



PSM UPDATES:

DISEASES

- Father of Public Health- Cholera
- Barometer of Social Welfare- Tuberculosis (said by William Osler)
- Slims' Disease- HIV/AIDS
- Black sickness- Kala Azar (Leishmaniasis)
- Black Death -Plague
- Cerebrospinal fever- Meningococcal meningitis
- Break bone fever- Dengue
- 5-day fever-Trench fever
- 8th - day disease - Tetanus neonatorum
- Hansen's disease -Leprosy

INSTITUTES :

Institute	Location
Central Drug Research Institute (CDRI)	Lucknow
National Institute of occupational health	Ahmedabad
Central Research Institute	(Kasauli)
National Tuberculosis Institute (NTI)	Bangalore
National Environmental Engineering Research Institute (NEERI)	Nagpur
National Institute of Communicable Disease (NICD)	New Delhi
National Institute of Virology (NIV)	Pune
National Institute of Nutrition (NIN)	Hyderabad
National JALMA Institute of Leprosy	Agra
Tuberculosis Research Institute (TRC)	Chennai

State Medicine ; Provision of free medical services to the people at government expense

Socialised Medicine ; Provision of medical service and professional education by the State (as in state medicine;) but the programme to operated and regulated by professional groups rather than by government

- Prevents competition between practitioners and clients
- Provision of medical services supported by state government
- Ensures social equity that is universally operated by professional health services

Social medicine: Study of the social, economical , environmental cultural psychological and genetic factors,



which have a bearing on health.

MEASUREMENTS

HUMAN DEVELOPMENT INDEX (HDI)

- Composite index combining 3 indicators
- Longevity
- Knowledge
- Income – real GNI per capita in PPP in US\$

[PPP – Purchasing Power Parity - Number of units of a counting currency required to buy the same amount of goods & services in domestic market as one dollar would buy in USA.

HDI – Range 0-1

Individual Index = $\frac{\text{Actual value} - \text{Min. value}}{\text{Max. Value} - \text{Min value}}$

Requirement:

Fixed	Min value	Max value
LE ₀	20 yrs	83.4 yrs
Mean years of schooling	0	13.1%
Expected years of schooling	0	18%
Per capita GNI	\$100	\$107721

3 categories

High HDI (≥ 0.800) (Iceland / Norway / Australia)
 Medium HDI (0.500 to 0.799) - India
 Low HDI (< 0.500) (Sierra leone / Niger)

HUMAN POVERTY INDEX (HPI)

Measures **deprivation** in basic dimension of human development
 (Complementary to **HDI** which measures **achievement**)

Range – 0-100

HPI-1 (Developing countries)

3 basic dimensions

- a) A long & healthy life = vulnerability to death at early age P (of not surviving to age **40**)
- b) Knowledge – adult literacy rate
- c) Decent Standard of living – unweighted average of 2 indicators
 - i) % of population not using improved water source
 - ii) % of children underweight for age



INDICATORS OF HEALTH

A) MORTALITY INDICATORS-

Crude death rate, Life Expectancy (indication of S.E. development), IMR, Child mortality rate, specific mortality rate, Proportionate Mortality Rate

B) MORBIDITY INDICATORS-

- Incidence & prevalence
- Notification rate
- Attendance in OPDs/health centers
- Admission, readmission & discharge rate
- Duration of hospital stay
- Spells of sickness/Sickness absenteeism

C) DISABILITY RATES-

- i) Event type –No. of days of restricted **activity**
 - Bed disability days
 - Work/School loss days
- ii) Person type –Limitation of mobility (confined to bed)
 - limitation of activity

D) HEALTH CARE DELIVERY INDICATORS-

- Doctor population ratio
- Doctor Nurse ratio
- Population bed ratio
- Population per PHC/SC

E) UTILIZATION RATES-

- E.g. % of infants fully immunized against 6 EPI diseases
- Bed occupancy rate
- Average length of stay
- Bed turn over ratio

STANDARDIZED DEATH RATE:

Method to compare death rates of two populations.

