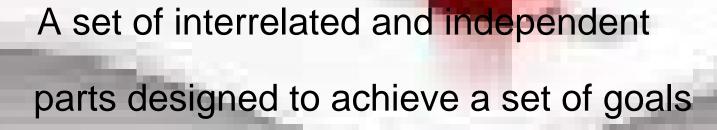




# System?





## Health System?

Structure & functions of a Country's MoH having-

- Resources,
- Management,
- Organization,
- Economic support and
- Service delivery as it's main component



# Health System Boundaries

The system includes all actors, institutions and resources that undertake health actions—where the primary intent is to improve health.

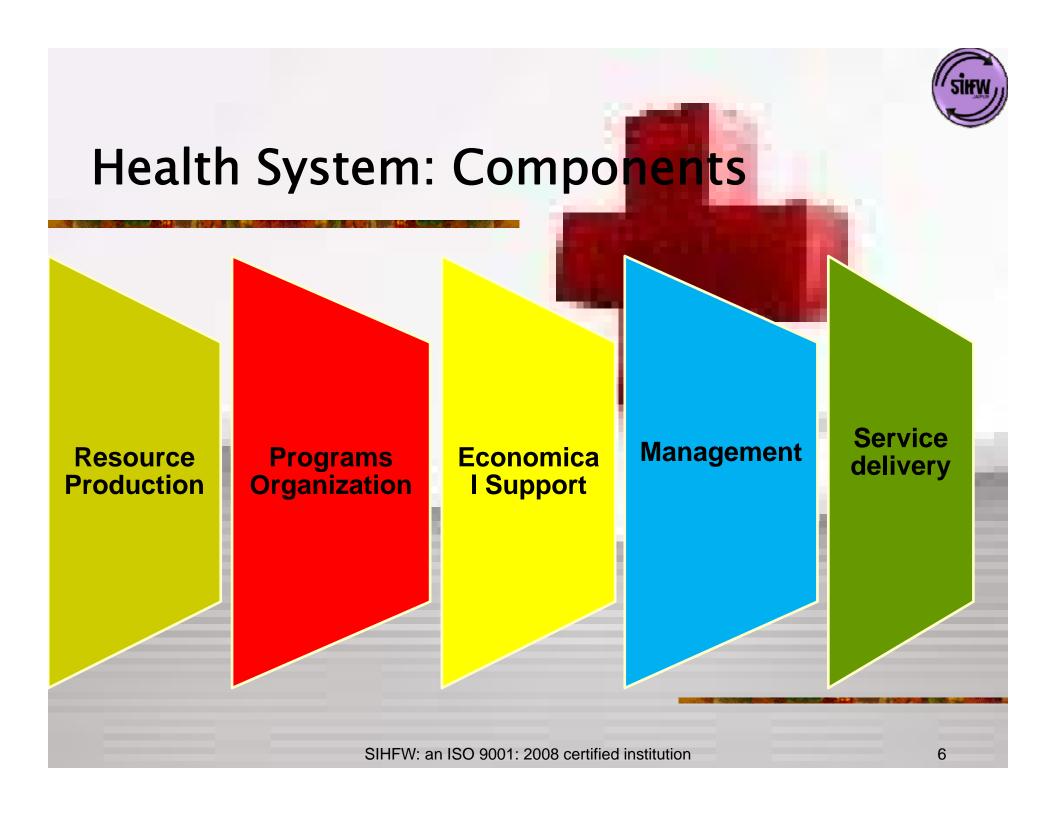


## Health System Goals

Improving the health of the population they serve;

Responding to people's non-medical expectations;

Providing financial protection against the costs of ill health





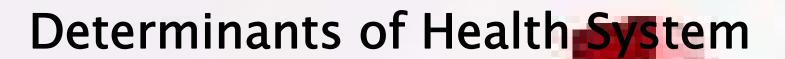
### Public Health

- ✓ What is public health?
- Why does it matter?
- How is the public health system structured?
- What does the public health system do for people?
- How is it done?



# Core Functions of Public Health

- Monitoring health situation
- Disease surveillance
- Health promotion
- Regulations
- Partnerships
- Planning & Policies
- ✓ HRD
- Reducing impact of emergencies on health





#### ✓ Economic-

- Affordability?
- Availability?

#### Political

- Priorities
- Appropriateness?
- Accessibility
- Equity

#### Cultural

- Acceptability
- Utilization
- Participation



# Main Systems of Medicine

- Western allopathic
- Ayurveda
- ✓ Unani
- Siddha
- Homeopathy



# Health Delivery Systems Models

- ✓ 200 countries, only 40 have established Systems.
- 4 basic models of Health care delivery-
  - Beveridge Model- provided and financed by the Government through tax payments
  - Bismarck Model- based on insurance systempremium by company/ employee
  - National Health Insurance Model- private-sector providers, but payment comes from a governmentrun insurance program that every citizen pays
  - Out-of-Pocket Model- rich get medical care; the poor stay sick or die



# Why study



- Provides perspective to understand self
- Observe & examine strategies for achieving equity under different situations
- Draw generalizations-System's influence on health status



#### **Problems:**

- Indirectly related to health
  - Environment
  - Education
  - Empowerment

- **Directly affecting Health** Diseases
  - Communicable

  - Non Communicable
  - New emerging
  - Fertility
    - Population
    - Growth rate
    - ✓ Total Fertility
  - Nutrition
    - Malnutrition
    - Obesity





# Forces Asking for a Change in System

- New emerging diseases,
- Changing disease profile,
- Technical and diagnostic advances,
- Longevity of life,
- Expectations of people,
- Subsidies and cross-subsidies
- Increasing non-plan expenditure,
- Competing priorities and
- Improving awareness among people, and
- Rising Cost of health care delivery



## Challenges

- Manpower- Number & Norms
- Rural / Urban differential
- Geographical divide across States
- S-E groups –accessibility/ reach
- Gaps between Policy & Action
- Health sector expenditure
- Newer Infections





#### ✓ Issues:

- Generalizations of performance & trend
- Political dimensions-Dynamism
- Forces deciding character
- Impact on Health
- Relevance to human rights



# Development of Health Systems

- Organization-changes in character with time
- Resource expansion
- Increase in utilization
- Increase in expenditure & Financing pattern
- Cost-control strategies & Increasing system's efficiency
- Technological advances-demand & application
- Prevention emphasized
- Quality assurance
- Public-Private interaction
- Pattern of service delivery
- Public participation in Policy decisions



## **Evolution of Health Systems**

- Early Health Systems
  - Traditional practices and medicine (China, India)
  - Effect of industrial revolution
  - Politicization of workers in Germany
  - ✓ UK National Health System (1948)
  - ✓ Bhore Report (India) 1946



## **Evolution of Health Systems**

- ✓Alma Ata Declaration, 1978
  - Primary Health Care Themes
    - ✓ Equity
    - ✓ Social Justice
    - Community participation
    - Prevention/promotion
    - ✓Intersectoral collaboration
    - Appropriate use of resources
    - ✓ Sustainability



## Evolution of Health Systems

- ✓ GOBI/FFF (UNICEF)
- ✓ Health economics brought in health care (1980-90)
  - Efficiency & effectiveness
  - Structural program adjustment-Health sector reform
  - Dominance of World Bank over WHO
- 1990-2000
  - √"One size does not fit all"
  - Recognition of key elements-equity, empowerment & poverty reduction
  - Standardization & improving performance
  - **√**HSR

### **Types**



# Health Systems

- Core capitalist-USA, Germany
- Core capitalist-social welfare
   Canada, UK, Japan
- Industrialized Socialist oriented USSR
- Capitalist dependencies India, Indonesia
- Socialist oriented China, Cuba
   (Ray.H.Elling)

✓ Emergent

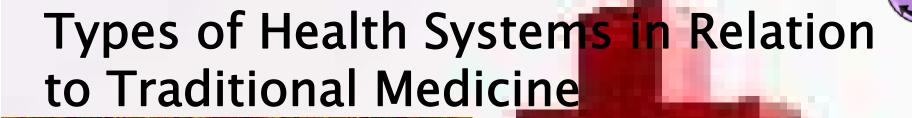
✓ Pluralistic

USA, Switzerland

- ✓ Insurance/Social security

  Canada, Japan
- National Hlth.service
   Great Britain
- SocializedUSSR

(Mark G.Field)



Exclusive (tolerant) : UK, Germany

✓ Inclusive : India, Pakistan, Burma,

Sri Lanka, Bangladesh,

Thailand

Integrated : China, Nepal



# Types-Health Systems

Economic Level(GNP/ Capita)	Health System			
	Entrepreneurial & permissive	Welfare oriented	Universal & comprehensive	Socialist & centrally Planned
Affluent	USA	Germany	UK	USSR
Developing	Philippines	Malaysia	Israel	Cuba
Poor	Bangladesh	India	Sri Lanka	China
Resource Rich	-	Libya	Saudi Arabia	-



# Health Care System in India: Public Sector

#### Rural Health Scheme

- Primary Health Centers
- ✓ Sub- Centers

#### Hospitals/Health Centers

- √ CHC
- District Hospitals
- Teaching Hospitals

#### Health Insurance Schemes

- Employees State Insurance
- Central
  Government
  Health Scheme

#### Other Agencies

- ✓ Defense
- ✓ Railways



# Health Care System in India: Private Sector

- Hospitals and Nursing Homes
- General Practitioners
- Medical Insurance



# Health Systems in India (Inclusive)

- ✓ Official/ Allopathic
  - -Cost
  - -Coverage
  - -Coordination
  - -Culture
- Traditional (ethno/ alternative/ indigenous/un-official)
  - -Roots
  - -Respect
  - -Reach
  - -Rural
  - -Renaissance
  - -Role



