EFFECT OF SOCIO-ECONOMIC BACKGROUND ON THE NATURE OF CRIME COMMITTED BY THE LIFE CONVICTS LODGED IN CENTRAL PRISON, CHENNAI AND THEIR PRESENT MENTAL HEALTH STATUS

N. Mareeswaran¹, S. Gopalakrishnan²

^{1,2}Department of Community Medicine, SreeBalaji Medical College and Hospital Chennai *gopalakrishnan.s@bharathuniv.ac.in

ABSTRACT

To study the sociodemographic factors and its association to the nature of crime committed by the life convicts lodged in a central prison in Tamil Nadu. To study the socio-demographic profile of the life term prisoners lodged in the Central prison and assess the general health and mental health status among the life convicts. To study the association between certain socio-demographic factors and the nature of crime committed by the life convict prisoners. This study shows the statistically significant association between the socio demographic factors like place of residence, age, smoking, alcohol, chewable tobacco with the nature of crime.

Keywords

smoking, alchol, tobacco and demographic factors.

Introduction

Crime is a man-made concept. Crime and its relation to various socio-demographic factors has been subject of debate since time immemorial. Crime is wide spread, diverse in nature and increasing in frequency. The rate of crime is steadily increasing day by day all over the world, India being no exception. 1Crime and its relation to various socio demographic and economic factors determine the nature of crime.

It is a subject of changing attitudes over time within a given society, and international and national differences between the societies. For example, murder is almost universally unlawful, but to end the life of a terminally ill individual is legally permitted in some countries, but is a crime in others countries.2-5 In the foreword to the 2002 World Report on Violence and Health, Nelson Mandela states, "The twentieth century will be remembered as a century.

The most disadvantaged, stigmatized and the underserved individuals in the community were the prison population. People from low socio economic backgrounds, poor educational level, unemployment and indigenous populations are being over-represented among prisoner populations.6 Since, they live their life behind bars and this takes them away from their families (parents, wives, children), jobs, friends, communities, and religious activities and puts them in an extremely bad moral environment for years. Social welfare organizations in prison revolves around vulnerable prison gangs and bad role models in jails and stresses that they are to be followed. Many prisoners are being beaten, raped, brutally murdered or made to live in fear.7-11 Sanitation is one of the most basic human rights issues of the prisoners. The hygienic conditions in prisons are predominantly affected by shortage of latrines, urinals and bathrooms ,as per Draft National Policy on Prison Reforms . Due to overcrowding, improper construction of urinals and non availability of flush system in latrines and no sewer lines in prison campus, leading to choking of sewerage system.12The sub- standard sanitary conditions in the prison adds to the overall in- human conditions forced by the prisoners.

A convict is said to be life sentenced, when his / her duration of imprisonment is said to be in custody till the end of his/her life. However, they can be subjected to any remission granted by

the appropriate government but cannot reduce the period of sentence not less than fourteen years.13

MATERIALS AND METHODS

STUDY DESIGN:

This study is a cross – sectional descriptive study conducted in the Central prison Puzhal, Chennai

STUDY AREA:

This study was conducted in the Central prison located atPuzhal near Chennai. It is one among the largest prisons in India. It is a new prison complex situated at Puzhal, which is about 16 kilometers from the Central Railway station premises where it was located earlier. It was constructed at a total cost of Rs.77 crores. It consists of three prisons viz.

The prison complex is situated in a sprawling area of about 212 acres. Additional facilities such as Meditation Hall, Rehabilitation Centre, Open Air Theatre, Gymnasium, Computer training Centre has been provided. Apart from the above all cells, blocks and hospitals of this prisons are provided with ceiling fans.

STUDY POPULATION:

The Prisoners who were life sentenced and accommodated in Central prison 1 were the study population. A convict is said to be life sentenced, when his/her duration of imprisonment is said to be in custody t ill the end of his/her life. Central prison 1 Puzh al, Chennai can accommodate around 1250 convicts. During the data collection period there were about 750 prisoners in Central prison.

SAMPLE SIZE:

A study conducted by Vinodkumar and UshaDatria among prisoners in central prison kota, Rajasthan in 2013 has found that the prevalence of psychiatric morbidities among them to be about 33%.71This prevalence was taken as the reference value for calculating the sample size for this study. The sample size was calculated using the formula $N = 4 \, PQ/[L] \, 2$

INCLUSION CRITERIA:

The prisoners who were life sentenced and lodged in Central prison 1, who were willing to participate were included in this study.

