Building up Capacity of Public Hospitals of Delhi for Prevention & Management of Drug/substance abuse in Children & Adolescents - Novel Initiative by Delhi Government

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Abstract

Consequent upon orders of Juvenile Justice Committee of Delhi High Court, Health Department of Delhi Government has taken some novel initiatives to build up capacity of public health facilities for management of children & adolescents suffering from Drug/substance abuse. A total number of 60 beds have been earmarked in seven Delhi Government hospitals/institutions. A process to recruit appropriately trained staff has been undertaken to operationalize the centres. In the last 6 months, 65 Medical Officers and 101 Nursing Officers have been imparted 2 days hands-on-training on prevention & management of substance abuse in children and adolescents. During 1st April, 2016 to 31st Dec, 2017, 401 children & adolescents in the age group 5-18 years (average 14.5 years) with different types of substance abuse have been admitted at the juvenile drug treatment facilities established. Most of the cases were brought to drug treatment centers by an NGO Society for Promotion of Youth & Masses (SPYM). Poly-substance abuse (48.4%) was noted as most common form of substance abuse followed by dependence on inhalants (29.7%), tobacco (10.9%) and cannabis (5.2%). Amongst children with Polysubstance abuse most of children were addicted to tobacco & or inhalant & or cannabis & or opioid & or alcohol in different combinations. Management of the cases included pharmacological and non pharmacological management. Follow up of cases was done at level of referring institutions; however, the same need to be strengthened. Steps have also been taken to limit the access of inhalants to vulnerable children & adolescents by issuing a Gazette Notification on 28th July 2017. District Task Force Committees have been constituted under Deputy Commissioner (Revenue) & Deputy Commissioner (Police) for execution and monitoring of the said Gazette Notification of Delhi Government. The efforts may go a long way in addressing the menace of drug/substance abuse in children & adolescents in Delhi.

ABBREVIATIONS

DAC: De-addiction Centers; MoH & FW: Ministry of Health & Family Welfare; MS & JE: Ministry of Social Justice & Empowerment; DDAP: Drug de-Addiction; JJC: Juvenile Justice Committee; SPYM: Society for Promotion of Youth & Masses; SOP: Standard Operative Procedure; IHBAS: Institute of Human Behaviour & Allied Sciences; AIIMS: All India Institute of Medical Sciences; DGHS: Directorate General of Health Services; NCT: National Capital Territory

INTRODUCTION

Despite the fact that over the years a large number of children and adolescents, especially school drop outs & street children, have been indulging in various types of Drug/substance abuse [1-3], paucity of child detox centers and absence of requisite qualified or /trained manpower in public health facilities in Delhi has been a critical challenge [4,5]. Up to March 2016, total 9 de-

Addiction centres (DACs) were operational in Delhi, one each in the four tertiary care public health facilities under Drug de-Addiction Programme (DDAP) of Ministry of Health & Family Welfare (MoHF &W), Government of India [6], and five centres were operated by NGOs under central sector scheme of Ministry of Social Justice & Empowerment (MSJ&E), the nodal agency of Government of India for prevention of alcoholism and drug/substance abuse in the country [5].

Under section 18 of Juvenile Justice (J.J.) Act, 2015 [7], the state government has to ensure that the child suffering from drug addiction undergo a de-addiction programme. The issue of lack of child centric counseling & detox facilities for children in conflict with law in public health facilities of Delhi has been under review at Juvenile Justice Committee (JJC) of High Court of Delhi, constituted on directions of Hon’ble Supreme Court of India in 2006 [8]. Upon orders of JJC, Government of NCT of Delhi has taken several steps in the last one year to build the capacity of
the state for prevention & management of drug/substance abuse in children/adolescents. This paper describes some of the novel initiatives of Health Department, Delhi Government to address the menace of drug/substance abuse in children & adolescents in Delhi.

MATERIAL & METHODS

State profile

Delhi, the capital of India, has an area of 1,483 sq. kms. Delhi is divided into 9 revenue districts, each headed by a District Commissioner. The total population of Delhi in 2011 census was estimated to be 16,787,941 [9]. About 20% of the population i.e. 33,57,588 are adolescents in the age group of 10-19 years. The literacy rate in the state is about 86.2%. Average annual dropout rate in school children in the country in 2013-14 was 3.77-4.34%, 17.86% and 1.54%, respectively in primary & upper primary, secondary and senior secondary schools. Delhi is estimated to have about 1,00,000 street children [10,11].