# Allopathic / Modern System

- ✓ Systematic
- ✓ Strong Data base
- ✓ Pharmacopoeia
- ✓ Diagnostic support
- ✓ Quick
- Interventional procedures
- ✓ Epid. developments

- Cost
- Isolated approachAnatomical approach
- Dependence on technology
- Human touch missing
- ✓ latrogenic disease
- Voracious resource eater
- Drug use-irrational
- ✓ western



## Traditional systems

- AyurvedicUnani
- HomeopathyNaturopathySiddha

- Chinese
- Tibetan

- Yoga & MeditationHypnosisDivination & Exorcism
- Individual therapies like
  - ✓ Color
  - Flower
  - ✓ Diet
  - Hydrotherapy











# Traditional-Ayurvedathe science of life

- Oldest
  - Ref. in upveda of Atherveda (114 hymns) & Rigveda
- Doctrine
  - Panchbhutas
    - Air, Water, Fire, Space & Earth
  - Tridosha
    - ✓ Vata, Pitta, Cough
  - Ashta dhatus
    - Rasa, Rakta, Mansa, Asthi, Mazza, Meda, Shukra, Maila



## Ayurveda-

- School of Physicians (Atreya Sampradaya)
- School of Surgeons (Dhanvantari Sampradaya)
- Specialties
  - Kayachikitsa
  - √ Balchikitsa
  - Grahchikitas
  - Shalyachikitsa
  - ✓ Jarchikitsa
  - Vishaychikitsa





# Characteristics of Indian Health System

- Complex mixed health system
  - Publicly financed government health system
  - Fee-levying private health sector





# Different Phases of Indian Health System Development

- Pre-independence phase
- Development centred phase
- Comprehensive Primary Health Care phase
- Neo-liberal economic and health sector reform phase
- Health systems phase



### Before Independence

- ✓ Healthcare has been based on voluntary work
- Medicinal properties of plant and herbs was passed from one generation to another







## After Independence

- Government of india laid down a stress on primary health care.
- Government initiative was not enough to meet the demand.
- Alternate sources of finance were critical for sustainability of the health sector.



### Entry of Private Sector

- ✓ Government on its own would not be able to provide more facilities for health care.
- Government allowed the entry of private sector to reduce the gap between the supply and demand for health care.

# Hospitals, Nursing Homes, Fitness centre. Ambulatory Services, pharmaceuticals













- ✓ Place
- ✓ Product
- ✓ Provisions
- ✓ Process
- ✓ People
- ✓ Price
- ✓ Performance





### Committees & Commissions

- √ 1946: Bhore Committee
- 1959-62 Mudaliar committee (Health Survey And Planning Committee): Health services
  restructuring
- ✓ 1963: Chaddah committee: TOR-Malaria
- 1964:Mukherjee committee: Family planning



- ✓ 1964-67:Junglewala committee: Integration Of Health Services
- √ 1972-73:Kartar Singh committee: MPW scheme
- ✓ 1974-75:Srivastav committee: Medical Education & Support Manpower



#### 1959–62 Mudaliar Committee (Health Survey And Planning Committee)

- Consolidate gains
- Strengthen district hospitals
- Regionalization of health services
- PHC for 40000 population
- ✓ Integration of medical & health
- Creation of all India health services cadre



#### 1963: Chaddah Committee

- ✓ TOR-Malaria
- ✓ NMEP
  - vigilance & maintenance by health services
  - Monthly home visits
  - 10000 population per worker
- Basic health worker
  - vital statistics &
  - family planning



#### 1964: Mukherjee Committee

- TOR-Family planning
- Exclusive family planning staff (uni-purpose worker)



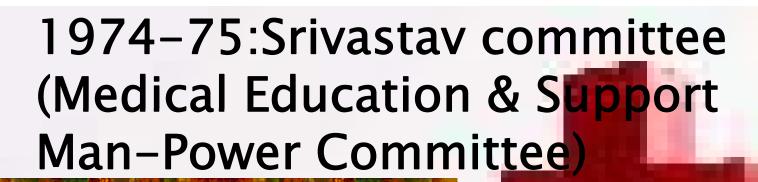
# 1964-67: Junglewala Committee (Integration Of Health Services)

- Unified cadre
- Common seniority
- Recognition of extra qualifications
- Equal pay
- Specialized pay
- No private practice



## 1972–73:Kartar Singh committee

- Conversion of ANM to MPHW (F)
- Uni-purpose to multi-purpose workers
- One PHC per 50000 population
  - √ 16 S/C per PHC
  - √ 3000-3500 population per S/C
  - One supervisor for 4 workers





- Cadre of community health workers (CHW)
- Medical officer for maternal health at PHC
- Heath assistant to be a link between health worker and PHC



#### Bajaj Committee, 1986

- An "Expert Committee for Health Manpower Planning, Production and Management" was constituted in 1985 under Dr. J.S. Bajaj.
- Recommendations:
  - Formulation of National Medical & Health Education Policy.
  - Formulation of National Health Manpower Policy.



- Establishment of Educational Commission for Health Sciences (ECHS) on the lines of UGC.
- Establishment of Health Science Universities in various states and union territories.
- Establishment of health manpower cells at centre and in the states.

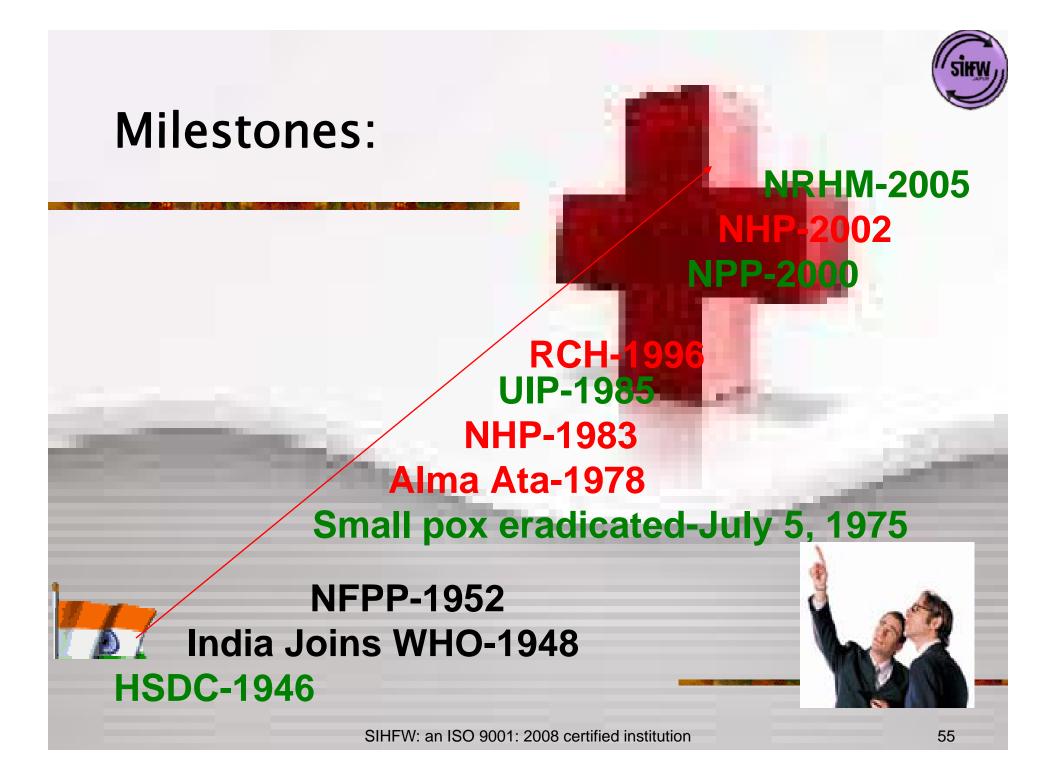


### Health Services Development in India

Bhore Committee 1943-46 (Health Survey & Development Committee)

- Payment not to be a punctuation
- All facilities
- Prevention to be the priority
- Services close to people
- Participation
- Planning
  - -Long term-20000 (PHC), 60000 (CSC), 3 million (DH)
  - -Short term- 40000 (PHC), 1.5 million (CSC), 3 million (DH)

Training in preventive medicine





#### Administrative Structure

- Central Ministries of Health and Family
   Welfare
  - Responsible for all health related programmes
  - Regulatory role for private sector
- 2. State Ministries of Health and Family Welfare
- 3. District Health Teams headed by Chief Medical and Health Officer



#### Health System's Organization-India

Central Govt.

**Planning Commission** 

National Dev. Council CCHFW

**MOHFW** 

**FW** 

Secretary Jt.Secy.(3) Director **Medical & Public Health** 

Secretary

Addl.Secy.

Jt.Secy.(9)

**DGHS** 

Addl.DGHS

ISM&H

Secretary

Jt.Secy.

