UNIT-3

NATIONAL HEALTH PROGRAMS

Points to be covered in this topic

1. NATIONAL HEALTH PROGRAMME
2. NATIONAL HIV AND AIDS CONTROL PROGRAMME
3. NATIONAL HEALTH PROGRAMME FOR TUBERCULOSIS
4. INTEGRATED DISEASE SURVEILLANCE PROGRAMME (IDSP)
5. NATIONAL LEPROSY CONTROL PROGRAMME
6. NATIONAL MENTAL HEALTH PROGRAMME
7. NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF DEAFNESS
8. UNIVERSAL IMMUNIZATION PROGRAMME
9. NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS
10. PULSE POLIO PROGRAMME

❑ NATIONAL HEALTH PROGRAMME

❖ INTRODUCTION

- The **National Health Programme** was launched by the **central government** for the following purposes:
  - ✓ **Communicable disease eradication.**
  - ✓ **Control of population and improving rural health.**
  - ✓ **Raising the standards of nutrition.**
  - ✓ **Improvement of environmental sanitation.**
- Technical and material support has been offered by numerous international organizations such as; the **WHO, UNICEF and UNFPA** to implement these programmes.

❖ HEALTH CARE PROGRAMME

- Health care programmes are meant to **enhance the health status** of the community.
- **An increase in life expectancy.**
- **Nutritional status improvements.**
- **Decrease in the rate of population growth.**

❖ OBJECTIVES OF THE PROGRAMME

- Achieving acceptable **levels of good health in the country's general population**
- Ensuring more equal access to health care through the **country's social and regional.**
- To regulate the **import, manufacture, distribution by licensing of drugs and cosmetics.**
- Distribution, manufacturing and selling of drugs by **eligible persons.**

❖ HEALTH CARE SYSTEM

- The health care system is designed for **provision of health care services.**
- It is represented in India by **five major sectors or companies** that vary from each other through the application of health technology and it includes; **public health sector, private sector, indigenous systems of medicine, voluntary health agencies, national health programmes.**

Programmes for Communicable Diseases

- National Vector Borne Diseases Control Programme (NVBDCP) Revised National Tuberculosis Control Programme
- National Leprosy Eradication Programme
- National AIDS Control Programme
- Universal Immunization Programme
- National Guinea worm Eradication Programme
- Yaws Control Programme
- Integrated Disease Surveillance Programme.

Programmes for Non Communicable Diseases

- National Cancer Control Program
- National Mental Health Program
- National Diabetes Control Program
- National Program for Control and treatment of Occupational Diseases
- National Program for Control of Blindness
- National program for control of diabetes, cardiovascular disease and stroke
- National program for prevention and control of deafness

National Nutritional Programs

- Integrated Child Development Services Scheme
- Midday Meal Programme
- Special Nutrition Programme (SNP)
- National Nutritional Anemia Prophylaxis Programme
- National iodine Deficiency Disorders Control Programme
- Balwadi Nutritional Programs

❑ NATIONAL HIV AND AIDS CONTROL PROGRAMME

- The **National AIDS Control Programme** (NACP), launched in **1992,** is being implemented as a comprehensive programme for prevention and control of HIV/AIDS in India.

NACP-I 1992	**AIDS Control Programme in India First National AIDS Control Programme**
NACP-II 1999	**Decentralization of programme implementation to State level and greater involvement of NGOs**
NACP-III 2007-2012	**Scaling up HIV prevention interventions for HRG and general population, and integrate them with Care, Support & Treatment services**
NACP-IV 2012-2017	**Slow & prevent spread of HIV through a major effort to prevent its transmission**

❖ Objectives of HIV and AIDS Control Programme

i. **Transfusing Safe blood.**
ii. Reduction of sexually transmitted disease transmission.
iii. **Prevention of HIV transmission.**
iv. **Establishing Surveillance.**
v. Creating an enabling environment.
vi. **Building the right capacity.**
vii. **Training of Health staff.**
viii. Reducing stigma attached with disease.
ix. Studying behavior and Research.
x. Developing programme management.

NACP- I

➢ Objective

- Slow & prevent spread of HIV through a major effort to prevent its transmission

Strategies

- Focus on raising awareness, blood safety, prevention among high risk populations
- **Improving surveillance**

Achievements

- Strong partnership with WHO Establishment of the state AIDS control cells
- **Improved blood safety**
- Expanded sentinel surveillance & improved coverage and collection of data
- Improved condom promotion activities
- **Development of national HIV testing policy**

NACP- II

Objective

- Reduce the spread of HIV infection in India through behavior change and **increase capacity to respond to HIV on a long-term basis.**

Key strategies

- Targeted Interventions for high-risk groups
- Preventive interventions for general populations
- **Involvement of NGOs**
- Institutional strengthening

Achievements

- Nation wide behavioral sentinel surveillance were conducted 3
- **Prevention of Parent to Child Transmission of HIV/AIDS** (PPTCT) program was expanded.
- **Computerized management information system was created.**
- HIV prevention & care and support networks were strengthened Supports from partner agencies increased.

NACP- III

Objectives

- Reduce the rate of incidence by 60% in 1st year of program in high prevalence states and by 40% in vulnerable states.

