

Original Research Article

# A study of health status of juvenile delinquents

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## Abstract

**Background:** A Juvenile is a person or child who has not completed the age of 18 years. A Juvenile delinquent is a child who has not attained 18 years of age and who committed an offence under existing law. Juvenile delinquency is a behavior disorder of deviant adults. Its spectrum extends from misbehavior to assault and includes robbery and heinous crimes.

**Aim:** To study the health, nutrition status, socio-demographic profile and risk factors of the juvenile delinquents.

**Materials and methods:** The present study was a cross sectional study undertake in government observation home for boys to study the health status of 175 juvenile delinquents in 8 months period of time.

**Results:** Higher Age Group Delinquents are having more habits which were statistically significant when compared with other age group delinquents. The parents of the majority of the delinquents were illiterates and working as a daily laborers and belong to low socio economic group. The findings of the study proves that the risk factors for juvenile delinquency were lack of parental supervision, parental negligence, single parent, illiteracy, poverty, ignorance, child abuse, low socio economic status, urbanization of the society and life pattern, lack of cultural influence, non-exposure of juveniles to good recreational facilities and hobbies. In Nuclear Families, habits in delinquents are at higher side which is statistically Significant when compared with Delinquents who lived in other type of families. The majority of the juveniles have behavioral disorders like smoking, drinking alcohol, absconding and doing theft. Most of the juvenile delinquents are healthy and very few of them are anemic.

**Conclusions:** Well-trained Health Workers, Social Workers, Psychologists, Nutritionists, Artists, Sportsman, Teachers are of immense importance and much needed for the task of juvenile correction and development. Parents must be given proper counselling to avoid repetition of the juveniles.

## Key words

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Health status, Juvenile, Delinquents.

## Introduction

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A Juvenile is a person or child who has not completed the age of 18 years [1]. A Juvenile delinquent is a child who has not attained 18 years of age and who committed an offence under existing law [2]. Juvenile delinquency is a behavior disorder of deviant adults. Its spectrum extends from misbehavior to assault and includes robbery and heinous crimes [3].

Children are the Nation's greatest Assets. Investing on child's development is the best investment of the future of the nation. The life of children is hardest in the developing countries where basic services like health, nutrition, safe water and shelter are inadequate. Healthy and happy childhood alone can ensure the protection against delinquency and criminal behavior. When a child is made to suffer right from his childhood, he develops tremendous hostility against the society and may try to seek revenge by committing antisocial acts.

As soon as the child is born, he takes shelter in home. He lives in a family which provides the best ground for training in social life, to develop himself physically, mentally and culturally. Home thus, has been playing a great role as an agency of education since its establishment. Among adolescents, some rebelliousness and experimentation is common. However, a few children consistently participate in problematic behaviors that negatively affect their family, academic, social and personal functioning. These children present great concern to parents and the community at large [2]. It is very important that the child should feel loved, wanted and accepted by his parents.

Observation home is meant for children in conflict with law are kept during pendency of the case. In observation Home during the stay period of children in conflict with law are provided education, recreation and medical facilities etc. They are imparted with vocational training and computer education. Counselling is given by the qualified counsellors to reform their attitude and behavior to bring them into normal life. Parents are given counselling to take proper care of children. It is a place of safety for the children awaiting court hearing. Parental visits, record keeping, follow up are also some of the other functions. The long term training schools for delinquents are special homes and after care homes where behavioral disorders of children are corrected. A well-adjusted family can stem the tide of delinquency. Parents should be prepared for parenthood. Parents must monitor their children's behavior, in terms of their whereabouts, and friends. There should be a healthy teacher-pupil relationship. The school teacher can play an important part by detecting early signs of mal adjustment. Prevention programs will have positive impact on the general public because they stop this crime from happening in the first place. Our aim is to know the health status of Juvenile Delinquents in Government Observation Home in Vijayawada.

## Materials and methods

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The present study was a cross sectional study connected through interview process and spot inspection. It was undertaken the study in government observation home for boys in Vijayawada to study the health status of 175 juvenile delinquents. The study was from 1<sup>st</sup> June 2017 and continued up to 31<sup>st</sup> January 2018 in children admitted in observation home in 7 months period of time.