Types of Drug/substance abuse in children of Delhi

Alcohol, tobacco and inhalants are common initial substances of abuse and have been described as ‘gateway substances’. In different surveys about 1/3rd to 2/3rd of street children, who are below the age of 18 years, have been found to indulge in drug/substance abuse [3]. The out-of-school children, especially the street based, slum based and vulnerable populations often start with tobacco products below the age of 10 years. Many of them progress to use of alcohol, inhalants (Ink Eraser /Correction Fluid, Glue, Petrol) and cannabis (Bhang, Ganja), and some of them eventually move onto illicit substances like ganja, heroin, other opioids etc. The hospital based samples of adolescent treatment seekers are overrepresented by inhalant, cannabis and opioid users, who were more likely to be regular/dependent users.

Status of drug treatment service for children / adolescents with substance abuse

Delhi has an extensive infrastructure for delivery of primary, secondary and tertiary care health services through 95 Government hospitals & over1500 First Referral Units [12]. The drug treatment services till March 2016 were offered only at psychiatry units of 4 tertiary care health institutions namely; National Drug Dependence Treatment Centre (AlIMS), Institute for Human Behavior & Allied Sciences (IHBAS), Dr. Ram Manohar Lohia Hospital and Safdarjang Hospital, New Delhi. However, no separate beds were earmarked in the psychiatry wards of these hospitals for the drug treatment purpose. In addition, 5 centrally sponsored NGO run DACs with total 90 beds were also operational. However, no separate beds were earmarked for management of children & adolescents with substance abuse.

Scarcity of qualified & trained Manpower

The status of filling up of posts of Psychiatrists, Clinical Psychologists and Social Workers in Delhi Government Hospitals/Health Institutions was assessed in August 2016. It was observed that 23/51 (45%) posts of psychiatrists and 4/21 (B1%) posts of clinical psychologists were vacant. There was no post of Social Worker in any Delhi Government hospital/health institution. This was attributable to lack of perception in policy makers & service providers regarding need for drug treatment services in public health institutions, acute shortage of psychiatrists and non availability of recruitment rules of the post of clinical psychologist& social worker. Further, there has been no emphasis on capacity building of medical officers, nurses and paramedical staff on drug treatment and rehabilitation of children & adolescents suffering from substance abuse.

Actions taken to create inpatient facility exclusively for juveniles in Delhi government hospitals

In April, 2016, a total 30 beds were earmarked in 6 of the 32 Delhi Government hospitals namely at Pandit Madan Mohan Malviya Hospital (South District), G. B. Pant Hospital (Central District), IHBAS (North East district), Dr. Baba Saheb Ambedkar Hospital (North West District), Deen Dayal Upadhyaya Hospital (West District), and Lal Bahadur Shastri Hospital (East District) @ 5 beds/institution, exclusively for in-patient management of children & adolescents with drug/substance abuse. The criterion for selection of these hospitals was availability of psychiatry services. A Standard Operative Procedure (SOP) for these centers was developed by Directorate General of Health Services (DGHS), Government of Delhi in consultation with technical experts of IHBAS and Society for Promotion of Youth & Masses, an NGO working in field of prevention & management of substance abuse in children & adolescents in Delhi. The hospitals were directed to start outpatient and in-patient drug treatment services exclusively for children & adolescents and provide nursing & support staff from within the existing manpower of the hospital. It was envisaged that IHBAS will act as the Apex Institution for trainings and referrals of complicated cases. A sensitization programme for psychiatrists and support staff of the drug treatment facilities and medical officers, pediatricians & physicians of Delhi Government Dispensaries & Hospitals was rolled out at IHBAS in April, 2016 and October 2016, respectively. The performance of the facilities created was reviewed by DGHS on quarterly basis. It was observed that only drug treatment facility created at Pandit Madan Mohan Malviya Hospital became operational while the other centers were partly functional due to non availability of sufficient manpower with the hospitals to run the centres.

In the meantime, Delhi Government constituted an Intersectoral Coordination Committee in January, 2017 upon approval of Hon’ble Lt Governor of Delhi under the Chairmanship of Chief Secretary, Government of Delhi for comprehensive response to drug/ substance abuse prevention & control in Delhi. The committee reviewed the performance of the DACs in its first meeting in February, 2017 and issued directions to set up an additional 30 bedded drug treatment facility for children &adolescents’ suffering from drug/substance abuse at Deep Chand Bandhu Hospital in North Delhi to enhance available beds for drug treatment purpose in Delhi Government Hospitals to 60 and strengthen the human resource for all the new facilities created. In order to operationalize these centres, 45 new posts of different categories were created. Recruitment rules of post of clinical psychologist and social worker were finalized and centralized recruitment process was initiated.
A reporting proforma was devised and centres were instructed to submit monthly reports to the Additional DGHS by 7th of the ensuring month. The data for the period from 1st April 2016 to December 2017 was collected analyzed with reference to the number and type of drug/substance abuse cases managed in the out-patient and drug treatment wards established in the public health facilities of Government of NCT of Delhi.

