

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

# Primary health-care goal and principles

# 8.1 Introduction

Primary health care (PHC) refers to a broad range of health services provided by medical professionals in the community. This means universal health care is accessible to all individuals and families in a community.

General health-care practitioners, nurses, pharmacists, and allied health-care providers are exclusive components of the primary health-care team. Basically, the PHC service is the process and practice of immediate health services, including diagnosis and treatment of a health condition, support in managing long-term health care, including chronic conditions such as diabetes. PHC also includes regular health checks, health advice when an unhealthy person seeks support for ongoing care (Fig. 8.1). In India, the government has fixed specific norms for primary health center, based on of community structure and population (Table 8.1).

# 8.2 Conceptual development of PHC

India is the first country to implement primary health services before the Declaration of Alma-Ata. The basic motto for adapting primary health service is to serve the people to maintain health without spending money from the pocket. On the basis of the Health Survey and Development Committee Report of 1946, the Indian Government implemented primary health service in rural community [1].

Many projects such as the most acclaimed The National family planning programme (launched in 1952) and the policy of one community health worker per 1000 people in the 1970s have been implemented for bolstering its health-care scenario. In 2005, the UPA Government launched the Rural Health Mission (NRHM), as a move to improve access to quality health care, especially for poor rural women and children. These entire health-care-related projects resulted in a remarkable decline of maternal mortality ratio (MMR) by 77% from 556 per 100,000 live births in 1990 to 130 per 100,000 live births in 2016.

Since the late 1960s and early 1970s, the concept on primary healthcare has emerged in the United States for the first time, fighting against malaria at the community level. The government initiated a health-care project at the community level. WHO staff members conducted a survey and studied the experiences of medical auxiliaries in developing countries and argued that "a strict health sectoral approach





Primary health-care center and services to community population (view from an Indian village).

For plain area (ft <sup>2</sup> )	For hilly tribal area (ft <sup>2</sup> )
5000	3000
30,000	20,000
120,000	80,000
	5000 30,000

**Table 8.1** Primary health-care structure and their structural norms (rural health infrastructure in India).

is ineffective" [2]. In 1874, Canadian Lalond report de-emphasized the importance attributed to the number of medical institutions and proposed determinants for health biology, health services, environment, and lifestyle [3].

In the late 1960s, Christian Medical Commission started planning on PHC. This organization, with the help of the World Council of Churches, and the Lutheran World Federation stated mission on PHC to emphasize the training of grassroot village workers equipped with very essential drugs and simple methods. In 1970, it published a Journal "*Contact*" based on "primary health care." Subsequently in 1974 WHO extended support on further popularization of this journal at the global level [4].

In 1948, World Health Organization (WHO) initiated the agenda for primary health care, and later it was highlighted through Alma-Ata International Conference on Primary Health care [5, 6]. Basically, primary health care is for the community/ whole society for a wide range of health services, including health promotion; diseases prevention; treatment and rehabilitation; and palliative care [7]. The entire process for primary health-care services is based on population dynamics and the health-care system in order to integrate personal health care, public health function, and hospital management process. The provision of primary health-care services is only a part of the broad spectrum of primary health-care concepts to address the determinants of health; the implementation of a primary health-care concept must be accompanied by multispectral actions and the empowerment of the population [8].

Since the last four decades, PHC Provision has moved from simple planning to action. Alma-Ata Declaration, is still crucial in current global health like COVID-19 pandemic, especially for developing countries. To achieve this, initially, the United Nations (UN) announced eight Millennium Development Goals (MDGs) by 2015 [4]. But looking at the progress, the UN announced 17 Sustainable Development Goals (SDGs), with the strong hope of achieving the same by the end of 2030 (Fig. 8.2).

The third (SDG3), to "ensure healthy lives and promote well-being for all at all age" is specific to health (Fig. 8.3).

SDG3 includes the provision of universal health coverage (UHC; SDG3.8), which aims to provide access to good-quality health services for all, without financial hardship. SDG3.3 is targeted at ending the prevalence of neglected tropical diseases. But, multisectoral action to address poverty, control disease vectors and the environment, and improve access to clean water and sanitation are key components of neglected tropical disease programs.