Directór



### National Developmental Council

Highest constitutional Policy making body to approve Policies and strategies for development Composition:

Chairman-PM

Members- Central Ministers

**Chief Ministers** 

Lt. Governors & Administrators of UTs, Dy.Chairman & members of Planning Commission



#### Planning Commission

March 15,1950

Composition: Chairman—PM

Dy.Chairman

Members 5-7(Full time)

2-3(Part time)

#### Functions:

- Assess & augment resources- material, capital & human
- Formulate Plan for utilization of resources
- Decision on priority based phased implementation
- Decide on nature of executing machinery
- Periodic progress review
- Make appropriate interim recommendations



#### Role of Central Govt. in Health Care

- Policy formulation
- Maintaining
   International health
   relations
- Administration of central health institutions
- Regulating Medical education through statutory bodies-MCI/DCI/Councils

- Medical & Public health research-funding
- Standards- laying & maintenance(Drugs/Education)
- Coordination-Other ministries/States/Statut ory bodies
- Central Health Acts
- Negotiation with International agencies



#### **Functions of FW**

- Policy-Planning
- Information-Evaluation
- Contraceptive-Research /Supply
- Seeking International support
- EPI/UIP/CSSM/RCH/ ARI/ORT-trainings & area development

- ✓ IEC
- Rural Health
- Paraprofessional training
- NGO support
- Development of Subcenter



- Health Policy
- National Health Programs
- Drug Control
- PFA enforcement
- Diseases-Communicable/Noncommunicable
- Supplies& Disposal
- ✓ CGHS

- ✓ CME & Trainings
- Nursing
- Medical Education & Research
- ✓ Vital statistics & Health intelligence
- International support



#### Organization at State Level

State Govt.

MoH & FW

Secretary (Health/ Med. Education)

Principals(6)

**Directors** 

FW

Public Health AIDS/HA

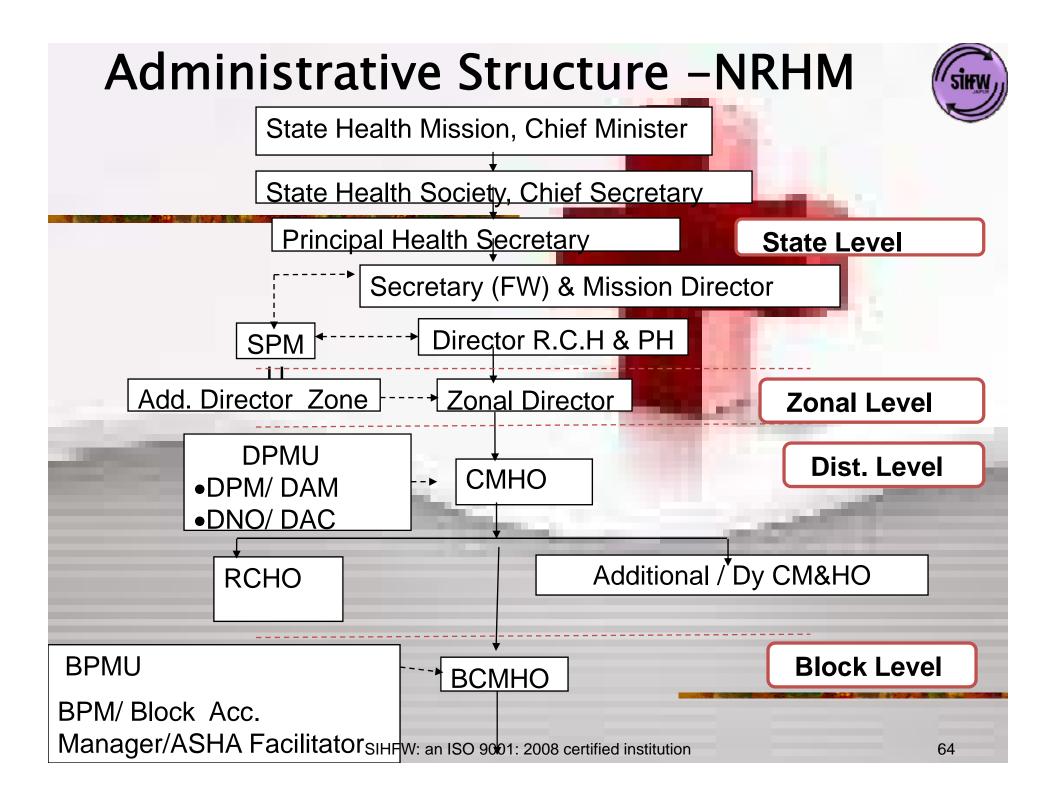
**Addl.Directors** 

**Jt.Directors** 

**Dy.Directors** 

**State Program Officers** 

**Jonal Directors(6)** 





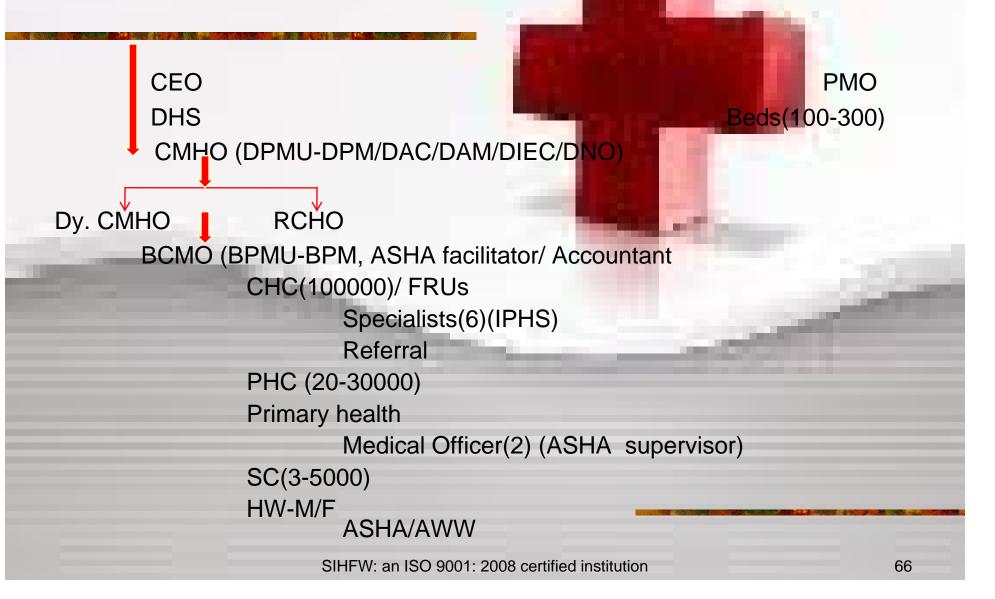
#### **District**

- An Administrative unit
- Peripheral most Planning unit
- A self contained segment of National Health System

Defined Geographical boundary and Population(5M)



## District Health Organization





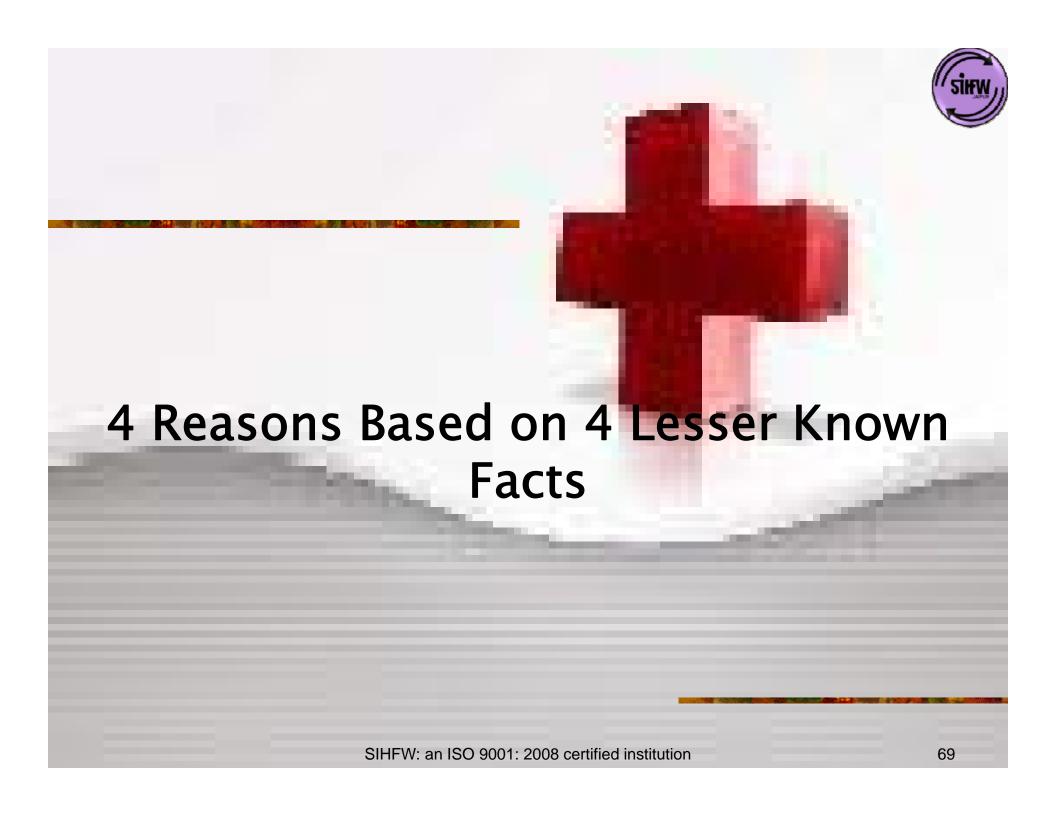
#### Functions of District Health System

