Health Equity

Health equity remains a critical goal for achieving Universal Health Coverage (UHC) in India. Despite government initiatives systemic inequalities persist across gender, religion, and regions, widening the gap in access to quality healthcare services.

What is Health Equity?

Health equity ensures that everyone has a fair opportunity to achieve their highest health potential, addressing avoidable disparities caused by social, economic, and environmental factors.

Various Parameters of Health Equity

1. Access to Healthcare: Equitable distribution of hospitals, health workers, and medicines in rural and urban areas.
2. Financial Protection: Reducing out-of-pocket healthcare expenditures and ensuring insurance coverage.
3. Gender Parity: Equal healthcare access for women, men, and non-binary individuals.
4. Social Determinants: Addressing poverty, education, housing, and clean water to improve health outcomes.
5. Quality of Care: Ensuring timely, affordable, and standardized healthcare services for all.

Present Inequity in Health in India:

1. Gender Inequality:
    - Anaemia among Women: 59% in the lowest wealth quintile (NFHS-5, 2019-21).
    - Maternal mortality remains higher in rural areas due to lack of care.
2. Religious Inequality:
    - Muslims have higher infant mortality rates (43 per 1,000 live births) than the national average (Census 2011).
3. Regional Disparity:
    - Urban areas have 75% of healthcare professionals, but only 27% of India's population resides there (WHO).
    - Rural CHCs face 83% shortages of specialists, worsening access to care.
4. Caste and Tribal Marginalization:
    - Child Mortality: Higher among Scheduled Tribes and Scheduled Castes.
    - Immunization rates lower for marginalized groups compared to upper castes (NFHS-5).
5. Economic Disparity:
    - Out-of-pocket expenses: 39.4% of total health expenditure (NHA, 2021-22).
    - Over 50 million people are pushed into poverty annually due to healthcare costs.

Government initiatives:

1. Ayushman Bharat – PMJAY: Provides ₹5 lakh annual health cover for low-income families.
2. National Health Mission (NHM): Focuses on strengthening primary and urban healthcare systems.
3. Pradhan Mantri Ayushman Bharat Digital Mission: Promotes digital healthcare access and efficiency.
4. Free Medicine Schemes: Tamil Nadu's robust drug procurement system ensures free medicines.
5. Focus on Primary Healthcare: Kerala's model emphasizes strong primary health infrastructure.

Challenges for health equity:

1. Inadequate Public Funding: Government healthcare spending stands at only 1.84% of GDP.
2. Shortage of Healthcare Workers: Severe deficit of doctors and specialists, particularly in rural areas.
3. Over-Reliance on Private Sector: High private healthcare costs exacerbate inequities.
4. Socioeconomic Barriers: Poverty, gender discrimination, and illiteracy hinder healthcare access.
5. Regional Imbalance: States with low healthcare infrastructure struggle with accessibility and quality of care.

Way ahead to achieve health equity:

1. Increased Public Health Spending: Raise budgetary allocation to 2.5% of GDP for improved infrastructure and resources.
2. Strengthen Primary Healthcare: Focus on PHCs and CHCs with adequate staffing and facilities in rural areas.
3. Expand Insurance Coverage: Integrate informal sector workers into schemes like PMJAY.
4. Leverage Technology: Use digital health platforms for telemedicine and health awareness.
5. Address Social Determinants: Tackle poverty, education gaps, clean water access, and nutrition to improve overall health outcomes.

Conclusion:

Achieving health equity requires political commitment, increased investment, and inclusive policies that address systemic disparities. As Nelson Mandela said, "Health cannot be a question of income; it is a fundamental human right."

Ustad Zakir Hussain

Ustad Zakir Hussain, the globally celebrated tabla maestro, passed away in San Francisco due to Idiopathic Pulmonary Fibrosis (IPF).

About Zakir Hussain:

- Birth: Born on March 9, 1951, in Mumbai, India.

- Family & Roots: Son of legendary tabla player Ustad Alla Rakha; trained in the Punjab Gharana tradition.
- Music Legacy: A pioneer in Indian classical and fusion music, blending tabla with jazz, film, and world music.
- Achievements & Awards:
    - Winner of five Grammy Awards, including one for the fusion group Shakti.
    - Awarded Padma Shri (1988), Padma Bhushan (2002), and Padma Vibhushan (2023).
    - Collaborated with artists like John McLaughlin, Pandit Ravi Shankar, and Ali Akbar Khan.
- Global Influence: Popularized the tabla globally through concerts, commercials, and innovative collaborations.

About Idiopathic Pulmonary Fibrosis (IPF):

- What it is: A chronic, progressive lung disease causing scarring (fibrosis) of lung tissue, making breathing difficult.
- Causes:
    - Exact cause unknown (idiopathic).
    - Triggered by environmental factors (smoke, dust, pollution), genetic predisposition, and chronic inflammation.
- Symptoms:
    - Shortness of breath (dyspnea)
    - Dry cough
    - Fatigue and unintended weight loss
    - Low oxygen levels leading to complications like pulmonary hypertension and respiratory failure.
- Diagnosis: Confirmed via high-resolution CT scans, pulmonary function tests, and occasionally lung biopsy.
- Treatment:
    - Antifibrotic medications: Pirfenidone, Nintedanib (slows progression).
    - Oxygen therapy and lung exercises.
    - Lung transplantation for advanced cases.

