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**Original Research Article** 

# Tattoo and Crime: A Cross Sectional Study of Convicted Prison Inmates from Central India

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#### Abstract

**Background:** The meaning and significance of tattoos varies from person to person across different cultures. Tattoos have been associated with both positive and negative attributes. The importance of studying tattooed individuals and its relation to the crime is particularly more important among prisoners.

**Objectives:** The primary objective of this study was to estimate the prevalence of tattoo, their number, types and location on body among convicted prison inmates from Khandwa district jail. The secondary objective was to assess association between tattoo and crime.

Materials and Methods: This cross sectional study was conducted in district prison/Jail, Khandwa, Madhya Pradesh, India, over a period of six months from April 2022 to September 2022. Total 106 convicted prison inmates were studied for presence for tattoo and crime committed.

**Results:** Male predominance (89.6%) was observed. Mostly were from rural background (77.3%) and lower socio-economic class (78.3%). Majority of the prison inmates belonged to 31-40 year age group (36.8%) and 18-30 years age group (29.2%). Majority (83.9%) had tattoos and among these, mostly were male 92%. Most of them had (41.6%) had one to two tattoos. The most common body sites for tattoo were forearm (91%) and wrist and hand including fingers and thumb (85.4%). most common tattoo content was religious symbols/Gods (91%). Overall, 70.7% were incarcerated for criminal offences whereas among tattooed participants, 75.2% were incarcerated for criminal offences. Among non-tattooed participants, nearly half participants were incarcerated for civil offences and difference was statistically significant (P = 0.04).

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## Introduction

Tattooing has existed for thousands of years with varying levels of influence and each culture has its own unique history involving the art of tattooing. The meaning and significance of tattoos varies across different cultures. [1,2] Tattoos have been associated with "art", "mark of nobility", "blessing", "cultural diversity" "self-expression" to various negative attributes like "marking the criminals", "stigma", and "deviant behaviour". [3-7]

In India, there is a rich cultural heritage of tattooing in the especially among tribal region, like 'Apatani tribes' of Arunachal Pradesh and the head-hunting 'Konyak tribe' of Nagaland used to tattoo their faces.(Thakur & Verma, 2016). However, with the modernization and urbanization, the tattoo culture has shifted significantly, now mostly seen as a fashion statement or improvement of body image. [8-10]

In current medico-legal scenario, tattoos play important roles such as in a forensic context, more unnatural and violent deaths among persons with expletive tattoos (Byard, 2020), identification and screening of victims of human trafficking by tattoo (Fang et al, 2018), personal identification and providing evidence of possible gang affiliation, incarceration history (Komar & Lathrop, 2008) and of childhood abuse and neglect (Ernst et al, 2022).

In addition, tattooed individuals significantly more likely show "Sensation-Seeking" behaviour (Stirn et al, 2006), engage in alcohol and marijuana use and risky sexual behaviours (King & Vidourek, 2019), substance use, violent behaviours, and school problems (Roberts & Ryan, 2002). Various psychiatry syndromes like drug abuse, mania and posttraumatic stress disorder are associated with tattooing. Similarly, antisocial. sadistic, negativistic, and borderline personalities are also commonly associated with tattooing (Manuel & Retzlaff, 2002). Research indicates that the frequency of tattoos can be associated with an increasing degree of criminal behaviour, as there is a positive association between the number of tattoos and the number of prior offenses and convictions (Harry B., 1987). [11,12]

Very little researches are available, especially in India, where prisons occupancy is way beyond their capacity and is further increasing despite newer prisons formation (Prison statistics India, 2020). Consequently, our study examined the relationship between tattoos and crime. This research will build upon past studies while uncovering new information to further the body of knowledge concerning tattoos and crime. [13,14]

## **Material and Methods**

This cross sectional study was conducted in district prison/Jail, Khandwa, Madhya Pradesh, India, over a period of six months from April 2022 to September 2022. Institutional ethics committee permission was obtained prior to the study. During the study duration, all the prison inmates who were willing to participate and ready to give consent for the study were included in the study. Our sampling method convenience sampling, as the visit to prison and sample collection could be done on feasibility basis, due to time constraint of visitation hours and distance of prison from our institute. At any cross section of time, during the study period, approximately 500-600 inmates were registered in prison (including convicted, under-trial inmates therefore on parole); interviewed and collected data of the consequent study participants available on the day of interview. In total, we interviewed 231 inmates, of which 125 were excluded as they were under-trial. Total 106 convicted prisoners were finally enrolled for data collection for our study.

