# MUSCULO-SKELETAL PAINS, PRESENTED AS A SYMPTOM IN PSYCHIATRIC DISORDERS

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#### **ABSTRACT**

# **Background:**

Pain is a universal experience that serves the vital function of triggering avoidance. Pain and psychiatric disorders have a close relationship but the fact of the matter is that till date in Pakistan the extent of the pain related to musculoskeletal system presenting as a feature into various psychiatric disorders has not been established as yet and above all this kind of presentation is not uncommon.

# Objective:

To identify the frequency of pain presentation, originating from musculoskeletal system in various psychiatric disorders.

# Method:

The study duration was one month, It was an observational prospective study done in out patient department Sindh Govt Lyari general hospital. The patients who has presented with pain having origin from musculoskeletal system irrespective of age and sex was included in study. All the patients having physical illness as co-morbidity were excluded. ICD-10 was used as diagnostic criteria. Statistical analysis was done on SPSS.

#### Result:

135 patients out of total no. of 504 patients presented with pain originating from musculoskeletal system suggesting that the incidence is high. The pain site along with variation of age and

sex were interesting and could guide us to set management strategies to help these patients at rapid rate and henceforth reduce their sufferings which by all means are quite intense and to some extent resistant to treat.

#### Conclusion:

Further long term studies are needed to examine the presentation of pain in psychiatric disorders, to develop better insight in dynamics of pain, its perception and its response to treatment. This in turn will establish rapid and smooth recovery to this segment of patients.

**Key Words:** Co-morbidity, Musculoskeletal Pain, Psychiatric disorder

# INTRODUCTION

Pain is a Universal experience that serves the vital function of triggering avoidance, even the primitive amoeba take avoiding action in the face of adverse events approaching the organism. Pain and Psychiatric disorder has a close relationship, it could be primary and leading to secondary co-morbid states with psychiatric disorders or it could be secondary to psychiatric disorders<sup>1</sup>. No matter what is the nomenclature of pain, the perception of pain and the impairment caused by the pain, it inflicts heavily on suffering individuals. Pain presented as a feature in psychiatric disorders makes the probability of recognition of the psychiatric disorders more difficult, especially by the Doctors of other disciplines, which gets even more difficult with increasing levels of somatization<sup>2,3,4,5</sup>.

Pain is a Major risk factor for the onset of Psychiatric disorders due to continued distress

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which it inflicts on the psyche of an individual, leading to exhaustion and henceforth the emeregence of Psychiatric Disorders. There is evidence to suggest that Psychiatric disorders could be a risk factor for the onset of chronic pain due to altered perception of pain which gets affected due to Psychiatric Disorders. It is also believed that presence of pain can effect the normal functioning of an individual, disturb his quality of life and can effect patients economic state<sup>6</sup>. Henceforth it gets important to examine and evaluate the extent of pain presentation as a feature in various psychiatric disorders in local scenario at the day to day practice.

The aim of the present study was designed to identify the frequency of pain presentation originating from musculoskeletal system in various psychiatric disorders.

#### **METHOD**

This is an observational study done prospectively to assess the magnitude and break up of pain as one of the presenting features in various psychiatric disorders.

#### Procedure:

The duration of study was one month. Every patient who was attending psychiatric out patient department during the study period either as newly registered patient, old patient attending follow up clinic or patient attending emergency department for psychiatric help, were included in this study and the record was maintained in a central register developed for the purpose of the study.

Out of all the patients registered during the study period, only those patients were included in the study, who presented with pain as a feature in their illness, The detailed history along with present state examination was also carried out of all those patients who presented with pain as a feature in their illness.

Through Physical examination along with relevant laboratory tests advised by the liaison sur-

geon or Physician were done to exclude any physical Co-morbidity.

The final diagnosis was made keeping in view the detailed history, mental state examination, relevant labs and appropriate physical examination in a joint discussion by a panel of Psychiatrists, Physician and Surgeon making sure that patient is attending the meeting by himself or herself.

The International classification of Diseases-10 (ICD-10) was used as diagnostic criteria.

#### **Inclusion Criteria:**

All those patients who were attending the out patient and reffered from emergency department of a tertiary care hospital during Oct 2006.

