

Introduction to Social Pharmacy

DEFINITION AND SCOPE OF SOCIAL PHARMACY

History: Since 1970s, social pharmacy has evolved and contributed to the knowledge of the needs of patients and society, which have a mutual vested interest in getting the most effective, safest, and cheapest drugs from manufacturers to users.

Definition: Social pharmacy is defined as “*the multidisciplinary field of education and research that focuses on the role, provision, regulation, and use of medicines by pharmacists in the healthcare sector and/or society*”. The scope of social pharmacy is broad, covering the social, psycho-social, economic, and organizational aspects of medicines. It analyzes policy decisions made on the local, national, international, and global levels concerning medicines.

IMPORTANCE/OBJECTIVES OF SOCIAL PHARMACY

Over the last decades, by incorporating the social pharmacy WHO believed that pharmacists would make a great contribution that promotes constant healthcare provision. Therefore, it is important for both understanding and improving the pharmacy practice.

1. To improve health, patient care, and medication-related outcomes through education, clinical practice, and research.
2. To assist anyone who wants to use a scientific approach to describe, explain, understand, and/or change practice.
3. To facilitate the development of personal and interpersonal skills which are linked with effective counseling and communication in improving the medication use process in the society.

4. To play an important role in training community-based pharmacists essential for a hyper-aged society.
5. To provide information and create awareness among the people so that they may be relieved from misconceptions, doubt, and ignorance.
6. To encourage the public to take advantage of various health programs running for community welfare such as vaccination, family planning, and Ayushman Bharat.

SCOPE OF SOCIAL PHARMACY

Social pharmacy combines pharmacy studies with theories and methods from the social, psychological, and humanistic disciplines, so it has wide scopes which are as follows (Fig. 1.1):

1. **Professional dispensing:** Pharmacists are healthcare professional with specialized knowledge and training who performs an important role in ensuring optimal health outcomes for their patients by educating them about the effective and appropriate use of ongoing medicines.
2. **Patients counseling:** Patient counseling is one of the key responsibilities of a social pharmacist. It is a one-to-one interaction where the pharmacists should provide vital information, advice, and assistance regarding ongoing pharmacotherapy and their side effects.
3. **Medicine management:** The role of the pharmacist in medicine management is to ensure that the selection of

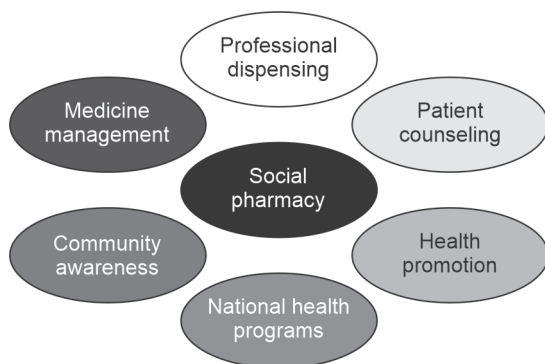


Fig. 1.1: Scope of social pharmacy

drugs should be based on the need of the situation, effective, affordable, and quality drugs that attain the best outcome for each patient.

4. **Health promotion:** Health promotion activities done by pharmacist which includes health education, behavior, and lifestyle modification among patients providing healthcare information on available choices for disease prevention or management encourages positive behavioral changes in care providers.
5. **Community awareness:** Community pharmacist should provide a wide range of services including medicine management and optimization, chronic condition management, patient empowerment, care coordination, health and wellness services, and other services that helps to improve the quality of a patient's life.
6. **National health programs:** The government of India runs several national health programs (NHPs) such as HIV / AIDS control, TB control, vector-borne disease control, leprosy eradication, pulse polio, universal vaccination, and tobacco eradication programs. Pharmacists could contribute to public health and patient care through these programs.

Role of Social Pharmacists in Public Health

Pharmacy professionals can play a vital role as social pharmacists. He can guide the public about self-hygiene, prevention of the spread of infection, family planning, and various ongoing national health programs. Pharmacists should contribute to public health in various ways:

Counseling on the proper use of OTC and prescribed medicines, medical problem histories, and referring patients to specific healthcare centers.

1. Distributing free or a cost price of tablets to prevent or cure the prevailing diseases.
2. Coordinating with medical health centers in the village or nearby town dispensaries and hospitals.
3. Working as a social worker and improving hygienic conditions in the community.

