Assessment of Depression among Musculoskeletal Fracture Patients in a Tertiary Referral Hospital in Bangladesh

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ABSTRACT

Psychological therapy is very important in musculoskeletal fracture patients for mental support. The study was conducted National Institute of Traumatology and Orthopedic Rehabilitation (NITOR), Dhaka. 102 participate in this study. Patients with a musculoskeletal disorder are commonly treated by physical therapists; it influences clinically relevant outcomes such as pain and disability but not influence a treated psychological disorder. Psychological therapy is very important relatively to treat of physical therapy. It found that the severe of injury moderate 20%, serious 2.4%, severe 77.1% depression on musculoskeletal fracture, he/she feel sad 41.0%, sad all the time 44.0%, so sad 14.5%,Indicates minimal depression 1.2%, mild depression 12%, moderate depress-sion 81.9%, severe depression 4.8%. It is found that the mean depressed mood of the respondent's sadness 94.0%, frequent weeping 6.0%, in agitation occasional 7.2%, frequent 92.8%, anxiety no difficulty 1.2%, tension irritability 89.2%, fear 9.6% depression on musculoskeletal fracture. So that the Musculoskeletal fracture in our country is more vulnerable and mental health is not so good.

Keywords: Assessment, Depression, Musculoskeletal fracture, Tertiary referral hospital, and Bangladesh.

1. INTRODUCTION:

Psychology can be defined as a science of behaviour and mind, including conscious and unconscious phenomena, as well as thought. Academically psychology discipline has immense scope and diverse interests that, when taken together, seek an under-standing of the emergent properties of brains, and all the variety of epiphenomena they manifest (Fernald, 2008). It aims to understand individuals and groups by establishing general principles and researching specific cases as a social science. In this psychology field, a professional practitioner or researcher is called a psychologist and can be classified as a social, behavioural, or cognitive scientist (Parker *et al*., 2002). Psychologists tries to understand the role of mental functions in individual as well as social behaviour, while also wants to explore the physiological and biological processes that underlie cognitive functions and behaviours (Wikipedia, 2018).

Fracture of a bone is a medical condition in which there is a breach in the continuity of the bone. Fracture of a bone may be the result of high force impact or stress, or with a minimal trauma injury due to certain

medical conditions that weaken the bones, such as osteoporosis, osteopenia, bone cancer, or ontogenesis imperfect, where the fracture is then properly termed a pathologic fracture (Katherine, 2013). There is a defined association between physical injury and disability and emotional distress. There is an increasing awareness that patient outcomes following orthopaedic trauma surgery do not depend solely on the success of the operative procedure. Emotional distress has been shown to affect physical function, overall outcomes, and post injury productivity levels (Patricia *et al.*, 2016). There is a known connection between physical injury and disability and emotional distress. There are several research works has shown a relationship between trauma, depression, and poor outcomes. Though literature on relation between trauma and depression is limited in regarding clarifying the relationship between the degree of injury and depression and the relationship between physical function of patients with less severe injuries and depression (Demyttenaere and De Fruyt, 2003; Nahid *et al.*, 2019).

Although trauma remains the leading cause of mortality in the first 4 decades of life, most people with traumatic injuries will survive their accident. As trauma care has improved substantially during recent decades and has led to higher survival rates and there has also been an increasing focus on thepatients' perceived health-related quality of life (HRQOL) as an outcome after trauma (Amit Chaitanya, 2015). Quality of life is an important issue for the large number of patients who may need to adapt to severe and chronic disability due to joint stiffness. The loss of mobility in the joints makes patient more dependent on others which affects their quality of life. Any loss of ability to live independently in the community has a considerable detrimental effect on their quality of life. It follows that reduction in the incidence of fractures will not only save lives but will prevent a significant reduction in their quality of life (Amit Chaitanya, 2015).

