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Prevalence of depression among the under trial prisoners (UTPS) of Odisha

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Depression is a state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings and physical well-being. Depression hurts and it can be debilitating. This present study was designed to determine the proportion of depression among the Under Trial Prisoners (UTPs) of Puri District Jail, to find out the socio-demographic co-relates, to study different psychosocial factors related to depression, to find out the prevalence of depression with respect to their different educational status, to find out the prevalence of depression with respect to their different criminal records, to assess the clinical presentation, to find out the outcome of the illness, and to compare the different diagnostic entity of ICD-10 to above variables. Out of 665 samples, hundred consecutive cases of depression within the age group of 20 to 60 years were selected. Frequencies of symptoms were determined using the items in Hamilton Depression Rating Scale for depression and other symptoms if any. The findings so obtained were tabulated, statistically analyzed by using ANOVA and critically interpreted. It was found that among 100 UTPs, the percentage of men is higher than female. The UTPs belong to the age level of 18 to 30 years are more prone to depression as their future aspirations are more in them. The results of this study suggest that depression in male UTPs is more prevalent than female UTPs. It was also found that the inmate depressed population is more frequent among the persons educated up to intermediate level. The prevalence of depression is also found to be higher in middle socio economic status group. Again the UTPs staying more than 6 months and charged with theft cases are more prone to depression than their counterparts. According to the learning theory explanations, depressed UTPs receive fewer rewards and more punishment then the UTPs who don't feel depressed. Thus, we may conclude on this statement that, few things make a depressed prisoner happy and more things make depressed prisoners unhappy. This implies that depression may be a self-sustaining state.

Keywords: depression, thought, behaviour, feeling, diagnostic entity, learning theory, self sustaining state

Feeling sad, or what we may call "depressed", happens to all of us. The sensation usually passes after a while. However, a person with a depressive disorder-clinical depression - finds that his state interferes with his daily life. Depression is different from regular sadness because it lasts longer and affects more than just a person's mood. Interestingly, people don't always recognize when they have depression. While it is understandable that anybody in a prison would be generally depressed, it is important to understand depression from the perspective of a mental illness. Depression is a

state of low mood and aversion to activity that can affect a person's thoughts, behavior, feelings and physical well-being. Depression hurts and it can be debilitating. Activities one used to enjoy no longer seem worth doing. Simple things such as hygiene, proper eating or leaving the house may fall by the wayside. Motivation is lacking to do anything meaningful and is replaced by sadness and the desire to stay in bed and sleep away the day. These are just a few of the ways that this illness can transform someone's life. In adults, other depression symptoms may include the following:

- Feeling of intense sadness or feeling blue
- Insomnia or excessive sleeping
- Loss of pleasure or interest in activities one used to enjoy including hobbies and being intimate with their partner
- Feelings of worthlessness, hopelessness or self loathing
- Feelings of helplessness or pessimistic feelings and guilt
- Loss or increase of appetite, usually accompanied by noticeable weight loss or weight gain
- Feelings of anxiousness and restlessness
- Irritability and increased anger, usually a short temper where everything seems to “get on one's nerves”, general increase in overall frustration
- Decreased energy level and overall fatigue
- Increase in the number of aches and pains in the body, including back aches, headaches and stomach pains
- Inability to think clearly, slowed thinking, memory loss
- Easily distracted with an inability to concentrate clearly
- Crying for no apparent reason
- Isolation or withdrawal from family and friends
- Thoughts of suicide or death
- Risky behavior such as substance abuse, gambling addiction or other self-destructive activities

Hippocrates referred to depression as melancholia, which literally means black bile. Black bile, along with blood, phlegm, and

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yellow bile were the four humors (fluids) that described the basic medical physiology theory of that time. Depressed mood is not necessarily a psychiatric disorder. It is a normal reaction to certain life events, a symptom of some medical conditions, and a side effect of some medical treatments.

There are several forms of depression (depressive disorders). Major depressive disorder and dysthymic disorder are the most common.