Innovative steps were taken to limit the access of inhalants to vulnerable children & adolescents by issuing a Gazette Notification on 28th July 2017. District Task Force Committees have been constituted under Deputy Commissioner (Revenue) & Deputy Commissioner (Police) for execution and monitoring of the said Gazette Notification of Delhi Government.

RESULTS

The Health & FW Department has earmarked 60 beds exclusively for in-patient management of juveniles with Drug/substance Abuse in seven Delhi Government hospitals & health institutions. In order to operationalize these centres with adequate Human Resource 45 new posts have been created as presented in Table 1. Total 37 out of 45 posts have been filled. A regular training programme for medical officers of Delhi Government health facilities has been rolled out in collaboration with IHBAS and SPYM. About 65 Medical Officers and 101 Nursing Officers have been imparted 2 days hands-on-training on prevention & management of substance abuse in children and adolescents.

During 1st April, 2016 to 31st December, 2017, a total number of 401 children & adolescents in the age group 5-18 years (average 14.5 years) with different types of substance abuse have been admitted at juvenile drug treatment centres established by Government of Delhi. Hospital wise cases managed by in-patient care are presented in Table 2. As evident, the juvenile drug treatment centre at Pandit Madan Mohan Malviya Hospital which started functioning on 1st April, 2016 and has so far managed about 40% of the total cases. The profile of the cases is presented in Box -1. Most of the cases were brought to the Juvenile Drug treatment centers by Society for Promotion of Youth & Masses (SPYM), an NGO. Most common form of addiction noted was with poly-substances (48.4%) followed by dependence on inhalants (29.7%), tobacco (10.9%) and cannabis (5.2%). Amongst children with Polysubstance abuse most of children were addicted to tobacco & or inhalant & or cannabis & or opioid & or alcohol in different combinations. Management of the cases included individual & family counseling, group psychotherapy, motivation enhancement, detoxification and management of co-morbid conditions. Average length of stay was 15 days. Follow up was done at level of referring NGOs & IHBAS; however, only 1/3rd of children & adolescents recruited were retained in the follow up.

Table 1: operationalize of these Hospitals with adequate Human Resource 45 new posts have been created.

<table>
<thead>
<tr>
<th>Name of Hospital</th>
<th>Senior Residents (Psychiatry)</th>
<th>Clinical Psychologist</th>
<th>Social Workers</th>
<th>Attendants (Peers)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep Chand Bandhu Hospital, Ashok Vihar (30 beds)</td>
<td>04</td>
<td>01</td>
<td>02</td>
<td>08</td>
<td>15</td>
</tr>
<tr>
<td>Dr BSA Hospital, Rohini (5 beds)</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>03</td>
<td>06</td>
</tr>
<tr>
<td>Pt. MMM Hospital, Malviya Nagar (5 beds)</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>03</td>
<td>06</td>
</tr>
<tr>
<td>DDU Hospital, Hari Nagar (5 beds)</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>03</td>
<td>06</td>
</tr>
<tr>
<td>GB Pant Hospital, Delhi Gate (5 beds)</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>03</td>
<td>06</td>
</tr>
<tr>
<td>LBS Hospital, Parparganj (5 beds)</td>
<td>01</td>
<td>01</td>
<td>01</td>
<td>03</td>
<td>06</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>09</strong></td>
<td><strong>06</strong></td>
<td><strong>07</strong></td>
<td><strong>23</strong></td>
<td><strong>45</strong></td>
</tr>
<tr>
<td><strong>Filled so far</strong></td>
<td><strong>08</strong></td>
<td><strong>05</strong></td>
<td><strong>02</strong></td>
<td><strong>22</strong></td>
<td><strong>37</strong></td>
</tr>
</tbody>
</table>

Table 2: Cumulative Number of Juveniles with SA provided In-patient care at 7 GNCTD Juvenile Deaddiction centre.