### **Inclusion criteria**

All children admitted during a year of time in the observation home are included in the study.

### **Exclusion criteria**

During my subsequent visits some of the children have got bail from the Court and left the Observation Home.

Height was measured in meters; Weight is measured using bathroom weighing scale; Socio-economic status was assessed by using modified BG Prasad classification. A detailed clinical examination was done and the nutritional status is assist for malnutrition. Before proceeding we had taken approval from the Institutional Ethical Committee of Dr. PSIMS & RF. Permission was also granted by the superintendent of Government observation home for boys, Vijayawada.

This home is run by the Superintendent (II level gazette officer) under whom the juveniles are placed for care and protection. The children are kept in observation home with the orders of Juvenile justice board and the rights are protected. Juvenile court sits in the Observation Home itself on every Friday. Parents, guardians or any other person authorized in this behalf can also produce the problem child directly before the Juvenile Court for admission to Observation Home. After getting the orders from the Juvenile Court, the child is admitted to Observation Home till the case is pending, and or for the period specified by the Juvenile Court, and/or further referral of the child to other institutions, or release on bond submitted by the parents. After admission of the juvenile, the Probation Officer studies the case comprehensively to find out the solutions and to decide the way of treatment. The records are maintained accordingly. The case can be disposed of within 4 months as per the provisions of juvenile justice Act,2000. The whole proceedings shall be run in formal dress without uniform. The term of J.J.B is for 3 years and constituted by the government of Andhra Pradesh.

Children are provided with nutritious food which includes rice, green leafy vegetables, eggs, fresh vegetables, various types of pulses and seasonal fruits and sweets on festival days. All the resident children having diet in accordance with the scale specified in diet chart.

### **Diet Chart**

<b>Name of the articles of diet</b>	<b>Scale per head per day</b>
Rice	500 gms 600 gms
Wheat or Ragi	(16-18 yrs age)
Dal (Toor, Moong and Gramdal to be issued as per convenience)	100 gms, 120 gms, 25 gms
Groundnut oil	25 gms
Onion	25 gms
Salt	05gms
Turmeric	05 gms
Coriander	05 gms
Garlic	15 gms
Tamarind	60ml
Milk (at breakfast)	05 gms
Dry Chillies	100 gms
Vegetables	130 gms
Milk to be converted into butter milk	100 ml
Chicken once in a week or eggs 4 days in a week	115 gms
Jaggery (vegetarian only) once in a week	60 gms
Sugar	40 gms

All the staff of the Institution shall work for the all-round development and well-being of the children. The staff shall so conduct themselves that they are good role models for the children. Data is collected and analyzed Chi Square test is used to find the statistical significance.

Data was entered and analysed using statistical package for scientific solutions (SPSS) version 16.0. Results were expressed as proportions, values and absolute numbers in the form of tables and graphs.

**Socio-economic classification according to modified BG Prasad classification as below [3].**

Socio-economic status	Per capita income per month
Upper class	>Rs10,000
Upper middle	Rs5000-Rs9999
Lower middle	Rs3000-Rs4999
Upper lower	Rs1500-Rs3000
Lower lower	<Rs1500

**Body Mass Index (BMI):** it is defined as the weight in kilograms divided by the square of the height in meters ( $\text{kg}/\text{m}^2$ ) [4]. It is a simple index of weight for weight that is commonly used to classify underweight, overweight and obesity, overweight and obesity in adults.

**Classification of BMI as below [5]**

Under weight	$<18.5\text{kg}/\text{m}^2$
Normal range	$18.5\text{ kg}/\text{m}^2\text{—}22.9/\text{ kg}/\text{m}^2$
Over weight	$23/\text{ kg}/\text{m}^2\text{—}24.9/\text{ kg}/\text{m}^2$
Obese—I	$25/\text{ kg}/\text{m}^2\text{—}29.9/\text{ kg}/\text{m}^2$

**Results**

Among the total juvenile delinquents in the Observation Home majority (61%) were in the age group of 16-18 years, belonged to Hindu religion. In the present study, 27% were illiterates, remaining 37% belonged to secondary education and 36% belonged to primary education. In Observation Home, (57%) were non-students employed and (23%) non-students, remaining were students (21%). 51% juvenile delinquents belonged to urban area and 49% belongs to rural area (**Table – 1**).