- Major depressive disorder (major depression) : Major depressive disorder is also known as major depression. The patient suffers from a combination of symptoms that undermine his ability to sleep, study, work, eat, and enjoy activities he used to find pleasurable.
- Dysthymic disorder (dysthymia): Dysthymic disorder is also known as dysthymia, or mild chronic depression.
- Psychotic depression: When severe depressive illness includes hallucinations, delusions, and/or withdrawing from reality, the patient may be diagnosed with psychotic depression.
- Postpartum depression (postnatal depression): Postpartum depression is also known as postnatal depression or PND, which a mother may feel for a very short period after giving birth.
- SAD (seasonal affective disorder) : A person who develops a depressive illness during the winter months might have SAD. The symptoms go away during spring and/or summer.
- Bipolar disorder (manic-depressive illness) : Bipolar disorder is also known as manic-depressive illness. A patient with bipolar disorder experiences moments of extreme highs and extreme lows.

Depression is one of the most common and serious of the mood disorders and it is the most important and under diagnosed mental health issues among the Under Trial Prisoners (UTP) living inside jail. It can be potentially life threatening.

The UTPs of jail are those who face their trial or judicial court until they are finally convicted or acquitted of the alleged charge or charges against them.

The extent of depression of the UTPs is of varying nature, when the causal offender think bitterly of their unfortunate confinement, the habitual offender don't feel measurable to the extent to which the causal offender fails.

There are external and internal factors that aggravate depression in UTPs. The external factors are more to do with the environment in prisons such as overcrowding, dirty and unhygienic living conditions, poor quality of food, and inadequate health care, physical or verbal aggression by inmates, unusual jail routine and living in an association ward with strangers, lack of privacy and time for quiet relaxation and reflection. The improper judicial administration and inadequate custodial measures, non-availability of magistrates, non-appearance of witness both from defense and prosecution side, also makes the UTPs hopeless and disheartened. Internal factors that play a contributory role are mostly emotional in nature, where prisoners may have feelings of guilt or shame about the offences they have committed, experience stigma of being been imprisoned, worry about the impact of their behavior on other people, including their families and friends, coupled with anxiety about how much of their former lives will remain intact after release. The cumulative effect of all these factors, left unchecked, tends to worsen their mental health and increases the likelihood of damage to the wellbeing of prisoners and staff (Blaauw & Van Marle, 2007).

In a study by Assadi et al. (2006) in Iran, 351 inmates from one of the largest prisons in the country were interviewed using stratified random sampling. Depressive disorders were highly co morbid along with anxiety disorders (26%), substance use disorders (83%) and psychopathy(23%). Depressive disorders were more prevalent in the youngest age group. When compared to the Iranian general population, rates of psychiatric morbidity were around three times higher.

In a retrospective cohort study by Baillargeon et al. (2009), medical case records of 2, 34,041 prison inmates were reviewed. Diagnosis was made according to the DSM-IV criteria. Major depressive disorder was present in 4.2% of the study population. It was more prevalent among females (10.3%) than males (3.5%).

Brooke et al (1996) conducted a study to determine prevalence of mental disorder among male unconvicted prisoners and to assess the treatment needs of this population. They found that mental disorder was common among male unconvicted prisoners. Psychosis was present at four or five times the level found in the general population. Extrapolation of the results suggests that remand population as a whole probably contains about 680 men who need transfer to hospital for psychiatric treatment, including about 380 prisoners with serious mental illness.

A combination of institutional factors, individual vulnerabilities and poor coping skills has also been consistently found to increase suicide risk among the under trial prisoners after a prolonged period of depression. Suicide remains a leading cause of death in prisons across the globe. Anderson (2004), in his seminal paper on psychiatric morbidity in prison populations, reviewed 11 studies across the globe on prison suicides. He concludes that there is a massive overrepresentation of suicides in prisons. The very first phase of imprisonment, early phase of long-term sentences, history of psychiatric illness, history of suicidal behaviour, intoxication, isolation or solitary confinement have been identified as risk factors for prison suicides.

A recent study conducted by Naidoo et al. (2012), to determine the prevalence of serious mental disorders in a prison population in Durban, South Africa, one of the largest prisons in the Southern hemisphere. They found that there is a high prevalence of mental disorders among prisoners in a prison population in Durban, South Africa.

Petersilia (2003) has estimated that one in six prison inmates has a mental illness. Depression is the most prominent among them.

Eyestone and Howell (1994) interviewed 102 prisoners, using the Beck Depression Inventory and the Hamilton Rating scale. Major Depressive Disorder was found in 25.5% of the prisoners.

