

**FOOD & DRUGS**

**Chapter**

**13**

### 13.1 FOOD SAFETY & STANDARD AUTHORITY OF INDIA (FSSAI)

The Food Safety & Standards Authority of India (FSSAI) has been established under the Food Safety & Standards Act (FSS Act), 2006. It is a statutory body for laying down science based standards for articles of food and regulating manufacturing, processing, distribution, sale and import of food so as to ensure safe and wholesome food for human consumption.

The Food Safety & Standards Act, 2006 is being implemented by all State/UT Government. State/UT Governments have appointed Commissioners of Food Safety, notified Adjudicating Officers, Designated Officers and Food Safety Officers for respective areas to perform various functions mandated under the Act. Additional Food Safety Commissioners have been notified for Railways, Airports and Ports along with Designated Officers for Airports and Ports.

The technological solutions have either been adopted or are being considered by the FSSAI for addressing the problem of Food Adulteration. These can be classified broadly under three categories viz. Those aimed at (i) detecting adulteration; (ii) licensing and registration; and (iii) standard setting.

#### 13.1.1 Detecting adulteration:

i) A Central Sector Scheme for strengthening of Food Testing Infrastructure in the country at an estimated cost of Rs. 481.95 crore is under implementation. Under this scheme, 45 State/UT Food Testing Labs (at least one in each State/UT with a provision of two labs in larger States) and 14 Referral Food Testing labs will be upgraded to enable them to obtain NABL accreditation. 121 labs have been notified by FSSAI under Section 43 (1) of FSS Act, 2006 for the purpose of carrying out analysis of food samples taken under Section 47 of the said Act. 14 referral laboratories have also been notified by FSSAI under Section 43 (2) of the FSS Act, 2006 to carry out functions entrusted to the referral food laboratory under this Act or any rules and regulations made thereunder.

ii) Inflonet: With a view to optimally utilise the resources, a network of food testing laboratories

(State Food Testing Labs, and Referral labs) is being established across the country. Inflonet will enable multiple systems to work in an integrated manner to deliver services. The system will also be integrated with the existing Systems namely (1) Food Import Clearance System, (2) Food Licensing and Registration System, (3) FS Quick Access system which provides information about food categories and tests to be performed along with prescribed limits.

iii) Specific measure to check adulteration in milk: FSSAI has identified instruments which are useful for instant identification of milk adulteration. These include EMAT (Electronic Milk Adulteration Tester with Analyser) manufactured by M/s Rajasthan Electronic and Instrumentation Limited (REIL). The equipment was given to three States/UTs i.e. Chandigarh, Delhi and Uttar Pradesh to conduct Pilot tests. On the basis of successful completion of pilot tests, the Rapid Testing Kit has now been provided to 26 States/UTs and Indian Railways. CSIR has also developed Ksheer Scanner and transferred the technology to M/s REIL for large scale manufacture.

iv) Pilot Milk Quality Survey (MQS) has been initiated in the States of Delhi and neighbouring States namely Haryana and Uttar Pradesh on 28<sup>th</sup> September, 2016 and Pan India Milk Quality Survey from November, 2016 comprising approximately 135 cities across all States and UTs in order to ascertain the status of milk quality in the country. Surveillance data has been received from some States and UTs. Advisories have been issued to State Governments from time to time for implementation of effective Surveillance in their States as per their area of jurisdiction.

#### 13.1.2 Licensing and Registration of Food Business Operators:

i) FSSAI has developed an online Food Licensing and Registration System (FLRS) to smoothen the process of licensing and registration of Food Business Operators. It provides a mechanism for online connectivity to all Designated Officers and Food Safety Commissioners of various States/UTs to communicate any untoward incidents of food related offences. Common Service Centres have been roped in to increase the reach of the licensing and

registration processes. As on 31.10.2016, Central Licensing Authorities (CLAs) have issued 28,287 Central Licenses. The States/UTs have also granted 7,31,590 licenses and registered 28,74,471 Food Business Operators (FBOs) under the Act till 31.10.2016.