The fathers of the majority of delinquents were illiterates (55%), father of the majority of the delinquents were doing un skilled work like daily labourers (47%) as compared to (9%) of fathers were doing business. The majority of the mothers of juvenile delinquents were illiterates (69%). Majority of the mothers of juvenile delinquents are house wife's (57%) as per **Table - 2**.

Majority (41%) were only one sibling as compared to 2 siblings (24%). The majority of the juvenile delinquents were from nuclear families (76%). Among the study group the majority of the parents are living together (62%).

The impact of child abuse by parents (39%) and teachers (35%) was as per **Table - 3**.

**Table - 1:** Demographic details of Delinquents.

Age (Years)	No of Delinquents	%
7 - 10 Yrs	3	1.71%
11 - 15 Yrs.	65	37.14%
16 - 18 Yrs	107	61.14%
Total	175	100.00%
<b>Religion</b>		
Hindu	81	46.29%
Muslim	27	15.43%
Christian	67	38.29%
Total	175	100.00%
<b>Educational Status</b>		
Illiterate	48	27.43%
Primary	63	36.00%
Secondary	64	36.57%
Total	175	100.00%
<b>Occupation</b>		
Student	36	20.57%
Non-student	40	22.86%
Non-student employed	99	56.57%
Total	175	100.00%
<b>Residential Address</b>		
Urban	89	50.86%
Rural	86	49.14%
Total	175	100.00%

**Table – 2:** Education of father and mother of delinquents.

Education of Father	No of delinquents	Percentage
Illiterate	96	54.86%
Primary	8	4.57%
Secondary	19	10.86%
Graduate	1	0.57%
Not Applicable	51	29.14%
Total	175	100.00%
<b>Occupation of Father</b>		
Farmer	11	6.29%
Un-skilled	83	47.43%
Skilled	12	6.86%
Business	15	8.57%
Not working	3	1.71%
Not Applicable	51	29.14%
Total	175	100.00%
<b>Education of Mother</b>		
Illiterate	121	69.14%
Primary	5	2.86%

Secondary	7	4.00%
Not Applicable	42	24.00%
Total	175	100.00%
<b>Occupation of Mother</b>		
House Wife	99	56.57%
Employed	34	19.43%
Not Applicable	42	24.00%
Total	175	100.00%

**Table – 3:** Social condition in juvenile delinquents.

Number of Siblings	No of delinquents	Percentage
1	71	40.57%
2	41	23.43%
3	20	11.43%
4	5	2.86%
5	24	13.71%
No Siblings	14	8.00%
Total	175	100.00%
<b>Type of Family</b>		
Joint	11	6.29%
Nuclear	133	76.00%
Not Applicable	31	17.71%
Total	175	100.00%
<b>Nature of living of Parents</b>		
Living Together	108	61.71%
Divorced	5	2.86%
Died both parents	31	17.71%
Single parent	31	17.71%
Total	175	100.00%
<b>Child abuse by</b>		
Parents	68	38.86%
Teachers	62	35.43%
Sibling	7	4.00%
Peer Group	23	13.14%
Not known	15	8.57%
Total	175	100.00%

Among the study group the majority belonged to class IV socio-economic group (43%) and class III (29%), class V (7%), class II (2%) and Class I (1%) as per **Figure - 1**.

Among the behavioural disorders the majority of the delinquents were having habit of smoking (85%) and the second major disorder was habit of drinking alcohol (45%). Smoking Disorder was statistically significant when compared with other disorders at  $P < 0.05$ . The existence of disorders since long but occasionally were (54%)

and since long but frequently (39%) and very few (7%) are having disorders since long but frequently (**Table – 4**).