# **Exclusion Criteria:**

All those patients who were having presenting features of pain but do have a concomitant Co-morbid physical disorder.

# STATISTICAL ANALYSIS

The statistical analysis was done by using SPSS-13th version. Categorical variables such as gender, diagnostic break-up, type of pain were presented in frequencies and percentages.

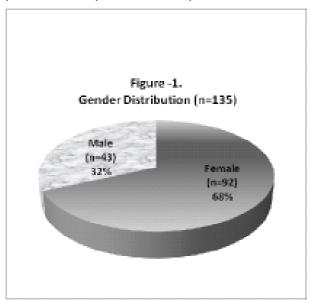
Chi-square test was used to determine the association between different type of pains and gender in different age groups. P<0.05 was considered as statistically significant.

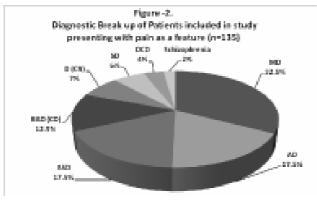
#### **RESULTS**

135 patients had the sex distribution of 92 females(68.1) and 43 (31.9%) males out of total number of 504 patients included in the study having female and male ratio of 2.1:1.

In terms of breakup of pain at various areas of body, Headache presented in 75 patients (55.5%), generalized body ache and other 35 (25.9%) while backache presented in 25 patients (18.5%). Head-

ache was found to be significantly different as compared to other presentation of pain.

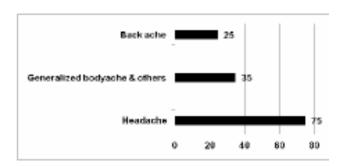




MD = Major Depression, AD = Anxiety Disorder, ASD = Acute Stress Disorder, BAD (CD) = Bipolar Affective Disorder (Currently Depressed), D (CR) = Dissociative (Conversion Reaction), SD = Somatization Disorder, OCD = Obsessive Compulsive Disorder

The Diagnostic break up of patients included in study presenting with pain as feature out of 135 patients, Major Depression was the most frequent one 44 (32.5%) followed by acute stress disorder 24 (17.5%) and anxiety disorders 24 (17.5%). Bipolar affective disorder currently depressed was 17 (12.5%).

TABLE -1.
PRESENTATION OF BREAKUP OF PAIN.
(N=135)



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TABLE -2:

ASSOCIATION BETWEEN TYPE OF PAIN &
GENDER IN DIFFERENT AGE GROUPS (N=135)

Type of Pain	Age Groups	Female (n=92)	Male (n=43)	P-value*
	< 18 years	11	4	0.639
	19 - 40 years	25	12	0.934
	41 & above			
Headache	years	17	6	0.523
	< 18 years	2	2	0.448
	19 - 40 years	15	5	0.467
Generalized Bodyache	41 & above			
& Others	years	7	4	0.736
	< 18 years	1	0	0.511
	19 - 40 years	8	6	0.364
	41 & above			
Backache	years	6	4	0.573

\*Chi-square test was used

In terms of distribution of pain presentation in various age groups among all the females and males included in study exhibited headache as the most frequently occurring presentation in both sexes and all age group. In both sexes the age of patients was independent with respect to pain.

#### DISCUSSION

Based on above data and many other reports from literature like, Ohayon and Schwartzberg<sup>7</sup> and Dersh J et all<sup>8</sup>,It is quite evident that there is an association between pain and psychiatric disorders especially, Major Depression, Acute stress reaction and Anxiety disorders. Regarding Depression it has been suggested by stahl<sup>1</sup> that painful symptoms might be an integral part of depression.

The difference seen in this study is that other psychiatric disorders as given in (Figure: 2) were also having pain as symptoms originating form musculoskeletal symptoms.

Reviewing all the studies quoted above, most were having pain as presentation in Depressive disorders, to the extent that stahl¹ has suggested Major Depression should be considered as a disorder characterized by a triad of Psychological, somatic and physical symptoms.

This pushes us to examine this fact that if pain is an integral part of Depression as evident from various studies and in this study too, along with Acute stress reaction and Anxiety Disorders, than why this has not yet been taken into account in the current description of Major Depression, Acute Stress reaction and Anxiety disorders as diagnostic criteria in DSM IV and ICD-10.