4. Encourages people about family planning because it is also a great concern when it comes to health.
5. Giving information about government schemes such as free vaccination and Ayushman Bharat.
6. Exhibiting posters and distributing literature on preventive measures against existing epidemics such as literature, advertisement, and verbal promotions of preventive measures against COVID-19.

Others May Include

1. More patient-friendly pharmacy practice.
2. Enhance pharmacist's status.
3. Patient compliance.
4. Communicate with prescribers.
5. Ensure patients' safety.
6. Patient counseling on general health.

Key Points

1. Social pharmacy is a discipline of pharmacy concerned with the social aspects of drugs and their administration.
2. The pharmacist's duty in social pharmacy is to guarantee that patients receive the best possible care.
3. Pharmacists engaged in social pharmacy play an important role in teaching patients about their medications, monitoring drug safety, and collaborating with other healthcare professionals to provide the best possible treatment.
4. Social pharmacy encompasses all social elements that influence medicine usage, such as views, attitudes, and policies about medicine and health.
5. Social pharmacies contribute to health promotion and education like immunizations, family planning, and rational use of medications

Concept of Health

History: The word health originally evolved from the old English word 'Hoelth' which means 'the state of being sound'.

Definition: Traditionally health has been described as “a state which characterized by anatomic, physiologic and psychological integrity, can perform family as well as community works and deal with physical, biological, psychological and social stress”.

Despite that for a common man, health means a sound body, a sound family, and a sound community.

The modern definition of health became official when in 1948 Dr Andrija Stampar (one of the founders of WHO) proposed the definition of health. According to WHO “*health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity*”.

Dimensions of Health

The modern concept of health recognizes health as a relative state in which a person can function well physically, mentally, spiritually, and socially to express the full range of one’s unique potential within the community in which a person lives. According to WHO various dimensions of health are as follows (Fig. 1.2):

1. **Physical health:** It refers to the efficient functioning of the body and its systems and includes the physical capacity to perform tasks and physical fitness. Physical health ranges in quality where a combination of diseases such as hypertension, diabetes, and cancer are at one end and a person who is in optimum physical condition is at the other. Physical health can affect the other dimensions of health as a result of a decline in other forms of health.

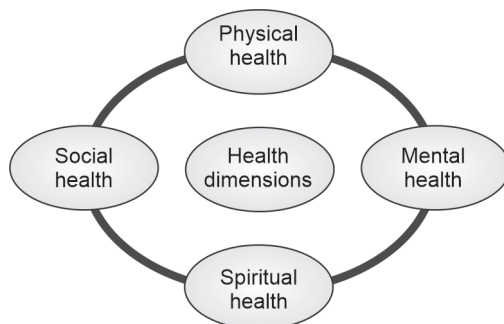


Fig. 1.2: Various health dimensions

For example: A 16-year-old boy is involved in a car accident and breaks his pelvis, rendering him unable to attend school or play football with the local club he loves.

His physical health is affected by the damage done to his pelvic bones and a loss of fitness, which in turn has prevented him from maintaining social contact at school and football, decreasing his ability to interact with others and have good social health. His isolation may also reduce his mental health as he may feel lonely and depressed.

2. **Mental health:** It is a state of well-being in which an individual:
 - a. Recognizes their abilities.
 - b. Can cope with the normal stresses of life.
 - c. Can work productively and fruitfully.
 - d. Able to contribute to their community.

Mental health affects the other dimensions of health. An increase in mental health can come as a result of increased physical activity and good mental health can then lead to an increase in self-esteem as mental performance improves. Greater self-esteem then leads to more confidence in social situations and can lead one to ask larger questions about life leading to increased spiritual health.

For example: A 33-year-old woman develops depression.

Depression causes feelings of hopelessness, stress, and loss of interest in normal activities, negatively impacting her mental health. This may decrease her desire to exercise or prepare healthy food, leading to weight gain and loss of fitness, reducing her physical health. Her depression may mean that she is not interested in interacting with others and participating in her community and her moodiness puts a strain on her relationship with her husband, reducing her social health.

3. **Spiritual health:** Spiritual health refers to our sense of overall purpose in life. People find their purpose from a belief or faith, while others create their purpose. A person who has a purpose in life is said to be healthier than those who do not have any purpose in life. Spiritual health will very easily affect emotional and mental health as having a purpose in

life can help you to apply yourself to achieving goals. Having a purpose in life can also help people to maintain a proper perspective on life. Often spiritual people meet together regularly around their spiritual purpose, which helps to improve their social health.