The type of movies watched by the delinquents were comedy 18%, horror 13%, crime 9%, social 7%, porno 6% and not applicable were 47%. The admissions of delinquents in the observation home due to non-serious offences were 70% and serious offences were 30% (**Table – 5**).

Among the delinquents Skin Infections were high i.e. 43%. ARTI was 9%. Among the study group only (11%) had past history of serious illness. On examination, majority were well nourished (71%), (26%) were anemic, icterus was seen in (3%) and (3%) of the juvenile showed clubbing. Lymphadenopathy was found in (10%) of the juveniles. Majority of the delinquents (95%) showed normal Pulse Rate. Normal Blood Pressure and normal Respiratory was seen in the (98%) of the delinquents. CVS was normal in 99% and CNS was normal in 99%, Respiratory system was normal in 96% GIT was normal in 97% (**Table – 6**).

In Nuclear Families, Habits were at higher side which was statistically Significant when compared with living in other type of families at  $P < 0.05$  (**Table – 7**).

Higher Age Group Delinquents were having more habits which was statistically significant when compared with other age group delinquents at  $P < 0.05$  (**Table – 8**).

## Discussion

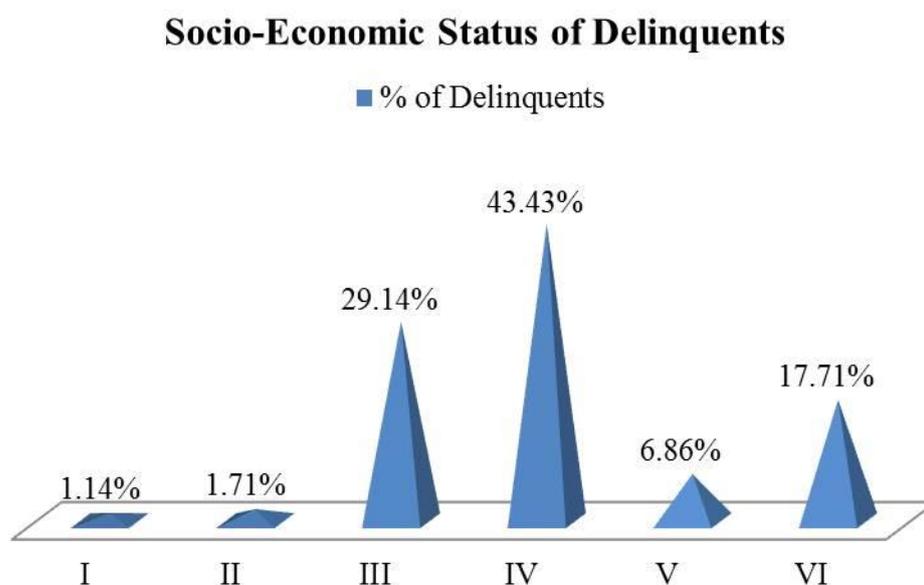
The present study was carried out with an aim to study the health status of juvenile delinquents in government observation home, Vijayawada. The study conducted was that of descriptive in nature, with sample size of 175. The study participants were juvenile delinquents admitted in government observation home in Vijayawada.

### Age group of juveniles

In the present study, the incidence of juvenile delinquency was significantly highest (61%) in the age group of 16-18 years, followed by (37 %) in the age group of 11-15 years and very few (1%) were in the age group of 7-10 years. In Ashok Kumar, et al. [6] study, (33%) children

were in the age group of 16-18 years and (57%) children were between 6-16 years of age. (2007). In comparison with the above study, the present study had higher proportion of juvenile delinquents in the age group of 16-18 years.