The data was obtained in a semi structured proforma which included personal details

(such as name, gender, education and residence), details of tattoos (location, number and content of the tattoo) and crime details (civil or criminal). Inmates with both civil and criminal offenses were included in the criminal offense group only.

The recorded data were entered in Microsoft Excel spread sheet and analysed using descriptive statistics. The data were presented as frequencies and percentages. To measure the association between tattooing and crime, chi square test was done. Significance level for analysis was set at the P < 0.05.

#### Result:

A total of 106 prison inmates, from 18-60 years of age group with both gender were studied. Majority of the prison inmates (36.8%) were of 31-40 year age group followed by 18-30 years (29.2%). Male predominance (89.6%) was observed and most of the participants belonged to rural area (77.3%) and lower socio-economic class (78.3%). The socio-demographic characteristics of the participants are summarized in Table 1.

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Table 1: The socio-demographic characteristics of the participants

		Number (n)	Percentage
Age (years)	18-30	31	29.2%
	31-40	39	36.8%
	41-50	28	26.4%
	51-60	8	7.5%
Gender	Male	95	89.6%
	Female	11	10.4%
Residence	Urban	24	22.6%
	Rural	82	77.3%
Socio-economic class	Lower	83	78.3%
	Middle	19	17.9%
	Upper	4	3.8%

Of total participants included in the study, majority (83.9%) had tattoos. Among tattooed participants mostly were male 92% (n=82) whereas only seven female prisoners had tattoo. The gender wise distribution of the tattooed participants is summarized in Table 2.

Table 2: The gender wise distribution of the tattooed participants

	Male	Female	Total
Tattoo	82	07	89 (83.9%)
No Tattoo	13	04	17 (16.03%)
	95	11	106 (100%)

Among tattooed participants majority (41.6%) had one to two tattoos, followed by three to four tattoos (32.6%). Only six participants (6.7%) had more than six tattoos. The most common body sites for tattoo were forearm (91%), followed by wrist and hand including fingers and thumb (85.4%). Only 6.7% participants had facial

tattoo. In the content of tattoos, most common were religious symbols/Gods (91%). Other common contents were selfname or initial (88.7%), name of significant others such as girlfriend, wife and parents (82%) and birth date or other important numbers (68.5%). The distribution of

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numbers, location and tattoo contents is summarized in Table 3.

Table 3: The distribution of numbers, location and tattoo contents

		Number (n)	Percentage %
Number	1-2	37	41.6%
	3-4	29	32.6%
	4-6	17	19.1%
	>6	6	6.7%
Location*	Wrists/thumb/fingers	76	85.4%
	Forearm	81	91%
	Arm	38	42.7%
	Neck collarbone and shoulder	24	26.9%
	Chest and abdomen	19	21.3%
	back	16	17.9%
	face	6	6.7%
	legs	11	12.4%
Content*	Self-Name/initial	79	88.7%
	numbers/birth date (self/other)	61	68.5%
	Girlfriend name/wife/parents	73	82%
	Religious scriptures	23	25.8%
	Religious symbol/God	81	91%
	Other pictures and symbols	59	66.3%
	(animals/flower/leaves/heart/star)		
	Other language quote	7	7.8%
	others	9	10.11%

<sup>\*</sup>Many participants had more than one location and content

Of all study participants, majority were incarcerated for criminal offences (70.7%). Among tattooed participants, majority (75.2%) were incarcerated for criminal offences, whereas among non-tattooed participants, nearly half participants were

incarcerated for civil offences and difference was statistically significant (P = 0.04). The distribution of civil and criminal offences among tattooed and non-tattooed participants is summarized in Table 4.

Table 4: The distribution of civil and criminal offences among tattooed and nontattooed participants

	***************************************					
	Civil offences	Criminal offences				
tattoo	22 (24.7%)	67 (75.2%)	89 (100%)			
No tattoo	9 (52.9%)	8 (47%)	17 (100%)			
total	31 (29.2%)	75 (70.7%)	106			

# **Discussion:**

The present study has highlighted many important issues regarding the tattoos and crime, among prison inmates. In our study on 106 prison inmates, male predominance was observed which was in accordance with the prison statistics India, 2020 (prison

statistics India, 2020). It can be explained on the basis of "the threshold hypothesis" which asserts that the prevalence of offending is lower among females because females have a higher threshold for risk than males (vaske et al, 2011). [15,16]