<table>
<thead>
<tr>
<th>W.Noa.</th>
<th>Name of the Hospital</th>
<th>Total no. of cases</th>
<th>Inhalent Dependence</th>
<th>Cannabis Dependence</th>
<th>Alcohol Dependence</th>
<th>Opioid Dependence (Injectable)</th>
<th>Opioid Dependence (Non Injectable)</th>
<th>Benzodiazepines</th>
<th>Tobacco</th>
<th>Polysubstance abuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dr Baba Saheb Ambedkar Hospital</td>
<td>8</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Pt. Madan Mohan Malviya Hospital</td>
<td>158</td>
<td>91</td>
<td>4</td>
<td>2</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>53</td>
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<td>3</td>
<td>Deen Dayal Upadhyaya Hospital</td>
<td>32</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>13</td>
</tr>
<tr>
<td>4</td>
<td>GB Pant Hospital</td>
<td>28</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>Lal bahadur Shastri Hospital</td>
<td>30</td>
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<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>27</td>
</tr>
<tr>
<td>6</td>
<td>IHBAS</td>
<td>27</td>
<td>1</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>7</td>
<td>Deep Chand Bandhu Hospital</td>
<td>118</td>
<td>18</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>34</td>
<td>62</td>
</tr>
<tr>
<td><strong>Total</strong>:</td>
<td></td>
<td><strong>401</strong></td>
<td><strong>119</strong></td>
<td><strong>21</strong></td>
<td><strong>6</strong></td>
<td><strong>13</strong></td>
<td><strong>4</strong></td>
<td><strong>0</strong></td>
<td><strong>44</strong></td>
<td><strong>194</strong></td>
</tr>
</tbody>
</table>
### Box 1: Profile of Children & adolescents with Drug/substance Abuse Admitted in Juvenile Drug treatment facilities during 1st April, 2016 to 31st Dec 2017.

1. Total number of patients: 401
2. Sex: Male: 395; Female: 3
3. Age: Range: 5-18 years - Average: 14.5 years
4. Brought by:
   - NGO Society for Promotion of Youth & Masses (SPYM)-276
   - By Family: 82
   - Local Social Worker: 5
   - Came by themselves: 33
   - On orders of Child Welfare Committee of Women & Child Development Department: 4 (3 Brought by NGO SPYM, 1 by NGO Salam Balkat Trust)
   - Admission ordered by juvenile Justice Board: 1 (Brought by NGO SPYM)
5. Types of Substance Abuse:
   - Inhalant Dependence Syndrome: 119
   - Cannabis Dependence Syndrome: 21
   - Alcohol Dependence: 6
   - Opioid (Injecting Drug Users): 13
   - Opioid (non Injectable): 4
   - Tobacco dependence: 44
   - Poly substance abuse: 194
6. Management included pharmacological and non-pharmacological methods, individual counseling in all cases, family counseling (82 cases), group psychotherapy/counseling, motivation enhancement in all cases, opioid substitution treatment-9, referred for antiretroviral treatment (ART)-7, management of comorbidity (TB-2, HIV-7, Hepatitis C-7), Mental Retardation: 3, Conduct Disorders: 12, ADHD: 1, Depressive Episode: 1, Others: 9
7. Detox: Required in 83 cases
8. Duration of In-patient care: range 1-50 days (Average: 15 days)
9. Follow-up: Cases brought by NGOs & managed at IHBAS followed-up by them. However, 2/3rd cases were lost to follow up.

After commencement of dedicated juvenile drug treatment clinics in these hospitals, cases started reporting directly to the hospitals. A total number of 262 juveniles with various types of drug/substance abuse have been managed in the outpatient department of various GCCTD Hospitals. Considering inhalant abuse observed in a third of those admitted for in-patient care, Department of Health & Family Welfare, Government of Delhi has issued a Gazette Notification on 28th July, 2017 to limit the access of inhalants to vulnerable children & adolescents by banning the production and sale of bottled correction fluids as well as bottled thinners, permitting sale of correction fluids as well as thinners in the form of pens or similar devices which allow limited amounts of the chemicals to come out of those devices when used with mandatory warning on these devices, and banning the sale of correction fluids/whiteners, thinners/diluters and vulcanized solution/sulochans to children below the age of 18 years unless the child is accompanied by parent/guardian or has a letter from the school authorities signifying their assent to purchase the same.

### DISCUSSION

The innovative efforts by Department of Health & family Welfare, Government of NCT of Delhi to build up capacity of the public health facilities for prevention & management of drug/substance abuse in children & adolescents has been effective in providing care to the needy patients. The infrastructure developed has been useful in providing outpatient and in-patient care to the much neglected population. However, further efforts are needed to ensure that the infrastructure created is optimally utilized by undertaking publicity of the centres. Child-friendly environment & recreation facility need to be ensured. Also, the Delhi Government must ensure adequate execution of the Gazette Notification issued for prevention and mitigation of inhalant abuse in children & adolescents. This is a beginning; these efforts may go a long way in addressing the menace of drug/substance abuse in Children / Adolescents in Delhi.

### REFERENCES


Cite this article