Daily habits that make a person spiritually healthy:

- a. Find a quiet place and spend time there every day.
 - b. Contemplate the meaning of your life.
 - c. If you have a religion, study and practice it.
 - d. Spend time appreciating the natural world around you.
4. **Social health:** The social dimension of health refers to our ability to make and maintain meaningful relationships with others. Good social health includes not only having relationships but behaving appropriately within them and maintaining socially acceptable standards. The basic social unit of relationship is the family and these relationships impact a person's life the most. Other key relationships are close friends, social networks, teachers, and youth leaders. Social health affects the other dimensions of health in many ways. A bad social life can lead a person to question his/her purpose in life or feel isolated and unwanted. Such feelings can demotivate people from physical activity and lead them towards depression.

Determinants of Health

The term 'determinants of health' was introduced in 1970s and it refers to the range of personal, social, economic, and environmental factors that influence health status (whether positive or negative) are known as determinants of health.

According to the CDC (Centers for Disease Control and Prevention), several determinants or variables contribute to the state of individual health:

1. **Biological and heredity:** Inheritance plays a part in determining lifespan, healthiness, and the likelihood of developing certain illnesses. For example, older adults are biologically prone to being in poorer health than adolescents due to the physical and cognitive effects of aging. Sickle cell disease is a common example of a genetic determinant of

health. Sickle cell is a condition that people inherit when both parents carry the gene for sickle cell. The gene is most common in people with ancestors from West African countries, South or Central American countries, India, and Saudi Arabia.

Examples of biological and genetic social determinants of health include:

- a. Age
- b. Sex
- c. HIV status

Inherited conditions, such as sickle-cell anemia, hemophilia, and cystic fibrosis

Carrying the BRCA1 or BRCA2 gene increases the risk of breast and ovarian cancer.

2. **Neighborhood or environment:** Environmental health is concerned with all aspects of the natural and built environment that affect human health. It can be classified as an internal and external environment. The internal environment of an individual includes every organ, organ system, and physiologic functioning. Similarly, the external environment consists of those things to which individuals are exposed.

According to recent estimations, globally about 4.9 million (8.7%) deaths per annum are reported due to environmental exposure.

Environmental health concern includes:

- a. Housing
- b. Transportation
- c. Safety
- d. Playgrounds
- e. Parks
- f. Air quality
- g. Disaster management
- h. Environmental pollution (air, water, noise, etc.)

3. **Individual behavior:** Individual behavior also plays a role in health outcomes. For example, if an individual quits smoking, his or her risk of developing heart disease is greatly reduced.

Many public health and healthcare interventions focus on changing individual behaviors such as substance abuse, diet, and physical activity. Positive changes in individual behavior can reduce the rate of chronic disease.

Examples of individual behavior determinants of health include:

- a. Diet
 - b. Physical activity
 - c. Alcohol, cigarette, and other drug use
 - d. Handwashing
4. **Socio-economic status:** The economic status determines the quality of life and standard of living. Higher-income and social status are linked to better health. The greater the gap between the richest and poorest people, the greater the differences in health.

Examples of socio-economic determinants include:

- a. Quality schools
 - b. Residential segregation
 - c. Employment
 - d. Income and expenses
5. **Health and family welfare services:** Both access to health services and the quality of health services can impact health. Lack of access or limited access to health services greatly impacts an individual's health status. For example, when individuals do not have health insurance, they are less likely to participate in preventive care and are more likely to delay medical treatment.

Examples of health services determinants include:

- a. Lack of availability
- b. High cost
- c. Lack of insurance coverage
- d. Limited language access
- e. Delays in receiving appropriate care
- f. Inability to get preventive services

Health Indicators

A health indicator refers to the indicator of the population's health rather than an indicator of individual health. Therefore,

it uses information on groups or places generated by aggregate measurements of health. These are commonly based on an event of interest, a reference population, and inclusion and exclusion criteria.

Every health indicator is an estimate (a measurement with some degree of imprecision) of a given health dimension in a target population.

The indicators are classified as positive and negative whether they are directly or inversely associated with health.