EXCLUSION CRITERIA:

- The prisoners who were in the high security block were excluded.
- The prisoners who were remanded and in trials were excluded.
- The prisoners those who didn't give consent to participate in this study were excluded.

STATISTICAL ANALYSIS:

The data analysis was done using descriptive and analytical statistics. Data was entered in Microsoft excel and data analysis were done using the SPSS software, version 22. The descriptive statistics analyzed were presented as frequency distribution and percentage. The analytical statistics used were by calculating the Chi – square, Odds Ratio and Confidence Interval. The association of socio-demographic indicators and the nature of crime was assessed. P value < 0.05 was considered as statistically significant value. The descriptive data were presented in the forms of tables (frequency and percentage) and figures. The analytical data were presented in the form of tables.

This study was conducted in a Central jail, Chennai to assess the sociodemographic factors of the prisoners and its association with the nature of crime committed by them and also to assess their present physical and mental status. This study was conducted among 400 life convicted prisoners. The results are presented in the form of tables and graphs.

RESULT & DISCUSSION

Table 1: Sociodemographic Profile of the Study Population.

S/No	Characteristics	Frequency(Percentage		
		N=400)			
1	Age Group				
	Less than 30	44	11.0		
	31- 40	131	32.8		
	41- 50	138	34.5		
	51- 60	64	16.0		
	More than 61	23	5.8		
2	Place of Residence				
	Urban	230	57.5		
	Rural	170	42.5		
3	Type of Family				
	Nuclear	224	56.0		
	Three generation	140	35.0		
	Joint	36	9.0		
4	Religion				
	Hindu	317	79.3		
	Christian	32	8.0		
	Muslim	43	10.8		
	Others	8	2.0		
6	Marital status				
	Single	113	28.3		
	Married	211	52.8		
	Divorcee	20	5.0		
	Separated	56	14.0		
7	Education				
	Professional	1	0.3		

	Graduate	19	4.8		
	Diploma	18	4.5		
	High school	60	15.0		
	Middle school	212	53.0		
	Primary school	59	14.8		
	Illiterate	31	7.8		
8	Occupation				
	Profession	3	8.0		
	Semi-profession	7	1.8		
	Clerical	6	1.5		
	Skilled	45	11.3		
	Semiskilled	169	42.3		
	Unskilled	165	41.3		
	Unemployed	5	1.3		
9	Socio- economic status (B. G. Prasad Classification)				
	Upper class	66	16.5		
	Upper middle class	76	19.0		
	Middle class	117	29.3		
	Lower middle class	85	21.3		
	Lower class	56	14.0		

Table 1 shows the sociodemographic profile of the study participants, which includes age, place of residence, type of family, religion, marital status, education and occupation. Nearly 67.3% (269) of the study participants belong to the age group of 31 - 50 years, the elderly population i. e more than 60 years is around 5.8%. More than half (57.5%) of the participants were residing in urban areas. Around 56% (224) of them were from nuclear type of family and only 9 % (36) were from joint family. Majority (79.3%) of the study population belongs to Hindu religion. Nearly 28.3% (113) of the study participants were still unmarried because of their longer duration of imprisonment, 5% (20) were divorcees and 14% (56) were separated.

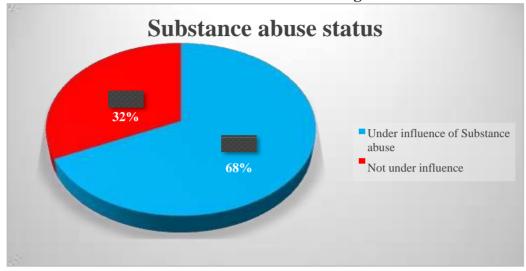
Table 2: Reasons for discontinuing education less than high school (up to 12 th standard):

Sl.No	Reasons	Frequency(n= 362)	Percentage
1	No interest	180	49.7
2	Economic burden	176	48.6
3	Due to problems of civil	6	1.7
	war in Srilanka		

Table 2 shows the reasons for discontinuing the education less than high school level, about 362 participants stopped or discontinued their education below the higher secondary level in which 49.7% (180) said they had no interest in continuing the education, 48.6% (176) said they stopped because of economic

burden and 1. 7% (6) said they stopped due toproblems of civil war as they were from Srilanka.