- ✓ Liaison between Field units & Headquarter Tools- Field reports Monitoring Meetings
- Implementation of Policy/Programs
- District level planning-Action Plans
- Rationale use of Finances
- Communication-Plans/Schedules/Progress/Problems
- Coordination- effective resources use, avoid duplication
- Control & Monitoring



#### Problem Areas at District

- Quantity v/s Quality
- Cluttered Policy guidelines
- Decentralization on papers
- Roles/Responsibilities poorly defined
- Program integration ?
- HMIS-generation & use ?
- Managerial skills
- ✓ Donor initiative "Societies"
- Resource restriction





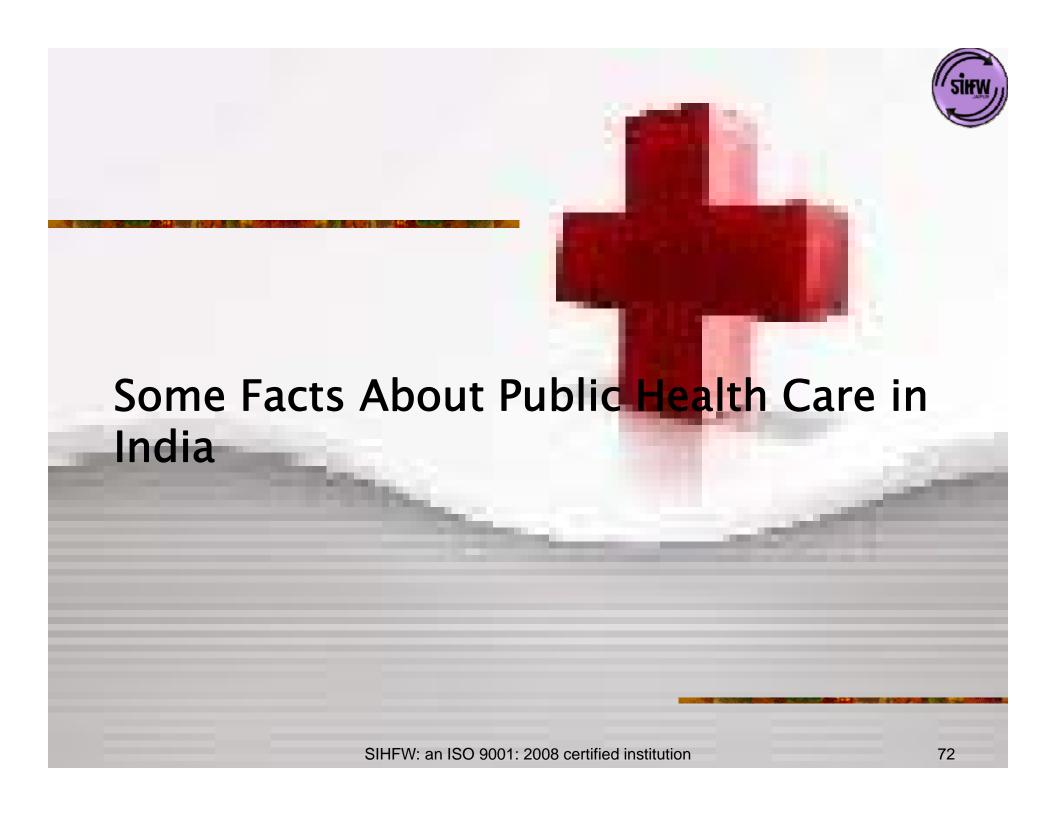
#### ✓ Reason 1:

- Public doctors in India are among the most absent in the world
- Absences are never below 30 percent!
- ✓ Reason 2:
  - When public doctors do show up for work, the exert very little effort
- ✓ Reason 3:
  - Public doctors in PHCs are not particularly competent to begin with
- ✓ Reason 4:
  - You still have to bribe public doctors to do their work



## One Important Question...

Why don't the poor use public health facilities more?





#### ✓ Fact #1:

Most spending is private; the fraction on genuine public goods is tiny

#### ✓ Fact #2:

The poor use private care as much as the rich

## ✓ Fact #3:

More public money on health goes to the rich than the poor (because hospital use is regressive)



# A summary of Why Poor People may not be Using the PHC System

- The doctors are low on competence
- They don't show up for work
- When they do show up, they don't work to the level of their knowledge
- And patients have to pay bribes anyway



- ✓ And we still ponder over Health system
- ✓ A system
  - ✓ not well understood
  - ✓ large enough in content & context
- ✓ A system
  - ✓ which needs inputs, and
  - ✓ aim to bring out
  - ✓outputs and Outcomes







## **US Health System**

## Major Features:

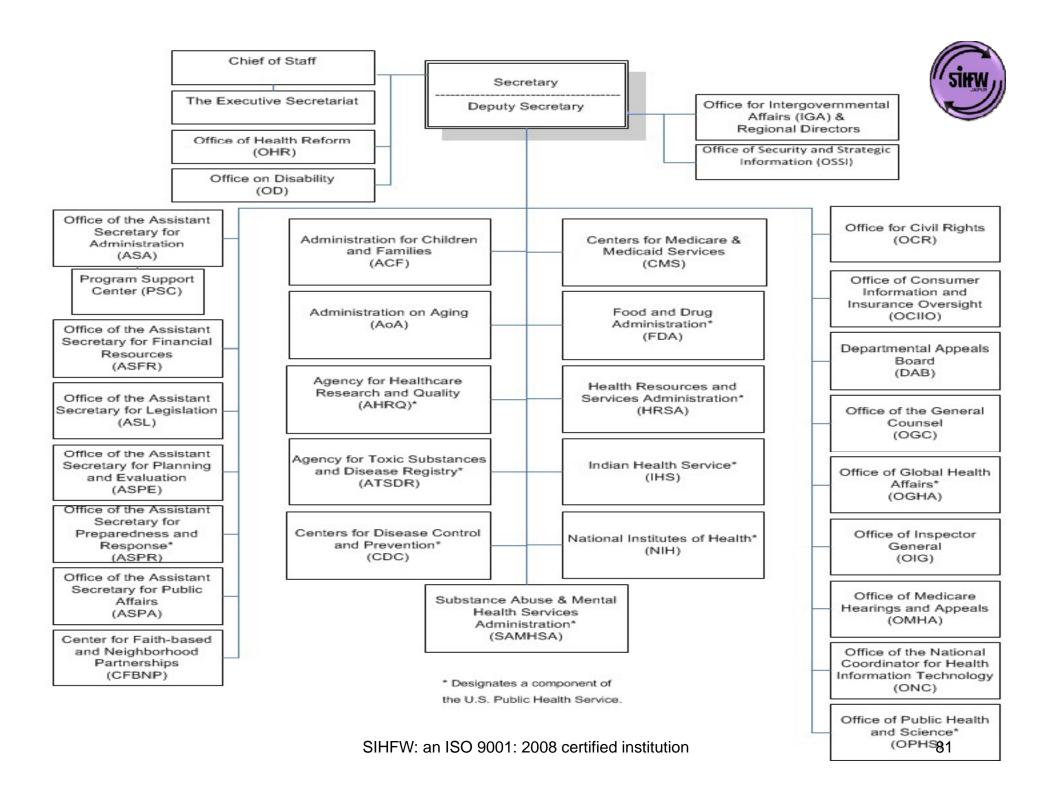
- Dominant private sector
- Resources in abundance
- Highly Decentralized
- Free Market Economy
- Dynamic



# US Health System- 5 Drivers

- Payments- Money based decisions
- Physician- Choices
- Products- Good care but good value
- Purchases- By business houses for employee
- Prospects- sustainability threatened







# Components of US Health System

- ✓ MoH
- Other ministries
  - Labor, Mines, Agriculture, Justice,
     Social welfare
  - Industry, Education, Local bodies, Planning, Public works
- ✓ Vol. bodies
- Professional bodies
- Private market



# Mgt. of US Health System

- Local responsibility
- Private sponsorship
- Minimum Govt. role
- Comprehensive health Planning
- Decentralization & Voluntarism
- Strict regulation-avoid misuse & negligence



# Service Delivery in US Health System

## Primary-

- Private physician/ poly-clinics
- Payment-insurance, out of pocket
- Preventive NO
- Sec./Ter. Care-
- Govt. hospitals

Increasing cost

- HMOs (pre-paid)
- PPO (groups, competitive cost)



Health manpower
Medical schools 50:50 Pvt.:Public 24.2/10000 - Physicians (2010); 98.2/10000 - Nurses

Source: WHO, World Health Statistics, 2012

#### **Health commodities**

Patents-valid for 17 yrs.
Regulation-on prescription/OTC drugs
Drug formulary with hospitals

#### Health knowledge

Extensive and varied research Research grants from Govt.

