NATIONAL HEALTH PROGRAMS, POLICIES AND LEGISLATIONS IN INDIA

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NATIONAL RURAL HEALTH MISSION (NRHM) 2005-12

- National rural health mission (NRHM) 2005-12: one of the key components of the is to provide every village in the country with a trained female community health activist-ASHA (accredited social health activist)
Accredited Social Health Activist (ASHA)
Accredited social health activist (ASHA)

Proposed population norm: 1 ASHA worker per 1000 population

ASHA is expected to act as,

Interface between: community and health care system

Bridge between: ANM and village

Accountable to: panchayat

Selection criteria of ASHA:

Woman resident of local community

Preferably 25-45 years age

Literate with formal education up to VIII class
Responsibilities of ASHA:

Counsel women on aspects of reproductive and child health
Mobilize the community and facilitate them in accessing health and health related services provided by the government
Responsibilities of ASHA:

- Create awareness on health and its social determinants and mobilize the community towards local health planning and increased utilization and accountability of the existing health services.
- Promote good health practices and provide a minimum package of curative care as appropriate and feasible and make timely referrals.
- Provide information on determinants of health, on existing health services and the need for timely utilization of services.
- Act as a depot holder for essential provisions like ORS, IFA tablets, chloroquine, disposable delivery kits, oral pills & condoms
- Provide primary medical care and act as DOTS provider
- Help develop a comprehensive village health plan
- Arrange escort/ accompany pregnant women, children requiring treatment/ admission to nearest health facility
- Be a part of JSY (Janani Suraksha Yojana) and help reduce MMR
- Resource person for training of ASHA: ANM and Anganwadi worker
- Core unit of planning, budgeting and implementation: District
NATIONAL LEPROSY ELIMINATION PROGRAMME (NLEP)

- Infrastructure norms under NLEP
  - SET Centre: one per 20,000-25,000 population
  - Urban leprosy centre (ULC): one per 50,000 population
  - Leprosy control unit (LCU): one per 4.5 Lac population
  - Accompanied MDT; If patient is unable to come to collect his/her MDT from clinic, any responsible person from family or village can collect it.
Lepra Reactions

Lepra reactions: is an inflammation that can effect skin patches, nerves, eyes and in few case, internal organs. They can occur anytime in a leprosy patient:

- Types of lepra reactions: 
Type 1 leprosy reaction
<table>
<thead>
<tr>
<th>Type I Lepra reactions</th>
<th>Type II lepra reactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reversal reactions</td>
<td>erythema nodosum leprosum (ENL)</td>
</tr>
<tr>
<td>More common in</td>
<td>More common in LL and BL Leprosy</td>
</tr>
<tr>
<td>borderline leprosy</td>
<td></td>
</tr>
<tr>
<td>Type I(reversal)</td>
<td>DOC is</td>
</tr>
<tr>
<td>reactions:</td>
<td>Mild cases: analgesics</td>
</tr>
<tr>
<td>DOC is prednisolone</td>
<td>or anti-pyretics like</td>
</tr>
<tr>
<td>(steriod)</td>
<td>aspirin</td>
</tr>
<tr>
<td></td>
<td>Severe cases:</td>
</tr>
<tr>
<td></td>
<td>prednisolone (steriod)</td>
</tr>
<tr>
<td></td>
<td>During steroid</td>
</tr>
<tr>
<td></td>
<td>withdrawal:</td>
</tr>
<tr>
<td></td>
<td>clofazimine</td>
</tr>
</tbody>
</table>
MULTIDRUG THERAPY (MDT)

- Treatment of single skin lesion (SSL) of leprosy:
- Previously: ROM therapy (NOW NOT USED)
  - Rifampicin 600 mg
  - Ofloxacin 400 mg
  - Minocycline 100 mg
- Currently: 6 month treatment as for paucibacillary (PBL) leprosy (Rifampicin and Dapsone for 6 months)^Q.
<table>
<thead>
<tr>
<th></th>
<th>Paucibacillary (PBL) leprosy</th>
<th>MBL (Multibacillary leprosy)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Treatment</strong></td>
<td>Day1: Supervised monthly Rifampicin 600mg Dapsone 100mg</td>
<td>Day1: Supervised monthly Rifampicin 600mg Clofazimine 300mg Dapsone 100mg</td>
</tr>
<tr>
<td></td>
<td>Day2-28: Daily Dapsone 100mg</td>
<td>Day2-28: Daily Clofazimine 50mg Dapsone 100mg</td>
</tr>
<tr>
<td><strong>Duration of treatment</strong></td>
<td>6 months</td>
<td>12 months</td>
</tr>
<tr>
<td><strong>Duration of follow up</strong></td>
<td>2 years</td>
<td>5 years</td>
</tr>
</tbody>
</table>
NATIONAL HIV/AIDS CONTROL PROGRAMME (NACP)