Trauma remains the prime cause of mortality in the first 4 decades of life, most people with traumatic injuries will survive their accident Psychiatric complications of physical injury are a public health concern. Following orthopaedic trauma, recovery depends on the outcome of mental health. Poor mental health, development of symptoms of PTSD (Post Traumatic Stress Disorder), depression and increased substance abuse leads to poor recovery. Present review article has discussed quality of life on patients following orthopaedic trauma with emphasis on the psychological distress (Amit Chaitanya, 2015).

The pathological environment of prolonged abuse fosters responsible for the development of psychiatric symptoms. History of abuse, especially childhood abuse, appears to be one of the major contributing factors predisposing a person to become a psychiatric patient. Though only a minority of survivors of chronic childhood abuse ultimately become psychiatric patients, a large proportion of adult psychiatric patients are survivors of childhood abuse (Briere and Runtz, 1987). Repetitive trauma appears to amplify and generalize the physiologic symptoms of PTSD. Chronically traumatized people are hyper vigilant, anxious and agitated, without any recognizable baseline state of calm or comfort (Hilberman, 1980). Psychologists have studied individual characteristics in an attempt to find explanations as to why similar work and organisational characteristics are associated with varying degrees of well-being amongst people (Roy *et al.*, 2019; Frank and Emma, 2010).

1.2 Justification of the Study

Patients with musculoskeletal disorder are commonly treated by physical therapists, it influence clinically relevant outcomes such as pain and disability but not influence to treated psychological disorder. Psychological therapy is very important relatively to treat of physical therapy. Considerable detrimental effect on quality of life if any loss of ability to live independently in the community. It indicates that reduction in the cases of fractures will not only save lives but will also prevent a significant reduction in their quality of life. Having a good knowledge in health related quality of life predictors after injury may enable us to optimize and individually tailor interventions at an early stage in treatment and rehabilitation process.

1.3 Statement of Hypothesis

1.3.1 Null Hypothesis - There is no significant effectiveness of musculoskeletal fracture and depression.

1.3.2 Alternate Hypothesis - There is significant effectiveness of musculoskeletal fracture and depression.

2. Review of Literature

The prevalence of clinically relevant depression approached 45% in a diverse cohort of orthopaedic trauma patients. Global disability is strongly correlated with depression. A case of an open fracture may also increase the risk of depression in many folds (Butcher *et al.*, 1996). Psychological acceptance (also referred to as acceptance) may be described as willingness to experience thoughts, feelings, and physiological sensations, especially those which are negatively evaluated (e.g. fear), without trying to avoid them, or let them consider as one's actions. Emotional intelligence (EI) describes people's ability to perceive, Understand, assimilate and regulate their emotions (Wikipedia, 2018). A good deal of importance has been given to the potential predisposition of negative affectivity and anxiety sensitivity in fear related to pain symptoms. Acceptance involves a willingness to experience all psychological events (i.e. thoughts, feelings, and sensations), without changing, avoiding, or otherwise controlling them (IASP, 2017).

(Demyttenaere and De Fruyt, 2003) Consistent with this conceptualisation of psychological acceptance, there is a great deal of research that implicates this individual characteristic in a wide range of psychological problems, from substance abuse to depression and suicide. Refers to 'the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in self and others'. The term 'emotional intelligence' has received a great deal of attention in the applied psychology and popular press (Wikipedia, 2018). (Lasa *et al.*, 2000) Edition to the problems of over reporting and underreporting, accurate prevalence estimates of physical and sexual abuse of women in the general population are somewhat difficult to obtain because of a lack of comprehensive studies and of uniform definitions of physical and sexual assault or abuse.

Although some women with schizophrenia may benefit from a more gradual form of traditional exposure-based treatment, as with other groups of trauma

survivors (Glancy *et al.*, 1992). Unlike the one-dimensional biomedical perspective, which focuses on etiological and pathophysiological explanations for chronic pain, or the psychogenic view, which suggests pain as physical manifestations of psychological difficulties, a bio psychosocial view provides an integrated model that incorporates purely mechanical and physiological processes as well as psychological and social-contextual variables that may cause and perpetuate chronic pain.