Two methods – Direct & Indirect

Direct standardization

Age specific death rates of *study population* are applied to *standard population*



2 requirements -

Availability of age specific death rates (ASDR)

Availability of population in each age group

■ Indirect standardization (SMR)

- Mortality rates of *standard population* are applied to *study population*

$$o \text{ Standardized Mortality Ratio (SMR)} = \frac{\text{Observed Deaths}}{\text{Expected Deaths}} \times 100$$

- Expected Deaths
- If the SMR is greater than 100, then the particular group has a great mortality risk than that of total population

ISOLATION PERIODS

<i>Disease</i>	<i>Duration of isolation</i>
Chicken pox	Until all lesions crusted, usually about 6 days after onset of rash
Measles	From the onset of catarrhal stage through 3 rd day of rash
German measles	None, except that women in the 1 st trimester or sexually active, non-immune women in child bearing years not using contraceptive measures should not be exposed
Cholera, Diphtheria	3 days after tetracycline started, until 48 hrs of



	antibiotics (or -ve cultures after treatment)
Shigellosis, Salmonellosis	Until 3 consecutive negative stool cultures
Hepatitis A	3 weeks
Influenza	3 days after onset
Polio	2 weeks adult, 6 weeks pediatric
TB (positive)	Until 3 weeks of effective chemotherapy
Herpes Zoster	6 days after onset of rash
Mumps	Until swelling subsides
Pertussis	4 weeks or until paroxysms cease

DISINFECTION

<i>Material</i>	<i>Methods</i>
Inoculating loops or wire, tip of forceps and searing spatulas	Flaming
Contaminated cloth, animal carcasses & pathological material	Incineration
Glasswares, syringes, petridishes, test tubes, flasks, surgical instruments	Hot air oven
Most of the culture media	Autoclaving
Sharp instruments	5% cresol
Cystoscopes, bronchoscopes, corrugated rubber, anesthetic tubes, face masks, plastic endotracheal tubes	Glutaldehyde
Milk	Pasteurization



Discussion paper- PSM

Suture material except catgut	Autoclaving
Catgut	Ionizing radiation
Dressings, apron, gloves, catheters, surgical instruments except sharp ones	Autoclaving
Heat sensitive catheters, wards, labs, OT	Formaldehyde gas or UV rays
Culture media containing egg, serum or sugar	Tyndallisation

VACCINATION

HISTORY:

- 1978 – Expanded program on Immunization (EPI) introduced in India; Introduction of BCG, DPT, OPV & **Typhoid**; Mainly in urban areas
- 1985 – EPI was renamed as Universal Immunization Program (UIP); **Measles** was added;
- 1990 – Vitamin A supplementation
- 1992 – Child survival & safe motherhood program (CSSM)
- 1995 – Polio National Immunization Days (Pulse polio rounds)
- 1997 – Reproductive & Child health program - I
- 2005 – RCH-II & The National Rural Health Mission (NRHM)

STRAINS

Vaccine	Strain(s)
BCG	Danish-1331 strain (WHO recommended)
Measles vaccine	Edmonston Zagreb strain (MC) Schwartz strain
Mumps vaccine	Jeryll Lynn strain
Rubella vaccine	RA 27/3
Yellow fever vaccine	17 D strain



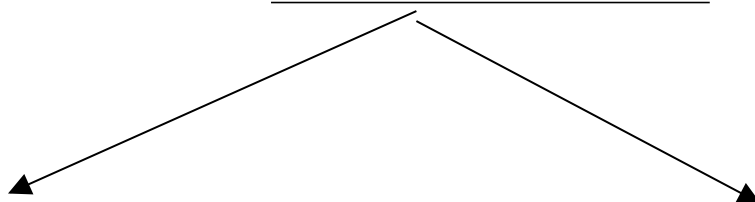
Varicella vaccine	Oka strain
Japanese encephalitis vaccine	Nakayama strain Beijing P3 strain SA 14-14-2 – live vaccine(Used in India)
Swine flu vaccine (killed)	A7/California/2009
Malaria vaccine	SPI 66 strain Pf 25 strain
HIV vaccines	mVA (modified Vaccinia Ankara) strain

