

Maruf et al., 2015

Volume 1 Issue 1, pp.500-508

Year of Publication: 2015

DOI- <https://dx.doi.org/10.20319/pijss.2015.s21.500508>

This paper can be cited as: Maruf, M. M., Rahman, F., Khan, M. Z., & Jahan, N. (2015). Socio-Demography, Substance Abuse and Offence among Inmates with Psychiatric Disorders in Female Juvenile Centre, Bangladesh. *PEOPLE: International Journal of Social Sciences*, 1(1), 500-508.

This work is licensed under the Creative Commons Attribution-Non Commercial 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

## **SOCIO-DEMOGRAPHY, SUBSTANCE ABUSE AND OFFENCE AMONG INMATES WITH PSYCHIATRIC DISORDERS IN FEMALE JUVENILE CENTRE, BANGLADESH**

**Mohammad Muntasir Maruf**

Psychiatrist, National Institute of Mental Health (NIMH), Dhaka, Bangladesh  
[marufdmc@gmail.com](mailto:marufdmc@gmail.com)

**Farzana Rahman**

Assistant Professor, National Institute of Mental Health (NIMH), Dhaka, Bangladesh  
[k56a9@yahoo.com](mailto:k56a9@yahoo.com)

**Muhammad Zillur Rahman Khan**

Assistant Professor, National Institute of Mental Health (NIMH), Dhaka, Bangladesh  
[mzrkhan@gmail.com](mailto:mzrkhan@gmail.com)

**Nasim Jahan**

Psychiatrist, Department of Psychiatry, BIRDEM General Hospital, Dhaka, Bangladesh  
[njahan.bird@gmail.com](mailto:njahan.bird@gmail.com)

---

### **Abstract**

*Inmates of Juvenile Developmental Centers are generally vulnerable to psychiatric illness. Females are more prone to that. The objective of the study was to determine the socio-demographic correlates, prevalence of substance abuse and offence among female inmates with psychiatric disorders in Juvenile Development Center. This was a cross sectional and descriptive study conducted in Juvenile Developmental Center (Girls'), Bangladesh. All female inmates of 9 to 18 years of age were enrolled in the study. Total respondents were 43. One stage-structured assessment of psycho-pathology was carried out by using a structured*

*and valid Bangla version of The Development and Well-Being Assessment (DAWBA). Information regarding socio-demography, substance abuse and offence was collected through face-to-face interview with a semi-structured questionnaire and case-notes. Data analysis was done by SPSS for windows 15 version. The result revealed that overall prevalence of psychiatric disorder was 93% in inmates of Juvenile Developmental Center. Among the respondents with psychiatric disorders, 10% had history of substance abuse and 30% had history of offence. It can be concluded that considerable rate of substance abuse and offence was there among the female juvenile with psychiatric disorders in the development centre. Considering limitations, careful conclusion should be drawn.*

**Key words**

Bangladesh, Juvenile Development Centre, Female Juvenile Offender, Substance Abuse

---

**1. Introduction**

Inmates in institutional care suffer from psychiatric disorders. They are extremely vulnerable to psychological problem (Jephcott & Carter, 1984). Long-term institutionalization in early childhood and adolescent increases the like lihood of growing into psychologically impaired and economically unproductive adult (Sadock, & Sadock, 2007). It has also been observed that in inmates setting children’s emotional and behavioral status worsen and develop a range of negative behavior including aggression and indiscriminate attitudes towards adult (Farrington, 1977).

The crude psychiatric morbidity (CPM) rate was 44.4% in a point prevalence survey among children and young person’s appearing in the Nairobi juvenile court, Kenya. Common psychiatric disorders were conduct disorders, mixed disorders of conduct and emotion, emotional disorders with onset specific to childhood, mood disorders and hyperkinetic disorders (Maru et al., 2003). In Templin’s Study, largest study till date, substantial rates of psychiatric morbidity were found in juvenile detainees in Chicago, Division of Juvenile Justice (DJJ). Even after excluding for the diagnosis of conduct disorder, 60% of males and 67% of females met diagnostic criteria for one or more psychiatric disorders. Bearing in mind the limitations in the research, the rates of psychiatric disorder in young offenders is far greater than previously estimated and exceeds the capabilities of community and institutional mental health services (Teplin et al., 2002).