Strategy

- **Prevention by TI, ICTC, Blood safety, Communication, and condom promotion**
- **Care , support & treatment-ART, COES, Community center**
- Capacity building
- Strategic information management by monitoring & evaluation

Achievements

- 12.5 lakh PLHIV were registered & 4.2 lakh patients were on ART.
- **3000 Red ribbon clubs were established.**
- Link workers training module updated & condom promotion program was strengthened

NACP- IV

Goal

- To halt and reverse the epidemic in India over next 5 years by integrating programmes for preventions & care, support & treatment.

Objective

- **Reduce new infection by 50%** (ac. To NACP III base line)
- Provide care, support & treatment to all living with HIV/AIDS and treatment service for all who needs it.

Key strategies

- ✓ **Strategy 1 :-** Intensifying and consolidating prevention services.
- ✓ **Strategy 2 :-** Comprehensive care, support and treatment.
- ✓ **Strategy 3 :-** Expanding IEC services.
- ✓ **Strategy 4 :-** Strengthening institutional capacity
- ✓ **Strategy 5 :-** Strategic Information Management System

➢ Key Priorities under the NACP-IV are :-

- **Prevention of Parent to Child transmission. (PPTCT).**
- Focusing on IEC strategies for behaviour change in High-risk group (HRG), awareness among the general population and demand generation for HIV services.
- **Providing comprehensive care**, support and treatment to eligible **People living with HIV (PLHIV).**
- **Reducing stigma and discrimination** through Greater involvement of PLHA (GIPA). The de-centralizing rollout of services including; technical support.
- Ensuring effective use of strategic information at all levels of the programme.
- **Building capacities of NGO** and civil society partners especially in states with emerging epidemics.
- Social protection and insurance mechanisms for PLHIV will be strengthened.

➢ Package of services provided under NACP-IV are as follows:

▪ Prevention services

- ✓ Targeted Interventions For High Risk Groups and bridge population
- ✓ Needle Syringe Exchange Program and opioid substitution therapy for IDUs
- ✓ Link worker scheme for HRGS and vulnerable population in rural areas
- ✓ **Prevention & Control Of STI/RTI**
- ✓ **Blood Safety**
- ✓ HIV counselling and testing services
- ✓ **Prevention Of Parent To Child Transmission**
- ✓ Condom Promotion
- ✓ **IEC & BCC**
- ✓ Social Mobilization, Youth Interventions and adolescent education programme
- ✓ **Mainstreaming HIV/AIDS**
- ✓ Workplace interventions

➢ Care, support & treatment services

- ✓ **Lab services for CD4 testing and other investigations**
- ✓ Free first line and second line ART
- ✓ **Pediatric ART for children**
- ✓ Early infant diagnosis for HIV exposed infants and children below 18 months
- ✓ Nutritional and psychosocial supports through care and support centres.
- ✓ HIV/TB coordination (cross referral, detection and treatment of co-infections)
- ✓ **Treatment of opportunistic infection**
- ✓ Drop-in centres for PLHIV **(People Living with HIV)** networks.

❖ PROGRAMS OF NACO

NACO has initiated many programs. Some of them are:

i. **Blood Safety Programme:** It aims to provide safe healthy and quality of blood and blood products for patients who need them.
   - ✓ **The NACO plan of strategies** sets out the following strategies
   - ✓ **Strengthening the national services** for blood transfusion
   - ✓ Ensuring a sufficient blood supply to all blood centre
   - ✓ Ensuring the safety the safety of blood product
   - ✓ **Blood transfusion management, monitoring and evaluation.**

ii. **National AIDS Control Programme:** It is the umbrella programme that coordinates all other NACO programmes.

iii. **Prevention of Mother To Child Transmission (PMTCT):-** This programme prevents HIV from being transmitted from mother to child. **Taking HIV medicine and maintaining an undetectable viral load during pregnancy, labor and delivery and while breast/chest feeding** reduces the chances of transmission through breastfeeding to less than 1% .

iv. **National Strategic Framework for Comprehensive Management of HIV and AIDS :-** This framework provides the overall strategy for managing HIV and AIDS in India.

v. **National Programme on Prevention and Control of Sexually Transmitted Diseases (NPPCSTD):** This programme focuses on preventing and controlling sexually transmitted diseases.

vi. **Support Services for People Living with HIV/AIDS (PLHA):** These services provide support to people living with HIV/AIDS.

vii. **National AIDS Prevention and Control Policy (NAPCP):** This policy provides guidelines for preventing and controlling HIV and AIDS in India.

viii. **National Guidelines on HIV Testing:** These guidelines guide how to test for HIV.

ix. **National Minimum Standards for Care and Support of People Living with HIV and AIDS (NMSPC):** These standards provide minimum requirements for the care and support of people living with HIV and AIDS.

x. **National Guidelines on Antiretroviral Therapy (ART):** These guidelines guide the use of antiretroviral therapy for people living with HIV.

xi. **National Guidelines on Adolescent HIV Prevention and Care:** These guidelines guide the prevention and care of adolescents living with HIV.

xii. **Condom programming :-** Condom programming is a strategic approach to **ensure that sexually active persons at risk of HIV/STIs** are motivated to **use condoms**, have access **to quality condoms**, and can use them consistently and correctly.