#### **Health facilities**

30bed/10000(2010) Govt. hospitals-freé OPD-only for poor Health centers-Preventive care

Source: WHO World Health Statistics, 2012



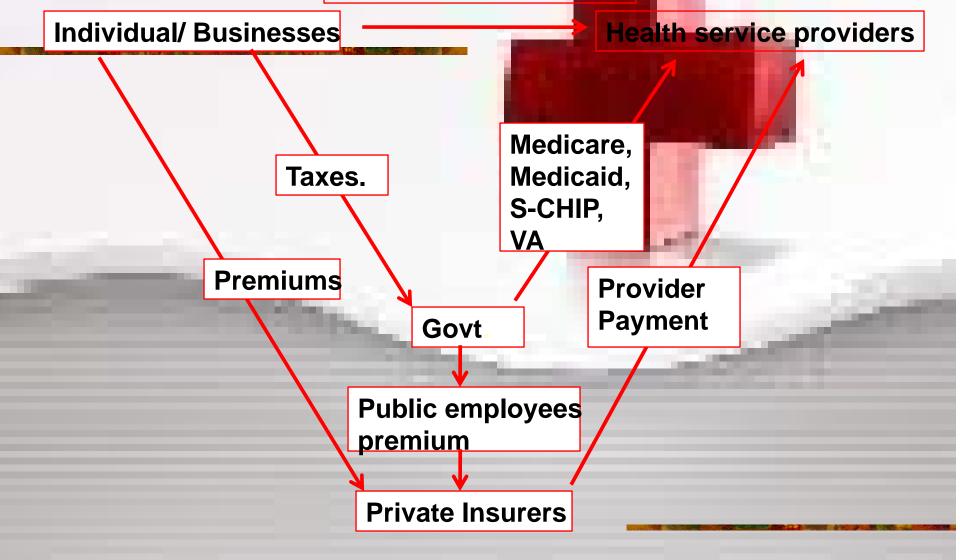
# Financing US Health System

- Funding
  - ✓ Total expenditure on health as % of GDP:17.6%(2009)
  - Per capita total exp. On health (PPPint.\$):7960(2009)
  - ✓ General Govt. exp.on health as % of Total exp. On health :47.7% (2009) Source: WHO, World Health Statistics,2012
  - Individuals (47 million U.S. residents 8 M Children) have no health insurance)
  - Federal Govt.
  - State Govt.
  - Employers
    - Larger houses(500+ employees) with declining trend



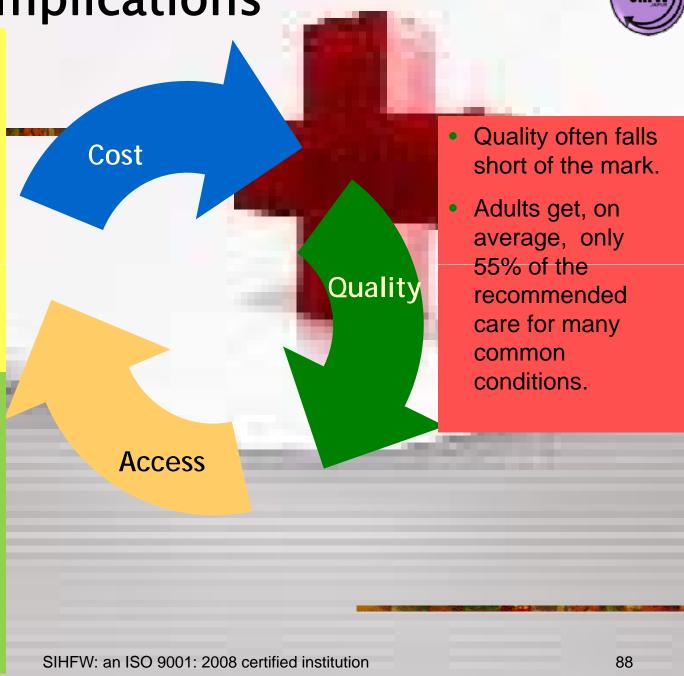
## Financing US Health System

**Direct OoP expenditure** 



Financial implications

- In 1960, spent a nickel out of every dollar earned, on health; today spend 15 cents out of every \$1 on health.
- The U. S. spent \$6,400 per person in 2004; By 2014, this amount is expected to be \$11,000.
- Almost 46 million are uninsured.
- Many uninsured are from working families.
- The uninsured are 8 times more likely to skip medical care because they can't afford it.





# Economics of US Health System

#### In 2003-

- Private Employer sponsored insurance- 62% of non elderly
- 15% in public insurance programs like Medicaid
- 18% were uninsured
- 5% purchased insurance on the private non group (individual) market



# Components of US Health system

- Large private market
  - Ambulatory care
  - Dental
  - Prosthetic
  - Surgical
  - Optical
- Emergence of poly clinics (complimentary role)



## Public Health Insurance

## ✓ Medicare

- ✓ Beneficiary: 65+ and disabled
- Single payer(Govt.) program
- 3 parts-
  - ✓ Part-A- Hospital Services
  - ✓ Part-B- Physician's services
  - ✓ Part-C pharmacy
- No coverage for skilled Nursing care, dental, hearing, vision, preventive care



## Public Health Insurance

#### ✓ Medicaid

Financed jointly by the states and federal government through taxes

 Very poor pregnant women, children, elderly, disabled, and parents



## Public Health Insurance

✓ S-CHIP The State Children's Health Insurance Program (S-CHIP) (1997)

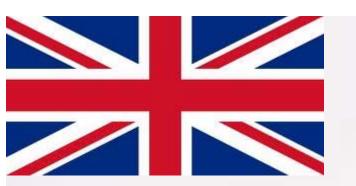
## ✓ VA-

- Federally administered program for veterans of the military
- Funded by taxpayer dollars



## Private Health Insurance

- Private non-group (individual market)
  - private insurance companies
  - Individuals pay an insurance premium outof-pocket for coverage
- Employer-sponsored insurance
  - financed both through employers (who usually pay the majority of the premium) and employees











# UK Health System (NHS: 1948)

- Major features:
- Publicly-funded healthcare system
- Biggest and oldest single-payer healthcare system
- Comprehensive nature of services
- Universal reach-primary care, in-patient care, long-term healthcare, ophthalmology and dentistry.
- Socialized medicine(social entitlement)
  - Funded through the general taxation system
  - "Free at the point of use"
- Initiated as worker's insurance
- National Health Service 1948- (NHS Act 1946,2006)



- It meet the needs of everyone
- Free at the point of delivery
- Based on clinical need, not ability to pay
- ✓ Since 2000 July
  - Provide a comprehensive range of services
  - needs and preferences of individual patients, their families
  - needs of different populations
  - improve the quality of services and to minimize errors
  - Use public funds for healthcare devoted solely to NHS patients
  - Work with others to ensure a seamless service for patients
  - work to reduce health inequalities
  - confidentiality of patients, access to information about services, treatment and performance



## Service Delivery

- Community Hospitals, GPs, Teaching Hospitals and Public Health Authority
- Primary health care services by general practitioners, dentists, pharmacists and ophthalmic practitioners who were independent contractors
- Preventive services were provided by local Govt.
- Hospital services by regional hospital boards



# The Initiatives of the Current NHS Reforms

- Providing incentives for people to take out private health insurance;
- Introducing new charges for health care services;
- Converting the tax-based financing system into a social health insurance system; and
- Limiting the provision of health care services to the core services.



# Economic support to NHS

Patients 4.0%

Social Insurance-4.75%

6.1% of GNP(1985)

Local health Authority-12.25%

Central Govt.-78.75%

SIHFW: an ISO 9001: 2008 certified institution

100



## Service Trends

- National health insurance act (1911)
- Manpower supply increase-gradual & slow
- 27.4 physicians/10000population, 2010
- √ 101.3 Nurses/10000 population, 2010
- ✓ 33 Bed/10000 population, 2010 Source: WHO, World Health Statistics, 2012
- Increase in hospitals expenditures
- Grouping of physicians-poly clinics
- Correction of geographic overloads
- ✓ NHS reorganization(1974) Area health authority
- Health districts
- Predominance of private sector-payment by govt.



# Financing UK Health System

#### In 2009

- Total expenditure on health as % of GDP: 9.8
- General Govt. Expenditure on health as %of Total expenditure on Health: 84.1
- Per capita Expenditure on health (PPPint.\$):3438
- Out of pocket expenditure as % of private exp.on health: 62

Source: WHO, World Health Statistics, 2012





# USSR: Health System





# Socialist Health System - USSR

- Major features:
  - Health services-a social entitlement
  - Health –Govt. responsibility
  - Integration of Preventive & Curative
  - Resources/services-Centralized planning
  - Single authority-MoH with sub-divisions
  - Prioritize services-workers & children first
  - Regulate private practice
  - Application/practice only based on scientific principles



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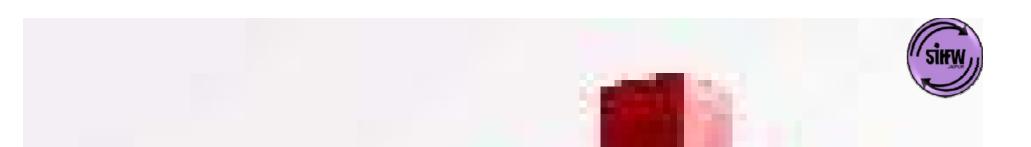


## Manpower

- Medical education under MoH
- Strength-430/lac (1986),M:F50:50
- Middle medical workers
- ✓ CME
- Secondary medical schools
- Stations
- Commodities
- State owned enterprises
- Cost/competition-delays

## **Health facilities**

- Govt. owned, small no. in private
- Sector hospitals-35-50 beds,pop.-4000
- District-100-300 beds,40-150 thousand
- ✓ Provincial –600-1200 beds,1-5 M pop.
- Rural-Mid-wife post
- Emergency medical services
- Sanitary.-Epidemiology.