1. **Positive health indicator:** Indicators are considered positive when they have a direct relationship (association, correlation) with healthiness. The higher the indicator value, the better the state of health of the people in the population being studied.

For example: Life expectancy at birth is an indicator of long-term survival. As such, it can be considered a positive health indicator.

2. **Negative health indicator:** Indicators are considered negative when they have an inverse relationship (association, correlation) with healthiness. The higher the indicator value, the worse the state of health of the people in the population being studied.

For example: Negative indicators are infant mortality rate, maternal mortality ratio, rate of incidence of AIDS, etc.

The negative health indicators are further categorized as

1. **Mortality indicators:** The mortality rate of children in any country is the direct indicator for judging the status of the country. A higher mortality rate indicates that the country is underdeveloped.

Mortality data are a fundamental source of demographic, geographic, and cause-of-death information. This data is used to quantify health problems as well as to define or monitor health priorities and goals.

The important mortality indicators are as follows:

- a. **Infant mortality rate:** The death rate of children below one year is called infant mortality rate. It is the number of infant deaths out of 1,000 live births per year. Particularly

in India, the infant mortality rate varies between 70 and 80% per year per 1000 live births.

- b. **Crude death rate:** It is defined as the number of deaths per 1000 population per year in a given particular area. A higher crude death rate indicates poor health. It is not suitable for international comparisons because it may be influenced by the sex and age of the population.
2. **Morbidity indicators:** It is the number of cases of prevailing disease found in a stated number of people. It is assigned as per lakh or million. Morbidity indicators are found to be more sensitive than mortality indicators. The annual figure for morbidity rate gives the incidence of the disease, which is several new cases reported in a given year. It usually describes the ill health of those who are suffering from disease and those who are admitted to the hospital.
Morbidity indicators are designed to measure the occurrence of diseases, injuries, and disabilities in populations.
3. **Healthcare service indicators:** It determines the doctor–patient ratio, doctor–nurse ratio, population–bed ratio, population–hospital ratio, etc. Health status does not depend only on the availability of healthcare services but also on the extent to which these services are utilized.

Key Points

1. Health is a state of complete emotional and physical well-being.
2. Physical health refers to a perfect bodily operation where each organ is operating at its highest potential.
3. Mental health refers to the ability to adapt to life's many different situations with flexibility and a sense of purpose.
4. Every health indicator is a prediction of a specific health dimension in a given population.
5. Mortality data are an important source of demographic, regional, and cause-of-death information.

National Health Policy: Indian Perspective

History: The Ministry of Health and Family Welfare, Government of India, evolved a National Health Policy in 1983 keeping in

view the national commitment to attain the goal of health for all by the year 2000 as shown in Table 1.1.

Definition: National Health Policy (NHP) is a spirit of optimistic empathy for the health needs of the people, particularly the poor and underprivileged had hoped to provide 'Health for All' by 2000 through the comprehensive PHC (primary health center) services.

According to WHO *"Health policy refers to the decisions, plans, and actions that are undertaken to achieve specific healthcare goals within a society"*.

Aim: To inform, clarify, strengthen, and prioritize the role of government in shaping health systems in all dimensions such

Table 1.1: National health policies

Sr. No.	Policy name	Year
1.	National Health Policy	1983
2.	National AIDS Control and Prevention Policy	1992
3.	National Nutrition Policy	1993
4.	National Policy on Older Persons	1999
5.	National Population Policy	2000
6.	National Policy of Women Empowerment	2001
7.	National Blood Policy	2002
8.	National Policy on Indian System of Medicine and Homeopathy	2002
9.	National Health Policy	2002
10.	National Policy for Access to Plasma-derived Medicinal Products from Human Plasma for Clinical/Therapeutic Use	2003
11.	National charter for children	2003
12.	National Environment Policy	2006
13.	National Pharmaceutical Pricing Policy	2012
14.	National Water Policy	2012
15.	National Policy for Children	2013
16.	National Youth Policy	2015
17.	National Health Policy	2017

as investments in health, organization of healthcare services, prevention of diseases and promotion of good health through technologies, development of human resources, encouraging medical pluralism, developing better financial protection strategies, strengthening regulation and health assurance.