MILESTONES OF THE PROGRAMME

1986	First case of HIV detected. AIDS task force set up by ICMR. National AIDS Committee by Ministry of Health.
1990	Medium term plan for states and 4 metros
1992	NACP I launched National AIDS control board constituted. NACO set up
1999	NACP II began, SACS established
2002	National AIDS control policy National blood policy
2004	Antiretroviral treatment initiated
2006	National council on AIDS under chairmanship of Prime Minister. National policy on Pediatric ART
2007	NACP III launched for 5 years (2007-2012)
2012	NACP IV launched for next 5 years

❑ NATIONAL HEALTH PROGRAMME FOR TUBERCULOSIS

- **Tuberculosis (TB) is caused by a bacterium called Mycobacterium tuberculosis.**
- TB affects the lungs mainly and causes pulmonary tuberculosis.
- The other parts of the body, including the **intestine, bones and joints, lymph glands, skin, and other body tissues,** are also affected by TB.
- The National TB Programme (NTP) was launched by the Government of India in **1962** in the form of District TB Centre model involved with BCG vaccination and TB treatment.
- **The Revised National TB Control Programme** (RNTCP) thus formulated, adopted internationally recommended Directly Observed Treatment Short-course (DOTS) strategy was launched in **1997.**

❖ Objectives of Tuberculosis Control Programme

The main goals of anti-TB therapy are

i. To cure the TB patient (by removing much of the bacilli rapidly).
ii. **To Prevent death .**
iii. To provide facilities for activities in training, teaching and research.
iv. To serve as an open institution for the prevention, control and treatment of TB and allied diseases in the region.
v. To **prevent the development drug resistance** (by using a combination of drugs).
vi. To **reduce the transmission of tuberculosis** to others.
vii. To promote the national programme for the **management of tuberculosis** in the country and formulate strategies those are socially appropriate and economically viable to sustain and improve the programme.
viii. To ensure correct diagnosis of TB and management of treatment and further speedup the **reduction of transmission of TB.**
ix. To extend systems for adherence to tuberculosis care and touch tracing of points treated in the private sector.

❖ Organization

The profile of RNTCP in a state is as follows : -

- ✓ State Tuberculosis Office
- ✓ State Tuberculosis Training
- ✓ Director and Demonstration Centre
- ✓ District Tuberculosis Centre
- ✓ Tuberculosis Unit
- ✓ Medical officer -TB Control
- ✓ Senior Treatment Supervisor
- ✓ Microscopy Centres, Treatment Centres
- ✓ DOTS Providers

❖ Achievements of RNTCP

- ✓ Covers whole country since **March 2006**.
- ✓ Phase II has been launched from **1 October 2006**.

❖ National Strategic Plan for 2012-2017

- ✓ The 2012-2017, National Strategic Plan (NSP) was included in the country's 12th **Five Year Plan**.
- ✓ **"Universal access for quality care** and treatment for all TB patients in the nation" with an aim of "reaching the unreached" was the theme of the NSP **2012-2017**.
- ✓ The key focus was on the early and full diagnosis of all **community-based TB cases**, including **drug-resistant TB and HIV-associated TB**, with **greater private sector** participation in improving treatment for all patients.
- ✓ National Strategic Plan 2012-2017 period in **improving support systems, programme architecture** and **implementation** of the **TB control environment.**

❖ National Strategic Plan for 2017-2025

- The NSP for TB elimination **2017-2025** is a framework to guide the activities of all stakeholders including; the national and state governments, development partners, **civil society organizations, international agencies, research institutions, private sector** relevant to elimination TB in India.

❖ Vision, Goals and Targets

1. **Vision:-** TB-Free India with zero deaths, disease and poverty due to tuberculosis.
2. **Goals:-** To achieve a rapid decline in **burden of TB, morbidity** and mortality while working towards **elimination of TB in India by 2025.**
3. **Targets:-** The requirements for moving towards TB elimination have been integrated into the four strategic pillars of **"Detect - Treat - Prevent - Build" (DTPB).**
4. **Detect:- Early identification of presumptive TB cases**, at the first point of care be it private or public sectors and prompt diagnosis using high sensitivity diagnostic tests to provide universal access to quality TB diagnosis including; **drug resistant TB in the country.**
5. **Treat:-** Provide sustained, equitable access to high quality TB treatment, care and support services responsive to the community needs without financial loss thereby protecting the populaion especially the poor and vulnerable from TB related **morbidity, mortality and poverty.**

   It can be achieved by:-

   - Treatment services.
   - Key affected populations.
   - Patient support system.
6. **Prevent :-**
   - **Scaling up air-borne infection** control measures at health care facilities.
   - Providing treatment for latent TB infection for the contacts of people with confirmed TB.
   - Deals with the **social determinants** of TB through an approach across different sectors.
7. **Build:- Build and strengthen relevant polices** to provide extra capacity for institutions and extra human resources capacity. This is to be done by **Restructuring the RNTCP** and other institutional arrangements.