- HIV screening in NACP
- Tests for screening of HIV: E/R/S Battery
  - ELISA (E) Test
  - RAPID (R) Test
  - SIMPLE (S) Test
NATIONAL HIV/AIDS CONTROL PROGRAMME (NACP)

- Confirmatory diagnosis of HIV: Western Blot Assay
Screening strategies of HIV:

**Strategy I**: One out of three screening tests (E/R/S) are used
- Done for screening every blood unit before transfusion
- Does not recommended its use for diagnosis of HIV in a person

**Strategy II**: Two out of three screening tests (E/R/S) are used
- Done for screening person who is symptomatic with any one of AIDS defining illness (NACO guidelines)

**Strategy III**: All three screening tests (E/R/S) are used
- Done for screening person who is asymptomatic
Western Blot Assay (Immunoblot): Is a method to detect a specific protein in a given sample of tissue homogenate or extract.

Used as a confirmatory test for HIV (NACP, India)

Based on detecting: viral core protein (p24) and envelope glycoprotein (gp 41)
NATIONAL HIV / AIDS CONTROL PROGRAM

- "3 BY 5 target" approach refers to: Providing ART to 3 million people by 2005 (MCQ)
- People living with HIV/AIDS (PLHA) in World: 40 million
- 3 by 5 Target approach:
  - Announced by WHO and UNAIDS on December 1, 2003
  - Interim target:
  - Providing anti-retroviral treatment (ART) to '3 million people living with HIV/AIDS (PLHA)', in developing countries (low & middle income), by end of 2005
Continuum of Care for PLHIV

Secondary Health Care

District Hospitals
HIV Clinics
Social/legal Support Hospice

- Health posts
- Dispensaries
- Traditional
- Orphan care

Primary Health Care

Voluntary Counselling Testing

ICTC is the entry point

PLHIV

Specialists and Specialised Care facilities

Tertiary Health Care

Palliative emotional & spiritual support self care

Peer support

NGOs Youth Groups Volunteers

Community Care

Home care

National AIDS Control Programme
# National Response

| National AIDS Control Programme |  
|---------------------------------|---------------------------------|
| PHASE I                         | 1992-1999                       |
| PHASE II                        | 1999-2006                       |
| PHASE III                       | 2007-2012                       |
Integrated Counselling & Testing Centres

Single window service for:

- Pre-test counselling before HIV testing
- HIV testing and providing results of the test
- Post-test counselling to both positive and negative persons
- Condom promotion and distribution
- Identification for HIV+ pregnant women
- Providing prophylaxis (Nevirapine tablet and syrup and mother and new born) for prevention of transmission from mother to child
- Prophylactic (Co-trimoxozole) to exposed children
- Education regarding infant feeding
- Referral to ART Centre for investigation and treatment
- Cross referral between RNTCP and ICTCs
NATIONAL POLIO ELIMINATION PROGRAMME (NPEP)

Acute Flaccid Paralysis (AFP) Surveillance

- Acute Flaccid Paralysis (AFP): Any child less than 15 years age who has sudden onset of flaccid paralysis or paralytic illness in a person of any age when polio is suspected.

- Acute Flaccid Paralysis (AFP) Surveillance is used to identify reservoirs pf wild poliovirus transmission in National Polio Surveillance Project.