## **Medical facilities:**

✓ Bed: 97/10000 population

## Man power:

- ✓ Physician: 43.1/10000
- ✓ Nurses: 85.2/10000

Source: WHO, World Health Statistics, 2012



## Financing: USSR Health System

- General taxation to the state, county or municipality
- Social health insurance
- Voluntary or private health insurance
- Out-of-pocket payments
- Donations



#### In 2009

- ✓ Total expenditure on health as % of GDP: 5.6
- General Govt. Expenditure on health as %of Total expenditure on Health: 63.4
- Per capita Expenditure on health (PPPint.\$): 1043
- Out of pocket expenditure as % of private exp. on health: 82.1

Source: WHO, World Health Statistics, 2012





#### China





#### China

- Population: 1,313,900,000 (2006)
  - Some 900,000,000 in rural areas
- ✓ Life Expectancy: 70.9 male/74.5 female
- Infant Mortality: 23.1 per 1000 (2006)
  - ✓ Urban:11 per 1000
  - Rural: 37 per 1000 (1999)
- ✓ Population >65: 7.7%



Health system classified in relation to traditional medicine-

- Exclusive (tolerant): UK, Germany
- ✓ Inclusive

Burma, Srilanka, Bangladesh, Thailand

Integrated

:China, Nepal

:India, Pakistan,



## China: Geographical Units

**Country-National** 

Province (State), 21

Counties (Districts), 2300

Communes (Townships vs. Tehsils)

Production Brigades (Villages or Village clusters)

**Production teams (Hamlets)** 



#### Exemplary Health Reforms (1985)

4% GDP on Health
MMR 44/100000
CPR-74% (1985)
CBR-20/ 1000
IMR-33/ 1000
Life Expectancy-70 (1987)

"Sick Man Of Asia" (1911)

(Malaria, Plague, TB, Small Pox, Trachoma, Leprosy, Chorea, Syphilis, Typhoid...)



#### **Health system evolution: China**

Medical education reduced to 3 Years

Recognition of Chinese Medicine

1965 - Criticism of existing system as "Elite oriented"

Cultural Revolution-(1965-75)
1957-Secondary Medical Schools established
First Five year plan-1953

1951- Health insurance for Central Govt. Employees
Western Medical schools established
1950-Adoption of a 3-tier Pyramid structure for Health
1927-Public Health Dept. in Ministry of Interior
1927-Dept of Public Health attached to PUMC
1914-Perking Union Medical College
1912-Republic China



1986- Pop. Crosses 1000 M

Med. Education pd. Restored to 6 years

1976-Free market Policy

1975- Geographical redistribution of Health care facilities

One child policy -1972

**Bare-Foot Doctors(3 M -1973)** 

Medical education reduced to 3 Years
Recognition of Chinese Medicine

1965 - Criticism of existing system as "Elite oriented"

Cultural Revolution-(1965-75)



## Health System-China

#### Major features

- Comprehensive-Universal
- Little regulation
- Wide variations in implementation
- Payment for services-reimbursed subsequently
- Large presence of Traditional healers
- Bare-foot & asset. Doctors trained in Sec.med.schools



Universal reach of primary care-

Innovative trg,

Bare foot doctor

Asstt. doctor

3-Tier system-County

Commune

Village hlth.station

- Family welfare-social approach
- ✓ Unintended negligence –no action
- Health Insurance
- All services to be paid for



## Health Resources-Manpower:

- Practitioners of Traditional Chinese Medicine (31.9 /100000, 1986) Curriculum Traditional: Western 70:30
- ✓ Physician 14.2/ 10000 Source: WHO, World Health statistics, 2012
- ✓ Nurses 13.8/ 10000 Source: WHO, World Health statistics,2012
- Assistant Doctors (Products of Secondary Medical Schools, 3-4 yrs of Training) 45/ 100000
- Bare Foot Doctors
  - Rural Doctors
  - Orderlies



#### Health Facilities-

- 42 Beds/ 10000 Source: WHO, World Health statistics, 2012
- √ 1414 Hospitals (12% Traditional Medicine)
- All Govt controlled
- Encouraging Entrepreneurs under PPP
- Specialty Hospitals
- Epidemiological units(3410 by 1985)
- Health centers (48100 by 1986, 1/22000)
- Pharmaceutical Industry for Western & Traditional herbal drugs- Private sector by 1976



#### Organizational Structure

**National Level-**

Ministry Of Public Health

(Centre for Policy leadership)

Health & Epi. Prevention

Med. Administration

Science & Education

**MCH** 

Pharmaceutical. Administration

**Traditional Medicine** 

Planning & Finance

Retail drug distribution

**Academies** 

Medical sciences

Traditional medicine

Preventive Medicine



Province level-

Bureau of Public health

Provinces to finance up to 90%

Services to be area specific

County Level-

Bureau of Public health

Hospitals

**Epidemics** 

Health campaigns

Drugs

Secondary Medical Schools

Supervision of township



✓ Township level Health centers (CHCs)
 No public health admn. Office

✓ Village levelVillage Health Stations (PHCs)



## Other Govt. Agencies

Petroleum & Chemicals

(Drug Production)

Commerce

(Drug Distribution

**Light Industry** 

(Medical Equipments)

Labor + MoPH

(Safety standards)

Education

(Medical education Standards)

Finance + Labor

(Health Insurance)



## Non-Governmental Agencies-

No significant presence Professional Bodies like-

Chinese Medical Association

Anti-Tuberculosis Association

Mental Health

Leprosy

Anti-Cancer

Anti Smoking

Family Planning Association

Chinese Red Cross Society

Chinese Communist Party-

Privatization

Decentralized authority

Local self reliance

**Private Market** 



#### **Economic Support-**

- On payment services
- Price regulated by Govt. and kept at its min.
- Urban Oriented
- Not Obligatory for Govt. to finance
- Health –Personal responsibility rather than collective action(1983)
- Covers cost of care to central employees
- Govt. Insurance (Health), not for Dependents
- Labor Insurance Workers & Dependents, Freedom to choose, Reimbursement
- Health care cooperatives at Village levels with Annual Membership fee (Participation)
- Health Expenditure-4.0 % of GDP (1987)
  - 95.3% Recurrent Expenditure
  - 4.7% Capital construction



#### **Economic Support-**

Sources of Health funds (%)

1980 - 1987

Insurance 48 — 50

Govt. 35 18

Individuals 17 32



#### Health Care Delivery

- Primary Health Care
  - Universal coverage
  - Innovative training
  - Bare foot Doctors
  - Assistant Doctors
- 3 Tier structure below province levels
- Largely preventive, though to be paid for
- Traditional Chinese system
- Say of lowest cadre of workers respected
- Unintentional mistake not punished
- Uninsured rarely hospitalized( High cost)
- ✓ 40 % pop. Covered by some insurance



#### Family Planning services in China-

- Regular policy changes
- Birth planning committees at each level
- Easy access to delivery of contraceptive services
- Deliveries assisted by SBA(97%)
- Strong IEC
- 1968-National policy
  - Late marriages, (23 & 20 yrs.)
  - Incentives on single child
  - ✓ IEC for FP
  - Abortions legalized



## Summary Highlights-

- Decentralized Administration, Centralized planning leading to regional disparities
- Dominant role of CCP
- Strong Soviet influence
- Local Self Reliance
- Area specific planning & Service Delivery
- Resources public but services on payment
- Health facilities need to be self supporting
- Even preventive services are to be paid for
- Community participation- Communes
- Bare-foot Doctors



## Summary Highlights-

- ✓ 4% of GDP
- Incremental Govt. Health spending
- Traditional System not neglected
- Gradual decline in Rural Health Cooperatives
- Health Insurance to cover rising costs
- Separate funds for different socio-economic groups
- Pooled contributions to meet Pooled risks
- Communicable diseases not in first 5 leading causes of Death
- General Anesthesia by Acupuncture



#### China: Health Indicators

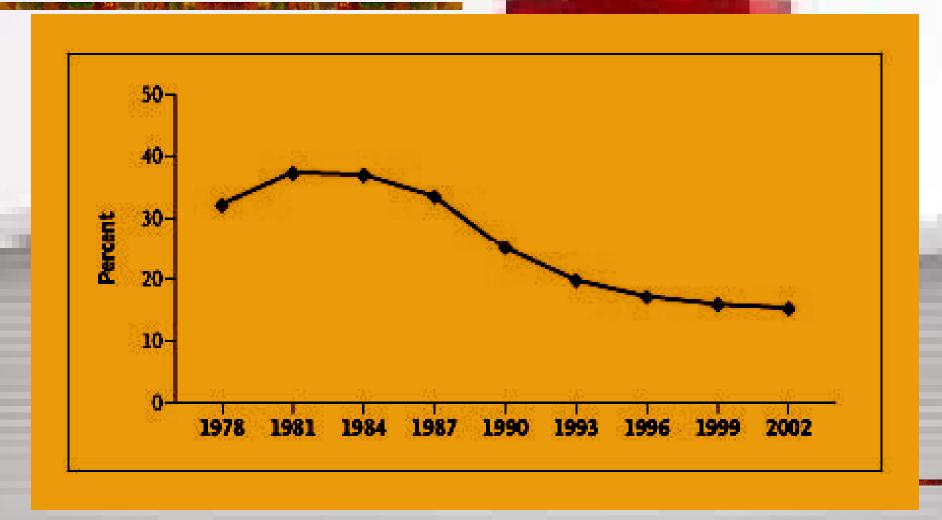
(http://www.who.int/gho/countries/chn.pdf)

(2009 data)		Country	Regional average	Global Average
Total population (thousands)		1353311	-	-
Population living in urban areas (%)		44	48	50
Gross national income per capita		6890	9497	10599
	Male	72	72	66
Life expectancy at birth	Female	76	77	71
	both	74	75	68
Maternal mortality ratio		38	51	260

# 4 Historical and Economic Steps to a Decline in Population Health Outcomes

- ✓ 1<sup>st</sup>: 1978 to 1999, reduced federal funding of healthcare from 32 to 15%—in favor of provincial/local gov'ts having more "control" (result: disparities & privatization)
- 2nd: Govt. imposed Perverse Price Regulations: hospitals and physicians that generated more income got bonuses; promoted use of new, expensive pharmaceutical products and hightechnology services







- Dismantling of Cooperative Medical System,
  - 900 million rural Chinese became uninsured overnight,
  - barefoot doctors became unqualified peddlers of high cost pharmaceuticals, loss of preventative emphasis
- Reduced govt. funding for public health efforts
  - local agencies switched to revenue generating focus (restaurant/food inspection) vs. MCH, epidemic control & health ed.