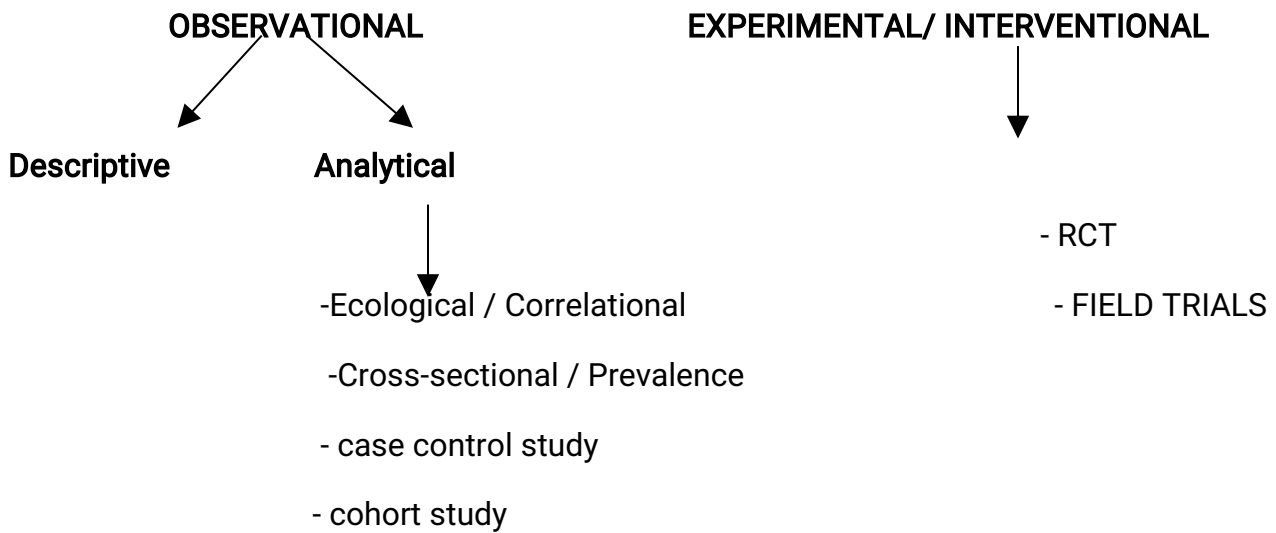
CASES OF DELAYED IMMUNIZATION

- **A completely unimmunized child**
- At 9 months of age should receive: BCG, DPT-1b (next two doses one month apart each and booster after 1 year of 3rd dose), OPV-1 (next two doses one month apart each and booster after 1 year of 3rd dose), HepB-1 (next two doses one month apart each), Measles, and Vitamin A (1 Lac IU)
- At 18 months of age should receive: DPT-1 (next two doses one month apart each and booster after 1 year of 3rd dose), Measles (if not suffered from measles disease previously), and Vitamin A (2 Lac IU)