ii) FSSAI has operationalized the import food clearance process in a phased manner since August-September 2010 through appointment of Authorized Officers for 21 points of entry at six major locations i.e. Delhi, Mumbai, Chennai, Kolkata, Tuticorin and Cochin Ports (including sea, air and land). Further, with a view to facilitate trade and import of food item into the country, following steps, among others, have been taken:

- a) FSSAI has notified Customs Officers as Authorised Officers at 135 locations to maintain parity of testing and import clearance.
- b) Food Safety and Standards (Food Import) Regulations, 2016 have been operationalised from 15.07.2016.
- c) FSSAI has evolved a risk based system for faster clearance of imported goods to facilitate ease of doing business. Accordingly, Food Import Clearance System (FICS) of the Food Safety and Standards Authority of India (FSSAI) has been integrated with ICEGATE of Customs under the Single Window Project. In this arrangement, the Bill of Entry filed at ICEGATE is seamlessly transferred to the FICS and online clearance is accorded. Further, Food Import Prioritization System (FIPS) has been implemented by the FSSAI on pilot basis for fresh fruits under which risk based sampling of import consignments is done on the basis of compliance history of food item, country of origin and the importer.

### 13.1.3 Setting Standards:

i) FSKAN and R&D: Food Safety Knowledge Assimilation network (FSKAN) is one of the measures that has been started to ensure availability of the required information to all stakeholders and

agencies involved in research on food safety, nutrition and areas of concerns in food in the country. In the area of R&D, FSSAI would be calling for the proposals for evolving solutions to address food safety concerns. A number of projects for development of new technologies for testing presence of contaminants/adulterants in food have been finalised and will be taken up with reputed research institutions in the country.

ii) IFS Quick Access System has been developed to integrate all food related standards and provide a quick access to the vertical as well as horizontal standards. This system has been envisaged to provide all relevant information about any product on a single screen.

iii) FSSAI has constituted a Scientific Committee and 16 Scientific Panels comprising of independent scientific experts under section 14(1) and 13(1) of FSS Act, 2006. As per Section 16 (2) of FSS Act, 2006 FSSAI may, by regulations specify the standards and guidelines in relation to articles of food. 24 Standards have been notified and another 27 draft notifications on standards have been issued for soliciting comments of public thereto as on 31.10.2016.

**13.1.4** India successfully conducted the 20<sup>th</sup> session of FAO/WHO Coordinating Committee for Asia (CCASIA) in New Delhi, from 26<sup>th</sup> to 30<sup>th</sup> September 2016. The Session was attended by delegates from 18 Member countries, four Member countries outside the Region, one observer country and seven international organizations. The document prepared by India on REGIONAL CODE OF HYGIENIC PRACTICES FOR STREET-VENDED FOODS was discussed in detail and the Coordinating Committee agreed after some amendments to forward the proposed draft Regional Code of Hygienic Practice for Street-Vended Foods to CAC40 for final adoption. India was reappointed for a second term as Coordinator for Asia.

### 13.1.5. Training:

#### A. For Regulatory Staff of FSSAI

As per the new training policy, two type of training will be imparted to the regulatory staff working in the

**States/Union Territories:**

- a. Refresher training- for the existing regulatory staff; and
- b. Induction training - for the newly recruited/promoted regulatory staff

In addition to the above two training programmes, Training of Trainers (ToT) will also be organised at central and national level, to create a pool of master trainers. FSSAI will organise ToT at National level. During 2016-17, 4 training programmes were conducted for Designated officers and Food Safety Officers. Three training programmes were organised for internal staff. 21 Institutes have been recognised by FSSAI for conducting of training of Regulatory Staff

**B. Training of Food Handlers**

1. FSSAI launched Food Safety Training & Certification Programme on 23<sup>rd</sup> August, 2016 as a part of 10@10 initiative. Under this programme, nine courses have been introduced for Training of Food Handlers. In this connection, a portal is being developed. Training Content has been developed. As a part of Training of Food Handlers, 'Clean Street Food- Delhi Project' was launched during the Street Food Festival in Delhi on 13<sup>th</sup> March 2016.



