# **DEPRESSION;** PREVALENCE AMONG AMPUTEES

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ABSTRACT... Depression has been estimated to have an increased prevalence amongst all population and particularly among diseased population. Objectives: To determine prevalence of depression among amputees after major traumas by using Beck Depression Inventory (BDI), in different hospitals of Rawalpindi and Islamabad. Methodology: A descriptive Cross sectional survey was done with a sample of 110 amputees of age between 15-60 years, in different hospitals of Rawalpindi and Islamabad. The study duration was completed from 1st June 2013 to 1st January 2014. Details of data were collected through structured questionnaire. Questionnaire contained causes responsible for this depression and Beck's Inventory Score to measure level of depression. Results: According to the data analyzed results shows that out of 110 amputees 28(25.5%) were having no depression, 35(31.8%) were mildly depressed, 16(14.5%) were borderline depressed, 14(12.7%) were moderately depressed, 8(7.3%) were severely depressed and 9 (8.2%) were extremely depressed according to BDI. Conclusions: The current study suggests that amputees in sample have mostly mild mood disturbance BDI. as they were following rehabilitation and using assistive devices which reduces the impact of disability and dependency and helps coping with depression. Sample selection was from those hospitals of Rawalpindi and Islamabad where a proper Rehabilitation setup was working and a lot of emphasis was laid on the Rehabilitation regime after Amputation. So on the whole mostly patients were mildly depressed according to BDI.

Key words: BDI, Depression, Amputation, Rehabilitation, Assistive devices

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# **INTRODUCTION**

Depression is a mood disorder that is characterized by the feeling of hopelessness, constant sadness, loss of interest or pleasure, sleep disturbances and decrease functional ability. Depression is having a deep impact on our daily lives as it is related and associated with many adverse health conditions and lower socioeconomic status<sup>1</sup>. A person habitual of thinking bad and thinking negatively about one's self are more prone to get depressed. Now a day's Pakistan is at verge of terrorism where bomb blasts, terror attacks are occurring on daily basis. Due to which many causalities occurs and many who survive from these circumstances, may lost their body parts. And if a person undergoes these circumstances he or she may develops posttraumatic stress disorders in very initial stages of his life which later in life turns to severe depression and other psychiatric disorders<sup>2</sup>.

Amputation is defined as the intentional surgical removal of a limb or body part. It is performed to remove diseased tissue or relieve pain<sup>3</sup>. The different types of amputation include Lower limb amputations, upper limb amputation, Face amputations, Breast amputation and Genitals amputations. Amputation is a kind of triple threat to an individual. It involves loss of function, loss of sensation, and loss of body image. The disability arising from amputation gives rise to depression in those people<sup>4</sup>. one of the main reasons of depression is societal negative attitude and functional limitation of the person having any disease or disability. It has been seen that the amputees attending surgical or rehabilitation clinics, 20 to 60 % of them are assessed as being clinically depressed<sup>5</sup>.

The body image problems is another main factor which contributes to depression and have been found among people with amputations

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Article received on: 15/08/2014 Accepted for publication: 18/09/2014 Received after proof reading: 21/02/2015 and these have been associated with increased activity restriction. Three Factors associated with high prevalence of psychological symptoms included female gender, lack of social support, unemployment, traumatic amputation and shorter time since amputation. A significant reduction of anxiety and depression scores in patients who received social support was confirmed by these findings.

Patients who undergo limb amputation need multidisciplinary care. After an amputation, patients have to cope with severe loss, the loss of their body part with consequences on their body image, the loss of mobility following dependency on means such as wheel chairs and prosthesis, and the loss of the ability to manage activities of daily living. The loss of a body part can cause physical, psychological and social disturbances<sup>6</sup>.

In totality the experience rehabilitation and the entire rehabilitation team can deeply impact on the patient's psychological and social wellbeing. Working within the limits of their professional competencies, team members, including the patient and their family, share responsibility for attending to psychosocial health across the continuum of care<sup>7</sup>.