STUDY DESIGNS

EPIDEMIOLOGICAL METHODS



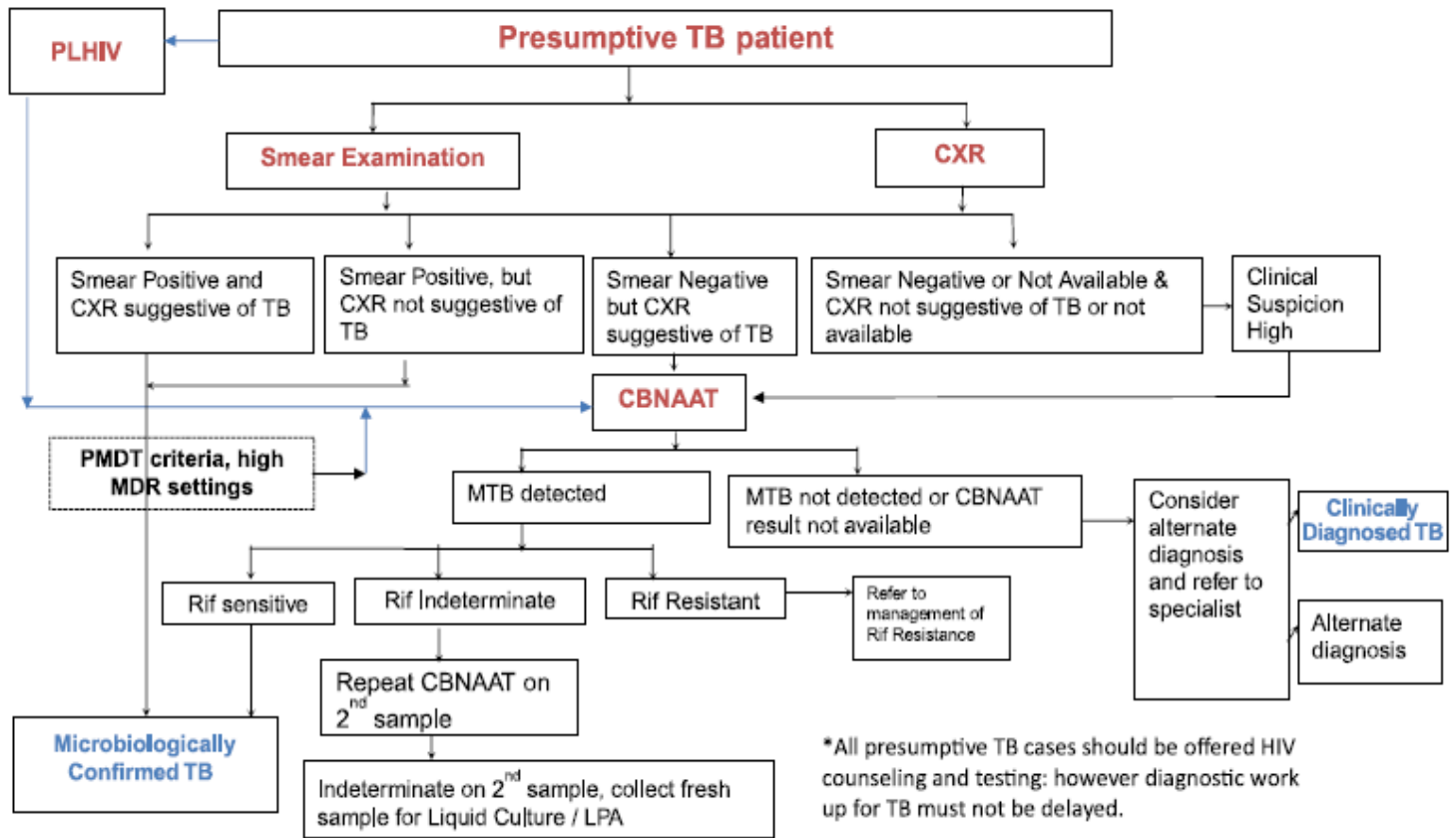


DIFFERENCE

Case Control	Cohort
1. Proceeds from “effect to cause”	Proceeds from “cause to effect”
1. Starts with disease	Starts with exposure to suspected cause
2. Fewer no. of subjects	Large number of subjects
3. Suitable to rare disease	Not for rare
4. Quick research	Long follow-up period
5. Yield OR (estimate of RR)	Yield RR, AR
6. Yield information about multiple risk factors.	Yield information about multiple outcome
7. Inexpensive	Expensive



Diagnostic algorithm for pulmonary TB



Recent changes in Tuberculosis guidelines 2016

1. 3 new goals – cure, prevent resistance and break chain of transmission
2. Introduction of daily regime: Being pilot tested at Gujarat, Maharashtra, Jharkhand, Sikkim and Himachal Pradesh
3. Definition and treatment of mono and poly resistance apart from MDR and XDR Tuberculosis
4. Treatment in CAT 1 – 2(HRZE) + 4 (HRE): Continue ethambutol in continuation phase too
5. Treatment in CAT 2 – 2(HRZES) + 1(HRZE) + 5 (HRE)
6. Introduction of Bedaquiline as a new drug:
 - a) ATP synthase inhibitor specifically targets myc. Tb