Blumenthal D, Hsaio W *Privatization and Its Discontents* — *The Evolving Chinese Health Care System.* NEJM. Volume 353:1165-1170 (11)



- ✓ Health expenditure as % of GDP: 5.1 (2009)
- Per capita total health expenditures: \$ 347 US (2009)
- General Government expenditure on health as % of total expenditure on health: 52.5(2009)
- Private expenditures out of pocket: 78.9%(2009)
- External resources for health as a % of total expenditures on health: 0.2%(2008)
  - 50-70% of ALL healthcare spending is on pharmaceuticals—many of which are counterfeit

Source: WHO, World Health Statistics, 2012



#### Privatization

Hospitals: 15% cooperative ownership, 15% private, for-profit

 Rural area clinics and hospitals allowed to privatize



#### Rural Healthcare

- Rural residents pay for 90% of their own healthcare (out-of-pocket)
- Public Health Campaigns: Government and NGOs/INGOs frequently sponsor immunization or other healthcare campaigns
- No opportunity for rural residents to purchase health insurance (no competitive market place for insurers)
- ✓ In 2002, officials launched several experiment inpatient care insurance plan as a rural health safety net. The government provides \$2.50 a year, rural residents must match this with an annual \$1.25.

#### Urban Healthcare

- Public hospitals: 70%, state mandated charges
- Two tier "National" insurance system: based on employer and employee contributions—started in 1998
  - ✓ 1<sup>st</sup> Tier: Personal medical account
  - 2<sup>nd</sup> Tier: Universal fund available when the personal account is exhausted
  - A "young" program, not all employers participate, time will tell the impact



#### Canada







## Health System- Canada

- Major features:
  - Welfare oriented
  - ✓ Resource rich
  - Health-Provincial responsibility
  - ✓ National Health Insurance



#### Organization-

- Deptt. Of National Health & Welfare
- Provincial Health bodies
- Federal agencies
- Deptt. Of Veterans affairs- Military hospital
- Other agencies-Justice, Defense, Agriculture
- Workmen's compensation board
- Voluntary agencies



- Private clinics-fee for service
- Insurance payment-strict reg.
- Low malpractice rate-Quality
- Hosp.Insurance-strong Govt. Surveillance
- Med.faculty- NO pvt. practice
- Weak chain of CHCs
- Legislative action against harmful health practices



Health Manpower in Canada Health System

#### **Health manpower**

- √ 19.8/10000 Physician
- √ 104.3/10000 Nurses

#### **Health Facilities**

√ 32/10000 Bed

Source: WHO, World Health Statistics, 2012



## Financing in Canada Health System

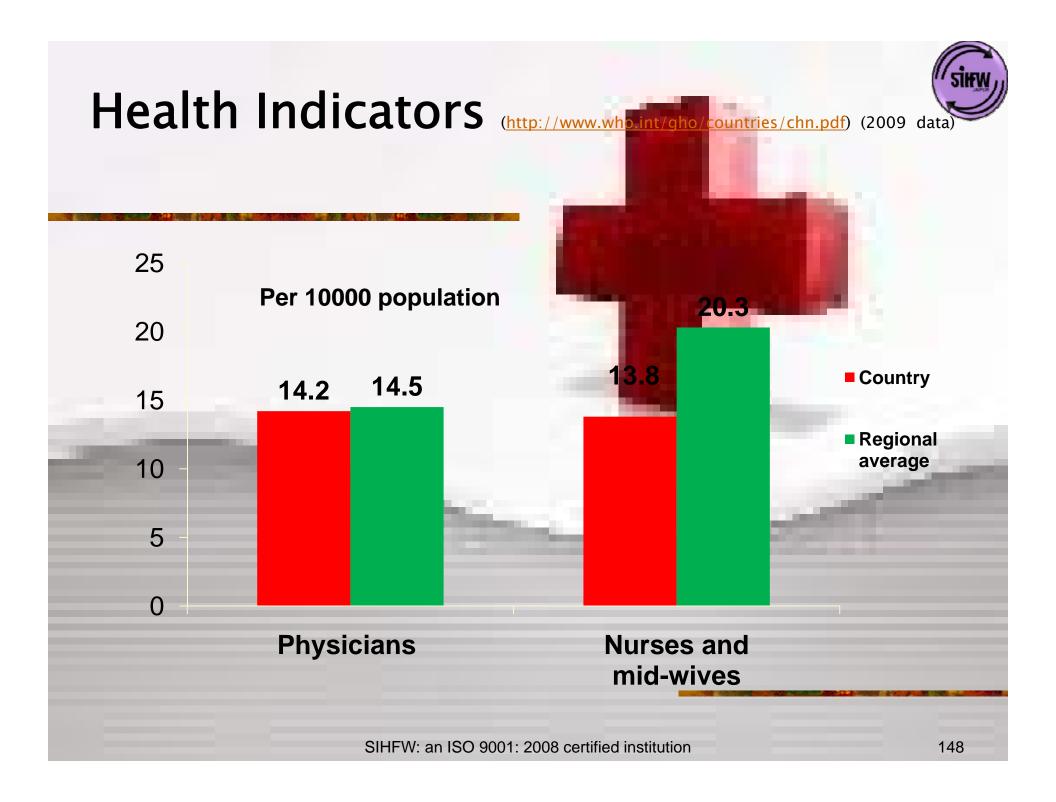
✓ Total expenditure on health as % of GDP-11.4

 General Govt. expenditure on health % of Total expenditure on health- 70.6

Per capita expenditure (PPPint.\$)- 4314

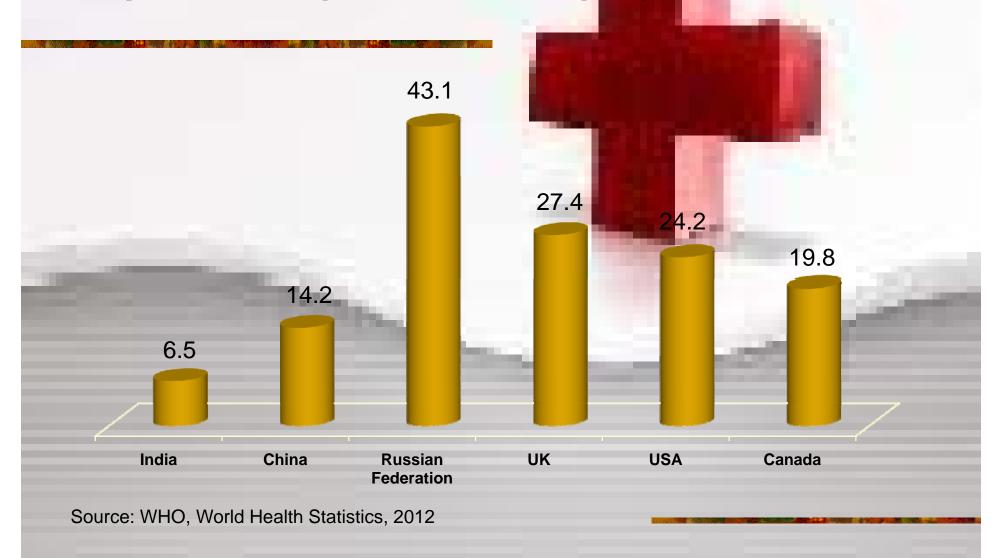
Source: WHO, World Health Statistics, 2012