Like wise there is lack of items covering these pain symptoms in the rating scales available for assessing Depressive illness, Acute Stress reaction or Anxiety disorders. This stretches on the assumption that these symptoms are different from those of "core symptoms" of the above mentioned disorder.

It is also indicated that depression and anxiety are the major risk factors for onset of chronic pain. In addition there is also convincing evidence that pain also act as a major risk factor for the onset of Depression and anxiety patterns.M. Shahid, Riffat and Rehman<sup>9</sup>, Muhammad saleem Akthar, Saad Bashir Malik and Masha Magbool Ahmed<sup>10</sup>, has ex-

amined the fact and collectively all the studies have proven this fact.

As we compare this fact to the present study, it is clearly evident that pain has presented as a feature in (n=135) patients out of (n=504) patients registered for the study in the given time bearing various Psychiatric disorders as evident in (Figure:1). So, it can be postulated that pain has a vice a versa effect, and Clinician should take a note of it, if they come across the painful symptoms emerging from any source, no matter, which ever the discipline they belong too.

Another fact which emerged from this study was the headache which out numbered all other presentations of pain in all the age groups in both genders.

The overall female patients presented with pain as a feature in this study were 68.1% while in males it was 31.8% with male female ratio of 2.1:1 Which is remarkable and is quite high. The problem of pain syndromes remains just that, a problem, which is looked after in every discipline by a concerned specialist. It is a fact that the boundaries between all the painful conditions remains unclear and all overlap with each other<sup>11</sup>.

The possible explanation is that the sensations associated with the routine functioning of the body, such as digestion and feedback from the musculoskeletal system throughout, are relayed back to the brain via the spinal cord. These inputs are normally suppressed from consciousness by the descending serotonergic and noradrenergic pathways. In case if there is dysfunction of these descending serotonergic and nor adrenergic pathways, routine sensory input that was not normally felt becomes interpreted as disagreeable or even as a painful physical symptoms<sup>12</sup>.

In a study by David Mumford<sup>13</sup>, this issue has been linked by his finding that patients from India and Pakistan frequently communicate their emotional distress in terms of somatic sensations.

# RECOMMENDATION

Keeping in view all the above facts, it is recommended that, all the Health Professionals should take notice of all the painful symptoms and look for it's origin, if they can find any Psychiatric disorder or a comorbid state as its cause, if they can not find any cause, then they should remain alert as a pain ful state can lead to a Psychiatric co-morbid state at any point during the course of illness, and that will be the point where the treatment will need a change to provide relief to the patients. It is important as, if the Pain is there the clinician will fail to provide relief to the sufferings of the patients.

# **CONCLUSIONS**

Given with all this, the area of painful physical symptoms is unfortunately still not very well understood and clearly merits much greater attention. Linking the present and all other studies the need for much greater attention is further strengthened with the fact that the incidence of pain originating from musculoskeletal system in various Psychiatric disorders especially in Major depression is high. Furthermore it is a proven fact that the presence of pain will affect the normal functioning of the individual, reduce the quality of life and hence forth increased health care utilization.

In depressed patients, pain is associated with more pain complaints and greater impairment than in pain free patients. Keeping in view the problems with patients suffering with Major depression it is suggested that:

- \* Chronic pain should be seen as a harbinger of Depression and not explanatory factor, and strategies should be worked upon to find appropriate management plan to treat these Depressive Disorders.
- \* Moreover primary care physician should be involved and given with the information about the diagnosis of these kinds of patient and their management plan.

- \* The variety of musculo skeletal pain looked for in this paper is different from the fibromyalgias which are described as chronic wide spread pain, hypersensitivity to pain upon palpitation, and a range of functional Disorders.<sup>15,16,17,18,19</sup>.
- \* Chronic pain should be seen as cardinal symptom of Depression whose elimination must be seen as an essential goal to be achieved for the full remission of Depression. At the same time management plans regarding Anxiety disorders and Acute reactions along with other psychiatric disorder should also be discussed to come up with reviewed management plans. This inturn will help us in structuring an updated reviewed and effective action plan to reduce the sufferings of ailing community.

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