- b) Indicated in age more than 18 years
 - c) Contraindicated in pregnancy and those taking hormonal OCP
 - d) It may be given in patients with stable arrhythmia
 - e) MDR TB/ XDR TB under DOTS
 - f) Rolled out at 6 government hospitals, 104 districts across 5 states drug not available in retail market
 - g) Decrease duration from 24 to 30 months to 12 months
7. Definition of presumptive tuberculosis: Duration > 2 weeks etc.
8. New algorithm to diagnose Tuberculosis – pulmonary, extrapulmonary, drug resistant.
9. Introduction of Newer molecular methods like CBNAAT and line probe assay in diagnostic algorithm apart from smear microscopy and chest X ray
10. Diagnosis of tuberculosis based on X-ray will be called as Clinically diagnosed tuberculosis.
11. Sputum should be around 2ml and preferably be mucopurulent
12. Follow up – New and previously treated Drug sensitive pulmonary tuberculosis – No need to extend Intensive phase, sputum microscopy at end of IP and end of treatment, weight monthly, chest x-ray if required
13. **Follow up –**
- a) MDR tuberculosis – sputum smear monthly 3,4,5,6,7 months in intensive phase and at 3 months interval in continuation phase 9,12,15..., extend IP phase by maximum 3 months total of 9 months
 - b) Monitoring health status of Tb treated patients (for recurrence of TB) for 24 months after treatment
 - c) Online monitoring of treatment adherence through 99dots programme (currently it is on pilot basis running for TB- HIV patients)
 - d) Intensified TB case finding in clinically, socially and geographically vulnerable population. It's a provider initiated activity
14. Now 'TB suspect' term is replaced by 'presumptive TB case'
15. In diagnostic algorithm sputum examination along with chest x-ray is recommended
16. 'NSP' term is replaced by 'microbiologically confirmed case'
17. NSN and others r called now onwards 'clinically diagnosed TB' case. (terms replaced)
- 18. Cat I, Cat II, Cat IV terminologies are obsolete and replaced by drug sensitive (new or previously treated) and drug resistant TB categories**



ENVIRONMENTAL HEALTH

WATER QUALITY CRITERIA

<p><u>Acceptability aspects</u></p> <p>Turbidity < 5 NTU</p> <p>Colour – Upto 15 TCU</p> <p>pH 6.5 – 8.5</p> <p>Total dissolved solids < 1000 mg/L</p> <p>Chlorides = Max. PERMISSIBLE LEVEL : :600mg/L (guideline=200 mg/L)</p>	<p><u>Microbiological aspects</u> (bacteriological INDICATOR)</p> <p>Primary indicator – E.coli</p> <p><u>Supplementary indicators –</u></p> <p>Faecal streptococci (Recent conta.)</p> <p>Cl. Perfringens (Remote conta.)</p>
<p><u>Chemical aspects</u></p> <p>Arsenic : 0.01mg/l</p> <p>Nitrites < 3 mg / L (Recent contamination.)</p> <p>Nitrates < 50 mg / L (Remote conta.)</p>	<p><u>Radiological aspects</u></p> <p>α activity = 0.1 Bq / L</p> <p>β = 1.0 Bq / L</p>

NUTRITION

RDA – energy & protein intake- ICMR (2010)

	Activity	Energy	Protein (gm/day)
Adult	Sedentary (S)	2320	
Male	Moderate (M)	2730	60
	Heavy (H)	3490	
Adult	Sedentary	1900	
Female	Moderate	2230	55
	Heavy	2850	
Pregnancy		+350	78
Lactation (0-6mths)		+600	74

Infants	0-6mths	92 kcal/kg/d	1.16/kg
	6-12mths	80	1.69/kg

OCCUPATIONAL HEALTH

ESI BENEFITS

(A) Sickness Benefit(SB) : Sickness Benefit in the form of cash compensation at the rate of 70 per cent of wages is payable to insured workers during the periods of certified sickness for a maximum of 91 days in a year. In order to qualify for sickness benefit the insured worker is required to contribute for 78 days in a contribution period of 6 months.