  - Acute: rapid progression of from on set to maximum paralysis
  - Flaccid: loss of muscle tone, `floppy` as opposed to spastic or rigid
  - Paralysis: weakness, loss of voluntary movement
Differentential diagnosis of AFP: Descending asymmetric flaccid LMN paralysis
- Guillain Baree Syndrome (Cytologico-albuminic dissociation)
- Transverse myelitis (Normal CSF, sensory loss+bladder dysfunction+)
- Traumatic neuritis (any age,only one leg involved)
- Other Non-polio enteric viruses: Coxsackie-B, ECHO, Enterovirus type 70and 71, Mumps

AFP case investigation: Is done within 48 hours of notification.
Stool sample collection: From every case of AFP, stool samples are collected for diagnosis of cases of poliomyelitis

- 2 stool samples
- 24-48 hours apart
- Within 14 days of onset of paralysis (or maximum 8 weeks)
- Each 8 grams (adult thumb size) weight
- Collect in clean, dry screw-capped container (need not be sterile, no preservative/transport media required)
- Transport to laboratory in `Reverse cold chain` (+2°C to +8°C)
2 critical WHO Indicators of AFP Surveillance & Lab performance

- Non-polio AFP rate in children < 15 years of age > 1/100,000
- Reported AFP cases with 2 stool specimens collected < 14 days since paralysis onset (Target > 80%)

Outbreak response immunization (ORI): Following the AFP case investigation and stool Specimen collection, ORI is organized in community where all children aged 0-59 months are given one dose of OPV regardless of previous immunization; At least 500 children are vaccinated

Follow-up examination: Is done 60 days after onset of paralysis to confirm the presence or absence of residual weakness (Activity completed before 70th day)
26 से 31 पूर्ण
पूरा सही अनुसार नहीं तो एक बिगाड़ की परिस्थिति सुधारने ही बना।

पत्रकारिता, प्रचार-प्रसार और जनता जारी हैं।

[Logos and icons]
Pulse Polio Immunization (PPI) Programme in India

- First PPI targeted children < 3 years age
- Later on WHO recommended age group be 0-5 years (1996-97)

Meaning of `pulse`: Sudden, simultaneous mass administration of Oral Polio Vaccine (OPV) on a single day to `all children 0-5 years age`, irrespective of their previous immunization status
- PPI replaces wild virus with vaccine virus from the community
- PPI is over and above routine immunization

Intensive Pulse Polio Immunization (IPPI)\(^Q\): Intensification of PPI has been done by adding additional rounds at fixed booths followed by `house-to-house search-and-vaccinate` component

Success off PPI (India): 35000 cases annually in 1995-96 to NIL case in 2013
FROM 200,000 TO zero

The journey to a polio-free India
Essential Components of Reproductive and Child Health Programme:

- Community Needs Assessment Approach (CNAA)
- Integrated packages of services for mother and child
- MTP services at PHC and safe abortion
- Control and prevention of (reproductive tract infections) RTI/ (sexually transmitted infections) STI
Iron Folic Acid (IFA) Tablets

- Iron and Folic acid Content Per IFA tablet:
  - Adult tablet: 100mg elemental iron and 500mcg folic acid
  - Pediatric tablet: 20mg elemental iron and 100mcg folic acid
**Prevalence of iron Deficiency Anemia (IDA) in India: [NFHS-3, 2005-06]**

<table>
<thead>
<tr>
<th>Group</th>
<th>Anemia cut off level</th>
<th>Anemia type</th>
<th>Prevaience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children (6-59 months)</td>
<td>&lt;11.0 gm/dlQ 10.0-10.9 gm/dl 7.0-9.9 gm/dl &lt;7.0 gm/dl</td>
<td>Any Mild Moderate Severe</td>
<td>70% 27% 40% 03%</td>
</tr>
<tr>
<td>Women (15-49 years)</td>
<td>&lt;12.0 gm/dlQ 10.0-11.9 gm/dl 7.0-9.9 gm/dl &lt;7.0 gm/dl</td>
<td>Any Mild Moderate Severe</td>
<td>55% 38% 15% 02%</td>
</tr>
<tr>
<td>Men (15-49 years)</td>
<td>&lt;13.0 gm/dlQ 12.0-12.9 gm/dl 9.0-11.9 gm/dl &lt;9.0 gm/dl</td>
<td>Any Mild Moderate Severe</td>
<td>24% 13% 10% 01%</td>
</tr>
</tbody>
</table>
Reproductive Child Health (RCH) PROGRAM