*'Clean Street Food- Delhi Project' launched by Hon'ble Minister for Health & Family Welfare during the Street Food Festival in Delhi on 13<sup>th</sup> March 2016*

2. Training of Street Food Vendors has been completed successfully in New Delhi. New project has been launched in Goa and Training for Restaurants has been initiated in Goa.

3. FSSAI-European Union are jointly working under CITD Initiative, on various activities viz. Training of Trainers in Food Safety Awareness Rising; Training in the Audit of Food Safety Management System; Enhancing the National SPS Information System; and Designing a Framework for the National Food Control System in India.

13.1.6 A "Workshop on *Scientific Cooperation Framework for Food Safety*" was organized by FSSAI on 12<sup>th</sup> July, 2016 at New Delhi. The workshop was attended by more than 120 participants representing concerned key officials from the ministries, public and private institutions engaged in research and development in areas of food safety, hygiene and nutrition and Research Funding Agencies, thus largely contributing to the success of this workshop.

(i) Several initiatives have been taken to disseminate information on the FSS Act, Rules and Regulations as well as promote safe and nutritious food through various IEC related activities. A comprehensive strategy is in place to promote all the initiatives of FSSAI to various target audiences through multiple media channels such as print and electronic media. An awareness campaign was undertaken in Delhi Metro Trains for one month in March-April, 2016 through display of awareness panels in metro trains of all routes.

(ii) 10@10 new initiatives were launched which are: Safe and Nutritious Food @ Home; Safe and Nutritious Food @ School; Safe and Nutritious Food @ Workplace; Serve Safe; Corporates for Safe and Nutritious Food; Connect to Citizens; Diet4Life; Food Safety Training and Certification; Integrated Food Standards – Quick Access System; and Strengthening of Food Testing Laboratories.

(iii) A National Summit on Fortification of Food was organised on October 16-17, 2016, at Vigyan Bhawan, New Delhi. Hon'ble Union Minister for Consumer Affairs, Food and Public Distribution, Shri Ram Vilas Paswan and Hon'ble Minister of State, Ministry of Health and Family Welfare, Smt. Anupriya Patel released the Standards on Fortification of Food, 2016, unveiled a logo to mark fortified foods and released a book "Journey of Food Fortification, Fighting Malnutrition, Improving Lives



and an Advocacy Docket". This initiative was taken to promote food fortification as a complementary strategy to fight widespread micronutrient malnutrition in India. This event culminated in a Joint Declaration by all stakeholders to implement large-scale fortification in India. A road to implement this was also formulated.



*Hon'ble Union Minister for Consumer Affairs, Food and Public Distribution, Shri Ram Vilas Paswan and Hon'ble Minister of State, Ministry of Health and Family Welfare, Smt. Anupriya Patel unveiling the logo to mark Fortified foods in National Summit on Fortification of Food organised on 16-17 October, 2016 at New Delhi*

13.1.7 During the visit of Prime Minister of New Zealand to India, an arrangement between FSSAI and New Zealand Ministry for Primary Industries regarding food safety cooperation was signed and exchanged on 26<sup>th</sup> October, 2016. The objective of this arrangement is to enhance cooperation and alignment of understandings between the participants so as to better manage risks to human health, while reducing any duplicative or unnecessary food safety related regulation affecting trade between the two countries.

## 13.2 REGULATORY CONTROL OVER DRUGS

Availability of medical products that are safe, efficacious and of standard quality is a critical link for effectively providing health services in the country. Currently, the medical products are regulated both by CDSCO and State Drug Regulatory authorities within their respective realms in terms of the Drugs and Cosmetics Act, 1940 and Rules thereunder.