Like other countries, Bangladesh also has government-operated Juvenile

Development Centers in which the children and adolescents are provided with security, care, and education, services for corrections, rehabilitation and reintegration in the society. A study was carried out at National Institute for Correctional Services in Tongi, Bangladesh (which is now called the National Developmental Center, Tongi, Bangladesh) in 1999 among 200 male juvenile offenders. The study revealed that there was a high psychiatric morbidity among them. Disrupted Behavior Disorder were 86%; among them conduct disorder was 74.5% and 8.5% had co-morbid ADHD. Other common co-morbid disorders were Substance Abuse Disorder, Depressive Disorder and Generalized Anxiety Disorder (Haq, 1999). Most probably it was the first study conducted in Bangladesh about the psychiatric morbidity in juvenile offenders though it had some methodological shortcomings. There is no study regarding socio-demographic and other related factors in female juvenile offenders with psychiatric morbidity in Bangladesh. The current study was aimed to show the socio-demography, substance abuse and offence among female juvenile offenders with psychiatric morbidities.

## **2. Methods**

It was a descriptive cross sectional study. The study was carried out in National Juvenile Developmental Center (Girls'), Konabari, Joydebpur, and Gazipur, Bangladesh. The study was carried out from January 2011 to June 2011. Participants of the study were identified from registrar books of the National Juvenile Developmental Center. Forty three girls within age range of 9-18 years were included in the study. Informed consent (in Bangla) was taken from the respondents' house parents and the respondents aged above 11 years. All the ethical issues have been considered throughout the study. After taking consent, they were interviewed by the researchers by using a semi-structured questionnaire (in Bangla) for socio-demographic variables. House parents were interviewed by using the parent version of DAWBA (Development and Well-Being Assessment). DAWBA is an internationally well accepted research instrument and a novel package of questionnaires, interviews, and rating techniques designed to generate ICD-10 psychiatric diagnoses among children and adolescents of 5 to 16 years (extended up to 18 years) (Goodman et al., 2000). This instrument has been translated in B angla and standardized and validated by Mullick & Goodman (2005). DAWBA has three versions- parent version, self-version and teacher version. Children of 11 or more years of age were interviewed by using self-version of DAWBA. Teacher version of DAWBA was given to the class teachers to fill up the questionnaire. The researchers also recorded

verbatim accounts of any reported problem. Information regarding substance abuse was collected through face-to-face interview using a separate semi-structured questionnaire and from the case-notes. Data analysis was performed by Statistical Package for Social Sciences (SPSS), for windows version-15 and chi-square test was done to show the association.

### 3. Results

Total 43 inmates participated in the study. The mean ( $\pm$ SD) age of the respondents was 14.9 ( $\pm$ 1.6) years. Most (69.8%) of the respondents belonged to the age group of 15-16 years.

Psychiatric disorders were diagnosed in 40 respondents (93.0%). Regarding specific disorders, major depressive disorder was the most common emotional disorder and conduct disorder was the most common behavioral disorder (Table 1).

**Table 1:** Psychiatric disorders (N=40)

Psychiatric disorders	No. of respondents*	%
<i>Emotional disorder</i>		
Major depressive disorder	26	65.0
Generalized anxiety disorder	5	12.5
Post-traumatic stress disorder	9	22.5
<i>Behavioral disorder</i>		
Conduct disorder	8	20.0
Oppositional defiant disorder	2	5.0
Hyperkinetic disorder	5	12.5

No association was found between socio-demographic characteristics and psychiatric disorder of the subjects (Table 2).

