete the questionnaire. Approximately all the participants completed the questionnaires in the presence of researchers. Researchers clarified or interpreted the questions to the less educated participants. It took 20 to 30 minutes for the completion of the protocols. They were also asked to mention their age, gender, qualification, marital status and socio-economic status as demographic variables.

Pearson's product moment correlation method and t-test were used to find out the significance level of the data through SPSS.

RESULTS

Table I
Pearson's Correlation between depression and self esteem N =67

	Depression (Dep)	P Value
Self-esteem (SE)	-.68(**)	0.00

Table: I indicates that the results are significant at .01 levels. It also shows that there is a negative correlation between self esteem and the level of depression among patients of spinal cord injury.

Table II
Mean values of male and female patients on depression and self esteem N =67

Group	Mean	S.D	df	t-test	p
Self-esteem (SE)			65		
Male (N=27)	89.67	19.64		-1.308	.000
Female (N=40)	83.45	18.69		-1.295	
Depression (Dep)			65		
Male (N=27)	12.56	10.98		-3.196	.000
Female (N=27)	24.03	16.29		-3.441	

Table: II indicate that females had higher depression and lower self-esteem than males. It also supports the results that higher the self-esteem and lower the depression level.

BAHRIA JOURNAL OF PROFESSIONAL PSYCHOLOGY

DISCUSSION

Disasters are catastrophic events that disrupt the normal functioning of a community and create panic and chaos in affectee's life. Disasters also leave long lasting imprints in the minds of the people who experience this tragic event. Present study specifically focused on the emotional health of earthquake victims who got spinal cord injury (SCI) during earthquake 2005 and were admitted in hospitals and centers for rehabilitation services. They faced different kind of psychosocial problems due to immobility, disability, dependency and lack of support. It has been observed that immediately after the earthquake there was an intense feeling of panic all around. Every one was running around for his/her own safety and the people who suffered major injuries were left unattended.

While working with patients during rehabilitation centers, it has been observed that initially it was difficult for them to accept the loss but as they came out of the immediate shock conditions and started realizing the fact, their symptoms like anxiousness, restlessness and irritability seems to be changed into hopelessness, low self-esteem, helplessness and worthlessness, which led them to the depressive disorder and other psychological problems. The results of current study indicated that as the time passed, they were recovering from illness and they turned their focus of attention on their losses owing to which their level of self-esteem became low which further led to depression as well. This in fact is an inverse relationship between the two variables. As it can be seen in result section, table # I indicates that there is a high negative correlation ($r = -.68$) between self-esteem and depression among patients of spinal injury, which also shows that the results are highly significant at .01 levels.

These results are also supported by Harter (1987) and Renouf and Harter (1990) they found that self-esteem is strongly negatively correlated with depression in both middle childhood and adolescence. They found that lower the self-esteem stores more the depression and correlations were ranged from -0.67 to -0.80.

Mahmood & Noor

The table # 2 of the current study also shows that female patients of SCI have lower mean scores on self-esteem and higher scores on depression as compared to male patients and results are significant at .01 level. This also indicates that female patients of SCI are more vulnerable to be a victim of low self-esteem and resultantly more depressed than male patients. The probable cause of these findings may be the more independent status of males than that of females, which is given them in this culture. Hence this given status makes males comparatively more social and strong. The findings of the current study are consistent with a number of other studies. Kennedy & Evans (2001) reported high levels of emotional distress in 14% of patients at 6-24 weeks after injury, significantly higher in females. Kalpakjian & Albright (2006) noted that that women experience a greater burden of depression than men and nearly one fourth of women and men reported experiencing some or greater difficulty in daily life and relationships in the absence of probable depressive disorder.

During the process of data collection it has been observed that when these patients ranked themselves low, and started feeling unable to perform their normal functions, they developed the feelings of worthlessness, hopelessness, inadequacy, inferiority and insecurity which further raised their level of depression. In a society like Pakistan where people are emotionally attached with each other, they like to share their feelings of sorrow and happiness, which in fact is one of the basic elements of the values and customs of this culture. On the other hand spinal cord injury is a more or less permanent loss of mobility which means more or less permanent dependency on others. As the disease prolongs the caretakers and the related members of family get involved in daily life activities then the patient develops a sense of isolation, deprivation and rejection. They start feeling worthless, insecure and developed poor self perception and ultimately get more depressed.

CONCLUSION

Keeping in view the findings of the current study it is concluded that there exist a negative correlation between self esteem and the level of depression among patients of spinal injury. Furthermore, it can be said that low self-esteem leads to the depression. It has also been found that females had higher depression and lower self-esteem than males. It also supports the results that higher the self-esteem, lower the depression level.