People who attribute their symptoms to an injury appear more likely to view any physical sensation as harmful and noxious, thereby increasing anxiety. These changes may, consequently, lower pain thresholds and tolerance, further increase activity avoidance and functional limitations, and facilitate general deconditioning. Even when there is no difference in physical pathology between those who attribute symptom onset to a traumatic event and those who perceive their symptoms has having an insidious onset (Rannaparekh, 2017).

Patients who describe their pain as a consequence of accidental injury are significantly more likely to be prescribed physical and pharmacological modalities for symptomatic relief, including nerve blocks, physical therapy, transcutaneous electrical nerve stimulation, and opioid medication.

Chronic pain patients with elevated pain-related anxiety tend to anticipate higher levels of pain than those with low anxiety, and anticipation of pain often results in poorer behavioural performance. Physical activities and work tasks is more strongly associated with disability and work loss during the previous year than are biomedical variables and characteristics of pain. They concluded that "fear of pain and what we do about it is more disabling than the pain itself".

Counter conditioning by means of graded exposure to a feared stimulus is an effective treatment for people suffering from excessive fear (Patten et al., 2001). Negative affectivity, the general tendency to experience subjective distress and dissatisfaction, has been demonstrated to be associated with elevated symptom reporting by chronic pain patients (McCarthy *et al.*, 2003). Despite these general conclusions about psychosocial predictors of disability, the results must

be interpreted cautiously, as there are methodological problems inherent in each study that make gene-ralizations based on the body of research problematic (Wikipedia, 2018).

Psychological treatments for chronic pain are most effective when incorporated with other treatment components or modalities. Examined the effectiveness of an outpatient program for FMS that included family education along with physical and psychological components. Patients demonstrated significant impro-vements on measures of pain, interference of symp-toms. Patients whose painful symptoms follow an accident have been shown to be more refractory to treatment than patients with non-traumatic onset. Psychological factors have been reported to be predi-ctive of long-term disability for many pain syndromes as well as for pain severity, emotional distress, and treatment seeking (Wikipedia, 2018). Majority of individuals with spinal cord injuries (SCI) experience chronic pain and this pain can have a substantial negative impact on quality of life. A particularly notable absence in the SCI literature has been research on patient catastrophizing, the phenomenon of expecting or worrying about major negative cons-equences from a situation, even one of minor importance**.**

3. METHODOLOGY:

3.1 List of the Key Variable

Age, sex, Occupation, Marital status, Education, dep-ression, income and Expenditure.

3.1.1 Dependent Variable - Musculoskeletal fracture patient.

3.1.2 In-dependent Variable - Psychological depress-sion.

3.2 Objectives of the Study

3.2.1 General Objective

To assess the level of depression among the musculoskeletal fracture patients in a tertiary referral hospital in Bangladesh?

3.2.2 Specific Objectives

1. To assess the social demographic char-acteristic of the musculoskeletal fracture

patient in a tertiary referral hospital in Bangladesh.
2. To determine the depression level of patient.
3. To find out the history of musculoskeletal complication.
4. To assess the social support in a tertiary referral hospital in Bangladesh.
5. To assess the management of musculoskeletal fracture patient.

3.3 Study design - Mixed Method study.

3.4 Outcome measure - Musculoskeletal and disa-bility index.

3.5 Parameter - Abbreviated Injury Scale (AIS), Beck Depression Scale (BDS), Hamilton Depression Rating Scale (HDRS) (Hamilton, 1960).

3.6 Sample population - The sample population was consisted of male and female who complain of musculoskeletal fracture and depression and consult to the physician in selected hospitals in locations.