The regulatory control over the import, manufacture, distribution and sale of drugs, cosmetics and notified medical devices in the country under the provisions of the Drugs and Cosmetics Act, 1940 and the Drugs and Cosmetics Rules, 1945 is exercised by Central Drugs Standard Control Organisation (CDSCO) and the State Drug Regulators. The manufacture, sale and distribution of drugs in the country is primarily regulated by the State Drug Control Authorities appointed by the State Governments. Control over drugs imported into the country, new drugs introduced for the first time in India, clinical trials, etc. is exercised by the Central Government through CDSCO. The objective of the drug regulatory system is to ensure availability of drugs, cosmetics and medical devices that meet the parameters of quality, safety, efficacy or performance.

### 13.2.1 Central Drugs Standard Control Organisation (CDSCO)

The Drugs Controller General (India) is the head of Central Drugs Standard Control Organisation (CDSCO). The CDSCO with its Headquarters in New Delhi has six Zonal offices situated at Mumbai, Ghaziabad, Kolkata, Chennai, Ahmadabad and Hyderabad, four Sub-Zonal offices at Bengaluru, Baddi, Jammu and Indore and Port Offices at notified ports of entries at Mumbai (Sea and Airport), Nava Sheva (Seaport), Kolkata (Sea and Airport), Chennai (Sea and Airport), Hyderabad (Airport), Delhi (Airport), Kochi (Seaport), Ahmedabad (Airport), Bengaluru (Airport) and Goa (Sea and Airport).

There are, at present, seven central drug testing laboratories under CDSCO and all of them have been accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) for the functions indicated to them. These are:

Name of Laboratory	Field of NABL Accreditation
CDL, Kolkata	Biological, Chemical & Toxicological
CDTL, Mumbai	Biological, Chemical
CDTL, Chennai	Chemical & Mechanical
CDTL, Hyderabad	Chemical
RTDL, Chandigarh	Chemical
RDTL, Guwahati	Biological & Chemical
CDL, CRI Kasauli	Biological & Chemical

The Central Drug Laboratory, Kolkata is the appellate laboratory for testing of drugs. The Central Drug Testing Laboratory, Mumbai is an appellate laboratory for copper T–intra-uterine contraceptive devices and tubal rings. The Central Drug Testing Laboratory, Chennai is an appellate laboratory for condoms. The Regional Drug Testing Laboratory, Guwahati tests the samples of chemicals and biological drugs received especially from the States in the Northern Eastern States.

### 13.2.2 Strengthening of CDSCO

The Government has, with a view to improve the quality, safety and efficacy of medical products taken a series of measures during last two years. These include approval of a scheme for strengthening the drug regulatory structures both in the Centre and also in the States at a total cost Rs. 1,750 crore.

The Scheme for strengthening includes setting up of 6 new drugs/medical devices/cosmetics testing Central labs and 8 Mini labs at Airports and Seaports for assuring the safety, efficacy and quality of drugs, cosmetics and medical devices. The approved schemes also entail setting up of a National Academy for Drug Regulators.

As per Government approval, training programmes have already been started for regulatory personnel both from the Central and State Government and Laboratory personnel. The training programmes conducted were for induction level, on enforcement and prosecution related areas and risk based inspection of pharma manufacturing facilities. Nearly 500 regulatory personnel from the Centre and States have been trained. Further, CDSCO has in partnership with Indian Pharmacopoeia Commission, conducted training programmes for the laboratory staff of the Central and State Drug Testing Laboratories. The Common training programmes for regulatory and laboratory personnel from all over the country will ensure commonality in regulatory practices including testing and analysis. CDSCO has implemented Quality Management System (QMS) as per ISO 9001:2008 with effect from 1st August, 2015 in all its divisions at CDSCO (Hqr).

With a view to enhance the quality, safety and efficacy of medical products in the country, three pronged

strategy has been adopted viz. (i) Product quality; through testing of larger samples; (ii) Process quality; through GMP and GLP inspections; and (iii) Comprehensive training of regulatory and laboratory personnel.