## FIG. 8.2

Sustainable Development Goals (17 goals) to be completed by the end of 2030.



#### FIG. 8.3

SDG3 showing healthy lives and promote well-being for all ages.

SDG 3 consists of 13 targets and 28 indicators to have accountability of progress. The first nine targets are known as "outcome targets" which include reduction in maternal mortality; completely stop of maternal death under 5 years of age; prevention of communicable diseases; ensure reduction of mortality from noncommunicable diseases and promote mental health; prevent and treat substance abuse; reduce road injuries and deaths; sexual and reproductive care, family planning and education; achieve universal health coverage; and reduce illness and deaths from hazardous chemicals and pollution.

The four "means to achieve" SDG 3 targets include implement the WHO Framework Convention on Tobacco Control; support research and development of affordable vaccines and medicines; support financially for the health workforce in developing countries; and improve early warning systems for global health risk.

Additionally, SDG 3 targets to successfully implement and achieve universal health coverage, which is means for equitable access of healthcare services to all people so that it could be helpful to end the preventable death of newborns, infants, and children under the age group of 5 years.

Other SDGs (e.g., on hunger, gender equality, clean water, and sanitation, affordable and clean energy; sustainable cities and communities; climatic action; and peace, justice, and strong institutions) of health also indirectly support PHC.

All people, irrespective of caste, race, nation, everywhere, deserve the right care, right in their community, which is basic to the premise of primary health care. Primary health care (PHC) is essential to a person for leading sound health throughout the life. This includes physical, mental, and social well-being of all people at all times. It should cover health promotion, disease prevention, treatment, rehabilitation, and palliative care. The best way to approach the people for PHC is to meet their health needs throughout their lives. In order to bring awareness on broader determinants of health through the multispectral policy, it is necessary to convince the population at individual, family, and community levels to take responsibility for their own.

In 1978, International Conference on Primary Health Care was held in Alma Ata, Kazakhstan and became a core concept of the World Health Organization's goal of Health for all. The Alma-Ata conference mobilized a "Primary Health Care Movement" of professionals and institutions, governments and civil society organizations, researchers, and grassroot organizations that undertook to tackle the "policy, socially and economically unacceptable" health inequalities in all countries.

After a gap of four decades, global leaders could realize the importance of the primary health-care system and brought few amendments in the Declaration of Astana summit in order to make it globally acceptable.

In 2005, the United Progressive Alliance Government launched the National Rural Health the Mission (NRHM) to improve access to quality health care, especially for poor rural women and children, to upgrade primary health-care institutions, increase equity, and the decentralization of services, and encourage states to generate alternate sources of financing.

## 8.3 Alma-Ata summit

In September 1978, Soviet Socialist Republic held an international conference on primary health care at Almaty (formerly Alma-Aata), with the need for urgent action by all government workers, and the world community to protect and promote the health of all people. This was the first international underlining on the social significance of primary health care. The other primary members of the World Health Organization (WHO) also accepted the norms of Alma. So, from the global point of view, the main motto of the conference is to collaborate in introducing, developing, and maintaining primary health care for all the people. The declarations have 10 points and are nonbinding on member states:

The first section is about Alma-Ata acceptance of definition on primary health care as defined by the WHO: "a state of complete physical, mental, and social wellbeing and not merely the absence of disease or infirmity," The definition includes social and economic sectors within the scope of attaining health and reaffirms health as a human right.

The second section explains that inequality of health status between the developed and developing countries is absurd and not an acceptable term, politically, socially, and economically.

The third section reveals how primary health care and economic and social development are complement to each other. Concomitantly, it is responsible for bringing world peace through the promotion and protection of the health of the people. Participation of people as a group or individual in planning and implementing their health care was declared as a human right and duty.

The fourth section emphasized the responsibility and commitment of the member states in providing adequate health and social measures. As declared by WHO "Health for All," all the member states are supposed to campaign for universal health coverage. The declaration also urged governments, international organizations, and the global community to take this challenge as a social target in the spirit of social justice. The fifth section explains the responsibility of the Sovereign state in providing sufficient health and social measures for bringing awareness on primary health care and support WHO's call for "Health for All."