   ✓ Building supportive arrangements for **surveillance, research and innovations.**

- ✓ **Providing a range of interventions** based on the local situations.
- ✓ Preventing the duplication of partners' activities.

❖ Outcomes of programmes

- **Sputum collection and sputum positivity** rates were **low in urban** and tribal areas, but **TB screening** was significantly low, particularly in tribal areas. In **tribal areas, sputum positivity was substantially greater.**
- The need for enhancement of RNTCP activities in tribal areas is warranted by a significantly **low cure rate and high default rate in tribal areas.**

❑ INTEGRATED DISEASE SURVEILLANCE PROGRAMME (IDSP)

- Surveillance can be defined as **'ongoing systematic data collection,** analysis and explanation and information distribution to those who need to know in order to take action.
- The **Integrated Disease Surveillance Programme (IDSP)** is a nationwide **disease surveillance** system in India incorporating both the **state and central governments** aimed at early detection and **long term monitoring of diseases** for enabling efficient policy decisions.
- It was started in **2004** with the assistance of the **World Bank.**

❖ Elements of Surveillance Activity

- ✓ Analysis and interpretation.
- ✓ Follow up
- ✓ Collection of data
- ✓ Feedback from the Programme for Integrated Disease Surveillance
- ✓ Compilation of data.

❖ Types of Surveillance in Integrated Disease Surveillance Programme (IDSP)

1. **Syndromic**:- Knowledge regarding diseases by **paramedical staff** and **community members** on the basis of **clinical patterns.**

2. **Presumptive** :- Diagnosis by **medical officers on typical history, pattern** and **clinical examination.**

3. **Confirmed** :- Positive laboratory investigation confirms clinical diagnosis by a medical

❖ Functions and strategies of IDSP

i. To take advantage of common monitoring roles, expertise tools and target populations, multiple tasks are merged into one integrated activity.

ii. Improving **sub-district mobility and communication.**

iii. State and district epidemiological cell upgrade and computerization.

iv. Share resources between programmes for disease control.

v. Distribute resources among **disease control programmes.**

vi. Strengthen monitoring at district level and response to priority diseases.

❖ Objectives

i. List all conditions under **primary health centre surveillance.**

ii. Specify the key targets of the **project for integrated disease surveillance.**

iii. Identification of **risk factors and developing hypothesis.**

iv. **Allocate funds for health care**

v. Limiting **mortality and morbidity.**

vi. Prevention of further **transmission of disease.**

vii. Formulate **prevention and control measures.**

viii. Establish a decentralized system of **disease surveillance for timely.**

❖ Outcomes of the programme

- ✓ **Reduction in mortality and morbidity**
- ✓ **Minimize economic loss**
- ✓ **Increased in number of trained surgeons.**

❖ Reporting units for disease surveillance are

	Public health sector	Private health sector
Rural	CHCs, district hospital	Sential private practioners and sentinel hospital
urban	Urban Hospital,ESI/Railway/medical college hospital	Sential private practioners and sentinel hospital, Medical colleges, private and NGO laboratories

❖ Milestone

NSPCD (National Surveillance Programme for Communicable Diseases) Launched in:

- ✓ **1997 :-** 5 districts
- ✓ **1998 :-** 20 more districts
- ✓ **1999 :-** 20 more districts.
- ✓ **2003 :-** more than 101 districts
- ✓ **Nov. 2004 :-** IDSP launched (up to 2010)
- ✓ **2010 :-** Extended for 2 more years
- ✓ **2012 :-** Integrated Disease Surveillance Programme

❑ NATIONAL LEPROSY CONTROL PROGRAMME

- ✓ Leprosy is a chronic infectious disease caused by ***Mycobacterium leprae.***
- ✓ The **National Leprosy control Programme (NLCP)** is a centrally sponsored **Health Scheme of the Ministry of Health and Family Welfare, Government of India.**
- ✓ NLCP has been in operation since **1955**, as a centrally aided programme to achieve **control of leprosy through early detection of cases and DDS (Dapsone) Monotherapy.**
- ✓ Sponsored by **central government**
- ✓ Funding pattern **central government**
- ✓ Ministry/department - DGHS **(Directorate General Of Health Services)**
- ✓ Beneficiaries - **individual and community**
- ✓ Eligibility criteria anyone

❖ Objectives

i. **Strengthen Disability Prevention** and Medical Rehabilitation of people affected by **leprosy.**

ii. **Reduction in the level of stigma** associated with **leprosy.**

iii. Normal treatment of cases in a neighboring village in moderate to low endemic areas/district by offering **Multi Drug Therapy (MDT).**

iv. Proper facilities for **surgical recovery and leprosy ulcer therapy.**

v. Early identification by **active monitoring of health workers** who are trained.

vi. **Monitoring** and reviewing the **National Elimination Programme for Leprosy.**

vii. Providing specialist facilities in the field of **leprosy diagnosis, response, relapse and reconstructive surgery.**

❖ Components

i. Decentralized integrated **leprosy services** through **general healthcare system.**

ii. Capacity building of all **general health services functionaries.**

iii. Intensified **information, education and communication.**

iv. Prevention of **disability and medical rehabilitation.**

v. Intensified **monitoring and supervision**

❖ Multi Drug Therapy (MDT) :-

✓ Multidrug therapy (MDT) treatment has been made available by **WHO.**

✓ it is **free of charge to all patients .**

✓ It provides **highly effective cure for all types of leprosy.**

✓ Combination of 2-3 drugs :- **Clofazimine , Rifampicin, Dapsone.**

❖ Major Initiatives :

✓ **DPMR (Disability Prevention and Medical Rehabilitation).**

✓ Dressing material, supporting medicine, ulcer kit to leprosy affected person.