CHARAK Initiative

The Northern Coalfields Limited (NCL), launched 'CHARAK' (Community Health: A Responsive Action for Koylanchal) to provide free treatment for life-threatening diseases to economically weaker sections in Singrauli and Sonbhadra districts.

About CHARAK Initiative:

- What it is: A health-centric CSR initiative by NCL for free treatment of life-threatening diseases.
- Launched by: Northern Coalfields Limited (NCL), under the Ministry of Coal.
- Aim: To provide free and specialized healthcare to economically weaker sections suffering from life-threatening diseases.
- Eligibility: Residents of Singrauli and Sonbhadra districts with annual family income below ₹8 Lakhs.
- Covered Diseases: Includes malignancy, TB, HIV complications, cardiovascular diseases, organ transplants, burns, neurological disorders, accidental trauma, etc.

La Niña

La Niña, a critical phase of the El Niño Southern Oscillation (ENSO), significantly influences global and regional weather patterns, including India's monsoons and winters. Its delayed onset in 2024 has led to varied climatic effects.

About La Niña:

- What it is: A cooling phase of the Pacific Ocean, characterized by lower-than-average sea surface temperatures between Indonesia and South America.
- How it forms: Strengthened trade winds push warm water westward, allowing colder water to upwell in the central and eastern Pacific.
- Global Impacts:
    - Increased hurricanes over the Atlantic Ocean.
    - Droughts in Africa and western U.S.
    - Enhanced rainfall in Southeast Asia and Australia.
- Impacts on India:
    - Above-normal monsoons (e.g., 2020-2022).
    - Colder winters in north India and cooler summer relief.
    - Higher wind speeds, improving air quality.

About El Niño:

- What it is: The warming phase of ENSO, with higher-than-average sea surface temperatures in the eastern Pacific Ocean.
- How it forms: Weakened trade winds allow warm water to accumulate in the eastern and central Pacific.
- Global Impacts:
    - Heavy rainfall in the southern U.S. and western South America.
    - Severe droughts in Southeast Asia, Australia, and Africa.
    - Disruption of marine ecosystems due to warmer ocean waters.
- Impacts on India:
    - Below-normal monsoons (e.g., 2023).
    - Intense summer heat waves and prolonged droughts.
    - Reduced agricultural output and water shortages.

About Triple Dip La Niña:

- What it is: When La Niña conditions persist for three consecutive years (rare occurrence).
- How it forms: Sustained strengthening of trade winds and persistent cooling of the Pacific over multiple cycles.
- Global Impacts:
    - Extended droughts in Africa and western U.S.
    - Increased cyclone activity in Australia and Atlantic hurricanes.
    - Prolonged disruptions in global agricultural and marine systems.
- Impacts on India:
    - Consistent above-normal rainfall (e.g., 2020-2022).
    - Cooler winters in north India.

- Enhanced agricultural yield due to robust monsoons.

Cyclone Chido

Cyclone Chido, a super cyclone with winds exceeding 200 km/h, struck Mayotte, a French overseas territory in the Indian Ocean, causing unprecedented destruction.

About Cyclone Chido:

- Origin: Developed over the warm waters of the Indian Ocean, intensifying rapidly due to rising sea surface temperatures.
- Classification: A super cyclone with sustained wind speeds exceeding 200 km/h and gusts surpassing 250 km/h.
- Criteria for a Super Cyclone
    - Wind Speed: Sustained wind speeds of over 220 km/h (137 mph) or higher.
    - Classification: Categorized as a Category 4 or 5 storm on the Saffir-Simpson scale.
    - Low Central Pressure: Extremely low central pressure, often below 920 hPa.

About Mayotte:

- Location: Situated in the Mozambique Channel, between northwestern Madagascar and northeastern Mozambique in the Indian Ocean.
- Capital: Mamoudzou, located on the main island, Grande-Terre.
- Controlled by: Overseas department of France.
- Consists of Grande-Terre (main island), Petite-Terre, and surrounding islets.

Hydroxymethanesulphonate

A study reveals hydroxymethanesulphonate, a secondary aerosol, forming in cold urban areas like Fairbanks, Alaska, reshaping understanding of aerosol chemistry in extreme conditions and its air quality impact.

About Hydroxymethanesulphonate:

- What it is: A secondary aerosol that forms from chemical reactions involving formaldehyde and sulphur dioxide in the presence of liquid water.
- How it is formed:
  - Occurs when formaldehyde reacts with sulphite ions in aerosol articles.
  - Requires liquid water within aerosol particles, even in extremely cold conditions (supercooled state).
- Factors favoring its formation:
  - Low temperatures: Inhibit ammonium volatilization, reducing aerosol acidity.
  - High ammonium ion concentrations: Neutralize acidity, enabling reactions.
  - Supercooled liquid water: Present in aerosols at sub-zero temperatures.
- Impact on environment:
  - Contributes to PM2.5 pollution, worsening air quality.
  - Influences cloud formation and radiative properties, affecting climate.
- Impact on humans:
  - Aggravates respiratory illnesses, lung diseases, and cardiovascular conditions.
  - Long-term exposure increases risks of premature mortality in polluted regions.