Objectives

1. To achieve an acceptable standard of good health among the general population of the country.
2. The approach would be to increase access to a decentralized public health system by establishing new infrastructure in the existing institutes.
3. Ensure equitable access to health services across the social and geographical expanse of the country.
4. Primacy will be given to preventive and first-line curative initiatives at the primary health level.
5. Focus on those diseases that are principally contributing to disease burden such as malaria, blindness, etc.
6. Emphasis will be laid on the rational use of drugs within the allopathic system.

Key Principles of Health Policies

1. **Professionalism, Integrity, and Ethics:** The health policy commits itself to the highest professional standards, integrity, and ethics to be maintained in the entire system of healthcare delivery in the country, supported by a credible, transparent, and responsible regulatory environment.
2. **Equity:** Reducing inequity would mean affirmative action to reach the poorest. It would mean minimizing disparity on account of gender, poverty, caste, disability, other forms of social exclusion, and geographical barriers. It would imply greater investments and financial protection for the poor who suffer the largest burden of disease.
3. **Affordability:** As costs of care increase, affordability, as distinct from equity, requires emphasis. Catastrophic household healthcare expenditures defined as health expenditure exceeding 10% of its total monthly

consumption expenditure or 40% of its monthly non-food consumption expenditure, are unacceptable.

4. **Universality:** Prevention of exclusions on social, economic, or on grounds of current health status. Against this backdrop, systems and services are envisaged to be designed to cater to the entire population, including special groups.
5. **Patient-Centered and Quality of Care:** Gender-sensitive, effective, safe, and convenient healthcare services to be provided with dignity and confidentiality. There is a need to evolve and disseminate standards and guidelines for all levels of facilities and a system to ensure that the quality of healthcare is not compromised.
6. **Accountability:** Financial and performance accountability, transparency in decision making, and elimination of corruption in healthcare systems, both public and private.
7. **Inclusive Partnerships:** A multistakeholder approach with partnership and participation of all non-health ministries and communities. This approach would include partnerships with academic institutions, not-for-profit agencies, and the healthcare industry as well.
8. **Pluralism:** Patients who so choose and when appropriate, would have access to AYUSH care providers based on documented and validated local, home, and community-based practices. These systems, inter alia, would also have Government support in research and supervision to develop and enrich their contribution to meet the national health goals and objectives through integrative practices.
9. **Decentralization:** Decentralization of decision-making to a level that is consistent with practical considerations and institutional capacity. Community participation in health planning processes is to be promoted side by side.
10. **Dynamism and Adaptiveness:** Constantly improving the dynamic organization of healthcare based on new knowledge and evidence with learning from the communities and national and international knowledge partners is designed.

Key Points

1. The National Health Policy is a Central Government initiative to strengthen India's health system.
2. The National Health Policy, which was launched in 2017, replaces the previous policy, which was formed in 2002.
3. This policy aims to reduce medical expenses and other health-related costs and provide superior services to poor and backward communities.
4. It also aims to reduce early mortality from diabetes, cardiovascular disease, chronic respiratory diseases, and cancer by 25% by 2025.
5. It promotes the use of AYUSH (Ayurveda, Yoga, Naturopathy, Unani, Siddha, and Homeopathy) as a tool for efficient therapy and prevention that is both secure and affordable.

Public and Private Health System in India, National Health Mission

The healthcare sector in India is government, private, or individual-owned. The public sector comes under the Ministry of Health and Family Welfare (MoHFW), Government of India, consisting of hospitals, nursing homes, clinics, and dispensaries that follow various kinds of medicine systems. The private healthcare sector, on the other hand, is registered under the Clinical Establishment Act and owned or run by an individual or a group of individuals which also consists of dispensaries, clinics, nursing homes, and hospitals that may practice Allopathic, Ayurvedic, and Homeopathic system of medicines (Table 1.2).

National Health Mission

The National Health Mission (NHM) predicts the achievement of universal access to equitable, affordable and quality healthcare services that are accountable and responsive to people's needs.

The National Health Mission seeks to ensure the achievement of the following indicators:

1. Reduce Maternal Mortality Rate (MMR) to 1/1000 live births.
2. Reduce Infant Mortality Rate (IMR) to 25/1000 live births.
3. Reduce Total Fertility Rate (TFR) to 2.1.