1. Extended Sickness Benefit(ESB) : SB extendable upto two years in the case of 34 malignant and long-term diseases at an enhanced rate of 80 per cent of wages.
2. Enhanced Sickness Benefit : Enhanced Sickness Benefit equal to full wage is payable to insured persons undergoing sterilization for 7 days/14 days for male and female workers respectively.

Maternity benefit:

- Confinement: 12 weeks
- Miscarriage: 6 weeks
- Sickness arising out of confinement: 30 days
- Benefit is around full wages

(B) Disablement Benefit

1. Temporary disablement benefit (TDB) : From day one of entering insurable employment & irrespective of having paid any contribution in case of employment injury. Temporary Disablement Benefit at the rate of 90% of wage is payable so long as disability continues.
2. Permanent disablement benefit (PDB) : The benefit is paid at the rate of 90% of wage in the form of monthly payment depending upon the extent of loss .

(C) Dependants' Benefit(DB) : DB paid at the rate of 90% of wage in the form of monthly payment to the dependants of a deceased Insured person in cases where death occurs due to employment injury or occupational hazards.



(D) Funeral Expenses : An amount of Rs.10,000/- is payable to the dependent.

BEHAVIORAL SCIENCES

PSYCHOLOGY

- **Attitude** - a relatively enduring organization of benefits around an object, subject or concept which predisposes one to respond in some preferential manner.
 - acquired characteristics
 - permanent ways of behaving
 - objective
 - caught but never taught
- **Value** – the ideals, customs, institutions of a society toward which people of the group have an affective regard.
- **Opinions** – Views held by people on point of dispute/ Temporary & provisional
 - inner subjective thought of a person towards an individual on a situation
- **Belief** – Views derived from parents, grandparents & other people we respect – are permanent, unstable & almost unchanging
- **Cultural belief** – Learned behavior which is permanent & consistent but liable to change
- **Learning** - any relative permanent change in behavior that occurs as a result of practice or experience
 - 3 types** – Cognitive learning (knowledge)
 - Affective learning (Attitude)
 - Psychomotor learning (skills)

HEALTH EDUCATION

Methods In Health Education

I) Individual approach-

Personal contact/Home visit/Personal letters

II) Group approach

- A) Lecture
- B) Demonstration- to teach a slum about ORS.
- C) **Discussion**

- Focused group discussion (FGD): (6-12 members in a group, group leader should initiate and facilitate the discussion; Nomogram/sociogram: graphical representation of interaction among participants in FGD)

- Panel discussion (Expert panel – discusses subject amongst them in front of a large audience, No



order of speeches, audience can take part)

- Symposium (Series of speeches by experts, No discussion among experts, audience can raise question at the end)
- Workshop: A SMALL GROUP working under a facilitator with more emphasis on individual work
- Conference
- Seminar
- Role play

III) **Mass approach**

- Mass media
- Direct mailing
- Posters
- Health exhibitions
- Folk methods
- Internet

Delphi Method-

- Systematic interactive forecasting method for obtaining consensus forecasts from a panel of independent experts.
- Conducted in 2-3 rounds
- Questionnaire – used
- Summary at end of each round with reasoning
- Participants are encouraged to revise their earlier answers .
- Till it converge towards the correct consensual answer
- Pre-defined stop criterion - No. of rounds / Achievement of consensus / Stability of results
- Most useful to arrive at single decision

HEALTH PLANNING AND MANAGEMENT :

DEFINITIONS

Objective -

- Planned end point of all activities
- is precise (point)
- Either achieved or not achieved
-

Target-

- A discrete activity which helps to measure degree of achievement
-

Goal-

- Ultimate desired state towards which objectives & resources are directed
- Not constrained by time or resources
- Not necessarily attainable

Mission-



- is a description of fundamental principle of existence of a programme
- is usually time bound

Policy - Guiding principles stated as expectations

Programme- Is a sequence of activities designed to implement policies & accomplish objective

- ❖ Monitoring – part of programme (Performance of planned activities)
 - Supervision – performance of people in project
 - Evaluation – assessment of project as a whole

MANAGEMENT METHODS

I) Based On Behavioral Science

- Organizational design
- Personal management
- Communication
- Information System
- Management by objectives (MBO)