Figure 1: Frequency distribution of study population on the substance abuse status at the time of committing crime.



This figure explains the substance abuse status of the prisoners at the time of committing the crime. About 68% of the study participants were under the influence of substance abuse and 32% were not under any substance abuse influence.

In dental problems about 47. 5% (190) had dental caries, 2. 8% had halitosis, 3.3% had gingivitis and a few had bleeding gums (1%) and oral ulcers (0.5%). About 36. 8%(147) had complaints of diminished vision and about 16.8% (67) had complaints of hardness in hearing and 10. 8% had ear discharge. Nearly 6.8% (27) had blisters and 6% had presented with hypo or hyper pigmented skin rash. 14

Figure 2: Opinion of the study population about the medical treatment given in the prison.

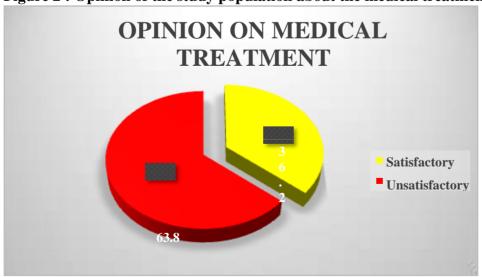


Figure 2 explains the opinion of the study population about the medical treatment given in the prison. More than half (64%) of the study participants responded with unsatisfactory option and only 36% of them were satisfied with the treatment given inside the prison.

Table 3: Association between brushing behaviour and dental illness.

Brushing behaviour	Dental illno	ess	Chi square value		P value
	Yes	No			
Once / twice in a day	140 (43 .8 %)	180(56.2%)	71.07	33	0.0001*
Once in two	77(96. 3%)	3(3.37%)			

(*p value < 0. 05 is significant at 95% CI)

Table 15 shows the association between brushingbehaviour and presence of dental i llness. It was found that the inmates who developed dental illness were 33 times higher odds among the inmates who brushes once in two days when compared to those who do not have dental illness and this association was found to be statistically significant (p value<0.05).

This study was conducted among 400 life convicted prisoners of central jail Puzhal, Chennai. The Sociodemographic characteristics of the study population, personal life style habits, nature of the crime and their general health and mental health status are studied. The main objective of this study is to find the association between the socio demographic characters and the nature of crime committed by them. The results were found to be interesting and the major findings in this study were compared with the research outcome of similar studies conducted in India and elsewhere.15

This study shows the prisoners age ranging from 21 years to 75 years with the mean age of 43.15 years and 67% of the study participants were from middle age group of 31 -50 years of age. Similar results were seen in a study done by FotedarS etalat Kanda model jail, Shimla which also showed the mean age of the population were 40 .8 years and 56. 5% of the study population belongs to the middle age group of 36 -50 years of age. 69Similarly, a study done by Torwane et al in a central prison Bhopal showed that 65% of the study participants belongs to the age group of less than 44 years. 16 In studies done by Kumar V and Daria U in central prison Kota Rajasthan and Reddy S et al in central prison, Bangalore showed the mean age of the study population were 33. 74 and 85% of the study population were belongs to less than 40 years of age respectively.

Similar results were found in the studies done by Kumar SD et al in Central prison Gulbarga and Bellad AA et al in Central prison Hindalga showed that 38% and 56.87% of the study participants were belong to the middle age group respectively which is less than 40 years of age. 15, Shrestha G et al done a study in a regional prison, Nepal showed that nearly 70% of the study population belongs to the age group of less than 40 years of age. 16

From all the above studies it is clear that the population who were less than 40 years of age are more prone to commit crimes as they are young and in the productive age group who had many habits and in the wrong company or misguided by the society in which they live and their commitments in family and busi ness which makes them to commit crimes.

This study shows that 7. 8% of the study participants were illiterate and 82. 8% were educated less than high school level, 41% were unskilled workers by occupation and 5% were degree holders. Similar results were seen in the study done by Shrestha G et al in Regional prison in Nepal, showed that 21.5% of the participants were illiterate, and in the study done by Reddy S et al, showed that 86% of the study participants were educated less than high school level.17

The studies done by Kumar V and Daria U 71 showed that 17% of the study participants were illiterate and 51% were unskilled by

occupation, and Kumar SD et al showed three fourth of the inmates were unskilled by occupation. The unskilled labourers were more involved in committing crimes. 18-21 This may be due to low income and less job satisfaction which prompted them to commit crimes for quick gains.