INTEGRATED MANAGEMENT OF NEONATAL AND CHILDHOOD ILLNESS (IMNCI):

IMNCI is a 'strategy for reducing morbidity and mortality associated with major causes of childhood illness'

Curative component includes management of:

(MCQ)

- Diarrhoea
- Measles
- Pneumonia
- Malaria
Case management process: Is presented in a series of charts (MCQ)
- Assess the young infant or child
- Classify the illness
- Identify the treatment
- Treat the infant or child
- Counsel the mother
- Give follow-up care

Implementation of IMNCI in India:
- National Population Policy (NPP) 2000 has incorporated IMNCI
- Under RCH-II, IMNCI is a major component
Tuberculosis in India
Clinical Vignette in exam:

A 25-year-old female has been diagnosed to be suffering from tuberculosis categorized as category I (sputum +ve) case of relapse. The new treatment regimen recommended under DOTS is - 2(HRSZE)_3 + 1(HRZE)_3 + 5(HRE)_3 (mcq)
Revised National Tuberculosis Control Programme (RNTCP)

Objectives of RNTCP:

- To achieve a cure rate of at least 85% through administration of short course chemotherapy (SSC), and
- To achieve a case detection rate of 70% (only after having achieved the desired cure rate)
# National Programme (NTP) vs RNTCP

<table>
<thead>
<tr>
<th></th>
<th>NTP, 1962</th>
<th>RNTCP, 1992</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective</strong></td>
<td>Early diagnosis &amp; treatment</td>
<td>Breaking chain of transmission</td>
</tr>
</tbody>
</table>
| **Operational targets** | Not defined                               | 1. Cure rate > 85%  
|                      |                                                | 2. Case finding > 70% |
| **Strategy**         | 1. SSC supervised                             | 1. DOTS     
|                      | 2. Conventional                                | 2. Uninterrupted drug supply |
| **Diagnosis**        | 1. More emphasis on x-rays                    | 1. Mainly sputum microscopy |
|                      | 2. 2 sputum smears                             | 2. 3. sputum smears |
|                      | 3. 1 SS +ve considered a case                  | 3. 1 SS +ve not a case |
|                      |                                                |             |
Under RNTCP, active case finding is not pursued: Case finding is passive

Some Important Working Definitions in RNTCP

- **New case**: A person suffering from TB who has `never taken treatment or took treatment for <4 weeks (1 month)`
- **Cured**: Sputum smear positive (SS +ve) who has completed treatment, and had `sputum smear negative (SS -ve) on atleast 2 separate occasions with one at the end`
- (Completion of treatment)
- **Relapse**: A person `declared cured returns back as SS+ve`
- **Failure**: A person on treatment who is SS +ve at or after 5 months of treatment
- **Defaulter**: A person who, at any time after registration, `has not taken anti-TB drugs for 2 months or more consecutively`. 
Categorization and Treatment Regimens in RNTCP

<table>
<thead>
<tr>
<th>Category</th>
<th>Type of patient</th>
<th>Regimens</th>
<th>Duration (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat I</td>
<td>New SS+ve, Seriously ill SS-ve Seriously ill extra-pulmonary</td>
<td>2(HRZE)\textsubscript{3}</td>
<td>4(HR)\textsubscript{3}</td>
</tr>
<tr>
<td>Cat II</td>
<td>SS+ve relapse SS+ve failure SS+ve treatment after default</td>
<td>2(HRZES)\textsubscript{3} + 1(HRZE)\textsubscript{3}</td>
<td>5(HRE)\textsubscript{3}</td>
</tr>
<tr>
<td>Cat IV*</td>
<td>MDR TB</td>
<td>4(KOCZE Et)</td>
<td>12-18 (OCEEt)</td>
</tr>
</tbody>
</table>

(*Category IV (DOTS PLUS): For MDR cases; pilot projects undertaken in Gujarat)
COMPONENTS OF DOTS

- The success of DOTS depends on five components
  - UPMA
  - Uninterrupted supply of good quality drugs
  - Political commitment
  - Microscopy good quality sputum
  - Accountability
  - Directly observed treatment

Numbers: The numbers before letters refer to months of treatment (2 imply two months of treatment). The numbers after letters refer to frequency of administration per week (3 imply thrice per week)