Objectives of the study

The study was designed :

- To determine the proportion of depression among the Under Trial Prisoners (UTPs) of Puri District Jail.
- To find out the socio-demographic co-relates.
- To study different psychosocial factors related to depression.
- To find out the prevalence of depression with respect to their different educational status.
- To find out the prevalence of depression with respect to their different criminal records.
- To assess the clinical presentation.
- To find out the outcome of the illness.
- To compare the different diagnostic entity of ICD-10 to above variables.

Method

Participants

The participants of this study comprised of 100 Under Trial Prisoners of 20 to 60 age groups collected from different prisons of Odisha. Out of them 77 prisoners are male and 23 prisoners are female.

Instruments

Hamilton Depression Rating Scale: The Hamilton Depression Rating Scale (HDRS) or abbreviated to HAM-D, is a multiple choice questionnaire used to rate the severity of a patient's major depression. Max Hamilton originally published the scale in 1960 and reviewed and evaluated it in 1966, 1967, 1969, and 1980. It is presently one of the most commonly used scales for rating depression in medical research.

Procedure

This study was a longitudinal. Samples were collected from different prison centers of Odisha. The details of UTPs were availed from the Jail office registers. The number of UTPs changes every day and there were 665 UTPs availed during the period of investigation. Finally, among 665, 122 UTPs were been screened out as diagnosed by consultants using ICD-10 diagnostic guide lines and the inclusion criteria. The UTPs having pervious medical illness and substance abuse are not included. Also the UTPs having the features of organic brain syndrome, presence of prominent schizophrenic symptoms and association of any other physical illness are excluded. Again, 22 prisoners did not co-operate. Hundred consecutive cases of depression within the age group of 20 to 60 years from the rest were selected. Frequencies of symptoms were determined using the items in Hamilton Depression Rating Scale for depression and other symptoms if any. The Odiya version of Hamilton Depression Rating Scale was distributed among the selected 100 UTPs. Frequencies of age levels, sex types, and levels of education, different types of crimes, and types of psycho-social factors were also noted. The UTPs' responses to the questions in each task were recorded in the response sheet. The findings so obtained were tabulated, statistically analyzed by using ANOVA and critically interpreted.

Results and Discussion

The result and discussion of the present study are as following.

Table1: Frequency Distribution of Depressive UTPs As Per The Diagnostic Sub-Categories of ICD-10.

S N	Diagnostic sub-categories		No. of Depressive UTPs(n=100)	
			No.	%
1	BAD, Current episode mild or moderate Depression.	With somatic symptoms	6	6%
		Without somatic symptoms	5	5%
2	BAD, Current episode severe depression	With psychotic symptoms	1	1%
		without psychotic symptoms.	4	4%
3	Mild Depressive Episode	With somatic symptoms	13	13%
		Without somatic symptoms	9	9%
4	Moderate Depressive Episode	With somatic symptoms	15	15%
		Without somatic symptoms	17	17%
5	Severe Depressive Episode	With somatic symptoms	10	10%
		Without somatic symptoms	8	8%
6	Other Depressive Episodes		0	
7	Depressive Episodes Unspecified		0	
8	Recurrent Depressive Disorder, Current Episode Mild	With somatic symptoms	1	1%
		Without somatic symptoms	3	3%
9	Recurrent Depressive Disorder, Current Episode Moderate	With somatic symptoms	0	
		Without somatic symptoms	0	
10	Recurrent Depressive Disorder, Current Episode Severe	With somatic symptoms	1	1%
		Without somatic symptoms	3	3%
11	Recurrent Depressive Disorder, currently in remission		0	
12	Other recurrent depressive disorders		01	
13	Recurrent Depressive Disorder, unspecified			0
14	Persistent mood Disorder(Dysthymia)		4	4%
15	Other Persistent Mood Disorders		0	
16	Persistent Mood Disorder, unspecified		0	
17	Recurrent Brief Depressive Disorder/other Recurrent Mood Disorder		0	