3.7 Study area - The study was conducted National Institute of Traumatology and Orthopedic Rehabili-tation.

3.8 Study site - National Institute of Traumatology and Orthopedic Rehabilitation (NITOR), Sher-e-Bangla Nagor, Dhaka. Number of beds -1000.
Type of hospital **-** Orthopedic and Rehabilitation hospital, it is a tertiary level government hospital.
Facilities **-** Indoor and outdoor facilities.

3.9 Study period - This study conducted from 1st January to 2th April 2018.

3.10 Sample size - Following formula was used to determine the sample size.

$$n = \frac{z^2 pq}{d^2}$$

Here,
n = the desired sample size
z = the standard normal deviate usually set at 1.96 which correspondents to 95% confidence level
p = 45% (Patricia *et al.*, 2006)
q = 1-p = 1.00-0.45
q = 0.55
d = degree of accuracy desired, usually set at 0.05%.

Now, required sample size

$$n = \frac{z^2 pq}{d^2}$$

$$N = \frac{(1.96 x 1.96) x .45 x .55}{(.05 x .05)}$$

n = 380.316

So, required sample size is 380.316

Researcher took 102 samples for time and fund limitation.

3.11 Statistical tool

Paired 't' test - Paired 't' test was conducted to compare the pre-test and post-test values of visual analogue scale for pain and functional disability.

Formula of paired 't' test

$$S = \sqrt{\frac{\sum d^2 - \frac{(\sum d)^2}{n}}{n-1}}$$

$$t = \frac{\overline{d}\sqrt{n}}{s}$$

d = Difference between the pretests versus posttest.

$\overline{d}$ = Mean difference.

n = Total number of subjects.

S = Standard Deviation.

$\sum d^2$ = sum of the squared deviation.

3.12 Inclusion and Exclusion criteria

Inclusion Criteria -

- ➢ Age between 20 to 65 years
- ➢ Both patient (Male & Female)
- ➢ Musculoskeletal fracture injury
- ➢ Willing patients

Exclusion Criteria -

- ➢ Unwilling patient
- ➢ Hyper sensitivity patient

3.13 Sampling technique

Non randomized purposive sampling technique was applied.

3.14 Data collection tools

A pretested, modified, interviewer administrated, semi-structured questionnaire was used to collect the data.

3.15 Data management and analysis

After collection of data of the respondents were organized. Data was entered into the computer into a data base in the software package. Statistical package for the social science (SPSS) Version 16.0 (Polar engineering and consulting, Chicago) using descriptive statistics such as frequency, distribution, range, mean, and percentage. All scores and percentages was computed and presented in tabular form, charts, and graphs as appropriate. Further it was analyzed with the help of chi-square test and P-value. Finally the data was interpreted on the basis of study findings.

3.16 Ethical consideration

Prior to the commencement of this study, the research protocol was approved by the research committee of the academic institution. The aims and objectives of the study along with its procedure, risks and benefits were explained to the respondents in easily under-standable local language and then informed consent was taken from each. Then it was assured that all information and records will be kept confidential and used only for research purpose.

3.17 Limitation of the Study

This preliminary study had a number of limitations. The experimental study was risk for the respondents. The sample size was comparatively small due to shortage of time and financial constraints of the research period and thus the result could not be generalized.

4. RESULTS:

This experimental study was conducted in Dhaka city in order to determine depression among musculo-skeletal fracture in patients. A pre-tested modified interviewer administrated semi questionnaire was used to collect the information. A total of 102 patients were interviewed to collect the information. Section A contained the questions about socio-demographic characteristics; section B contained disease related variables contained treatment related variables. All the data were entered and analyzed by using statistical packages for social science (SPSS) software version 16.0 (Chicago).