**Table 2:** Association between socio-demographic characteristics and psychiatric disorders of respondents (N=40)

Socio-demography	Psychiatric disorder present		No psychiatric disorder		p-value
	No. of respondents	%	No. of respondents	%	
Age (in years)					

11-12	5	83.3	1	16.7	0.357
13-14	6	85.7	1	14.3	
15-16	29	96.7	1	3.3	
<b>Habitat</b>					
Urban	22	91.7	2	8.3	0.905
Rural	17	94.4	1	5.6	
Semi urban	1	100.0	0	0	
<b>Religion</b>					
Islam	36	92.3	3	7.7	0.565
Hindu	4	100.0	0	0	
<b>Education</b>					
Illiterate	5	83.3	1	16.7	0.514
Primary	29	93.5	2	6.5	
Secondary	6	100.0	0	0	
<b>Occupation</b>					
Unemployed	9	90.0	1	10.0	0.669
Student	17	89.5	2	10.5	
Service	11	100.0	0	0	
Others	3	100.0	0	0	
<b>Marital status</b>					
Married	19	95.0	1	5.0	0.635
Unmarried	21	91.3	2	8.7	
<b>Family pattern</b>					
Nuclear	27	90.0	3	10.0	0.237
Joint	13	100.0	0	0	
<b>Monthly income (Tk)</b>					
< 10,000	34	91.9	3	8.1	0.914
10,001-20,000	4	100.0	0	0	
20,001-30,000	1	100.0	0	0	

Ten percent of the respondents with psychiatric disorder had history of substance abuse (Table 3).

**Table 3:** History of substance abuse (N=40)

Substance abuse	N	%
Present	4	10
Absent	36	90

Among the female inmates with psychiatric disorders 30% had a history of offence (Table 4).

**Table 4:** Reason of admission (N=40)

Reason	N	%
Offence	12	30
Safe custody	28	70

#### 4. Discussion

Two studies conducted in Bangladesh on general child and adolescent population found overall prevalence of psychiatric disorder 15.2% and 18.4% (Mullick & Goodman, 2005; Rabbani et al., 2009). The present study found that overall prevalence of psychiatric disorder in female respondents was 93.0%. This finding indicates higher prevalence of psychiatric morbidity among female inmates of Juvenile Development Centre. This is consistent with the findings of the study conducted in the California Department of Corrections and Rehabilitation, Division of Juvenile Justice (DJJ) where 92% of females had psychiatric disorders (Karnik et al., 2009).

The current study showed that among the female juvenile offenders, the most common psychiatric disorder was Major Depressive Disorder (32.6%), followed by combined Major Depressive Disorder and Post-traumatic Stress Disorder. The high rate of PTSD may be because they experienced, witnessed or confronted with an event that involve actual or threatened death or serious injury, or a threat to the physical integrity of self or others. Most of which were related to their participation of criminal activities. The psychiatric disorders commonly found in the California study were affective disorders (29%), dysthymic disorder (20%), any anxiety disorder (55%), separation anxiety disorder (37%), and other anxiety disorders (21%) (Karnik et al., 2009).

In this cultural context the possible cause of high proportion of psychiatric disorders (93%) in female inmates might be due to large family size, low socioeconomic condition, overcrowding, family discord, lack of supervision, harsh parenting. Some of them were

victim of physical, emotional and sexual abuse. Most of the girls were neglected and victim of social discrimination. Some of them also had a history of parental criminality and family history of psychiatric illness. In children with one risk factor, rates of psychiatric disorders are not significantly greater than in children with no risk factor. Children with two risk factors have a fourfold increase in rate of disorder. One in five of children with four risk factors have psychiatric disorders. In our study there were multiple risk factors in most of the female inmates, which may act as cumulative factors for psychiatric disorders (Goodman, & Scott, 2005).

This study revealed that mean ( $\pm$ SD) age of inmates was 14.9 ( $\pm$ 1.6) years, which is almost consistent with the age around 14 years where juvenile offending is highest (World UNICEF report 2003).

Higher percentage of psychiatric disorders was found among the inmates of 15-16 years age group (96.7%), from rural background (94.4%), having primary level of education (93.5%), who were in service (100%), who were married (95%), from joint family (100%). The differences were statistically not significant ( $p > 0.05$ ). Four (10%) respondents with psychiatric disorders also had history of substance abuse. A comparative study about substance abuse among SAARC countries showed that 99.9% of abusers in Dhaka were male and only 0.1% was female (Alam et al., 1999). A study by Ahsan et al., (1999) found only 1 female among their 144 samples [14]. Current data may indicate that substance abuse is higher in female juvenile with psychiatric disorders. Almost one third (30%) of the respondents with psychiatric disorder was admitted to the development centre due to offence. In the study, diagnoses were done using sound methodology and standardized assessment procedure. However, the study had several limitations. Information was taken from the inmates and it was not cross-checked. So there may be some inconsistency. Parent version was given to their house parents who were not their real parents. So there was possibility of bias. There was also time constraints and lack of logistic supports.