The sixth section is all about the benefit of the primary health-care system as Margret Chan the Director-General of the WHO has reaffirmed that the primary health-care approach is the most efficient and cost-effective way to organize the health system. Margret Chan is a Chinese Canadian physician, who served as the Director-General of the WHO delegating the People's Republic of China during the period 2000–2017. She also highlighted those results on primary health care at the global level, which were highly encouraging due to the low cost with higher satisfaction.

The seventh section is about the components of primary health care. The subsequent two sections are for the governments to implement a primary health-care approach in their health systems, which urged international cooperation for the better use of the world's resources.

After about 5 years all other countries have accepted the Alma-Alta Declaration which has emerged as a major milestone of the 20th century for primary health care. Meanwhile, Communist China has started paying keen attention to PHC to serve the rural population at the community level massively. The "barefoot doctors" played a critical role to support the primary health-care campaign in the rural part of China.

Barefoot doctors are health-care providers who undergo basic medical training and worked in rural villages in China. They included farmers, folk healers, rural health-care providers, and recent middle or secondary school graduates who received minimal basic medical and paramedical education. Their main reason for bringing health care to rural areas is the urban-trained doctors would not prefer to settle in rural areas.

Subsequent to the Alma-Ata declaration, WHO, UNICEF, and other international organizations, as well as multilateral and bilateral agencies, nongovernmental organizations, funding agencies, all health workers, and world comity started showing interest for global approach in implementing primary health care and to channel increaser financial and technical, particularly in developing countries.

# 8.4 Criticism on Alma-Ata

The Alta-Ata Declaration is under a wide range of disputes due to its impracticable work plan without any time target. The target for "health for all by the years 2000" was planned without any guarantee. In this connection, the Rockefeller Foundation in 1979 held a conference in order to develop a most cost-effective blueprint to understand the status of interrelation between health and population programs.

In response to the vagueness of primary health care and the declaration of Alma Ata, an alternative movement began to gain momentum. After a year of Alma-Ata declaration, Julia Walsh and Kenneth Warren suggested bringing certain amendments as "Special Primary Health care (SPHC) [9]. The main base for such suggestions is to fight disease based on cost-effective medical intervention. Although they acknowledge that the goal set at Alma Ata was admirable.

The main significance of SPHC is to focus on the most severe public health problem. By narrowing the target, the quality of health care can be successfully managed within the target time. For example, SPHC identified four factors to guide the selection of target diseases for prevention and treatment: prevalence, morbidity, mortality, and feasibility of control. In this connection, SPHC highlighted four vertical programs: growth monitoring, oral rehydration therapy, breastfeeding, and immunization (GOBI) [10]. At a later stage, family planning, female education, and food supplementation (FFF) were added. The advantage of such additional programs is mainly due to their easy measurable fact [11]. This would be helpful for easy funding and developing successful and authentic reports.

# 8.5 Medicine vs public health

There have been recurring issues between medicine (treatment) and public health (prevention). This is mainly due to heavy competition on the development of value-added medicines by most modernized pharmaceutical companies. Most of the medicines have been manufactured under the strict guidelines of international monitoring agencies, in order to keep safety and security.

The continuous therapeutic revolution in drug design and development is mainly due to the maintenance of biological superiority of drugs from the quality point of view. For example, Penicillin is a miracle drug that not only cured illnesses but also saved entire societies from political and economic collapse [12].

Medicines are for maintenance of health care at different stages of the life cycle. Irrespective of cost, medicines are used at primary, secondary, and territory levels of health treatment. Contemporary medicine applies biomedical sciences, biomedical research to diagnose, treat, and prevent injury and disease. But, due to the cost and market availability, it is not possible to use many lifesaving biologics.

Availability of medicines and clinical practice varies across different geographic locations of the world, and the availability and cost of medicines vary accordingly. Biologic drugs are highly developed in the Western world. While in developing countries such as Asia-pacific and Africa, the population relies on traditional pharmaceutical medicines due to their low cost.