Table 1.2: Difference between public and private healthcare systems in India

Parameters of Comparison	Public Hospital	Private Hospital
Definition	Public hospitals are hospitals owned and funded by the government.	Private hospitals are hospitals that are owned by an individual or a group of people.
Services quality	Public hospitals offer healthcare services but the quality is not up to the mark.	Private hospitals provide the best healthcare facilities.
Waiting time	Have longer waiting periods.	Have a short period of waiting time
Affordability	Public hospitals are affordable for all.	Private hospitals are not easily affordable for middlemen.
Doctor to patient ratio	Low doctor–patient ratio.	Doctor–patient ratio is high.

4. Prevention and reduction of anemia in women aged 15–49 years.
5. Prevent and reduce mortality and morbidity from communicable, and non-communicable injuries and emerging diseases.
6. Reduce household out-of-pocket expenditure on total healthcare expenditure.
7. Reduce annual incidence and mortality from tuberculosis by half.
8. Reduce prevalence of leprosy to <1/10000 population and incidence to zero in all districts.
9. Annual malaria incidence to be <1/1000.
10. Less than 1% microfilaria prevalence in all districts.
11. Kala-azar elimination by 2015, <1 case per 10000 populations in all blocks.

Components of the National Health Mission

The National Health Mission (NHM) encompasses its two sub-missions, the National Rural Health Mission (NRHM) and the National Urban Health Mission (NUHM).

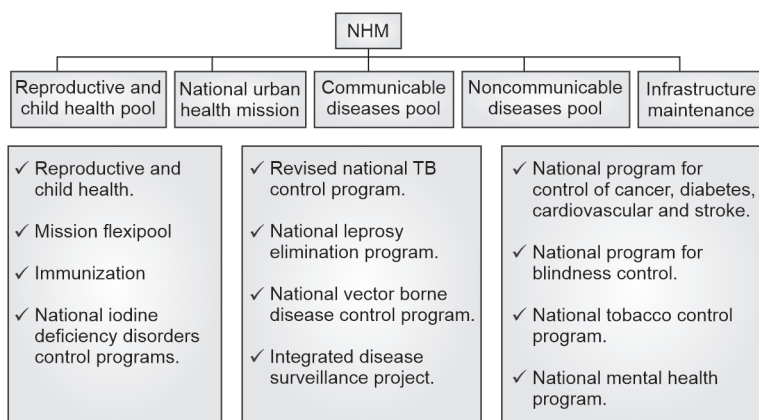


Fig. 1.3: Components of National Health Mission

NHM has 5 financing components (Fig. 1.3):

1. NRHM-RCH flexipool.
2. NUHM flexipool.
3. Flexible pool for communicable disease.
4. Flexible pool for non-communicable diseases including injury and trauma.
5. Infrastructure maintenance.

National Rural Health Mission (NRHM)

NRHM was launched on 12th April 2005 to provide accessible, affordable, and quality healthcare to the rural population, especially the vulnerable groups. The thrust of the mission is on establishing a fully functional, community-owned, decentralized health delivery system with inter-sectoral convergence at all levels, to ensure simultaneous action on a wide range of determinants of health such as water, sanitation, education, nutrition, social and gender equality as shown in Table 1.3.

The emphasis here is on strategies for improving maternal and child health through a continuum of care and the life cycle approach. It recognizes the inextricable linkages between adolescent health, family planning, maternal health, and child survival. Moreover, the linking of community and facility-based

Table 1.3: National health missions in India

Sr. No.	Name of mission	Year
1.	Intellectual disability-related schemes (Vikaas, Samarth, Gharaunda, Niramaya, Sahyogi, Gyan Prabha, Prerna, Sambhav, Bhadte Kadam, and Disha)	1996
2.	Sarwa Shiksha Abhiyan	2002
3.	National Rural Health Mission (NRHM)	2005
4.	National Mission on Medicinal Plants	2008
5.	National AYUSH Mission	2012
6.	National Urban Health Mission (NUHM)	2013
7.	Swachh Bharat Mission (Clean India Mission)	2014
8.	Affordable Medicines and Reliable Implants for Treatment (AMRIT)	2015
9.	National Health Protection Mission (Ayushman Bharat Yojana/Pradhan Mantri Jan Arogya Yojana—PMJAY)	2018

care and strengthening referrals between various levels of the healthcare system to create a continuous care pathway is also to be focused on:

1. **Rogi Kalyan Samiti (RKS):** RKS (Patient Welfare Committee or Hospital Management Committee) is a simple yet effective management structure. It is a registered society that acts as a group of trustees for the hospitals to manage the affairs of the hospital. It consists of members from local Panchayati Raj Institutions (PRIs), NGOs, local elected representatives, and officials from the government sector who are responsible for the proper functioning and management of the hospitals and community health centre. RKS/HMS is free to prescribe, generate, and use the funds with it as per its best judgment for smooth functioning and maintaining the quality of services.
2. **Accredited Social Health Activist (ASHA):** ASHA is a trained female community health activist. Selected from the community itself and accountable to it, the ASHA will be trained to work as an interface between the community and the public health system. At present, there are over 9 lakh

ASHAs. The ASHA scheme is presently in place in 33 states (except Goa, Chandigarh and Puducherry).

3. **Ayushman Bharat (PM Jan Arogya Yojana):** Ayushman Bharat-Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) is a centrally sponsored scheme having a central sector component under Ayushman Bharat Mission anchored in the Ministry of Health and Family Welfare (MoHFW). It is an umbrella of two major health initiatives, namely Health and Wellness Centres and the National Health Protection Scheme.

List of Services to be provided at Health and Wellness Centre:

- a. Pregnancy care and maternal health services
- b. Neonatal and infant health services
- c. Child health
- d. Chronic communicable diseases
- e. Non-communicable diseases
- f. Management of mental illness
- g. Dental care
- h. Eye care
- i. Geriatric care emergency medicine

Key Points

1. The Indian healthcare delivery system is divided into two parts: Public and private.
2. The public healthcare system consists of a few secondary and tertiary care institutions in major cities and concentrates on providing basic healthcare facilities in rural regions through primary healthcare clinics (PHCs).
3. Private healthcare provides secondary, tertiary, and quaternary treatment as well as individualized patient attention.
4. The government is promoting the AYUSH industry, raising awareness about improved nutrition, mental healthcare the use of artificial intelligence, and government accountability.
5. The Government of India started the National Health Mission to tackle India's malnutrition epidemic.
6. The goal of the National Health Mission is to improve the availability of and access to quality healthcare by people, especially those residing in rural areas, the poor, women, and children.

Millennium Development Goals, Sustainable Development Goals, FIP Development Goals

Millennium Development Goals

The MDGs are given from the actions and targets contained in the Millennium Declaration that was adopted by 189 nations and signed by 147 heads of state and governments during the UN Millennium Summit in September 2000.

This pledge became the eight Millennium Development Goals to be achieved by 2015. In September 2010, the world recommitted itself to accelerate progress towards these goals.

MDGs in India: India progress towards achieving the Millennium development goals by.

- 1. Eradicate extreme poverty and hunger:**
 - a. The percentage of the population below the poverty line is 21.92% as per survey conducted in 2011–12.
 - b. Poverty ratio as of 2011–12—5.05% (in rural) and 2.7% (in urban).
- 2. Achieved universal primary education:**
 - a. *Net enrollment ratio in primary education (both sexes):* 88.08% (2013–14)
 - b. *Literacy rate of 15–20 years old:* 86.1% (2011)
- 3. Promote gender equality and women empowerment:**
 - a. *The ratio of girls to boys:* 1.03% (2013–14)
 - b. *Female literacy ratio:* 0.91% (2011)
 - c. *The proportion of seats held by women in parliament:* 12.25% (2015)
- 4. Reduce child mortality:**
 - a. *Infant mortality rate (<1 year per 1000 live births):* 4% (2013)
 - b. *Child mortality rate (<5 years per 1000 live births):* 4.9% (2013)
 - c. *1 year old children immunization against measles:* 74.1% (2009)
- 5. Improve maternal health:**
 - a. *Maternal mortality ratio (per 100,000 births):* 16.7% (2011–13)

- b. **Combat HIV/AIDS, malaria, and other diseases:**
 - HIV prevalence among pregnant women: 0.32% (2012–13)
 - Condom use rate of the contraceptive prevalence rate: 5.2% (2005–06)
 - Adult HIV prevalence in India: 0.27% (2011)
 - Annual malaria rate: 0.80% (2014)
 - c. **Ensure environmental sustainability:**
 - Access to improved drinking water source: 91% (2012)
 - Area covered under forests: 21.23% (2013)
 - The area protected to maintain biological diversity: 4.83% (2014)
6. **Develop a global partnership for development:**
- a. **Telephone per 100 population:** 76 (2014)
 - b. **Internet subscribers per 100 population:** 20.83% (2014)

Sustainable Development Goals (SDGs)

The sustainable development goals build on the commitment of all countries to 'leave no one behind'. It gives us a global plan for a sustainable future and addresses the global challenges we face including poverty, inequality, climate change, environmental degradation, peace, and justice (Table 1.4).

