



Somatization, Depression, and Anxiety among Prisoners: A Psychological Study of Convicted and Undertrial Prisoners

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Abstract

Mental disorders are a public health concern all over the globe, and an estimated around 450 million people worldwide were affected, estimated more prevalent among prisoners (Solomon et al., 2019). The study examines the level of somatization, depression, and anxiety among Prisoners by comparing 80 Convicted and 80 Under-trial Prisoners of the Aizawl Central Jail, age ranging between 18 to 50 years of age, were selected by random sampling procedure. The study used the somatization, depression, and anxiety of the subscale of the Symptom Questionnaire (SCL-90-R; Derogatis, 1976) for the collection of data. Results revealed that the under-trial prisoners showed a higher score on somatization, depression, and anxiety at significant levels than convicted; and a significant positive relationship between the three psychopathological symptoms. The results suggested the need for psychological care for the prisoners especially those who are undertrial.

Keywords: Prisoner, Depression, Somatization, Anxiety, Adult, Convicted, Under-trial.

Introduction

Mental disorders are a public health concern all over the globe, and an estimated around 450 million people worldwide were affected, estimated more prevalent among prisoners (Solomon et al., 2019). Prisoners mostly have to stay in prison for a long period and be separated from their loved ones and not able to perform in the communities including religious practices which can help to cope with their problems in their extremely miserable living conditions (Kumar & Daria, 2013). "Prisoner" is a legal term for a person prosecuted for a felony but not applicable to a person prosecuted for a misdemeanour (Phillips, 1960). Prisoners could be broadly divided into two 'undertrial' and 'convicted' prisoners.

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An '*undertrial prisoner*' is a person who has been arrested for an alleged offence not followed by a grant of bail, committed to judicial custody and against whom a criminal trial has been initiated by a competent authority (www.lawyersclubindia.com, 2023). They are presumed innocent until proven guilty and have certain rights and protections under the law (Dhanuka, 2010). As such, though they are prisoners but have some rights under the Prisoners Act (1900, 1955) and Jail Act (1894) including the right to a fair and speedy trial, without unnecessary delays or adjournments, the right to legal aid and representation by a lawyer of their choice, or a free legal counsel if they cannot afford a lawyer, the right to be treated humanely with dignity, and not subjected to torture or ill-treatment, or discrimination (www.indiacode.nic.in).

A convicted prisoner is "a person found guilty of a crime and sentenced by a court" or "a person serving a sentence in prison" (Webster's New World Dictionary of the American Language. (1978, p-311), are often also known as "prisoners" or "inmates" (p-292).

The social environment in prison constituted prison gangs, no systematic good role models to be followed, and many have made beaten, raped, brutalized or lived in fear of overcrowding. As per data of 2006 by the National Human Rights Commission (2016), many Jails have limited sunlight and fresh air, bad odours, no proper health services, no good food, and so on (Dhanuka, 2010). As such, prisoners who experienced lengthy isolation with little mental stimulation experienced poor mental health such as anger, frustration, and anxiety (Nurse et al, 2003), and longer isolation was usually given to male prisoners with psychotic problems (Singleton et al., 2013) than other inmates.

Mentally ill persons are more frequently involved in crime due to impaired judgment, lack of impulse control, suspiciousness, loss of inhibitions, paranoid ideas, inability to trust others, delusions, and hallucinations and most of them are less smart, and easily caught by police than normal person (Fazel & Danesh, 2002). A high prevalence of psychiatric disorders among prisoners (Gunn, 2000), and prisons are full of people with serious mental problems with a rapidly increasing population all over the world (Birmingham, 2004). The literature on prisoners is very limited, most of the studies were done in Western countries, and only very minimal done in the Indian context (Bhojak et al., 1998).

It is also learnt that a high number of mental illness including undetected and untreated mental illnesses among prisoners (Andersen, 2004), who have serious mental disorders not transferred to a psychiatric hospital even is done but with a long delay (Bowden, 1978), and often rejected on the grounds of being too disturbed or dangerous or being criminals and unsuitable to stay together with non-criminals (Robertson et al., 1994); which implies a need for professional staff such as psychologists and psychiatric input (Coid, 1998).

Research findings revealed poor communication between the prison, court, and hospital systems hindering the assessment and management of the mentally disordered offender resulting in delaying medical intervention and also release from custody (Robertson et al.,1994); were medicated by untrained staff which may not train for diagnostic and treatment

of mental illness (Jorm, 2000). Mental disorders are highly stigmatized causing keeping them in secret or private settings to avoid fear of embarrassment or discrimination. In addition to this, records about the prison.

Somatization: Somatization is a tendency to experience psychological distress as bodily and organic symptoms, and seek medical help (Lipowski, 1988), more appearance in poor family functioning and having marital conflict (Aro et al., 1989), and the most complaint symptoms are cardiovascular, gastrointestinal, respiratory, neurological, pain and discomfort of the gross musculature.