However, considering the limitations of the current study. It is recommended that in future studies data may be increased and random sampling technique may also be used to get more accurate results. More variables like age, education and socioeconomic status may also be studied.

Mahmood & Noor

REFERENCES

- Beck, A. T. (1960). *Depression: Causes and treatment*. Philadelphia: University of Pennsylvania press. In krug & Laughlin (1976). *Handbook for the IPAT depression scale*. Institute for Personality and Ability Testing, Inc. USA. pp 37.
- Berk, L. E. & Branden, N. (1969). *The psychology of self esteem. A new concept of man's psychological nature*. Los Angeles: Nash
- Berk, L. E. (2003) *Child Development*. Boston; Allyn & Bacon.
- Craig, A. R., Hancock, K. M. & Dickson, H.G. (1994). A longitudinal investigation into anxiety and depression in the first 2 years following a spinal cord injury. 32:675-9
- DSM-IV-TR 2000. *Diagnostic and Statistical Manual of Mental Disorders* by , American Psychiatric Publishing, Inc.
- Elliott, T. R., & Frank, R. G. (1996). Depression following spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, 77, 816–823.
- Eysenck, M. W. (2001). *Simply Psychology*. (PP.344), UK, Psychology press Ltd. UK. pp. 344.
- Harter, S. (1987). The determinations and meditational role of global self-worth in children. In N. Eisenberg (Ed.). *Contemporary topics in developmental psychology* (pp. 219-242).
- Judge, T. A., Erez, A., & Bono, J. E. (1998). The Power of Being Positive: The Relationship between Positive Self-Concept and Job Performance. *Human Performance*, 11, 167-187.

BAHRIA JOURNAL OF PROFESSIONAL PSYCHOLOGY

- Kalpakjian, C.Z. & Albright, K.J.(2006). An examination of depression through the lens of spinal cord injury. Comparative prevalence rates and severity in women and men. *Women's Health Issues. Nov-Dec;16 (6) : 380-8.* University of Michigan Model Spinal Cord Injury Care System, Ann Arbor, Michigan 48109, USA. .
- Kemp, B. J. & Krause, J. S. (1999). Depression and life satisfaction among people ageing with post-polio and spinal cord injury. *Disability and Rehabilitation, 21(5/6):241-249*
- Kennedy, P. & Evans, M.J. (2001). Evaluation of post traumatic distress in the first 6 months following SCI. *Spinal Cord 39:381-6. Journal of Black Psychology, Vol. 20, No. 2, 157-174*
- Kennedy, P. & Rogers, B. A. (2000). Anxiety and depression after spinal cord injury: a longitudinal analysis. *Archives of Physical Medicine and Rehabilitation, 81:932-7*
- Khan, J. M. (1996). Validation and Norm Development of Salman Shah Depression Scale. Unpublished M. Phil dissertation. University of Peshawar.
- Krause, J. S., Kemp, B. and Coker, J. (2000). Depression after spinal cord injury: relation to gender, ethnicity, aging, and socioeconomic indicators. *Archives of Physical Medicine and Rehabilitation 81:1099-109*
- Krug, S. E., & Laughlin, J. E. (1876). Hand book for the IPAT depression scale. Institute for personality and Ability Testing, Inc. USA.

Mahmood & Noor

- Rana, M. H., Ali, S., Yusufi, B. & Sha, F. S. (2006). National plan of action for mental health and psychological relief of earthquake survivors-emergency phase. *Pakistan Armed Forces Medical Journal, Vol: 56*. Military hospital, Rawalpindi.
- Renouf, A. G. & Harter, S. (1990). Low self-worth and anger as components of the depressive experience in young adolescents. *Development and psychopathology, 2*, 293-310. In B. Helen (1997). *The developing child*. Addison Wisley Educational Publishers Inc.
- Rifai, F. (1999) Development and Validation of Self-esteem Scale. Unpublished Ph. D dissertation. National Institute of Psychology, Quaid-e-Azam University, Islamabad.
- Rugel, R. P. (1995). Dealing with the problem of low self-esteem: Common characteristics and treatment in individual, marital/family and group psychotherapy. Springfield, IL: Charles C. Thomas.
- Shnek Z. M., Foley F. W. & LaRocca N. G. et al (1997). Helplessness, self-efficacy, cognitive distortions, and depression in multiple sclerosis and spinal cord injury. *Annual Behavioral Medicine 19:287-94*
- Williams, N. (2001). *The work we were born to do*. London: Element Books.