The above findings showed that the majority of the prison inmates were married and this may have some sort of relationship and influence in committing crimes among the middle age group due to family commitments.

This study shows that 35. 3% of the study inmates belong to lower and lower middle socio economic status. The studies done by Bellad AA et al and Gupta PK et al showed a little high prevalence (43.1 % and 66 % respectively) of the inmates who were from lower socio economic status. The above findings tell us that the people from lower socioeconomic status are more involved in committing crimes this may be due to the poor living standards and poverty, which push them to commit crimes.19

Nearly 69.7 % of the study population were known smokers and 62. 7% were chewing tobacco in this study, similar results shown in the studies done by Reddy S et al in a central prison, Bangalore which showed that 87. 5% of the inmates were smokers. 22 Similarly, the study done by Torwane et al in Central prison, Bhopal showed that 66 .4 % of the study population had the habit of tobacco consumption. The study done by Abdu Z et al in Jimma town prison, South West Ethiopia showed that 46% of the study population were smokers. 95 This study shows 71% of the study population were consumed alcohol, while a study done by Abdu Z et al showed that only 21% of the inmates were alcoholic. 23

A multi- centric study done among 22790 prisoners in 12 countries by Fazel S and Danesh J showed that 10% had major depression, 3. 7% had psychotic illness. 19 concluded his study by reporting that longer period of isolation with little mental stimulus contributes to poor mental health which lead to anger, frustration and Anxiety. 17

One of the major findings of this study was nearly three fourth of the study participants were had depression in mild (32%), moderate (29 .8 %) and severe (13.3%) forms. Other mental illness like anxiety, hallucination, phobia was also found.

This study explains the association between socio demographic characteristics and the nature of crime. Though all the sociodemographic factors were assessed, this study finds the positive association between certain factors and the nature crime. The association between the depression

and psychosomatic illness were studied and found to be statistically significant in this study. This study also explains the statistically significant association between duration of imprisonment and depression.

CONCLUSIONS

This study explains the association between socio demographic characteristics and the nature of crime. Though all the sociodemographic factors were assessed, this study finds the positive association between certain factors and the nature crime. The association between the depression and psychosomatic illness were studied and found to be significant in this study. This study also explains the positive association between duration of imprisonment and depression. This study shows the statistically significant association between the socio demographic factors like place of residence, age, smoking, alcohol, chewable tobacco with the nature of crime.

Effective health education on nutrition, sex education, personal hygiene, alcohol and drug abuse should be undertaken for the prisoners. Maintaining the bond between the prisoner and his/her family frequently is crucial for the mental well -being of the prisoner. At institutional level screening of diseases and be tter infrastructure for improved living conditions should be provided. Providing training in maintaining the physical and mental health status of the prisoners will help them to become more responsible, reformed and productive in the long run. Vocational t raining on income generating activities will help to raise the satisfaction and happiness of prisoners and helps to cope up with the environment before the release from prison.

Funding: No funding sources

Ethical approval: The study was approved by the Institutional Ethics Committee

CONFLICT OF INTEREST

The authors declare no conflict of interest.

ACKNOWLEDGMENTS

The encouragement and support from Bharath University, Chennai is gratefully acknowledged. For provided the laboratory facilities to carry out the research work.

BIBLIOGRAPHY

- [1] Dahlberg LL, Krug EG. Violence- a global public health problem.Geneva: World Health Organization; 2002.p.1 –56.
- [2] World Health Organization [Internet].Geneva: World report on violence and Health; 2002. Available from: http://www.who.int/violence_injury_ prevention/ violence/world_report/en/summary_en. pdf. Accessed on 13 January 2018.
- [3] Center for disease control and prevention [Internet]. United States: The social ecological model for violence; 2018. Available from: http://www.cdc.gov/violenceprevention/over-view/social-ecological model.html. Accessed on 13 January 2018.
- [4] Lageson S, Uggen C. How work affects crime— and crime affects work— over the life course. Handbook of life- course criminology. New York: Springer publications; 2013.p. 201-202.