Seriously ill extra-pulmonary TB: Meningitis, disseminated TB, tuberculous percarditis, peritonitis, bilateral or extensive pleurisy, spinal disease with neurological complaints, SS –ve TB with extensive parenchymal involvement, and intestinal and genitor-urinary TB.
K-Kanamycin, O Ofloxacin, Et - Ethionamide, C — Cycloserine

The numbers before letters refer to months of treatment (*2 imply two months of treatment*)

The numbers letters refer to frequency of administration per week (*3 imply thrice per week*)
New Tuberculosis Diagnosis (RNTCP) Guidelines In India

- Tuberculosis Suspect: Any person with cough 2 weeks or more

- Number of specimen(s) required for diagnosis of smear positive pulmonary Tuberculosis: TWO
  - Spot sputum specimen (Day 1)
  - Morning sputum specimen (Day 2)

- Diagnosis of Tuberculosis:
  - None sputum positive: Doubtful
  - One sputum positive: Sputum positive pulmonary tuberculosis
  - Two sputum positive: Sputum positive pulmonary tuberculosis
Management of clients:

- None sputum positive: Give antibiotics for 10-14 days
  - Cough relieved: Non-tuberculosis person
  - Cough persists: REPEAT two sputum smear examinations
    1. None sputum positive: X-ray chest
      i. Findings suggestive of TB: Sputum negative tuberculosis; start ATT
      ii. No findings suggestive of TB: Non-tuberculosis person
    2. One sputum positive: Sputum positive pulmonary tuberculosis; Start ATT
    3. Two sputum positive: Sputum positive pulmonary tuberculosis; start ATT

- One sputum positive: Start ATT
- Two sputum positive: Start ATT

AFB sputum smears for follow-up during treatment
- ‘2 sputum smears’ over 2 days period
TB Institutes of importance in India:
- National Tuberculosis Institute (NTI) - Bangalore
- Tuberculosis Research Centre - Chennai
- LRS Institute of TB and Respiratory Diseases - New Delhi
DOTS Agents' (peripheral health staff) are paid Rs. 150/- per patient completing the treatment
QUESTIONS

1. Reverse Cold Chain is used for
   A. transportation of vaccines in +2 to +8 degree celsius from PHC to sub center
   B. transportation of OPV in -20 to -40 degree celsius
   C. transportation of poliomyelitis stool samples from field to laboratory
   D. none of the above
2 Under National poliomyelitis elimination program, poliomyelitis is diagnosed by

- Antibodies titer rise in blood
- Viral isolation in stool
- Viral microscopy in stool
- Clinical examination
3 Which of the following drugs are used in MDR-TB
- Rifampicin
- Isoniazid
- Fluroquinolones
- None of the above
Questions

4 Under Malaria program, peripheral smear is prepared by
- Medical officer
- Health worker male
- Health worker female
- Nurse midwife
NATIONAL VECTOR BORNE DISEASE CONTROL PROGRAMME
NATIONAL VECTOR BORNE DISEASES CONTROL PROGRAMME (NVBDCP)

- Goals for Malaria
  - Goal under National Health Policy (NHP) 2002: Reduction of mortality on account of malaria and other vector borne diseases (VBDs) by 50% by 2010 and efficient morbidity control
  - Millenium Development Goal 6: Combat HIV/AIDS, malaria and other diseases (by 2015)

- Diagnosis of Malaria
  - Diagnosis of malaria in NVBDCP (malaria component): Peripheral blood smear
Diagnosis of malaria in NVBDCP (malaria component):

- Peripheral blood smear
- Thick smear (SENSITIVITY): Presence of malaria
- Thin smear (SPECIFICITY): Species identification
- Stain used: JSB (Jaswant Singh Bhattacharaya) Stain
- Presumptive treatment is given to *every case of fever when peripheral* smear is made.
‘Dipstick Test’ is used for the rapid diagnosis of Plasmodium falciparum (Pf)
- Is a ‘rapid whole blood immuno-chromatographic test’
- Uses 2 antibodies specific for ‘Pf Histidine Rich Protein II Antigen’
Modified Plan of Operation (MPO)

- Modified plan of operation (MPO): In 1977, attempts at malaria eradication were given up and under review policy MPO was launched.