The Medical Device Rules, 2016 have been notified on 17.10.2016 under the provisions of Drugs and Cosmetics Act, 1940 for public suggestions/objections. The proposed Medical Device Rules seek to harmonise regulations with international practices. Earlier, the Government has also revised the Schedule 'M-III' relating to Quality Management System for medical devices and brought it in conformity with ISO 13485. Other actions taken include measures such as notification of separate draft Rules for regulating medical devices, amendment of the Drugs and Cosmetics Rules for removing ambiguity in areas such as clinical trials and bringing out a revised version of the Bio-Similar Guidelines.

The process of implementation of e-Governance in CDSCO has been accelerated and online licensing system 'SUGAM' has been operationalised for online submission and processing of applications for Import and Registration of drugs, Medical Devices and Diagnostics and Cosmetics, Ethics Committee registration, permission to conduct Global Clinical Trials and Bio-availability/Bio-equivalence studies for export purpose, test license and import permit for import of drugs for personal use. The online system can be accessed by stakeholders and they can upload their applications and essential documents online. Online payment has also been integrated with the application procedure to enable safe, secure, convenient and time saving payment by the stakeholders. CDSCO has also tied up with Custom authorities for integration of import clearance system at ports with ICEGATE. SUGAM, an e-Governance Solution for Central Drugs Standards Control Organisation (CDSCO) has been chosen for the Award of Excellence in category 'Project' for 2016 by the Computer Society of India.

The National List of Essential Medicines (NLEM) has been revised on the basis of the recommendations of the Core Committee. NLEM, 2015 approved in December, 2015 has 376 medicines listed in it. A total of 106 medicines have been added and 70 medicines have been deleted from the NLEM, 2011 to prepare the NLEM, 2015.

### 13.3 INDIAN PHARMACOPOEIA COMMISSION (IPC)

The Indian Pharmacopoeia Commission (IPC) has been established as an autonomous institution under the Ministry of Health and Family Welfare, to promote public and animal health in India by bringing out authoritative and officially accepted standards for quality of drugs including active pharmaceutical ingredients (API), excipients and dosage forms, used by health professionals, patients and consumers. It envisions promotion of the highest standards of drugs for use in human and animals within the practical limits of the technologies available for manufacturing and analysis.

The mandate of IPC includes publishing of the Indian Pharmacopoeia and its addenda, National Formulary of India (NFI), to certify and distribute Indian Pharmacopoeia Reference Substances (IPRS), to act as the National Coordination Centre for Pharmacovigilance Programme of India and to conduct Skill Development programmes for the drug analysts, regulatory officials and other stakeholders.

Indian Pharmacopoeia (IP) is the legal book of standards as per Drugs and Cosmetics Act, 1940. It contains monographs of drugs and general chapters on analytical test procedures and provides details on standards of identity, purity and strength of drugs and pharmaceuticals.

The current edition (IP 2014) was published in fulfillment of the requirements of the Drugs and Cosmetics Act, 1940 and Rules thereunder. Recently, IPC has published Addendum 2015 and 2016 to the Indian Pharmacopoeia 2014. IP-2014 and its addendum contain 2716 monographs (Chemicals, Herbals, Veterinary, and Radio pharmaceuticals, etc.), 201 general chapters and 18 general monographs.

IPC-WHO-RNTCP also joined hands to organize the National Collaborative Workshop on “Casualty Assessment for Bedquiline Pharmacovigilance in India” from 6<sup>th</sup>-9<sup>th</sup> September, 2016.

With a view to achieve the highest standard and safety of drugs at International and National levels, an Advanced Level Research Center is under construction at IPC premises, at Ghaziabad.

Indian Pharmacopoeia Laboratory has been recognized by WHO for drug testing and has been incorporated in the list of WHO Prequalified laboratories. IPC has been awarded ISO 9001, ISO 14001 and ISO 18001 for Integrated Management System. Indian Pharmacopoeia Laboratory has been accredited as the Reference Material Producer as per ISO GUIDE 34 by the National Accreditation Board for Testing and Calibration Laboratory (NABL). Indian Pharmacopoeia Commission has also obtained ISO/IEC:17025:2005 from NABL.