- [5] Sharma S. Mass Murder by Women[Internet]. NewYork: Psychiatry the state of the art; 1985. Available from: https://link. springer.com/ chapter/10.1007 %2F978 -1 -4613 -2365-5_66 . Accessed on 20 January 2018.
- [6] Wilson JQ, Herrnstein RJ. Crime human nature: The definitive study of the causes of crime. New York: The free press Publication; 1998.
- [7] Sahmey K. A study on factors underlying juvenile delinquency and positive youth development programs (Doctoral dissertation). Available from: http://ethesis.nitrkl.ac.in/4634/1/411HS1010.pd f.
- [8] Oana-Ramona Lobonţ, Ana-Cristina Nicolescu, Nicoleta-Claudia Moldovan & AyhanKuloğlu. The effect of socioeconomic factors on crime rates in Romania: a macro -level analysis. Economic Research-EkonomskaIstraživanja. 2017; 30(1). p.91 111.
- [9] UK Essays Internet]. The Concept of Imprisonment and Human Rights Criminology Essay; 2013. Available from: https://www.ukessays.com/essays/criminology/the-concept-of-imprisonment-and-human-rights-criminology-essay.php?vref=1. Accessed on 29 August 2018.
- [10] Cerqueira DC, Lima RS et al. Atlas da violência. 2018.
- [11] Pandey SP. Children of women prisoners in Jails: A study in Uttar Pradesh. Final report. Planning Commission, Govt. of India. New Delhi, India. 2004: 44 -83.
- [12] World prison brief[Internet]. London. Indian data; 2018.Available from: http://www.prisonstudies.org/country/india. Accessed on 10 November 2017.
- [13] Life imprisonment means jail term for entire life: SC. The Hindu [Internet]. 2012 Nov 25. Available from: https://www.thehindu.com/ news/ national/ Life-imprisonment-means-jail-term-for-entire-life-SC/article15619409. ece. Accessed on 6 June 2018.
- [14] India. National Crime Records Bureau. Prison Statistics India. New delhi: Ministry of home affairs; 2015. Available from: http://ncrb.gov.in/statpublications/psi/Prison2015/Full/PSI 2015- %2018 -11-2016.pdf.
- [15] Kumar SD, Kumar SA, Pattankar JV, Reddy SB, Dhar M. Health status of the prisoners in a central jail of south India. Indian J Psychol Med. 2013;35(4):373.
- [16] Phobia [Internet]. Psychology Today; 2017. Available from: https://www.psychologytoday.com/us/conditions/specific -phobia. Accessed on 16 Jun 2018.
- [17] Bellad AA, Naik VA, Mallapur M D. Morbidity pattern among prisoners of central jail, Hindalga, Belgaum, Karnataka. Indian J Community Med:2007;32: 307.
- [18] Reddy S, Khanagar SB, Naganandini S, Rajanna V, Naik S, Kodoth JK. Tobacco Usage and Attitude towards Tobacco Cessation among Prisoners in India—A Cross Sectional Survey. J Int Oral Health: 2014; 6(5):22.
- [19] Lesly G. Prisons and Health [Internet]. Europe; 2015. Available from:http://www.euro. who.int/data/ assets/ pdf_ file/0003/ 249 204/Prisons-and-Health,-15-Alcohol- and- prisons.pdf. Accessed on 10 Jun 2018.
- [20] Gupta PK, Dadiya VK, Baig VN. Socio -demographic profile and factors associated to nature of crime of prisoners in central jail of kota (rajasthan). National Journal of Community Medicine. 2015; 6 (3):405-10.

- [21] Gupta RK, Singh GP, Gupta RR. Health status of inmates of a prison. Indian J Community Medicine. 2001; 26(2):86-9.
- [22] Naghibi Sistani MM, Yazdani R, Virtanen J, Pakdaman A, Murtomaa H. Determinants of oral health: does oral health literacy matter?. ISRN Dent. 2013;2013.
- [23] Soroye MO, Braimoh BO. Oral health practices and associated caries experience among secondary school students in Lagos State, Nigeria. J Oral Res Rev. 2017; 9:16-20.
- [24] Sweeten G, Bushway SD, Paternoster R. Does dropping out of school mean dropping into delinquency?. Criminology. 2009; 47 (1):47 91.