✓ **Providing microcellular rubber footwear.**

- ✓ NGOS, Medical Colleges strengthen for Reconstructive surgery for correction of disability.
- ✓ Amount of **5000/-** for leprosy affected person from **BPL** family undergoing **Reconstructive Surgery.**
- ✓ Support to Government Institution in form of **5000/-** per **reconstructive surgery conducted.**
- ✓ Involvement of **ASHA,** in bringing out suspected **leprosy** cases and follow up of confirmed cases.
- ✓ Provision of **self settled colonies** for leprosy affected person.
- ✓ Intensive IEC campaign **"Towards leprosy free India".**
- ✓ Reduce leprosy burden.
- ✓ Reduce **stigma and discrimination.**

❑ NATIONAL MENTAL HEALTH PROGRAMME

- Mental health is an **integral part of health**, described as a healthy state of well-being (physical, mental, and social) and not just a lack of disease.
- **In 1980,** an expert group was formed. After several drafts and two workshops **(July 1981 and August 1982),** the final draft was sent, on **18th and 20th August 1982,** to the Central Health and Family Welfare Council , which recommended its adoption.
- **In 1982,** the Government of India launched the National Mental Health Programme (NMHP), taking into account the **heavy burden of mental illness** in the population and the absolute inadequacy of the country's mental health care system to deal with it.

❖ AIM

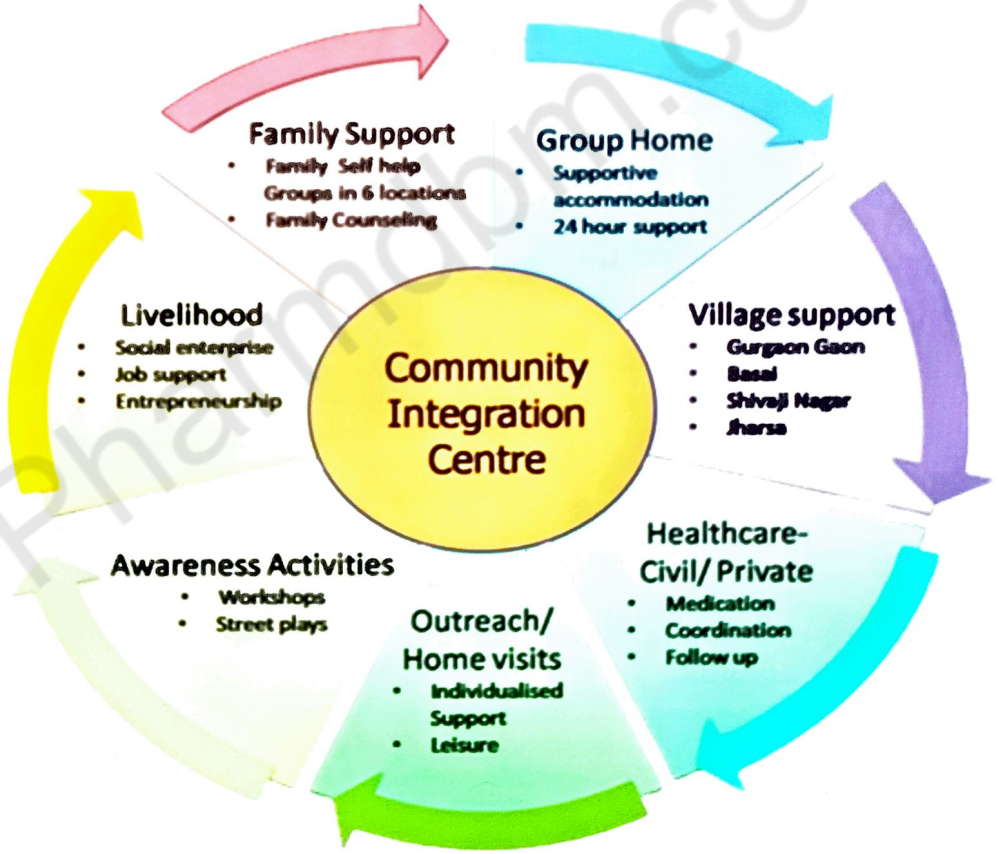
1. Mental and neurological conditions and their related disabilities are prevented and treated.

2. Usage of technology for mental health to expand general health services.
3. Use of the principles of mental health in overall national growth to enhance the quality of life.

❖ Objectives

- **Ensuring the availability and accessibility** in the near future of minimum mental health services for all, particularly for the **most vulnerable and under privileged segments of the population**.
- Encouraging the use of awareness of mental health in general health care and social growth.
- **Promoting community engagement** in the advancement of mental health services and stimulating self-help efforts in the community.