FIP Development Goals

FIP (International Pharmaceutical Federation) was founded on 25 September 1912 in The Hague, the Netherlands. It is an international federation of national organizations that represent pharmacists and pharmaceutical scientists.

The mission of FIP is to "improve global health by advancing pharmacy practice and science to enable better discovery, development, access and safe use of appropriate, cost-effective, quality medicines worldwide".

FIP aims to transform pharmaceutical science, practice workforce, and education resulting in 21 FIP development goals which are as follows:

1. Impact and outcomes
2. Pharmacy intelligence
3. Policy development

Table 1.4: A collection of 17 interlinked SDGs

Goal-1	No poverty More than 700 million people still live in extreme poverty. Donate what you do not use.
Goal-2	Zero hunger A third of the world's food is wasted, yet 821 million people are undernourished. Waste less food and support local farmers.
Goal-3	Good health and wealth Vaccination resulted in an 80% drop in measles death between the years 2000–2017. Vaccinate your family (take your shot).
Goal-4	Quality education 617 million children lack minimum proficiency in reading and mathematics. Help educate the children in your community.
Goal-5	Gender equality 1 in 3 women has experienced physical or sexual violence. Empower women and ensure their equal rights.
Goal-6	Clean water and sanitation Water pollution affects more than 40% of the world's population. Avoid wasting water.
Goal-7	Affordable and clean energy 3 billion people still lack clean cooking fuels. Use only energy-efficient appliances.
Goal-8	Decent work and economic growth One-fifth of young people are not in education, employment, or training. Create job opportunities for youth.
Goal-9	Industry, innovation and infrastructure Roads, water, and electricity remain scarce in many developing countries. Fund projects that provide basic infrastructure.
Goal-10	Reduced inequalities The poorest 40% of the population earn less than 25% of global income. Support the marginalized and disadvantaged.

(Contd.)

Table 1.4: A collection of 17 interlinked SDGs (Contd.)

Goal-11	Sustainable cities and communities 9 out of 10 urban residents breathe polluted air. Walk, bicycle, or use public transportation.
Goal-12	Responsible consumption and production Recycle paper, plastic, glasses, and aluminum.
Goal-13	Climate action Global emissions of CO ₂ have increased by almost 50% since 1990. Act now to stop global warming.
Goal-14	Life below water (sea lives) 3 billion people depend on marine and coastal biodiversity for their livelihoods. Avoid plastic to keep the oceans clean.
Goal-15	Life on land Forests are home to more than 80% of terrestrial species of animals, plants, and insects. Plant more trees and help to protect the environment.
Goal-16	Peace, justice, and strong institutions In 2018, above 70 million people were engaged in fleeing war and persecution. Standup for human rights.
Goal-17	Partnerships Achieving the SDGs could open up US\$12 trillion of market opportunities and create 380 million new jobs by 2030. Lobby for the government to boost development financing.

4. Medicines expertise
5. People centered care
6. Communicable diseases
7. Antimicrobial stewardship
8. Access to medicines, devices and services
9. Patient safety
10. Digital health
11. Sustainability in pharmacy
12. Academic capacity
13. Early carrier training strategy

14. Quality assurance
15. Advanced and specialist development
16. Competency development
17. Leadership development
18. Working with others
19. Continuing professional development strategies
20. Equity and equality
21. Advanced integrated services

Key Points

1. The Millennium Development Goals (MDGs) are eight goals that UN Member States have pledged to aim to fulfil by 2015.
2. Globally, the number of children under the age of five who died decreased from 12.7 million in 1990 to 6.3 million in 2013.
3. Sustainable development is the concept that human civilizations must survive and meet their needs without compromising future generations' ability to meet their own needs.
4. The three pillars of sustainable development are the economy, society, and the environment.
5. The FIP Development Goals are an important resource for altering the pharmacy profession globally, regionally, and nationally over the next decade.
6. FIP plans to transform global pharmacy working in partnership and collaboration with our members all over the world.