The European Pharmacopoeia Commission has granted 'observer' status to the Indian Pharmacopoeia Commission. The “Observer” status in EDQM opens the doors for IPC for joining the mainstream of European Pharmacopoeia Committee.

The IPC is closely working with similarly placed organizations both at the national and international levels such as USP convention. British Pharmacopoeia Commission, European Directorate for the Quality of Medicines and Healthcare (EDQM), Chinese Pharmacopoeia Commission, World Health Organization, National Health Programmes for promoting the quality and safety of medicines. IPC also extended expert advice to WHO, Geneva for preparation of Technical Report Series 986 on 'specifications of Pharmaceutical Preparation' – prepared working document on Good Pharmacopoeial Practices on a Monograph on Herbals and Analytical test procedures and methodologies.

### 13.4 DRUG DE-ADDICTION PROGRAMME (DDAP)

The Ministry of Health & Family Welfare implements a Drug De-addiction Programme by providing financial grants for augmenting post abuse treatment facilities in selected Central Government Hospitals/ Institutions and the Government Hospitals/ Institutions in North-East States. Under this programme, a National Nodal Centre, the “National Drug Dependence Treatment Centre (NDDTC), Ghaziabad (U.P.)” has been established under the All India Institute of Medical Sciences (AIIMS), New Delhi. The other DDTCs receiving regular annual recurring financial assistance under this programme are PGIMER, Chandigarh and NIMHANS,



Bangalore. The purpose of these centres is not only to provide de-addiction services and rehabilitation services to the patients but also to conduct research and provide training to medical doctors in the area of drug de-addiction.

### 13.5 NATIONAL DRUG DEPENDENCE TREATMENT CENTRE (NDDTC)

The National Drug Dependence Treatment Centre has continued to leap forward in achieving its objectives of providing highest level of clinical care in the field of substance abuse and developing models of clinical care for other centres to emulate. It has been conducting capacity building exercises for medical and non-medical staff working in various centres of the country. It has continued to provide monitoring modules for evaluating such centres. It continues to provide expert inputs to various Ministries of Government of India in their programmes and policies. Recognizing the role and leadership that the centre enjoys nationally and internationally the centre has been declared as the WHO Collaborating Centre on substance use disorders (WHO-IND95). It has also been designated as a Regional Learning Centre by UNODC and Regional Technical Training Centre by Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) Round 9. The centre offers clinical care through out-patient and in-patient services for drug dependent persons, and runs four specialty clinics i.e., Tobacco Use Cessation, Adolescent Drug Use, Dual Diagnosis clinic and Women's clinic (started this year). Presently, the Centre operates two community based clinics in two urban slums (Trilokpuri and Sundar Nagri in East Delhi). It is also in the process of starting another community clinic in Kotla, Mubarakpur as well as a mobile clinic in East Delhi in Seemapuri area. During the period from 1.4.2016 to 30.11.2016, a total of 36,131 patients seen in OPD, of whom, 6,029 were new cases and 30,102 were old cases, of whom 815 persons were admitted in the ward. A total of 13,666 patient visits were made in Trilokpuri and 29,573 patient visits were made in Sundar Nagri Community Clinics.

NDDTC continues to conduct the Drug Abuse Monitoring System (DAMS) exercise under which data on pattern and profile of new treatment seekers at 122 De-addiction centres is collected and collated.

NDDTC has strengthened the Drug De-addiction Programme (DDAP) by establishing Drug Treatment Clinics (DTCs). The pilot phase (2014-2017) had set a target of establishing 22 DTCs across the country, of which 14 have been established (3 clinics in Mumbai and one each at New Delhi, Bathinda, Kapurthla, Imphal, Bishnupur, Churachandpur, Thoubal, Lucknow, Rohtak, Kota and Osmanabad). Low-cost IT solutions are being implemented to manage and monitor the scheme and to provide technical support through the portal <http://dte-scheme.in>. The prestigious award from the British Medical Journal has also been awarded for this project.