II) Quantitative Method

- Cost benefit analysis
- Cost effective analysis
- Cost accounting
- Input – output analysis
- Model
- System analysis
- Network analysis - PERT/CPM
- Planning – Programming – Budgeting system – PPBS
- Work sampling
- Decision making

Cost benefit analysis

- Economic benefit of any programme compare with cost of that programme
- Benefits are expressed in monetary terms (MONEY)
- Main drawback – all benefits in the field of health cannot be expressed in monetary terms

Cost effective analysis (CEA)

- Benefits expressed in terms of **result achieved** (EX- no of maternal deaths avoided per unit cost)
- Most comprehensive indicator of CEA- QALYs gained

Cost accounting

- Basic data on cost structure of any programme

System analysis



- Finding cost effectiveness of **available alternatives**.

Network analysis

- A graphic plan of all event & activities to be completed in order to reach on end objective
- 2 types - PERT/CPM
 - PERT - Programme Evaluation & Review technique
 - Arrow diagram – representing logical sequence in with events must take place
 - CPM - longest path of network in critical path
 - If any activity along critical path is delayed, the entire project will be

delayed

Work sampling

- **Systematic observation** & recording of activities of one or more individuals carried out at **predetermined or random** intervals.

HEALTH CARE DELIVERY SYSTEM

Principles of PHC (PRIMARY HEALTH CARE)-

- Equitable distribution
- Community participation
- Intersectional coordination
- Appropriate technology

Health planning in India

1. Bhore committee (1946)

- Health survey & development committee

Objectives

- 3-millions plan : development of PHC in 2 stages: short term and long term
- 3 months training in PSM to prepare Social physicians.

2. Mudaliar committee (1962)

- Health survey & planning committee
- Constitution of All India health services

3. Chadah committee (1963)

- Vigilance operation of NMEP (national malaria elimination programme) : responsibilities of general health services (PHC at block level)
- 1 basic health workers for 10000 population : for malaria vigilance/ collection of vital stats & FP
- Family Planning Health Assistant (FPHA): to supervise 3-4 Basic HW

4. Mukerji committee (1965)

- Delink malaria activities from FP
- Separate staff for FP programme (FP-Assistants)



5. Jungalwallah committee (1967)

- Committee on integration of health services: from highest to lowest level with unified cadre and seniority.
- Unified approach – curative & preventive
- equal pay for equal work, special pay for special work, No private practice

6. Kartar Singh committee (1973)

- “Committee on Multipurpose workers under health & FP”
- Each SC should have one male and female health worker
- ANM → Female Health Worker (Female HW)
- Lady Health visitor → Female Health Supervisor

7. Shrivastav committee (1975)

- “Group on Medical Education & Support Manpower”
- RURAL HEALTH SCHEME: create para professional health workers from within the community (ex- school teachers)
- ROME scheme – Reorientation of medical education : Attach 3 PHCs to one medical college.
- Create REFERRAL SERVICE COMPLEX between PHC and higher centres.
- Establishment of medical & health education commission (UGC)
- Village health guide scheme

8. Krishnan Committee (1983)-

- Urban Revamping Scheme : health posts in urban slums

9. Bajaj Committee (1986)-

- Expert committee for health manpower planning, production and management.
- Formulation of National Medical & Health Education Policy
- Formulation of National Health Manpower policy

10. Balwant rai Mehta committee : - establish 3 tier rural infrastructure (Gram Panchayat, Panchayat Samiti, Zillah Parishad)

11. High level expert group (HLEG) – under 12th five year plan.

Recommendations- Universal Health Coverage, 3 year course of Bsc in community medicine/bachelors in rural health care.

Suggested population norms for health personnel

1. VILLAGE LEVEL :

TBA (Traditional Birth Attendant)	1/1000
VHG	1/1000
AWW-	400-800 : plain , 300-800 : hilly and tribal (She is not under MOHFW . Comes under MWCD.)