The provision of medical care for public health is classified into primary, secondary, and tertiary care categories.

Primary health-care medical services are extended by physicians, physician assistants, nurses, or other health professionals who have the first contact with a patient seeking medical treatment or care. About 90% of medical visits can be treated by the primary care provider. These include treatment of acute and chronic illnesses, preventive care, and health education for all ages and both sexes.

Secondary care medical services are provided by medical specialists in their offices or clinics or local community hospital for a patient referred by a primary care provider who first diagnosed or treated the patient. Some primary care providers may also take care of hospitalized patients and deliver babies in a secondary care setting.

Tertiary care medical services are provided by specialized hospitals or regional health center well equipped with diagnostic and treatment facilities. These include trauma center, burn treatment center, advanced neonatology unit services, organ transplants, high-risk pregnancy, and radiation oncology, etc.

Modern medical care is also well provided by information technology devices for recording and communicating information in the shortest possible time.

In low-income countries, modern health care is often too expensive for the average person. International health-care policy researchers have advocated that "user fees" be removed in these areas to ensure access, although even after removal, significant costs and barriers remain.

# 8.6 Components

There are eight essential components of PHC [13], including [1] health education, on prevailing health problems and the methods of preventing and controlling them, [2] nutritional promotion including food supply, [3] supply of adequate safe water and sanitization, [4] maternal and child health care, [5] immunization against major infectious diseases, [6] prevention and control of locally endemic diseases, [7] appropriate treatment of common diseases and injuries and [8] provisions for essential drugs, all these basic requirements are incorporated in the SDGs for 2030 from goal 2 to goal 4 [14].

Since the last four decades, PHC Provision has moved from simple planning to action. Alma-Ata Declaration is still crucial in current global health like COVID-19 pandemic, especially for developing countries.

To achieve this, initially, the United Nations (UN) announced eight Millennium Development Goals (MDGs) by 2015. But looking at the progress, the UN announced 17 Sustainable Development Goals (SDGs), with the strong hope to achieve the same by the end of 2030.

The third (SDG3) to "ensure healthy lives and promote well-being for all at all age" is specific to health. SDG3 includes the provision of universal health coverage (UHC; SDG 3.8), which aims to provide access to good-quality health services for all, without financial hardship. Other SDGs (e.g., on hunger, gender equality, clean water and sanitation, affordable and clean energy; sustainable cities and communities; climatic action; and peace, justice, and strong institutions) of health also indirectly support PHC. Despite developing innovative sustainable models on PHC, still, it has been tough to maintain quality PHC services in isolated communities having a small and randomly distributed population [15, 16].

# 8.7 Pillars of primary health care

The primary health-care system is the key factor for community improvement and balance socioeconomic conditions. It reduces the inequalities between different groups of a community. The primary health care is basic health care with applied,





The four major pillars of the primary health-care system.

scientifically sound, and universally acceptable methods and technology, which should be available and accessible to all individuals and families in a community, on a priority basis.

Successful primary health care can only be possible through an integrated system being coordinated by different workforces who are well-trained in health-care management. The primary health-care outline is built on four key pillars (Fig. 8.4).

The four major pillars of primary health care that should be made available are as follows: community participation, intersectorial coordination, appropriate technologies, and support mechanisms.

## 8.7.1 Community participation

- Community participation is a process in which community people voluntarily serve their community health care.
- It is absolutely a social approach.
- The participants should identify the health needs of the community, planning, organizing, decision-making, and implementation of health programs, sponsored by the government or NGO.
- It also ensures effective and strategic planning and evaluation of health-care services.

# 8.7.2 Intersectoral coordination

- Intersectoral coordination plays a significant role in performing different aspects of health-care services.
- The involvement of specialized NGOs, private sectors, and public sectors is important for the successful operation of the health-care system.

- It also refers to delivering health-care services in an integrated way.
- It is necessary that departments such as agriculture, animal husbandry, food industry, education, housing, public works, communication, and other sectors need to be involved in achieving health for all.