❖ Community Integration Centre



❖ Outcomes of Programme

- A big burden of mental illnesses in the Indian Population was reported in the **2015- 2016 National Mental Health Survey.**
- This result is based on a scientific, uniform and standardized approach conducted at one point in time across **12 states**.

- The effect is **immense, affecting the efficiency, productivity** and earning potential of all areas of a person and his/her family life. Such data should be used as **evidence to improve and enforce policies** and programmes in the field of mental health and should be the guiding force for future activities in India.

❑ NATIONAL PROGRAMME FOR PREVENTION AND CONTROL OF DEAFNESS

- The most common sensory problem in **humans is hearing loss**. The **National Programme for Deafness Prevention and Control** was developed by the Government of India's Ministry of Health and Family Welfare. There are about **63 million** people in India, as per the WHO, who are distressed by this issue.

- **Hearing impairment** may have a significant impact on people's ability to connect with others, on their schooling, on their ability to gain and retain jobs and on **social relationships that contribute to reprehension.**
- The programme was expanded to include **192 districts from 20 states**. The programme is planned to be expanded to an additional **200 districts** in a staggered manner that is likely to include all states and union territories by **March 2017**.

❖ Types of Deafness

1. **Conductive deafness:** Due to defect in the conducting mechanism of the ear namely external and middle ear.
2. **Sensori-neural deafness / Perceptive deafness:** Due to lesions in the labyrinth, 8th nerve & central connections. It includes psychogenic deafness.
3. **Mixed deafness:** Both the above mentioned types are present.

❖ Long Term Objective

Prevent and control the main causes of **hearing impairment and deafness**, so that by the end of the **12th five-year plan**, we will reduce the overall burden of this disease by **25 percent**.

❖ Objectives

1. In order to improve the **current inter-sectoral linkage** for the continuation of the recovery programme for people with deafness.
2. **Early detection, diagnosis and treatment of hearing** loss-related ear problems.
3. Prevent the **avoidable loss of hearing due to illness**.
4. Identification of health care facilities and operations at the **primary, middle and To lol tertiary levels.**
5. To identify weaknesses and strengths, and short-term and long-term needs.
6. To treat individuals of all age groups suffering from deafness medically.
7. To construct a **hearing aid using digital signal process**.

❖ Functions

1. Development of human resources for **ear treatment services**.
2. Developing the **institutional capacities of district hospitals.**
3. To promote effective information and education public awareness through communication strategies.
4. **Training to all the manpower.**
5. **Screening, early diagnosis and management.**
6. To aware people about the disease i.e. we can take care of our ears by these method.

❖ Strategies

1. To strengthen the **service delivery including rehabilitation**.
2. To develop human resources for ear care.
3. To **promote out reach activities and public awareness** through **innovative and effective IEC strategies** with special emphasis on prevention of deafness.

❖ Components of the Programme

1. **Service provision.**
2. **Generation of awareness through IEC/BCC activities.**
3. **Capacity building.**
4. **Manpower training and development.**

1. **Service Provision:** Early diagnosis and treatment of cases of hearing and speech impairment and recovery at various stages of the delivery system of health care.
2. **Awareness generation through IEC activities:** For early **detection of hearing impairment,** in particular children, so that it is possible to treat those cases in a timely manner and to eliminate the stigma attached to deafness.
3. **Capacity building:** In relation to audiometric facilities for the district hospital, and **neighborhood health centers and primary health centre.**
4. **Manpower training and development:** Education from medical college specialists **(ENT and Audiometry)** to grass root staff will be provided for prevention, early detection and treatment of cases of hearing impairment and deafness.

❖ Outcomes

- Decrease in the number of people with **hearing impairment.**
- Knowledge among health workers and root-level workers to act with the support of **PHC medical officers and health officers.**
- Reduction in the range of different ear conditions and hearing impairments
- **Increased availability at PHC/District Hospital and Community** Health workers of different services such as; **early detection, diagnosis prevention, care etc.** for hearing impairment and deafness.
- Improved support network for the hearing impaired.
- Increased **capacity building** to ensure better treatment and facilities hospitals.

❑ UNIVERSAL IMMUNIZATION PROGRAMME

- In 1974, the WHO initiated a global immunization programme called the 'Expanded Immunization Programme' to protect against six preventable diseases: diphtheria, whooping cough, tetanus, polio, measles and tuberculosis.
- The Extended Immunization Programme was implemented in January 1978. In 1985, the compulsory immunization programme was initiated. This scheme is also known as universal child immunization.
- On November 19th 1985, the Universal Immunization Programme was launched in India.
- The 1992 Child Survival and Safe Motherhood Programme and the 1997 Child Health Reproductive Programme were launched.
- On 11th June 2000, the Government of India established a National Technical Committee on Child Health.
- On 28th August 2001, a National Technical Advisory Group of Immunization was set up by the Department of Family Welfare.