Depression: It is a common mental disorder including a depressed mood or loss of pleasure or interest in activities for long periods (who. int/newsroom). The psychiatric disorders more common among prisoners are anxiety, depression, psychoses, personality disorder, substance misuse, and elevation of suicide risk (Baillargeon et al., 2010). Researchers found that rapist prisoners have a significant difference in depression in comparison to murderer prisoners (Sharma et al., 2015); many prisoners were identified as living with depression, anxiety, schizophrenia, and suicidal tendencies (Sinha, 2010).

Anxiety is an intense, excessive, and persistent worry and fear about everyday situations. A stay in prison resulted from generalized anxiety disorder due to their imprisonment (Al-Rousan et al., 2017), the risk of developing anxiety disorders was 2.49 times higher than before imprisonment (Dadi et al., 2016), more common among first-time offenders (Falissard et al., 2006). Prisoners are at high risk of developing anxiety disorders due to (i) social isolation from their family, friends, and community (Math et al., 2011); (ii) poor living conditions, such as overcrowding, lack of hygiene, and inadequate food and water (Dutta et al., 2014); (iii) exposure to violence, abuse, and harassment from other inmates or prison staff; (iv) lack of mental health care and treatment; and (v) stigma and discrimination from society due to their criminal status (Math et al., 2011).

People with depression have multiple medically unexplained symptoms, insomnia and fatigue (Yu & Lee, 2011), and are significantly positively associated with depression (Stapleton & Brunetti, 2013); patients with depression often have somatic symptoms/ somatization (Hagnell & Rorsman, 1978). Other studies reported higher somatization scores resulting in higher depression scores, and 50% of patients with depression reported somatic symptoms (Jones & Hall, 1963).

Studies highlighted the prevalence (Naing et al., 2006) of psychotic and other disorders among prisoners in India prisoners (Singleton et al 2013; Fazel & Danesh, 2004). Research findings revealed that insufficient psychiatric services in mental hospital beds in proportion to the number of prisoners in any given society (Penrose, 1939). It was assumed that a large population of prisoners would suffer from various mental disorders and commit crimes due to their mental illness but not be diagnosed because of the limited availability of mental healthcare services in the prisons (Rabiya & Raghavan, 2018). Mental illness prevalence among prisoners is at an alarming state (Kumar & Daria, 2013) and found at 50.7% among

convicts whereas 48.7% among undertrials and 0.2% among others (Brinded et al., 2001) which portrayed the magnitude of the need of mental health services in prison. The present study was designed to elucidate the prevalence of somatization, depression, and anxiety among prisoners, and to examine any difference between convicted and those under trial on the selected mental illness.

Objectives

Based on the available literature the following objectives were framed for the present study:

- a) To examine the applicability of test scales - Somatization, Depression and Anxiety to the targeted population.
- b) To examine any significant difference between the *Convicted and Under-trial prisoners* on somatization, depression, and anxiety.
- c) To examine any significant relationship between somatization, depression, and anxiety variables.
- d) To study any significant prediction of depression and anxiety on somatization among the samples.

Hypotheses

To meet the objectives of the study, the following hypotheses were framed for the present study:

- a) The somatization, depression and anxiety scales will be applicable to the targeted population under study.
- b) Undertrial prisoners will have a higher somatization, depression and anxiety than convicted prisoners.
- c) Somatization, depression and anxiety variables will have a significant positive relationship.
- d) Depression and anxiety will have a significant prediction on somatization.

Methodology

Sample

The study consists of 160 samples, which encompass 80 convicted and 80 under-trial prisoners who were selected from 1578 inmates (which was constantly changing every day) of the Central Jail, Aizawl, Mizoram based on the random sampling procedures, which were selected separately from the list of the Undertrial and convicted prisoners maintained by the Aizawl Central Jail, age range was between 18-50 years, and other confounding variables were controlled using socio-demographic profiles.

Tools Used

(i) Socio-Demographic Data Sheet a semi-structured Performa: It contains information about socio-demographic variables such as age, sex, religion, education, marital status, residence, occupation, health record, type of offence, date of entry, duration, status of the subjects.

(ii) The symptom questionnaire (SCL-90-R; Derogatis, 1976): it evaluates a broad range of psychological problems and symptoms of psychopathology, has a good internal consistency reliability (0.78 to 0.96), has nine primary symptom dimensions but the present study used three sub-scales (somatization, depression and anxiety).

Design

This study was correlation designed which consisted of 180 prisoners with an equal number of 80 convicted and 80 under-trial prisoners to compare on somatisation, depression and anxiety.

Procedures

The psychological scale was collected from the author, and translated into the Mizo language, The translated and original scale was checked and found its applicability ($r=79$), then, used for data collection. Permission was taken from authorities including Aizawl Central jail, informed consent was taken from participants, the instructions given in the manual of the scale-SCI-90 R was followed along with the APA code of ethics (2002), and administration of the scale was done in individual condition.