# 8.7.3 Appropriate technologies

- The technologies to be implemented for health-care system development should be available and accessible for health-care services.
- The technologies should be scientifically sound, adaptable to local needs, and acceptable to the doctor and health-care workforces.

# 8.7.4 Support mechanisms made available

- Support mechanisms are vital to health and quality of life.
- Support mechanism includes that the people are getting personal, physical, mental, spiritual, and instrumental support to meet goals of primary health care.
- Primary health care depends on an adequate number and distribution of trained physicians, nurses, community health workers, and others working as a health team and supported at the local and referral levels.

# 8.8 Salient features of primary health care

- Primary health care is mainly based on quality and cost effectiveness.
- Primary health care highlights "Health for All".
- Primary health-care system integrates preventive, promotive, curative, rehabilitative, and palliative health-care services.
- Primary health care promotes social inclusion: It includes services that are readily accessible and available to the community.
- Primary health care can be easily available, even at the time of emergency caused due to natural calamity and biological disaster.
- Primary health-care promotes equity and equality.
- · Primary health-care improves safety, performance, and accountability.
- Primary health-care pleads on health promotion and focuses on prevention, screening, and early intervention of health disparities.
- Primary health care also promotes socioeconomic condition of a community.

# 8.9 Challenges for implementation of PHC

In order to meet the challenges of primary health care, it is necessary to share ideas and experiences, test new approaches, and share the results to enable successful innovations to spread more rapidly between organizations and across geographies.

The following challenges can establish and scale primary care innovations and the solutions to overcome them:

- shortage of well-qualified physicians and health-care workforces to serve the patients in emergency,
- inadequate technology and equipment,
- poor condition of infrastructure, especially in rural areas,
- concentrated focus on curative health services rather than preventive and promotive health-care services,
- challenging geographic distribution,
- poor quality health-care services,
- inadequate financial support in health-care programs,
- lack of community participation,
- · poor allotment of health-care workforce to serve in the rural locality, and
- lack of intersectoral collaboration.

## **8.10** Role of primary care in the COVID-19 response

Massive health disruption has been occurring since the outbreak of COVID-19 from epidemic to pandemic. Cases of casualty due to COVID-19 all over the world are alarming [17].

There are huge differences between countries, the burden of COVID-19 on societies and economies, and the measures being implemented globally. The majority of the people infected with COVID-19 have a self-limiting infection and recovery. A minority of the population with 10% of cases require intensive care unit admission. Unfortunately, some patients pass away (Table 8.2).

Although all age groups are at risk of contracting COVID-19, older people face a significant risk of developing severe illness if they contract the disease due to physiological changes that come with aging and potential underlying health conditions. Presently, the severity of COVID-19 infection is noticed more in older adults. For example, in the European region, the top 30 countries are with the largest percentage of older people suffering from COVID-19.

Presently, people from all age groups are susceptible to COVID-19, but elderly people, above the age of 60 are more prone to COVID-19 due to physical changes that come with aging and potential underlying health condition. The pandemic nature of COVID-19 has completely changed the regular lifestyle of older people, and also the support they used to receive from the community. Prolonged stay of elderly people at home challenges their physical ability and mental condition. So, it is high time that we create opportunities to foster healthy aging during the pandemic. In this connection, WHO, in collaboration with other partners, is providing guidance and advice during the COVID-19 pandemic for older people and their householders, health and social care workers and local authorities, and community.