# **MATERIAL AND METHODS**

A descriptive cross sectional study was done with a sample of 110 patients from different hospitals of Rawalpindi and Islamabad. The study duration was completed from 01 June 2013 to 1<sup>st</sup>January 2014. The patients were recruited through the non-probability convenient sampling technique. Details of data were collected through structured questionnaire which contained the different causes responsible for this depression and Beck's Inventory Score was used to measure level of depression. The data was analyzed through SPSS 20 and descriptive analysis was recorded. The data was arranged in mild, moderate and severe depression through the scoring method of Beck's Inventory.

#### RESULTS

The study included sample of 110 amputees, aged 15-60 years., as shown in table 1, in our sample 28(25.5%) were having no depression, 35(31.8%) were mildly depressed, 16(14.5%) were borderline depressed, 14(12.7%) were moderately depressed, 8(7.3%) were severely depressed and 9 (8.2%) were extremely depressed according to BDI.



		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-10 normal	28	25.5	25.5	25.5
	11-16 mild mood disturbance	35	31.8	31.8	57.3
	17-20 boderlineclinicle depression	16	14.5	14.5	71.8
	21-30 Moderate depression	14	12.7	12.7	84.5
	31-40 severe depression	8	7.3	7.3	91.8
	>40 extreme depression	9	8.2	8.2	100.0
	Total	110	100.0	100.0	
Table-L level of depression					

When "level of depression \* use of assistive devices" shown in crosstabulation#01 and bar chart 1 shows 93 out of 110 with use of assistive devices of which 31 lay in BDI 11-16 mild mood

disturbance, 17 out of 110 do not use any assistive devices and 6 of which were reported to lay in BDI >40 extreme depression.

Useofassistivedevices * levelofdepression Crosstabulation#01								
Levelofdepression								
		1-10 normal	11-16 mild mood disturbance	17-20 borderlineclinical depression	21-30 Moderate depression	31-40 severe depression	>40 extreme depression	Total
Lisoofassistivadaviaas	yes	26	31	14	13	6	3	93
Oseolassistivedevices	No	2	4	2	1	2	6	17
Total		28	35	16	14	8	9	110



### **DISCUSSION**

Acute stress disorder and post-traumatic stress disorder (PTSD) are important causes of Traumatic amputations. Chronic illness as a result of planned surgical amputation does not often lead to PTSD symptoms. Accidental injury resulting in amputations may lead to higher occurrence of PSTD, depression following amputation can result from an adjustment reaction to surgery and to sudden disability; it typically resolves with supportive treatment and involvement in rehabilitation. Amputation very often adversely affects the individual's ability to engage in his previous activities<sup>8</sup>.

Amputees in this study sample have mostly mild mood disturbance BDI, as they are following rehabilitation and using assistive devices which reduces the impact of disability and dependency and helps coping with depression. Awareness regarding rehab visits is crucial preventing dilemma<sup>9</sup>.

Based on the findings, the current study suggests that traumatic amputation and those carried out more recently, could have a greater influence on prevalence of depression among amputees but due to use of assistive devices, more trend of visiting rehabilitation centers equipped with latest facilities and greater number of amputees following proper rehab regime, the prevalence of depression was lower in amputees, resulting in amputees having mild mood disturbance BDI. The other vital reason seen for low level of depression among amputees was enormous supportive and collaborative behavior of family and friends. This positive attitude boosts up amputees not only physically but also emotionally and morally<sup>8</sup>.

#### CONCLUSIONS

Many theses reviewed for this study showed concern for depression among amputees. With an intention of contributing to the body of knowledge regarding what factors contribute to the depression in amputees between the ages of 15-60 years, this thesis selected a list of variables and a Cross-sectional Survey was conducted based on a set of questions based on BDI.

The current study concluded mild mood disturbances of level of depression (BDI) in majority of population. Therefore, it is recommended that amputees should be encouraged to follow rehabilitation regime to

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