- Under MPO, areas were divided on the basis of API:
  - Areas with API $\geq 2$: Regular insecticide spray (interval 6 weeks)
  - Areas with API $< 2$: Focal spray of DDT (or BHC or Malathion) if a case of Pf occurs in the area.
Insecticide-Treated Nets (ITNs)

- Fever Treatment Depots (FTDs) and Drug Distribution Centre (DDCs)

<table>
<thead>
<tr>
<th>Fever Treatment Depots</th>
<th>Drug Distribution centres</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTD holder given training at PHC</td>
<td>DDC established (if no FTD)</td>
</tr>
<tr>
<td>2. Giving presumptive treatment</td>
<td>2. Impregnation of bed nets</td>
</tr>
<tr>
<td>3. Impregnation of bed nets</td>
<td>3. Promotions of larvivorous fishes</td>
</tr>
<tr>
<td>4. Promotion of larvivorous fishes</td>
<td></td>
</tr>
</tbody>
</table>
Insecticide treated bed nets (ITBN)

- Chemicals used in ITBN Programme: synthetic pyretheroids
  - Deltamethrin: 2.5% in dosage of 25mg/ m²
  - Cyfluthrin: 5% in dosage of 50 mg/ m²
  - Other insecticides used: permethrin, lambdacyhalothrin, etofenprox, cypermethrin

- Effectiveness of pyrethroids: for 6-12 months (retreatment every 6 months)

- Household bed nets used for mosquito control:
  - No. of holes per square inch > 150
  - Diameter of each < 0.0475 inch
सही आयोडीन नमक की पहचान

शक्ति और बुद्धि का युद्धक

सिफ़्फ़्फ़् आयोडीन नमक
NATIONAL IODINE DEFICIENCY DISORDERS CONTROL PROGRAM (NIDDCP)

National goiter control programme (NGCP) launched in 1962 (100% centrally sponsored)

National iodine deficiency disorders control programme (NIDDCP) was launched in 1992.

Indicators for epidemiological assessment of iodine deficiency:

- Prevalence of goiter
- Prevalence of cretinism
- Urinary iodine excretion
- Measurement of thyroid function (T4,TSH)
- Prevalence of neonatal hypothyroidism
Daily requirement of iodine: 150 mcg (<1 teaspoon over lifetime) supplied normally by well balanced diets and drinking water

Standards of iodised salt (level of iodization in slt):
- At production level: 30 ppm
- At consumer level: 15 ppm
NATIONAL PROGRAM FOR CONTROL OF BLINDNESS (NPCB)

- NPCB was launched in 1976 as a `100% centrally sponsored Programme`.
- India was the `first country to launch a national level programme for blindness`.
- NPCB cut-off for blindness : <6/60 in better eye.
- Prevalence of blindness in general population :1.05% (MCC: Cataract 77%) [2007].
- Cataract surgery rate required to clear the backlog of blindness : 340 operations per lac population [2007].
- IOL implantations in cataract surgeries : 34% [2007].
Under NPCB, school teachers are supposed to conduct vision screening for children.
National Programme For Prophylaxis Against Blindness

- National Programme for prophylaxis against blindedness in children caused due to Vitamin-A deficiency: Oral 5 doses (Total 17 lac IU) followed by a dose (2 lac IU) every 6 months till the age of 5 years.

- Vitamin A solution contains 1 lac IU per ml solution.

- Vitamin A is given in NIS of India till 5 years age (Recent guidelines)
  - At 9 months age: 1 lac IU (1 ml)
  - Every 6 months, till 5 years age: 2 lac IU (2 ml) each
  - Total dose given: 17 lac IU (9 doses)
Prevalence criteria for determining Xerophthalmia problem:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Night blindness</td>
<td>&gt; 1.0%</td>
</tr>
<tr>
<td>Bitot spots</td>
<td>&gt;0.5%</td>
</tr>
</tbody>
</table>

- Age group to determine Xerophthalmia problem: 6 months – 6 years.
Integrated Management of Neonatal and childlessness (IMNCI)