The Ministry of Social Justice and Empowerment, Government of India has entrusted NDDTC to conduct a national survey to assess the extent and pattern of substance use in India. The proposed survey is the **second** in the country, with the first and only national survey conducted fifteen years ago. The national survey is planned to be conducted over a two years period and will provide state-level numbers and proportion of people using different psychoactive substances in India.

The centre conducted a study on Size Estimation and Mapping of Substance Use in Street Children in Delhi. NDDTC has also been established as a monitoring centre for Pharmaco-vigilance to monitor adverse effects related to substance use management.

Faculty from NDDTC are involved in building the capacity of service providers working under the National AIDS Control Organisation (NACO), MoH&FW on delivery of Methadone Maintenance Treatment (MMT) for Injecting Drug Users (IDUs).

NDDTC organised the National Annual Continuing Medical Education (CME) on Substance Use Disorders as part of its annual day celebrations on April 30, 2016. The CME was themed "Alcohol Use Disorders: Contemporary Issues" and focused on a broad range of topics related to alcohol use that are relevant in modern times. The CME was attended by more than 180 delegates.

The National Drug Dependence Treatment Centre has taken further stride in clinical services, teaching and research areas by starting a new specialized course in "DM Addiction Psychiatry", from 1<sup>st</sup> January 2016, to



further build the capacity of the country in terms of creating a cadre of experts and resource persons in the field. Telemedicine unit will soon start its operation. A website is being planned for teaching and training purposes for health personnel in various aspects of mental health and drug abuse and dependence.

### 13.6 DRUG DE-ADDICTION AND TREATMENT CENTRE DEPARTMENT OF PSYCHIATRY PGIMER, CHANDIGARH

The Drug De-Addiction and Treatment Centre (DDTC), PGIMER, Chandigarh was established in 1988. At present it has a 20 bedded in-patient section, out-patient department and community clinics at Kharar and Boothgarh in the State of Punjab. In 2016, an Urban Outreach Clinic has been started at Civil Hospital Naraingarh in the State of Haryana.

At the DDTC, it is planned to expand the bed strength from 20 beds to 50 beds. During the year 2016-17, 7,353 new and follow up patients were seen in the outpatient service and 188 patients admitted to the ward. Counseling sessions were held with 3,033 patients. A total number of 3,460 Laboratory tests were administered. A total of 142 Yoga Sessions and 151 Art of Living Sessions were provided to patients. In community services around 15 camps and awareness-cum-treatment programs were organized.

At the DDTC, a training programme was also conducted for the Medical & Social Welfare students of Punjab University, Chandigarh. 15 research publications in areas relevant to alcohol and drug abuse were published in reputed national and international scientific journals.

For managing the problem of drug abuse in the State of Punjab, DDTC has drafted a drug abuse policy guidelines especially for opiates and opiate substance therapy and runs training programs for the medical professionals and para professionals of the State Health Services.

DDTC has developed service delivery models for Detoxification and Abstinence maintenance and Dual diagnosis. A post-doctoral course i.e. DM in Addiction Psychiatry has been running since January, 2014. This is the first such course in the country which will create a new cadre of deaddiction specialists.

### 13.7 CENTRE FOR ADDICTION MEDICINE, NATIONAL INSTITUTE OF MENTAL HEALTH AND NEURO SCIENCES, BENGALURU

#### 13.7.1 Clinical Services

The Centre for Addiction Medicine (CAM) has registered 1,900 new patients, 8,967 patients in out-patient follow up and 12,063 telephonic follow ups over the period of 8 months from April to November, 2016. 773 patients were admitted to the CAM in-patient ward during the above period for treatment. There is a comprehensive in-patient program consisting of individual and family assessment, individually tailored treatments which involve pharmacological treatments for withdrawal and long term prevention of relapse, individual and group counseling, family counseling and intensive aftercare.