Table 1: Distribution of respondents by age (n=102)

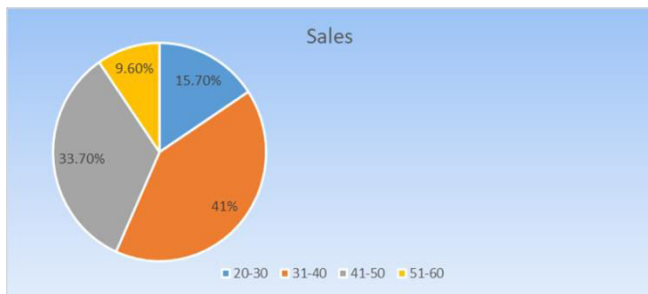| Valid	Frequency	Percent
20-30	13	15.7
31-40	34	41.0
41-50	28	33.7
51-60	8	9.6
Total	83	100
Missing system	19	
Total	102	100

Fig 1: Distribution of respondents by age (n=102).

It is found from **Table 1** that the respondents belonged to age group 21-30 years 15.70%, 31-40years 41%, 41-50 years 33%, and 51-60 years 9.6% depression on musculoskeletal fracture (**Fig 1**).

Table 2: Distribution of respondents by occupation (n=102)

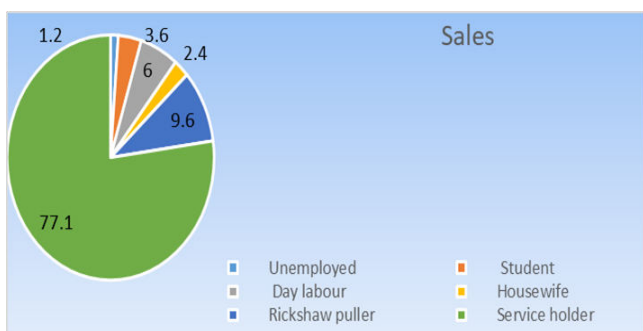| Valid	Frequency	Percent
Unemployed	1	1.2
Student	3	3.6
Day labor	5	6.0
Housewife	2	2.4
Rickshaw puller	8	9.6
Service holder	64	77.1
Total	83	100
Missing system	19	
Total	102	100

Fig 2: Distribution of respondents by occupation (n=102).

It is found from table 2 that the occupation of the respondents was unemployed 1.2%, student 3.6%, day labor 6.0%, housewife 2.4%, rickshaw puller 9.6%, service holder 77.1% (**Fig 2**).

Table 3: Distribution of respondents by body region (n=102)

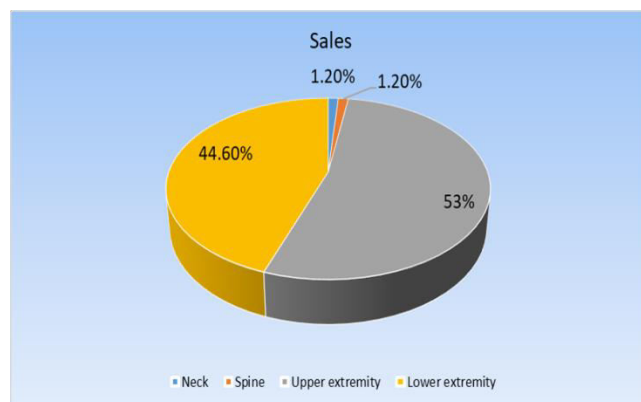| Valid	Frequency	Percent
Neck	1	1.2
Spine	1	1.2
Upper extremity	44	53
Lower extremity	37	44.6
Total	83	100
Missing system	19	
Total	102	100

Fig 3: Distribution of respondents by body region (n=102).

It is found from the **Table 3** from neck 1.2%, spine 1.2%, upper extremity 53.0%, and lower extremity 44.6% depression on musculoskeletal fracture (**Fig 3**).