S. N	Vaccine	Protection against
1	BCG	Tuberculosis
2	Hepatitis B	Hepatitis B, liver infection
3	Oral Polio Vaccine	Polio
4	Inactivated Polio Vaccine	
5	Pentavalent vaccine	Diptheria, Pertussis, Tetanus, Hepatitis B &Haemophilus Influenza B
6	Measles Vaccine	Measles
7	DPT Vaccine	Diptheria, Pertussis, Tetanus
8	TT (Tetanus Toxoid)	Tetanus
9	Rota virus Vaccine	Diarrhoea
10	Japanese Encephalitis Vaccine	Japanese Encephalitis - a brain infection

Immunization of Children's of Different Age group

Vaccine	Age
Bacillus calmette-Guerin, Oral Polio	Birth
Diphtheria PertunnisTetamas, Oral Polio	6 Week
Diphtheria Pertussis Tetanus, Oral Polio	10 Weeks
Diphtheria Pertussis Tetanus, Oral Polio	14 weeks
Measles	9 Months

❖ Schedule of Universal Immunization Programme

It contains three doses of tetanus toxoid for mother and infant. The baby is vaccinated against seven killer preventable diseases after birth, including the **oral polio vaccine, BCG (against tuberculosis), DPT vaccine, hepatitis B and the measles vaccine.**

Schedule of Vaccine Recommended by Indian Academy of Pediatrics

Age	Vaccine
Birth to 15 day	BCG + OPVC zero dose + Hep B11st dose
6-8 weeks	OPV1+ DPT1 + Hep B 2nd dose + Hib 1st dose
10-12 weeks	OPV2 + DPT2+ Hep B 2nd dose
14-16 weeks	OPV3+ DPT3 + Hep B 3rd dose
9 months	Measles
15-18 months	1st Booster of OPV/DPT + Hib + MMR
4-6 years	2nd Booster of OPV + DPT
10 years	Tetanus toxoid
16 years	Tetanus toxoid

Vaccine	When to give	Dose	Route	Site
BCG (Bacilli galmetteGurein)	At birth	0.05ml	Intra dermal	Left Upper arm
Hepatitis B birth dose	At birth	0.5ml	Intra muscular	Left Antero lateral side of mid thigh
OPV zero dose	At birth	2 drops	Oral	
OPV 1, 2, &3 (Oral Polio Vaccine)	At 6, 10 & 14 weeks	2 drops	Oral	
IPV (Inactivated Polio Vaccine)	At 14 weeks	0.5ml	Intra muscular	Right-Antero lateral side of mid thigh
Pentavalent 1,2 & 3 (Diptheria, Pertussis, Tetanus, Hepatitis B &HIB)	At 6, 10 & 14 weeks	0.5ml	Intra muscular	Left Antero lateral side of mid thigh
Measles – 1st Dose	At 9 completed months	0.5 ml	Subcutaneous	Right Upper arm
DPT Booster-1	16-24 months	0.5ml	Intra muscular	Left Antero lateral side of mid thigh
Measles – 1st Booster Dose	16-24 months	0.5 ml	Subcutaneous	Right Upper arm
OPV Booster	16-24 months	2 drops	Oral	
DPT Booster-2	5-6 years	0.5ml	Intra muscular	Left Upper arm
Tetanus Toxoid (TT)	10 years & 16 years	0.5 ml	Intra muscular	Upper arm

❖ Objectives

- To increase the **coverage of immunization.**
- To improve quality of services.
- To eradicate the neonatal **tetanus, diphtheria and pertussis by 2009.**
- To establish sufficient, sustainable and accountable fund flow at all levels.
- Introduction of a district wise monitoring and evaluation system.
- To ensure that there is sustained demand and **reduce social barriers to access immunization services.**
- **To achieve self-sufficiency** in the development and manufacture of cold chain equipment for vaccine production.

❖ Strategies of Universal Immunization Programme

1. **Polio Eradication.**
2. **Reducing dropout rate.**
3. Strengthen coordination.
4. Strengthening micro planning process.
5. **Use of new or underutilized vaccines.**
6. Mass and mid-media campaign.
7. **Training and capacity building.**

❖ Outcomes of the Programme

- For infants, the likelihood of immunization is greater than in urban areas.
- With the mother's empowerment index, the **probability of immunization increases.**
- For children in female-headed households, the probability of immunization is greater.
- Children from electrically powered households are more likely to be immunized.
- With the standard of living index of the children's household, immunization probability increases.
- **Boys are more likely than girls to be immunized.**
- Increases the opportunity to visit health professionals who help **mothers to increase immunization awareness.**

❑ NATIONAL PROGRAMME FOR CONTROL OF BLINDNESS

The National Program for Blindness Control was implemented in **1976**. In **1983, the National Blindness Program** was a very important programme for controlling public health problems. This programme's key motive is to **reduce the incidence rate of blindness**. The primary aim of the National Programme is to control blindness by **0.3 percent by 2020.**

❖ Objectives

- To improve the **consistency of the delivery of services.**
- To improve public knowledge of eye treatment.
- To build human resources for the **provision of facilities for eye care.**
- To **reduce the blindness backlog.**
- To maintain the standard of food in terms of nutrition.
- To **maximize a product's added nutritional value**. To ensure the inclusion of private eye care professionals in a voluminous organization.