**Figure - 1:** Socio-Economic Status of Delinquents.



**Table – 4:** Behavioral disorders status of delinquents.

Behavioral Disorders	Present		Absent		Total
	No.	%	No.	%	
Theft	45	25.71%	130	74.29%	175
Absconding	42	24.00%	133	76.00%	175
Quarrelsome	41	23.43%	134	76.57%	175
Fighting	38	21.71%	137	78.29%	175
Drinking	79	45.14%	96	54.86%	175
Smoking	148	84.57%	27	15.43%	175
Gambling	8	4.57%	167	95.43%	175
Teasing	12	6.86%	163	93.14%	175
Sex Offences	19	10.86%	156	89.14%	175

### Religion

Religion-wise study of juveniles revealed that (46%) belong to Hindu religion and remaining belongs to Muslims (15%) and Christians were (38%). In Kanth, Amodh K, et al. [7] study, majority of the children were Hindu (78.3%), followed by Muslim (19.2%), Sikh (1.2%), and Christian (1%) respectively. But, this distribution was in proportion to the percentage of respective

religions in the communities. Therefore, no concrete conclusions could be drawn in relation to the influence of religions of the juveniles on their behavioral patterns.

### Educational status of juveniles

In the present study, (27%) were illiterates and remaining belonged to primary education (36%) and secondary education group (37%). In,

Dhanya N [8] study, 70% of the delinquents had primary school education, and they were engaged in hotels (32%) and domestic work (17%).

**Table – 5:** Type of movies watching and health Complaints by delinquents.

Type of movies watching	No of delinquents	Percentages
Horror	23	13.14%
Social	12	6.86%
Comedy	31	17.71%
Crime	16	9.14%
Porno	10	5.71%
Not applicable	83	47.43%
Total	175	100.00%
<b>Reasons for admission in the Observation Home</b>		
Serious Offences	53	30.29%
Non-serious Offences	122	69.71%
Total	175	100.00%
<b>Type of Health Complaints</b>		
ARTI	15	8.57%
Skin Infections	75	42.86%
Eye Problems	3	1.71%
Ear Problems	1	0.57%
Fever	11	6.29%
STDs	8	4.57%
Non-Morbidity	62	35.43%
Total	175	100.00%

**Table – 6:** General and systemic examinations in delinquents.

General Examination (n= 175)	No.	Percentage
<b>Built &amp; Nourishment</b>		
Under Nourished	50	28.57%
Well Nourished	125	71.43%
<b>Pallor</b>		
Present	46	26.29%
Absent	129	73.71%
<b>Icterus</b>		
Present	5	2.86%
Absent	170	97.14%
<b>Cyanosis</b>		
Present	3	1.71%
Absent	172	98.29%
<b>Clubbing</b>		
Present	6	3.43%
Absent	169	96.57%

<b>Lymphadenopathy</b>		
Present	17	9.71%
Absent	158	90.29%
<b>Pulse Rate</b>		
Normal	166	94.86%
Tachycardia	9	5.14%
<b>Blood Pressure</b>		
Normal	170	97.14%
Hypotension	5	2.86%
<b>Respiratory Rate</b>		
Normal	170	97.14%
Abnormal	5	2.86%
<b>Systemic examination</b>		
<b>CVS</b>		
Normal	173	98.86%
Abnormal	2	1.14%
<b>CNS</b>		
Normal	174	99.43%
Abnormal	1	0.57%
<b>Respiratory System</b>		
Normal	168	96.00%
Abnormal	7	4.00%
<b>GIT</b>		
Normal	169	96.57%
Abnormal	6	3.43%

### Occupation of juveniles

In observation home, 57% were non-students employed as compared to the group of students (21%) and remaining non students (23%). In C.H Ghattargy, S.N. Deshmukh [9] study, among the delinquent group (78%), majority were students (38%) and nonstudents (11%), non students but employed (30%). Among non-delinquents in certified school (22%), only (1%) are non students and (21%) were students.

### Residential status

In this study, (51%) of juvenile delinquents belong to urban areas and (49%) belong to rural areas. In wankhede, Nilakantha S [10] study 81% delinquents belong to urban areas (2003) The impact of urbanization and subsequent mechanization of life on the behavioral disruption of the juveniles. In rural areas also, the juvenile delinquents are increasing due to the reasons to find easy sources of earning and family problems. Urbanization amounts to more stressful and mechanized life, greater opportunities of dislocation of family set-up,

struggle to stand among the fittest, competition in usual walks of life, non availability of time to help, guide and supervise children in the families and greater chances of indulgence in offences which could remain undetected by parents.