#### E-learning Certificate module : Anytime with Digital India

- Module**
- 1 - Alarms\*
  - 2 - Opoid Use Disorders and Management
  - 3 - Addiction and Co-morbidity
  - 4 - Cocaine Use Disorders\*
  - 5 - Psychological Assessment and Intervention
  - 6 - Addiction Pharmacology\*
  - 7 - Helping People Quit Tobacco\*
  - 8 - Stress and Resilience
  - 9 - Behavioral Addiction
  - 10 - Adolescence and Addiction
  - 11 - Substance Use in Special Population
  - 12 - Clinical Challenges
  - 13 - Evidence Based Practice - Alcohol
  - 14 - Substance Induced Psychiatric Disorders
  - 15 - Biological Aspects
  - 16 - Forensic Aspects of Addiction
  - 17 - Psychological Management



The first phase of digitalization of patient assessment has been initiated this year.

The *drug-toxicology laboratory* which tested around 12,457 samples for drugs and alcohol in urine and blood has had to add one more e-machine for testing samples to keep up with the growing demand. The lab has been receiving requests from outside agencies for tests to be done, since it is the only facility for such testing in the region.

An exclusive "*Opioid treatment clinic*" was started in the outdoor to provide comprehensive treatment for the patients addicted to different opioids. The buprenorphine maintenance treatment (BMT) was provided to 75 patients during this period.

### 13.7.2 Benefit to the health care professionals

The Centre has developed an e-learning module which can be assessed anywhere. The digital India, Department of Electronics and Telecommunication is the collaborative partner to this e-learning module.

Centre for Addiction Medicine NIMHANS-BIHAR model training non-specialist doctors and counselors to handle alcohol addiction (March 2016 to November 2016)



The non-specialist district health professionals (18) from nine districts of Bihar are currently mentored to provide quality care in the management of alcohol use disorders (AUDs). Over three months, 2,133 patients cases were screened for alcohol use disorders and 709 (33%) have AUDIT score greater than 16 suggesting severe alcohol problem. Ninety seven percent (97%) were managed by these non-specialists with collaborative care from NIMHANS. The relative contribution of the online tele-mentoring and handholding component in these improvements was perceived by the participants as 72%.

### 13.7.3 After Care Services & Vocational Rehabilitation

The Centre has dedicated manpower for after care. 14,321 SMS reminders were sent, 12,063 telephone calls were made for patients who were expected to come for follow-up and 176 home visits were made to facilitate treatment/follow up compliance of the patients. Sober patients who reported to OPD were

felicitated. Unemployed patients were motivated to work and placements were facilitated.

## 13.8 MEDICAL STORE ORGANIZATION

Medical Stores Organization (MSO) which consists of seven Medical Store Depots located at Mumbai, Kolkata, Chennai, Karnal, New Delhi, Hyderabad & Guwahati under the Directorate General of Health Services is a century old Organization.

The MSO handles the storage and distribution of medical stores worth Rs.750 crore per year (apprx.) under National & International Health Programmes under Ministry of Health & Family Welfare such as NVBDCP, RCH, Family Welfare, Anti TB, Anti Leprosy and various immunization programmes.

The MSO has also arranged for procurement and supply of quadrivalent meningococcal meningitis vaccine (QMMV); influenza vaccine (SIV) for Hajj Pilgrims; Yellow Fever Vaccine for CRI, Kasauli; and provisioned for emergency medical relief supply to Fiji cyclone and Sri Lanka flood affected area during 2016-17. The MSO also procured and arranged supplies of H1N1 drugs to different states in the country.

The new combined Generic Drug formulary of 1165 molecules for MSO/CGHS & Central Govt. Hospitals containing 2000 formulation has been finalized. The MSO has initiated the process of finalization of rate contracts for these Generic Formulations and 268 Life Saving Drugs for CGHS & other Central Govt. Institutions.

The MSO developed its own website and web application software (mso@gov.in) for carrying out various activities such as indenting by the indenters; compilation of demands; processing of Local Purchase Proposals (LPPs) and Sanctions; placement of Supply Orders and inspection & receipt of the stores etc.

During the period from 1.4.2016 to 31.10.2016, total online procurement & supply of Generic medicines for Rs. 67.98 crore & Proprietary medicines for Rs. 214.31 crore has been made.