Discussion paper- PSM

2. Health worker (Male/female) /Multipurpose worker (MPW) 1/5000 or 3000 : SC
Health Assistants (Male/female) 1/30000 or 20000 : PHC
3. Doctor 1/3500
Nurse 1/5000
4. Lab technician 1/10000
Pharmacist 1/10000

National health policy (NHP) -2002

- MOHFW, Govt. of India – First NHP – 1983
- Revised - NHP - 2002
- **Goals**

2005 - Eradicate Polio & Yaws

- Eliminate Leprosy
- Establish integrated system of surveillance National health account & Health statistics
- Increase state sector health spending from 5.5% to 7% of budget

2007 - Achieved zero level growth of HIV/AIDS

2010 - Eliminate kala-azar

- Reduce mortality by 50% due to TB, malaria/Vector Borne Diseases /Water Borne Diseases
- Reduce prevalence of blindness to 0.5%
- Reduce IMR to 30/1000 & MMR to 100/1 lac.
- Increase utilization of public health facilities from <20% to >75%
- Increase health expenditure as % of GDP from 0.9% to 2.0%
- Increase the share of central grants to constitute >25% of total health expanding
- Further increase state sector health spending to 5% of budget

2015 - Eliminating Lymphatic Filariasis

12th FIVE YEAR PLAN TARGETS / NHM targets

- Reducing Maternal Mortality Ratio (MMR) to 1 per 1000 live births. Reducing Infant Mortality Rate (IMR) to 25 per 1000 live births. Reducing Total Fertility Rate (TFR) to 2.1.
- Reducing malnutrition among children of age group 0-3 years to half its present level ie to 23%.
- Reducing anaemia among women by half ie.to 28%.
- Raising the sex ratio for age group 0-6 from 914 to 950 .

National Health Goals for Communicable Diseases UNDER 12TH FYP / NHM.

Tuberculosis : Reduce annual incidence and mortality by half



Leprosy: Reduce prevalence to <1/10000 population and incidence to zero in all districts

Malaria: Annual Malaria Incidence of <1/1000

Filariasis: <1 per cent microfilaria prevalence in all districts

Dengue :Sustaining case fatality rate of <1 per cent

Chikungunya: Containment of outbreaks

Japanese Encephalitis : Reduction in mortality by 30 per cent

Kala-azar :Elimination by 2015, that is, <1 case per 10000 population in all blocks

HIV/AIDS Reduce new infections to zero and provide comprehensive care and support to all persons living with HIV/AIDS and treatment services.

INTERNATIONAL HEALTH

WHO day theme

2014: Vector-borne diseases (Small creatures, big threat)

2013: Hypertension (High blood pressure)

2012: Ageing & Health: Good health adds life to years

2011: Antimicrobial resistance: no action today no cure tomorrow

2010: Urbanization & health (1000 cities/1000 live)

2009: Save lives, make hospitals safe in emergencies

2008: Protecting health from climate change

2007: Invest in health. Build a safe future

WHO Regions – 6 regions with Regional HQ

Region	Regional HQ
1) South East Asia (SEAR)	- New Delhi (India)
2) Africa	- Brazzaville (Congo)
3) America	- Washington DC (USA)
4) Europe	- Copenhagen (Denmark)
5) Eastern Mediterranean	- Alexandria (Egypt)
6) Western pacific	- Manila (Philippines)

Disease under International Health regulations (IHRs)

Cholera / Plague / Yellow fever / Wild poliomyelitis / Human influenza / SARS / Small pox

Disease under International Surveillance (WHO)

Louse borne typhus fever / Relapsing fever / Poliomyelitis / Malaria / Human influenza / Rabies / Salmonellosis

Current list of Quarantine disease (CDC)

Diphtheria / Plague / Yellow fever / Smallpox / Infectious TB / Viral hemorrhagic fever / SARS

NOTE :

- ❖ FOR FURTHER UPDATES ON PSM : please follow my posts in **DAMS EXCLUSIVE CLUB** under hashtag **#shettysPSM**



❖ FOR DOUBTS IN PSM : please inbox me in facebook in my profile : **RAJEEV SHETTY**.

❖ To practice mcqs on statistics u can refer to my book "**STATS MADE SIMPLE**" available on amazon stores / DAMS stores.

.....ALL THE BEST.....