**Table – 7:** Type of family wise habits of delinquents.

Type of Family Habit	Joint Family		Nuclear Family		No Family		Total	
	No.	%	No.	%	No.	%	No.	%
Smoking	8	6.50%	91	73.98%	24	19.51%	123	100.00%
Drinking	1	25.00%	3	75.00%	0	0.00%	4	100.00%
Coffee/Tea	1	2.38%	36	85.71%	5	11.90%	42	100.00%
Drugs	0	0.00%	2	100.00%	0	0.00%	2	100.00%
No Habit	1	25.00%	1	25.00%	2	50.00%	4	100.00%
<b>Total</b>	<b>11</b>	<b>6.29%</b>	<b>133</b>	<b>76.00%</b>	<b>31</b>	<b>17.71%</b>	<b>175</b>	<b>100.00%</b>

**Table – 8:** Age group wise habits of delinquents.

Age (Yrs)	7 - 10 Years		11 - 15 Years		16 - 18 Years		Total	
	No.	%	No.	%	No.	%	No.	%
Smoking	1	0.81%	43	34.96%	79	64.23%	123	100.00%
Drinking	0	0.00%	2	50.00%	2	50.00%	4	100.00%
Coffee/Tea	2	4.76%	17	40.48%	23	54.76%	42	100.00%
Drugs	0	0.00%	1	50.00%	1	50.00%	2	100.00%
No Habit	0	0.00%	2	50.00%	2	50.00%	4	100.00%
<b>Total</b>	<b>3</b>	<b>1.71%</b>	<b>65</b>	<b>37.14%</b>	<b>107</b>	<b>61.14%</b>	<b>175</b>	<b>100.00%</b>

### Education of parents

In the present study, (55%) of the fathers of juvenile delinquents were illiterates. Only (5%) of their fathers having primary education and (11%) are having secondary education. Very few fathers are graduates (0.57%) and remaining 29% are not applicable because some of the delinquents are orphans and some of them don't have father. The majority of the mothers of juvenile delinquents are illiterates (69%).very few (3%) of their mothers have primary education and secondary education (4%). 24% of the delinquents are not having mothers

In Azeez, Mudassir study [11], more than 90% of the parents of juveniles was illiterate and was from low socio economic class. In the present study also, majority of fathers and mothers of delinquents were illiterates and from low socio economic group. By educational status of the parents, it was found that lack of literacy,

knowledge; thinking power, maturity and intelligence due to low standard of life, contribute to the juvenile problems, including delinquency. Illiteracy was found going hand-in-hand with poverty and low standard of life.

### Occupation of parents

The fathers of the majority of the delinquents are doing un-skilled work like daily laborers (47%) as compared to (9%) of their parents doing business .The majority of the mothers of juvenile delinquents are house wives (57%) as compared to employed mothers (19%). The remaining (24%) are not applicable. In C.H Ghattargy, S.N. Deshmukh study [9], also the majority of the parents of delinquents (44%) were working in construction work as daily laborers.

Prevalence of delinquency and other problems requiring admission to observation home was

found to be highest in lower occupational group of laborers and manual workers. But this finding certainly does not allow us to ignore the problem juveniles coming from higher occupational groups, proving that whatever might be the nature of occupation, if it obstructs parents from extending supervision, guidance, discipline, control, basic amenities and sufficient time in a day towards juvenile, it will add to the etiology of juvenile problems.

### **Type of family**

In the present study, the majority of the juvenile delinquents were from nuclear families (76%) as compared to (6%) of them are from joint families and the remaining (18%) are not having family. Similar findings were found in Wankhede, Nilkantha S study [10]. In their study among the delinquent group (72%) came from nuclear families compared to 64.55% neglected children.

### **Socio economic class**

Study of socio economic status revealed that majority (43%) of the juveniles were from class IV socio economic group, the next major share (29%) goes to class III socio economic group and very few (1%) belongs to Class I socio economic group. Similar findings were seen in kanth, Amod K, et al. [7] study. The incidence of juvenile problems increased significantly with decreasing socio-economic status. It is concluded that poor socio-economic status associated with poverty, illiteracy and lack of basic amenities force juveniles to take to streets.