Table 4: Distribution of respondents by severe of injury (n=102)

Valid	Frequency	Percent
Moderate	17	20.5
Serious	2	2.4
Severe	64	77.1
Total	83	100
Missing system	19	
Total	102	100

It found from the **Table 4** that moderate 20%, serious 2.4%, severe 77.1% depression on musculoskeletal fracture (**Fig 4**).
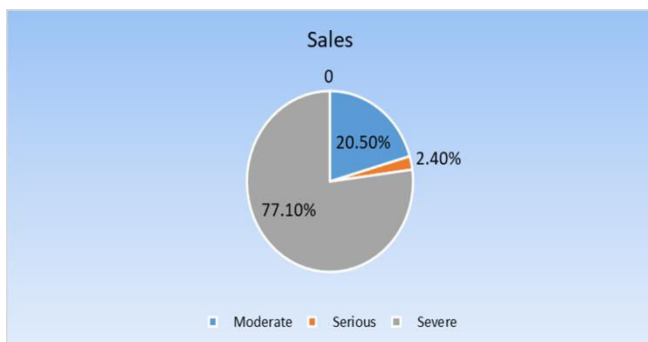
Fig 4: Distribution of respondents by severe of injury (n=102).

Table 5: Distribution of respondents by feel after injury (n=102)

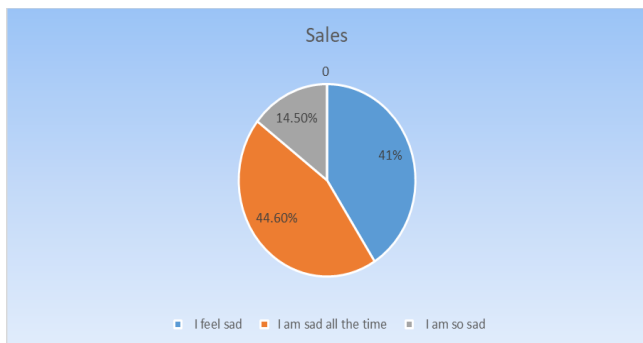| Valid	Frequency	Percent
I feel sad	34	41.0
I am sad all the time	37	44.6
I am so sad	12	14.5
Total	83	100
Missing system	19	
Total	102	100

Fig 5: Distribution of respondents by feel after injury (n=102).

It found from the **Table 5** that he/she feel sad 41.0%, he/she is sad all the time 44.0%, he/she so sad 14.5% depression on musculoskeletal fracture (**Fig 5**).

Table 6: Distribution of respondents by depression (n=102)

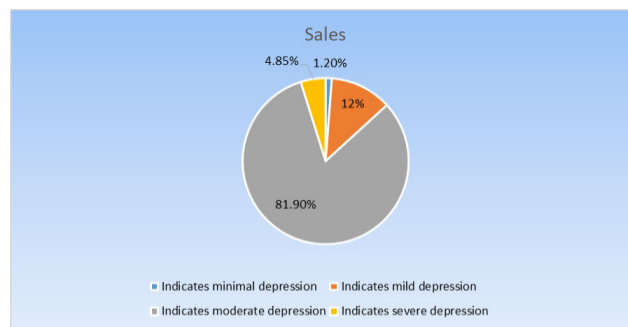| Valid	Frequency	Percent
Indicates minimal depression	1	1.2
Indicates mild depression	10	12
Indicates moderate depression	68	81.9
Indicates severe depression	4	4.8
Total	83	100
Missing system	19	
Total	102	100

Fig 6: Distribution of respondents by depression (n=102).

I found from the table 6 that from Indicates minimal depression 1.2%, Indicates mild depression 12%, Indicates moderate depression 81.9%, Indicates severe depression 4.8% depression on musculoskeletal fracture (**Fig 6**).

Table 7: Distribution of respondents by feel guilty (n=102)

Valid	Frequency	Percent
Strongly agree	8	9.6
Agree	75	90.4
Total	83	100
Missing system	19	
Total	102	100

Fig 7: Distribution of respondents by feel guilty (n=102).

It is found from the **Table 7** reveals that he/she feel guilty strongly agree 9.6%, agree 90.0% depression on musculoskeletal fracture (**Fig 7**).