❖ Activities Under Programme for Control of Blindness

1. Management Information system.
2. **Collection and utilization of donated eyes.**
3. **Control of vitamin and its deficiency.**
4. **Monitoring and evaluation.**
5. School eye screening programme.
6. **IEC Activity** (Information, Education and Communication

❖ Functioning

1. Target diseases.
2. Human resources development.
3. Infrastructure development.

1. Target diseases: The target diseases listed in India for Vision 2020 include:

- **Glaucoma**
- **Low vision**
- **Trachoma (Focal)**
- **Diabetic retinopathy**
- **Cataract**
- **Childhood blindness**

2. Human Resources Development: Primary Health Care is a basic principle for health advancement by the World Health Organization. All elements of primary health care can contribute to the **prevention of blindness**. There are some programmes for **Human Resources Development:**

- **Research Programmes**
- **Development Programmes**
- **Skill Programme**
- **Education Programme**
- **Training Programme**
- **Planning Programme**
- **Motivation Programme**
- **Evaluation Programme**
- **Performance Programme**

❖ Strategies

1. Disease control of avoidable blindness.
2. Training of ophthalmic personnel.
3. Information, education and communication activities.
4. Screening of school children for identification and treatment of refractory error.
5. Active screening of population above 50 years of age.
6. Capacity building of health personnel.
7. Developing institutional capacity.
8. Established 30 eye care facilities for every 5 lack people.
9. Promoting out-reach activities and public awareness.

❖ Outcomes of Programme

1. Facilities for Cataract surgery.
2. Training of ophthalmologists.
3. Facilities for IOL surgery.

❑ PULSE POLIO PROGRAMME

- Polio is a viral disease that destroys the nerve cells present in the spinal cord causing paralysis or muscle weakness to some part of the body.
- Pulse Polio Programme was launched in 1995 after a resolution for a global initiative of polio eradication was adopted by World Health Assembly (WHA) in 1988.
- Children in the age group of 0-5 years administered polio drops during National and Sub-national immunization rounds (in high risk areas) every year. About 172 million children are immunized during each National Immunization Day (NID).
- In 2005, India was first country to use a monovalent (type-1) vaccine.
- The WHO defines polio or poliomyelitis as a highly infectious viral disease, which mainly affects young children.

❖ Objectives

1. To remain vigilant.
2. To use guerilla marketing strategy to maximize audience reach.
3. To become largest Pulse Polio Programme initiative in the world.
4. To continue heavy screening and evaluation processes.
5. To Start NGO's.
6. To improve the quality of services.
7. To boost Pulse Polio immunization programme.
8. Achieving hundred per cent coverage under Oral Polio Vaccine.
9. To boost the immunity of children already immunised
10. To replace disease carrying wild virus by harmless vaccine virus in the environment.

❖ Polio Case in India

- According to the Ministry of Health, the last polio case in the country was reported from **Howrah district of west Bengal (13 January 2011).** Type-1 Polio Virus .
- **WHO on 24th February 2012** removed India from the list of countries with active endemic wild polio virus transmission.
- **Last case of Wild Polio Virus Type 2 in India was reported in 1999.**
- **On 27 March 2014**, the World Health Organization (WHO) declared India a polio-free country, since no cases of wild polio been reported in for five years.

❖ World Polio Day

World Polio Day was established by **Rotary International on 24th Oct** to celebrate the birth of Jonas Salk, who **developed a vaccine against Poliomyelitis.** Establishment of the Global Polio Eradication Initiative (GPEI) in **1988** reduce polio world wide by 99%.

✓ Two types of vaccines to prevent infection.

- **Oral Polio Vaccine** - (OPV) Primary 3 dose (6, 10, 14) weeks and 1 booster dose at 16-24 months.
- **Inactivated Polio Vaccine** - (IPV) Additional dose along with 3rd dose of DPT under the UIP.

❖ Principle for Polio Elimination

Polio is one of the few diseases that can be eliminated because:

1. It only affects humans and there are **no animal reservoirs.**
2. The virus is only able to live in the atmosphere for a very short period.
3. There is a **safe, inexpensive vaccine.**

❖ Functioning

1. Maintenance of community immunity each year by **high-quality national and sub- national polio rounds.**
2. Environmental observation was **developed to detect the transmission of polio virus.**
3. **Identifying missing children from immunization process.**
4. Setting up of booths in all parts of the country. **Arranging employees, volunteers and vaccines.**
5. **Monitoring of vaccination efficacy.**
6. Vaccines are always kept in cold storage or cold areas to protect them from degrading.

❖ Strategies for Polio Elimination

1. **Routine Immunization** (Oral Polio Vaccine in the 0-1-year age group: 3 doses).
2. **Supplementary Immunization Activities** (SIAs).
3. Investigation and Monitoring of cases of **acute flaccid paralysis.**
4. **House to house activity.**
5. **Using pulse polio booth.**

❖ Outcomes

- India efforts to polio eradication is commendable. It has a **robust polio surveillance programme,** which needs to be continued. Such strong **vaccination & surveillance programme** should be adopted for other preventable disease too.
- **Clean, safe drinking water & good sanitation** are key to fighting the spread of polio & making polio eradication programmes. Thus, it is importance to **improve sanitation & hygiene** condition in the country.