- IMNCI is a `strategy for reducing morbidity and mortality associated with major causes of childhood illness`.
  - Curative component includes management of:
    - Diarrhoea
    - Measles
    - Pneumonia
    - Malaria
    - Severe malnutritional counseling
  - Health promotive and preventive component:
    - Breast feeding
    - Nutritional counseling
    - Vitamin A and iron supplementation
    - Immunization
    - Treatment of helminthic infestation

- Target: Children < 5 years age
Case management process: Is presented in a series of charts (Mnemonic: A Case Is Treated & care Given)

- Assess the young infant or child
- Classify the illness
- Identify the treatment
- Treat the infant or child
- Counsel the mother
- Give follow-up care
School Eye Screening (SES) Program

- Focus on middle school (V-VIII class) covering 10-14 years age
- One trained teacher to handle 150 students
- 1-day training for teacher at nearest PHC
- Teacher kit: Vision Screening cards, referral cards, tape/rope to measure 20 feet
- 150,000 children to be screened per block
- Visual cut-off for referral to nearest PHC: <6/9 in either eye
## Others

- Stains commonly used in Public Health Programmes in India

<table>
<thead>
<tr>
<th>Disease (organism)</th>
<th>Stain(s) used</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB <em>(Mycobacterium tuberculosis)</em></td>
<td>Zeihl Neelson (ZN) stain (RNTCP)</td>
</tr>
<tr>
<td></td>
<td>Auramine Rhodamine stain</td>
</tr>
<tr>
<td>Leprosy <em>(mycobacterium leprae)</em></td>
<td>Modified Zeihl Neelson (Modified ZN) stain</td>
</tr>
<tr>
<td>Malaria <em>(Plasmodium)</em></td>
<td>Jaswant Sigh Bhattacharya (JSB) stain</td>
</tr>
<tr>
<td>Plague <em>(yersinia pestis)</em></td>
<td>Wayson’s stain</td>
</tr>
<tr>
<td></td>
<td>Giemsa stain</td>
</tr>
<tr>
<td>Diphtheria <em>(Corynebacterium diphtheriar)</em></td>
<td>Albert’s stain</td>
</tr>
<tr>
<td></td>
<td>Neisser’s stain</td>
</tr>
<tr>
<td></td>
<td>Ponder’s stain</td>
</tr>
</tbody>
</table>
Health Policies And Legislations

- Key Health Related Legislations passed in India
  - The Quarantine Act, 1870
  - The Vaccination Act, 1880
  - The Child Marriage Restraint (SARDA) Act, 1948
  - The Employees state insurance (ESI) Act, 1948
  - The Factories Act, 1948
  - The Prevention of Food Adulteration (PFA) Act, 1954
  - The Indian Medical Council (Prof. Conduct and Ethics) Act, 1956
  - The Dowry Prohibition Act, 1961
  - The Maternity Benefit Act, 1961
  - The Registration of Births and Deaths Act, 1969
  - The Medical Termination of Pregnancy (MTP) Act, 1971
- The Consumer Protection Act (COPRA), 1986
- The Environmental Protection Act (EPA), 1986
- The Infant Milk Substitutes, Feeding Bottles and Infant Food (Registration of Production, supply and distribution) Act, 1992
- The pre-conception and pre-natal Diagnostic Techniques (Prohibition of Sex selection) [PNDT] Act, 1994
- The Transplantation of Human Organs Act, 1994
- The Biomedical Waste (Management and Handling) Rules, 1998
- The National Rural Employment Guarantee Act (NREGA), 2005
- The protection of women from Domestic Violence Act 2005
NATIONAL POPULATION POLICY 2000 (NPP 2000)

- Immediate objective: To address the unmet needs for contraception, health care infrastructure, and health personnel, and to provide integrated service delivery for basic reproductive and child health care.
- Mid-term objective: To bring the TFR to replacement levels (TFR = 2.1) by 2010
- Long term objective: To achieve a stable population by 2045
National Socio-demographic goals for 2010:

- Address the unmet needs for basic reproductive and child health services, supplies and infrastructure
- Make school education up to age 14 free and compulsory, and reduce drop outs at primary and secondary school levels to <20% for both boys and girls
- Reduce IMR to < 30 per 1000 live births
- Reduce MMR to < 100 per 100,000 live births
- Achieve universal immunization of children against 6 VPDs
- Promote delayed marriage for girls (not <18y and preferably >20y).
- Achieve 80 % institutional deliveries and 100 % by trained persons
• Achieve universal access to information / counseling, and services for fertility regulation and contraception with a wide basket of choices
• Achieve 100% registration of births, deaths, marriage & pregnancy
• Contain the spread of AIDS, and promote greater integration between the management of RTI and STI and the NACO
• Prevent and control communicable diseases
• Integrate Indian systems of medicine (ISM) in RCH services
• Promote vigorously the small family norm to achieve replacement levels of TFR (i.e., TFR=2.1)
National Health Policy (NHP) 2002

Goals for 2005
- Eradicate polio and yaws
- Eliminate Leprosy
- Establish integrated system of surveillance, national health accounts and health statistics
- Increase state sector health spending from 5.5% to 7% of budget

Goals for 2007
- Achieve zero level of growth of HIV / AIDS
Goals for 2010

- Eliminate Kala Azar
- Reduce mortality by 50% due to TB, malaria, Vector borne diseases and water borne diseases
- Reduce IMR to 30 / 1000 and MMR to 100/ Lac
- Increase utilization of public health facilities from <20% to >75%
- Increase health expenditure as % of GDP from 0.9% to 2.0%
- Increase share of central grants to constitute >25% of total health spending
- Further increase state sector health spending to 8% of budget.

Goals for 2015

- Eliminate Lymphatic filariasis.
The National Rural Employment Guarantee Act (NREGA) 2005

The NREGA Act 2005 has been passed by the Parliament to provide for ‘100 days of guaranteed wage employment in every year’ to every household whose adult members volunteer to do ‘unskilled manual work’. Salient features:

- A household is entitled for ‘100 days of work in a year’
- Rural Household to register to local gram panchayat. ‘Job card’ to be given to every registered household (valid for 5 years)
- Registered adult must submit an application to gram panchayat (for at least 14 days of continuous work)
- One-third of persons who are given employment will be women.
Allotment for work: ‘within 15 days’, else he/she shall be provided unemployment allowance

- The statutory minimum wage applicable to agricultural workers in the state is to be paid.
- Work will be provided ‘within 5 km’ of applicant’s residence, else he/she is entitled to 10 percent additional wages towards transport and living expenses.
- Implementation of Act: The ‘gram sabha’ will identify works to be taken up. The ‘panchayats’ have the principal responsibility for planning, implementation and monitoring
- All agencies implementing NREGA will be accountable to the public for their work. Social audit and Right to Information will apply to each aspect of implementation.
construction of Gokarna at Konnammunda Tq, Bhalki FY 2010-11
Est. cost: 4.0 Lak Mandays Generated: 2400
Others

- Legal age cut-offs in India
  - Legal age of marriage in India: 18 years for girls and 21 years for boys
  - Legal age for voting in India: 18 years for both boys and girls
  - Legal age for employment in India: > 14 years
  - Legal age of consent by a girl for sexual intercourse in India: 18 years
  - Juvenile in India: Boy less than 18 years and girl less than 16 years
  - Major in India: 18 years and above
  - Tobacco products cannot be sold in India: To age below 18 years
  - Alcohol cannot be sold in India: To age below 25 years
QUESTIONS

- Cafetaria approach is related to which of the following
- National iodine deficiency disorder program
- National anemia prophylaxis program
- Reproductive and child health programme
- National vector borne disease control program
Questions

- Thalidomide is not used in lepra reactions because it may lead to
  - Allergic reaction
  - Swollen lymph nodes
  - Teratogenicity
  - Persistent cough
**Janani Suraksha Yojana (JSY)**

- Launched on 12\textsuperscript{th} April 2005
- Is modification of notification maternity benefit scheme
- Objectives of JSY: reduction of maternal mortality and infant mortality (through institutional deliveries and care especially for poor women)
- Sailent features of JSY:
  - Is 100% centrally sponsored
  - Combines 'benefit of cash assistance with institutional care
  - Eligibility of cash assistance.
**JSY package: [new guidelines]**

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National maternity benefit scheme has been now given a new name as

- Family welfare program
- Janani suraksha yojana
- ASHA scheme
- Vandemataram scheme
THANK YOU