### **Behavioral disorders**

In the present study, majority of the delinquents are having habit of smoking (85%) followed by the habit of drinking alcohol (45%). The remaining are having habit of theft (26%), absconding (24%) and quarrelsome (23%). Very few were involved in gambling (5%), teasing (7%) and sexual offences (11%). Smoking Disorder is statistically Significant when compared with other disorders at  $P < 0.05$ . In C.H Ghattargy, S.N. Deshmukh study [9], in the delinquent group, frequency of absconding was highest, followed by quarreling and fighting,

theft, smoking, gambling, alcoholism, sexual offences and teasing.

### **Child abuse**

The impact of child abuse by parents was 39% and by teachers was 35%. In Wankhede, Nilkantha S study [10] 44% was admitted due to child neglect and abuse by parents and relatives.

### **Friends habits**

The majority of the delinquents (97%) were having friends. The majority are having the smoking habit (92%), drinking habit (57%). The drug addicted are (13%) and involving anti-social activities are also less in number (5%). Habit of Smoking is Statistically Significant when compared with other habits at  $P < 0.05$ . In Johnson KW, Shamblen SR, Courser MW, Young L, Abadi MH, Browne T study [12], 89% were heavy alcohol users and 40% were using illegal drugs, i.e., crack, marijuana, cocaine, tranquilizers, opiates, and amphetamines. Gang members reported illegal drug use, crime, and gang related risk activity more than non-gang members, yet only 5% of the study participants were gang members.

### **Performance in the school**

Schooling pattern revealed that the majority were school dropouts (76%) and never gone to school were (5%) while regularly school going are (19%). (78%) of the juveniles showed bad performance in the school. Similar observations were found in kanth and amodh study [7] (2004). In Huisinga and Jakob-Chien study [13], poor school performance, truancy, and leaving school at a young age are connected to juvenile delinquency.

### **Hobbies of delinquents**

Study of juveniles by their hobbies revealed that 53% were having the habit of watching the movies while those had sports hobby were 22%, listening Music (14%) and reading Books (11%). The similar findings were seen in the study of organization for applied socio economic systems at New Delhi (1996).

### Reasons for admission

The admissions of delinquents in the observation home due to non-serious offences were 70% and serious offences were 30%. In Azeez, Mudassir study [11], the common offences committed by delinquents were ticket less travel (38%), stealing (22%), begging (12%), and wandering (9%). (77%) inmates agreed that they harboured some sort of alienation.

### Health problems

The incidence of various diseases among the total number of juveniles admitted, was found in the order of Skin Infections (43%) , Acute Respiratory Tract Infections (ARTI) (9%), Fever (6%), STDs (4%), Eye Problems (2%) and Ear Problem(1%). In P Chhabra, S Garg, N Sharma, R.D Bansal study [14], Morbidity in some form or the other was present in 148 (60%) boys. Skin disease was the commonest morbidity (31.7%), followed by diseases of the oral cavity (16.1%), acute respiratory infections (8.6%) and diseases of the ear (9.9%). (1996). In Ashok Kumar study [6], the most common diseases among children were tuberculosis (9%) and sexually transmitted diseases (8%). Very few children (0.9%) had HIV/AIDS related problems and 16% children of different homes had severe chronic diseases.

### Past history of trauma

In the present study, 35% of the delinquents had history of trauma. Our study did not reveal any causal association between major morbidities/injuries in the past to juveniles and their deviant behavior, although events of serious illness/injuries resulting in physical or mental disabilities and defects are known to contribute to the etiology of juvenile problems. In Dierkhising CB, Ko SJ, Woods-Jaeger B, Briggs EC, Lee R, Pynoos RS [15] study , up to 90% of justice-involved youth report exposure to some type of traumatic event. On an average, 70% of youth meet criteria for a mental health disorder with approximately 30% of youth meeting criteria for post-traumatic stress disorder.