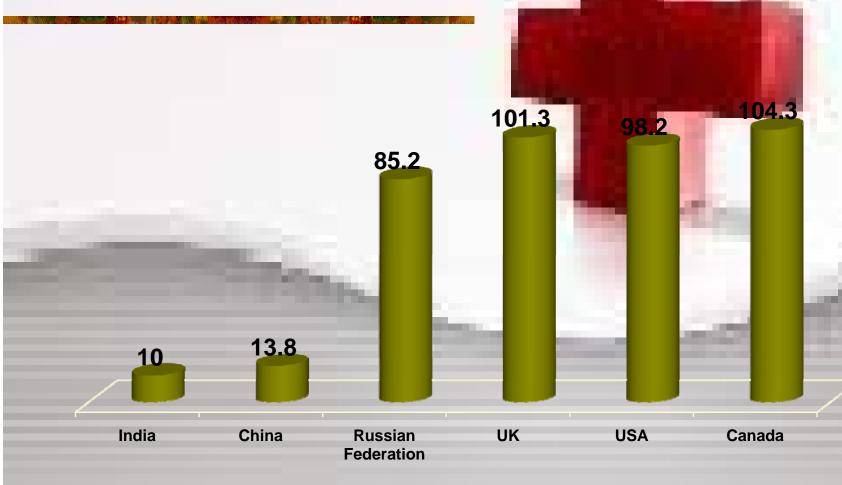


## Physicians per 10000 population





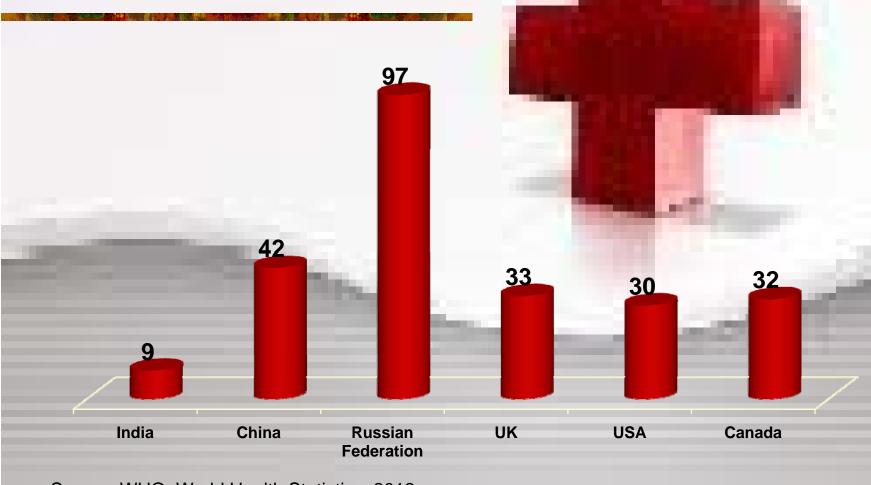
# Nursing/ Midwifery Personnel Density/10000 population



Source: WHO, World Health Statistics, 2012

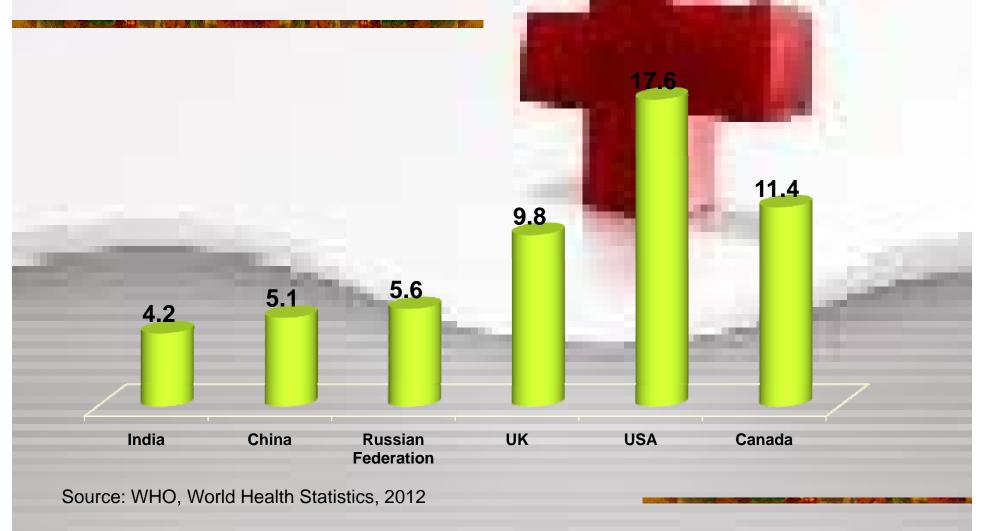


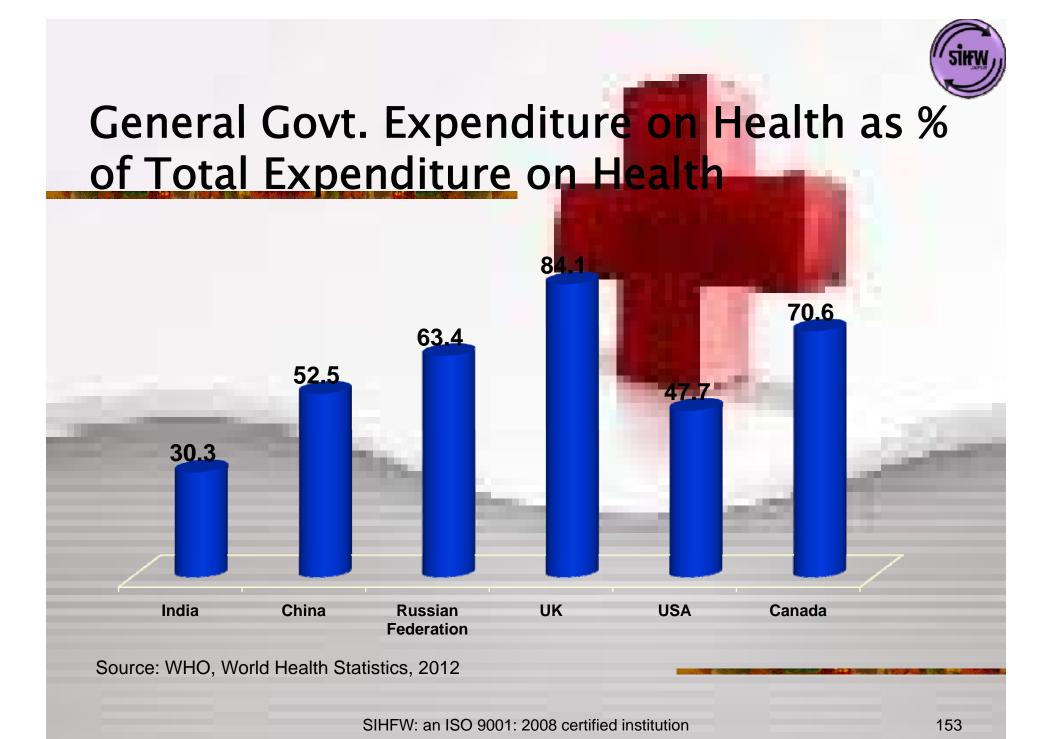
## Hospital Bed/10000 Population

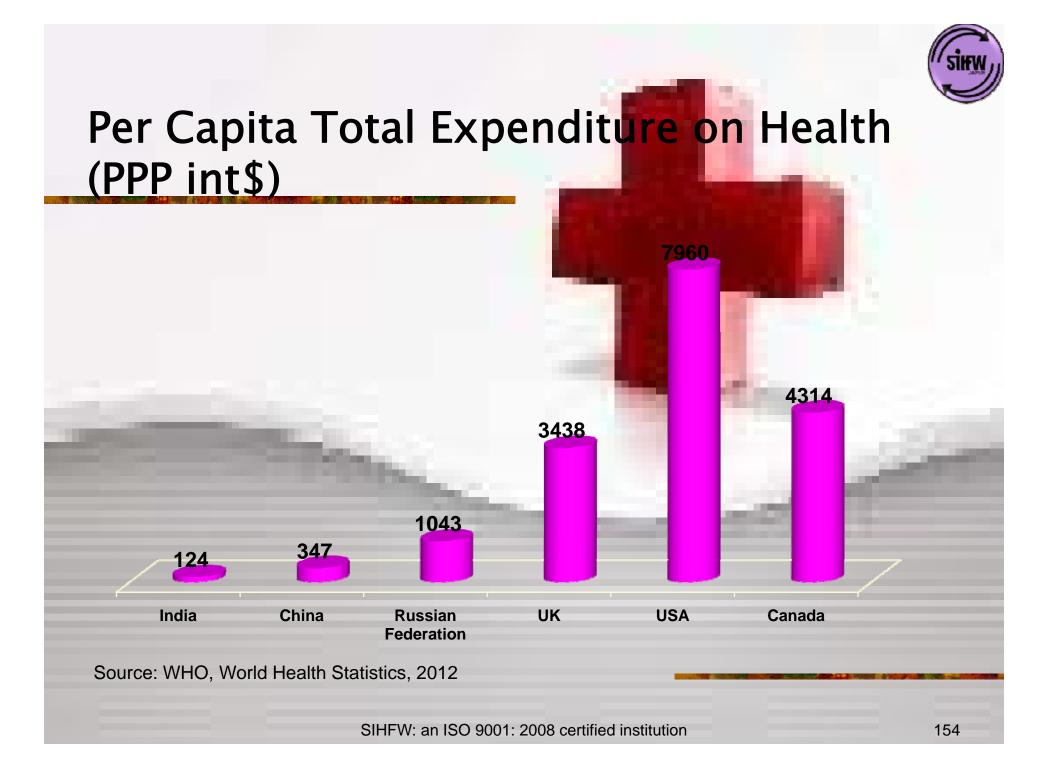


Source: WHO, World Health Statistics, 2012











#### Thank You

For more details contact

Director at sihfwraj@yahoo.co.in

Or

log on to: www.sihfwrajasthan.com