## **5. Conclusions**

It can be concluded that psychiatric disorders are prevalent among female inmates in correctional facilities at a considerable rate. There are also high rates of substance abuse and offence among the psychiatric patients. Considering limitations of the study, careful conclusion should be drawn and further evaluation is needed. Further research can enhance the understanding of the psychopathology and means of treatment to improve the quality of

life of the incarcerated inmates. Meanwhile, awareness on mental health problem among inmate population of correctional facilities should be build up. Adequate training should be provided to the case workers to screen possible and problematic inmates. There should be appointed at least one mental health professional so that early assessment of the psychiatric disorders and appropriate intervention is possible. A referral system should be established to treat the inmates having psychiatric disorder or a qualified psychiatrist should be appointed by concerned authority who would visit the institute at least once a week.

## References

- Ahsan, M. N., Alam, M. F., & Ahmed, S. (1999). Substance dependence: urine analysis of one hundred and forty four patients. *Bangladesh Journal of Psychiatry*, 13(2), 44–49.
- Alam, M. F., Ahsan, M. N., & Ahmed, S. (1999). Substance dependence: A south-asian perspective. *Bangladesh Journal of Psychiatry*, 13(2), 66–74.
- Farrington, D. P. (1977) the effect of public labeling *British Journal of Criminology*, 17, 112-125
- Goodman, R., Ford, T., Simmons, H., Gatward, R., & Meltzer, H. (2000) Using the strength and difficulties questionnaire (SDQ) to screen for child psychiatric disorders in a community sample. *British Journal of Psychiatry*, 177(6), 534-539.
- Goodman, R., & Scott, S. (2005). *Child psychiatry UK*: Blackwell Publishing Limited.
- Haq, M. N. (1999). *Psychiatric morbidity among juvenile offenders M Phil (Thesis) BSMMU* Retrieved on Feb 1, 2011, from Library, Department of Psychiatry, and BSMMU Not published.
- Jephcott, P., & Carter, M. P. (1984) *the social background of delinquency*. Nottingham: University of Nottingham Press.
- Karnik, N. S., Soller, M., Redlich, A., Silverman, M., Kraemer, H. C., Haapanen, R., et al. (2009) Prevalence of gender difference in psychiatric disorders among juvenile delinquents incarcerated for nine month. *Psychiatric Services*, 60(6), 838-841
- Maru, H. M., Kathuku, D. M., & Ndeti, D. M. (2003) *Psychiatric morbidity among children and young person appearing in the Nairobi Juvenile Court, Kenya East African Medical Journal*, 80(6), 282-288.
- Mullick, M. S., & Goodman, R. (2005) *The prevalence of psychiatric disorder among 5-10 years old in rural, urban and slums areas of Bangladesh: An exploratory study*. *Social*



Psychiatry and Psychiatric Epidemiology, 40(8), 663-671.

Rabbani, M. G., Alam, M. F., Ahmed, H. U., Sarkar, M., Islam, M. S., Anwar, N., et al (2009) Prevalence of mental disorders, mental retardation, epilepsy and substance use in children Bangladesh Journal of Psychiatry, 23(1), 11-52.

Sadock, B. J., & Sadock, V. A. (2007). Synopsis of psychiatry, behavioral sciences /clinical psychiatry USA: Lippincott Williams and Wikins.

Tippling, L. A., Abram, K. M., McClelland, G. M., Dulcan, M. K., Mericle, A. A. (2002). Psychiatric disorders in youth in juvenile detention Archives of General Psychiatry, 59(12), 1133–1143

World UNICEF report 2003. Retrieved from <http://unicef.dk/sites/default/files/mediafiles/UNICEFAnnualReport2003.pdf>