Majority of the prison inmates (36.8%) were of 31-40 year age group followed by 18-30 years (29.2%), which is comparable to the data of prison statistics India, 2020, which also reported maximum number of inmates from these two age groups. In our study most of the participants were from rural area (77.3%) and lower socioeconomic class (78.3%). Anser et al (2020) in their study of "dynamic linkages between poverty, inequality, crime, and social expenditures of 16 countries found the strong correlation between socio-economic factors and crime rates. [17]

Of total participants included in the study, majority (83.9%) had tattoos. Among tattooed participants mostly were male 92% (n=82) whereas only seven female prisoners had tattoo. To the best of our knowledge we could not find any study from India studying "tattoo in prisoners". [18] Studies from other countries have reported varying results. Ceylan et al (2019) studied 76 male adolescent prisoners and 76 age-matched comparison groups, and found significantly higher frequency (65.8%) among tattooing prisoners. Hellard et al (2007) studied 642 prisoners and found that 449 (69.9%) had tattoo, of whom 182 (41%) had been tattooed in adult or juvenile prison. [19] higher prevalence in our study could be due to the fact that Indian society is a unique blend of traditional and modern religious and social practices. Thus, traditional tattoos are still prevalent among various tribal societies and scheduled castes spread throughout various parts of India (rohith et al, 2020). [20]

Among tattooed participants majority (41.6%) had one to two tattoos, followed by three to four tattoos (32.6%). Only six participants (6.7%) had more than six tattoos. In our study the most common body sites for tattoo were forearm (91%), followed by wrist and hand including fingers and thumb (85.4%). Only 6.7% participants had facial tattoo. We couldn't

find any study about number and body location of tattoos among prisoners however zeiler and kasten (2016) studied differences in criminal behaviour between 110 tattooed and non-tattooed people. They used a self-constructed questionnaire to collect the data which included fifteen short descriptions of criminal behaviour. They also found maximum participants with one or two tattoos. However they did not find significant correlation anv number, location or visibility of tattoos and the criminal behaviour. In contrast, adams (2009) suggested highly placement of tattoos to be most strongly associated with deviant behaviours.

Regarding the content of tattoos, most common were religious symbols/gods (91%). Other common contents were selfname or initial (88.7%), name of significant others such as girlfriend, wife and parents (82%) and birth date or other important numbers (68.5%). Unlike other studies from outside India, we found very few participants with "prison tattoo" (like bars, spider-web, and tear drop) or tattoos with violent or aggressive themes. Zeiler and kasten (2016) divided the tattoos into two categories friendly and aggressive tattoos. They found significant difference between participants with friendly tattoos motives and participants with aggressive tattoo motives regarding their inclination to criminal behavior. Names, slogans, erotic figures, religious symbols, and weapons have been common tattoos associated with criminals and psychopaths for decades (mckerracher & watson, 1969). [21]

Of all study participants, majority (70.7%) were incarcerated for criminal offences. Among tattooed participants majorities (75.2%) were incarcerated for criminal offences, whereas among non-tattooed participants, nearly half participants were incarcerated for civil offences, the difference was statistically significant. Deschesnes et al (2006) postulated that tattoo is associated with "externalized risk

behaviours" such as multiple drug use, illegal activities, gang affiliation, problem gambling, school truancy and rave attendance. Adams J. (2009) also found strong association between tattoo and deviance, particularly criminality. Similarly g newman G. (1982) also suggested that commission of crimes involving personally assaultive behaviour was found to be related to the possession of tattoos. Similar findings were also reported by other researchers like mckerracher & watson, (1969), harry (1987) and adams J. (2009). [22]

In contrast, jennings et al. (2014) in their study of causal relationship between tattoos and life-course offending among males from the cambridge study in delinquent development suggested that having tattoos is better considered as a symptom of another set of developmental risk factors and personality traits that are both related to tattooing and being involved in crime rather than as a causal factor for predicting crime over the life-course. [23]

Our study was single centric study hence very few female prisoners could be studied. Other limitations were cross sectional nature and no comparison group from general population. Therefore study cannot be generalized.

# **Conclusion:**

In conclusion, most of the prison inmates were male, from third and fourth decades of age, belonging to rural background and lower social class. Most of them had at least one or two tattoos mainly among males. Our participants mainly had non-aggressive and non-prison tattoos. The association between criminality and tattoo was significant. It can be recommended that health professionals, especially those in forensics and corrections, should recognize the possible significance of tattoos in offenders. Very little research work is done in this area, especially in countries like India, where prisons occupancy is way

beyond their capacity. Further research is of utmost importance for early identification of high risk groups with possible prevention of crime.

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