### Health status

Majority (64%) showed normal body mass index (BMI). About 30% of them were underweight and a very few (6%) were found over weight. Palor was seen in (26%), Lymphadenopathy was found in (10%) of the juveniles and Clubbing was noticed in 3% of the Juveniles. Normal pulse rate was seen in 95% of the delinquents. Normal blood pressure and normal respiratory was seen in 98% of the juveniles. In P Chhabra, S Garg, N Sharma, RD Bansal study [15], 36.7% of the boys were found to be malnourished. Signs of specific nutritional deficiencies were observed in 13.5% of the boys.

### Conclusion

Juvenile delinquency is a serious problem in our society. Today in India more than a million children require attention, treatment and care because of emotional and learning disorders. Well trained Health Workers, Social Workers, Psychologists, Nutritionists, Artists, Sportsman, Teachers are of immense importance and much needed for the task of juvenile correction and development. Parents must be given proper counseling to avoid repetition of the juveniles. Parents must watch the activities of children regularly. Parents should be friendly with their children by respecting their feelings and improving their confidence. Over admiration and grant of over freedom, associated with lack of supervision and discipline, should not be allowed by parents.

The Government should provide education to every child in the community. The Government should provide recreation activities and moral classes in the school curriculum, so that no student will stop education in the middle. Basic health care for mothers, infants, toddlers, juveniles and families must be ensured to develop an idea of happy home.

### References

1. Park K. Text Book of preventive medicine, Chapter-10, 22<sup>nd</sup> edition, bansari bhanot publishers; 2013, p. 545.

2. DeLisi, Matt. *Career Criminals in Society*. London, United Kingdom: Sage Publications, 2005, p. 39.
3. Park K. *Preventive and Social medicine*. 21<sup>st</sup> edition, Jabalpur, India: M/s banarsidas Bhanot; 2011, p. 368.
4. India reworks obesity guidelines, BMI lowered (internet). 9.9 media; 2008 Nov 6. Available from <http://www.igovernment.in>
5. Sridha Rao B. *Principles of community medicine*, chapter-2, fourth edition, AITBS publishers; 2005, p. 26.
6. Ashok Kumar, et al. *Juvenile justice institutions in India or child care institutions in India*, New Delhi, 2007, p. 322.
7. Kanth, Amod K, et al. *Juvenile justice system and rights of the child*. New delhi: prayas, 2004, p. 137.
8. Dhanya N. *Self Concept, Level of Aspiration and Social Tenderness of Juvenile Delinquents*, 1999. Available at URL:<http://nipccd.nic.in/reports/rasd>.
9. C.H Ghattargi, S.N Deshmukh. *A Study Of Family Background Of Juveniles And Reasons For Their Admission To Remand Home*. *Indian Journal of Community Medicine*, 1999; 24(2): 50-57.
10. Wankhede N. *Study of medico social problems of inmates of Government Observation Home for Boys, Nagpur*, *Research Abstracts on Social Defense and Trafficking Prevention*, 2009, National Institute of Public Cooperation and Child Development, New Delhi, 2003.
11. Azeez Mudassir. *A study of psycho social and health aspects of inmates in juvenile homes*. Mysore; 1998; p. 150.
12. Johnson KW, Shamblen SR, Courser MW, Young L, Abadi MH. *Browne Drug use and treatment success among gang and non-gang members in El Salvador: A prospective cohort study*. *Subst Abuse Treat Prev Policy*, 2013 Jun 4; 8: 20.
13. Huizinga D., Jakob-Chien C. *The contemporaneous co-occurrence of serious and violent juvenile offending and other problem behaviors*. In *Serious and Violent Juvenile Offenders: Risk Factors and Successful Interventions*, edited by R. Loeber and D. Farrington. Thousand Oaks, CA: Sage Publications, 1998.
14. P Chhabra, S Garg, N Sharma, RD Bansal. *Health and nutritional status of boys aged 6 to 12 years in a children observation home*. *Indian journal of public health*, 1996; 40(4): 126-129.
15. Dierkhising CB, Ko SJ, Woods-Jaeger B, Briggs EC, Lee R, Pynoos RS. *Trauma histories among justice-involved youth: findings from the National Child Traumatic Stress Network*. *Eur J Psychotraumatol.*, 2013 Jul 16; 4.