Results

Sample Character

The distribution of age groups of the study was 16% belonged below 25 years, 33% to 26-33 years, 24% to 31-35 years, 17% to 36-40 years, and 10% to 41 years and above age. Among the samples, 59% were below class X level of education, 29% had class 12, 12% had BA and 3% had MA level of education. Most of the prisoners were unemployed constituting 49%, 43% belonged to business, 3% to Group - IV, 3.95% to Group B, and .05 % to Group A. It may be interpreted as low education and economic hardship may contribute to the causes of criminal behaviour like earlier research finding that poor living conditions, overcrowding, lack of hygiene, and inadequate food and water contributed to psychological problems among prisoners (Dutta et al., 2014).

Results (Table 1) evinced that skewness values and Kurtosis values were less than 1.0 (+/-) which conveyed that the data had a normality. The result showed high reliability on somatization (.83), depression (.78), and anxiety (.86). Homogeneity was also checked and found highly acceptable on somatization (.36), depression (.34), and anxiety (.31). The overall results showed the applicability of the tests in the targeted population, and also suggested to accept hypothesis no -1.

The result (Table-2) displayed that Undertrial Prisoners scored higher than convicted Prisoners on somatization ($M=18.11$; 10.44 ; $t=23.98$; $p<.01$), Depression ($M=16.17$; 11.85 ; $t=13.21$; $p<.01$) and Anxiety ($M=18.18$; 11.89 ; $t=21.29$; $p<.01$) at significant .01 level which was in the line with earlier research finding that anxiety disorder high prevalence among prisoners (Al-Rousan et al., 2017); and also suggesting to accept the hypothesis no -2.

Table 1: Showing psychometric properties of the scale's reliability, homogeneity, and normality) on Somatization, Depression, and Anxiety variables				
Reliability (Alpha)		.83	.78	.86
Test of Homogeneity of Variances		.36	.34	.31
Independent Variables	Statistics	Dependent Variables		
		Somatization	Depression	Anxiety
Under-trial	Mean	18.11	16.17	18.18
	SD	2.420	2.265	2.110
	Kurtosis	0.96	0.73	-0.98
	Skewness	-0.68	-0.92	0.69
Convicted	Mean	10.44	11.85	11.89
	SD	2.09	2.35	2.15
	Kurtosis	-0.86	0.72	-0.91
	Skewness	00.82	0.85	0.89
Table 2: showing significant difference between the undertrial and convicted prisoners				
Undertrial prisoners		18.11	16.17	18.18
Convicted prisoners		10.44	11.85	11.89
Total samples		14.28	14.01	15.04
t-test		23.98*	13.21*	21.29*
Table 3: Showing significant correlation between the Somatization, Depression, and Anxiety variables.				
**= significant at the 0.01 level (2 tailed)	Dependent Variables	Depression		Anxiety
	Depression	.71**		.73**
	Anxiety			.74**
Table 4: Prediction of Depression and Anxiety on Somatization among Samples				
Predictor	Criterion	R Square	F Change	Durbin-Watson
Depression	Somatization	0.51	204.52	0.48
Anxiety		0.48	1433.16	0.80

The results (Table-3) showed that somatization had a positive correlation with depression ($r=.71^{**}$) and anxiety ($r=.73$), and depression and anxiety also had a positive correlation ($r=.74$). The finding was consistent with earlier findings that anxiety, depression, psychoses, personality disorders, substance misuse, and elevation of suicide risk were common among prisoners (Baillargeon et al., 2010).

The simple regression analysis results (Table-4) showed that Depression predicted somatization at 51 % (F change=204.52; DW=.48; $R^2=.51$; $p < .01$), and Anxiety predicted somatization at 48% (F change=1433.16; DW=.80; $R^2=.48$; $p < .01$). Earlier research findings also found that depression (Rabiya et al., 2018) and Anxiety are positively associated with somatization symptoms (Ionescu et al., 2021) among prisoners.

Limitations

It would have been more informative to include bigger samples with types of crimes, duration of staying in prison, and looking at gender and cultural differences but due to the COVID-19 pandemic it was not possible.

Suggestions

Based on the study it was suggested that the inclusion of a bigger sample size, differences between type of criminals, duration of staying in prison, gender and cultural differences will enhance more information about prisoners' mental health/ or psychopathological symptoms. It would also be very fascinating to study more psychopathological symptoms and other related problems including more independent and dependent variables in the study.

Significance of the Study/ Summary of the Findings

Though the study has some limitations still had a significant contribution to the literature about mental health among prisoners (i) a high prevalence of psychopathological symptoms such as Somatisation, Depression, and Anxiety, (ii) these pathological symptoms were higher in undertrial prisoner than convicted prisoners; (iii) all psychopathological symptoms were positively related; and (iv) depression, and anxiety significantly predicted somatisation among the samples. The study emphasizes the importance of psychological diagnostics for detection of mental illness, types, and combination for framing prevention for further effect and intervention to the policymakers to bring about prisoner mental well-being. The findings of the study can benefit by the prisoners, help them reduce their distress, improve their well-being, and prepare them for their reintegration into society as normal people if policymakers utilize to understand their mental health problems and to work out strategies to help them.

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