Analysis of Variance performed on the Hamilton Depression Rating Scale scores of UTPs revealed that there is a highly significant differences found among the four age groups on this measure {F(6,88)=128.5,p<.01}. It indicate that the degree and severity of depression is higher among the UTPs belong to the age level of 18 to 30 years old in comparison with other age groups as such 51 to onwards, 31 to 40 and 41 to 50 years respectively. Similarly, analysis of variance performed on the HDRS scores of male and female UTPs revealed that there is a highly significant differences found between male and female subjects on this measure {F(2,94)=78.6, p<.01}. The result shows that the severity of depression is more in male UTPs than the female participants. With respect to socio economic status of UTPs, the ANOVA performed on the HDRS scores of UTPs revealed that there a significant differences found among low, middle and high economic status on this measure {F(4,91)= 3.5,p<.05}. It shows that UTPs belong to middle SES have higher

degree of depression in comparison with the UTPs belong to low and high SES respectively. With respect to educational status, analysis of variance performed on the HDRS scores of UTPs revealed that there is no such significant differences found among them on this measure {F(4,91)=2.45,p>.05}.

With respect to their duration of staying, analysis of variance performed on the HDRS scores revealed that there is highly significant differences found between the two groups on this measure {F(2,94)=118.5,p<.01}. The result shows that the UTPs staying more than six months are diagnosed as having more depression than their counter groups. Again ANOVA performed on the HDRS scores of UTPs with respect to their nature of crimes revealed that they are not significantly different on this measure {F(8,85)=2.01,P>.05}.

Table 2: Frequency Distribution of Demographic Variables

Variables	Sub-variables	Distribution in	ICD-10 sub-categories		
		Total Sample(100)	BAD Depression (N=16)	Mild/Moderate/Severe Depression (n=72)	Other Depression (n=12)
Age	18-30	31	6	23	2
	31-40	26	3	17	6
	41-50	15	2	10	3
	51-onwards	28	5	22	1
Sex	Male	77	9	58	10
	Female	23	7	14	2
SES	Low	38	5	29	4
	Middle	51	9	36	6
	High	11	2	7	2
Education	Below Matric	31	6	21	4
	Intermediate	47	7	35	5
	Graduate and above	22	3	16	3
Duration of stay	<6 months	34	5	26	3
	>6 months	66	11	46	9
Nature of Crime	Murder	32	4	24	4
	Theft	40	6	31	3
	Rape	9	2	5	2
	Pick Pocket	14	3	8	3
	Eve Teasing	5	1	4	0

From the above study, it was found that among 665 UTPs, 100 UTPs are diagnosed as suffering depression. Among them the percentage as well as of men are higher than female. The UTPs belong to the age level of 18 to 30 years are more prone to depression as their future aspirations are more. The hopelessness, uncertain future and helplessness at this age leading to frustration are the vital causes of depression. The results of our study suggest that depression in male UTPs is more prevalent than female UTPs. Since depression is such a common risk factor for suicide, the higher rate of depression in male inmates may help explain why men are more than 4 times as likely as women to die by suicide. It was also found that the inmate depressed population is more frequent among the intermediate persons. The prevalence of depression is also found to be higher in middle socio economic status group. Again the UTPs staying more than 6 months and charged with theft cases are more prone to depression than their counterparts. According to the learning theory explanations, depressed UTPs receive fewer rewards and more punishment then the UTPs who don't feel depressed. Thus, we may conclude on this statement that, few things make a depressed prisoner happy and more things make depressed prisoners unhappy. This implies that depression may be a self-sustaining state.

As part of treatment and reforms, it must be proposed to organize psychotherapeutic counseling inside jail for the UTPs to make them overcome depression of having run around the courts go through an arduous trial. Again Cognitive Behavior Therapy (CBT) and Interpersonal Psychotherapy are most important. Two types of biofeedback should be applicable on them, i.e., EEG biofeedback and HEG biofeedback. Also an "ashram" atmosphere should be created inside each prison, to enhance "satwik" thought among prisoners and a job chart should be prepared to keep the depressed prisoners engage in useful activities throughout day. To provide the UTPs, a safe life structure that inhibits self-destructive feelings and impulses, the emphasis on "vipassana" is needed. With vipassana, the UTPs can learn to re-establish contact with their unconscious. Last but not the least, the Prison Welfare Board should put more emphasis on the psychiatric complains, the prisoners are facing each day and the old systems should be reformed from the very grass root level.

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