Table 8: Distribution of respondents by depressed mood (n=102)

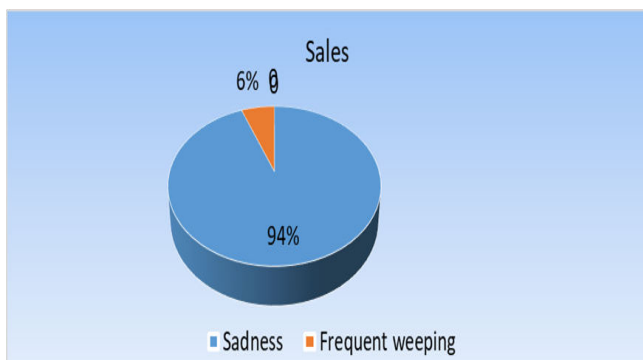| Valid	Frequency	Percent
Sadness	78	94.0
Frequent weeping	5	6
Total	83	100
Missing system	19	
Total	102	100

Fig 8: Distribution of respondents by depressed mood (n=102).

It is found from the **Table 8** reveals that the mean depressed mood of the respondent's sadness 94.0%, frequent weeping 6.0% depression on musculoskeletal fracture (**Fig 8**).

Table 9: Distribution of respondents by agitation (n=102)

Valid	Frequency	Percent
Occasional	6	7.2
Frequent	77	92.8
Total	83	100
Missing system	19	
Total	102	100

Fig 9: Distribution of respondents by agitation (n=102).

Table 10: Distribution of respondents by anxiety (n=102)

Valid	Frequency	Percent
No difficulty	1	1.2
Tension and irritability	74	89.2
Fear	8	9.6
Total	83	100
Missing system	19	
Total	102	100

It is found from the **Table 9** reveals that in agitation occasional 7.2%, frequent 92.8% depression on musculoskeletal fracture (**Fig 9**).

Fig 10: Distribution of respondents by anxiety (n=102).

It is found from the **Table 10** reveals that the mean anxiety no difficulty 1.2%, tension irritability 89.2%, fear 9.6% depression on musculoskeletal fracture (**Fig 10**).

Table 11: Distribution of respondents by laugh (n=102)

Valid	Frequency	Percent
As much as I always could	83	100
Total	83	100
Missing system	19	
Total	102	100

Fig 11: Distribution of respondents by laugh (n=102).

It is found from the **Table 11** reveals that the mean laugh of the respondents he/she as much always could laugh 100% on musculoskeletal fracture (**Fig 11**).

5. DISCUSSION:

It is found that the respondents belonged to age group 21-30years 15.70%, 31-40years 41%, 41-50 years 33%, 51-60 years 9.6% depression on musculoskeletal

fracture, the occupation of the respondents were unemployed 1.2%, student 3.6%, day labor 6.0%, housewife 2.4%, rickshaw puller 9.6%, service holder 77.1% and neck 1.2%, spine 1.2%, upper extremity 53.0%, and lower extremity 44.6% depression on musculoskeletal fracture the mean depressed mood of the respondent's sadness 94.0%, frequent weeping 6.0% depression on musculoskeletal fracture. The prevalence of depression in our sample was high, with 45% of our cohort screening positively for moderate, moderate-to-severe, or severe depression and 16.7% screening positively for moderate-to-severe or severe depression. These levels are extremely high relative to those in the population at large. The prevalence of depression in the general population ranges from 3.2%.

These high levels of depression are consistent with findings in other studies documenting the prevalence of psychological distress following physical trauma (Wilhelm *et al.*, 2003). The incidence of psychological distress has ranged between 23% and 41% in a variety of studies with widely divergent populations and outcome instruments. In the Lower Extremity Assessment Project (LEAP) population (patients with severe lower-extremity injuries) the incidence of moderate-to-severe depression was 41.8% and the incidence of severe depression was 15.3%. Most depression-screening instruments involve questions that are directly related to physical status and vitality. Trauma patients, who have difficulty with activities of daily living, chronic pain, or continuing narcotic requirements, may confound depression scores by scoring poorly on items related to vitality, energy, or sleep disturbance. Secondarily, there have been criticisms that the BDI overestimates the severity of depressive symptoms in patients with somatic symptoms (Kessler *et al.*, 2003).

The level of perceived depression and disability might also have been influenced by the patient's socio-economic status, medical comorbidity, and health habits; however, such data were not collected. It has been shown that adequate financial and familial support can minimize the impact of injury on perceived physical and emotional disability. The review of the literature offers unsystematised but

extensive empirical support for the concept of acomplex post-traumatic syndrome in survivors of prolonged, repeated victimization. This previously undefined syndrome may coexist with simple PTSD, but extends beyond it. The syndrome is characterized by a pleomorphic symptom picture, enduring personality changes, and high risk for repeated harm, either self-inflicted or at the hands of others. Psychological acceptance (acceptance) and emotional intelligence (EI) are two relatively new individual characteristics that are hypothesised to affect well-being and performance at work. This study compares both of them, in terms of their ability to predict various well-being outcomes (i.e. general mental health, physical well-being, and job satisfaction). In making this comparison, the effects of job control are accounted for; this is a work organisation variable that is consistently associated with occupational health and performance.

Acceptance predicted general mental health and physical well-being but not job satisfaction, and job control was associated with job satisfaction only. Discussion focuses on the theoretical and applied implications of these findings. These include support for the suggestion that not controlling one's thoughts and feelings (as advocated by acceptance) may have greater benefits for mental well-being than attempting consciously to regulate them. To our knowledge, this study is the first to explore the relative abilities of acceptance and EI to predict well-being outcomes (general mental health, physical well-being and job satisfaction). These individual difference constructs are both fairly new to the field of occupational health psychology and may prove of equal, if not greater, importance than longer established constructs, such as A behaviour pattern, locus of control and negative affectivity.

The study was conducted National Institute of Traumatology and Orthopedic Rehabilitation (NITOR), Dhaka. Psychological therapy is very important in musculoskeletal fracture patient for mental support.102 participate in this study.It is found that the occupation of the respondents were unemployed 1.2% , student 3.6% , day labor 6.0% , housewife 2.4%, rickshaw puller 9.6%, service holder 77.1%.

It is found from the from neck 1.2%, spine 1.2%, upper extremity 53.0%, and lower extremity 44.6% depression on musculoskeletal fracture. Indicates minimal depression 1.2%, indicates mild depression 12%, indicates moderate depression 81.9%, indicates severe depression 4.8% depression on musculoskeletal fracture. It found that he/she feel sad 41.0%, he/she is sad all the time 44.0%, he/she so sad 14.5% depression on musculoskeletal fracture. Anxiety no difficulty 1.2%, tension irritability 89.2%, fear 9.6% depression on musculoskeletal fracture. Study concludes that the prevalence of clinically relevant depression approached 45% in a diverse cohort of orthopedic trauma patients. Global disability is strongly correlated with depression. The presence of an open and close fracture may also increase the risk of depression.

6. CONCLUSION AND RECOMMENDATIONS:

Study concludes that the prevalence of clinically relevant depression approached 45% in a diverse cohort of orthopedic trauma patients. Global disability is strongly correlated with depression. The presence of an open and close fracture may also increase the risk of depression. Based on the study findings, the following recommendations are depression among musculoskeletal fracture patients in a tertiary referral hospital in Bangladesh.

1. This study is a short term study, it is therefore necessary to do a long term study to make the result more valid.
2. Sample studied was small so larger population is recommended.
3. No standard protocol of assessment was used for this study.
4. In future other psychotherapy technique should be considered.
5. Long term of psychotherapy and trauma center modification has to be analyzed in future.
6. In future needed a large sample.

7. ACKNOWLEDGEMENT:

8. CONFLICTS OF INTEREST:

The author's declared there are no conflicts of interest to publish the present work.

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