## **8.10** Role of primary care in the COVID-19 response **233**

Country	Cases	Deaths	Date of data collection
Austria	641,044	10,355	02/06/2021
Belgium	1,063,405	24,968	01/06/2021
Bulgaria	418,813	17,726	02/06/2021
Croatia	356,397	8034	02/06/2021
Cyprus	72,515	360	02/06/2021
Czechia	1,662,256	30,126	02/06/2021
Denmark	282,135	2516	02/06/2021
Estonia	129,804	1259	02/06/2021
Finland	92,642	956	02/06/2021
France	5,677,172	109,691	02/06/2021
Germany	3,687,828	88,774	02/06/2021
Greece	404,163	12,122	02/06/2021
Hungary	804,987	29,774	02/06/2021
Iceland	6590	30	02/06/2021
Ireland	261,517	4941	02/06/2021
Italy	4,220,304	126,221	02/06/2021
Latvia	133,518	2379	02/06/2021
Liechtenstein	3016	58	02/06/2021
Lithuania	275,198	4283	02/06/2021
Luxembourg	69,983	817	02/06/2021
Malta	30,543	419	02/06/2021
Netherlands	1,649,646	17,610	02/06/2021
Norway	125,071	783	02/06/2021
Poland	2,872,868	73,856	02/06/2021
Portugal	849,538	17,025	02/06/2021
Romania	1,077,978	30,353	02/06/2021
Slovakia	774,919	12,353	02/06/2021
Slovenia	254,045	4694	02/06/2021
Spain	3,682,778	79,983	01/06/2021
Sweden	1,068,473	14,451	26/05/2021

Table 8.2 COVID-19 situation update for the EU/EEA, as of June 2, 2021.

Source: European Centre for Disease Prevention and Control, an agency of the European Union.

The United Nations General Assembly declared 2021–2030 the Decade of Healthy Aging. The Decade of Healthy Aging 2020–2030 is a global collaboration, aligned with the last 10 years of the Sustainable Development Goals (SDGs) that brings together government, civil society, nongovernmental Organizations (NGOs), international agencies, professionals, academia, the media, and the private sector to improve the lives of older people, their families, and the communities in which they live.

The process of early aging is at a faster rate due to environmental changes and climatic changes at a faster pace than in the past. The demographic transition catalyzes the country's economic development. The demographic transition refers to population trends of two demographic characteristics: birth rate and death rate to suggest that a country's total population growth rate cycles through stages as that country develop economically. So, it is obvious that world population is aging at a faster pace than in the past. The demographic transition will have an impact on almost all aspects of society.

Although all age groups are at risk of contracting COVID-19, older people face a significant risk of developing severe illness if they contract the disease due to physiological changes that come with aging and potential underlying health conditions.

At present more than 1 billion people in their 60s are from low- and middleincome countries. Many of them have inadequate access to even the basic resources necessary for a sustainable healthy life. The alarming Covid-19 has challenged the gaps in policies, systems, and services. Under the pandemic condition of COVID-19, it is necessary to plan on how to save the older people and their families and communities from the grip of COVID-19 and develop an ideal strategy for the continuity of healthy life, till the pandemic is completely eradicated. It is high time to mitigate the massive damages caused by the COVID-19 pandemic, the need to maintain and improve essential primary health-care services on a priority basis. This situation underscores the importance of the primary health-care revitalization agenda articulated in the 2018 Astana Declaration.

Regulation and control of health are not only by genetic inheritance but also closely related to the surrounding social- and natural environment where we live in. Our physical, mental, and body function throughout the life cycle, and especially in old age has to adjust with the environment, despite the loss of body structure and function with the passing of time. In this connection, the long-term effect of COVID-19 is still subject to much research. But, it has been in the process of understanding that the severity of COVID-19 may cause harm to the immune system.

Environments play an important role in determining our physical and mental capacity across a person's life course and into older age and also how well we adjust to the loss of function and other forms of adversity that we may experience at different stages of life, and in particular, in later years. Both older people and the environments in which they live are diverse, dynamic, and changing. In interaction with each other, they hold incredible potential for enabling or constraining *Healthy Aging*.

It reemphasizes the importance of primary health care to address current health challenges, renewing political commitment to primary health care, and achieving universal health coverage.

# 8.11 Astana declaration on primary health care

In 2018, after a gap of four decades of Alma-Ata declaration on primary health care, world leaders, government ministers, development partners, civil society, and young people organized a conference on primary health care. Astana conference was jointly hosted by the Government of Kazakhstan, UNICEF, and WHO.

The Astana declaration is based on "Commitment to the fundamental right of every human being to the enjoyment of the highest attainable standard of health without distinction of any kind." The Astana declaration reemphasizes the importance of primary health care to address current health care challenges, renewing political commitment to primary health care, and achieving universal health coverage with a special reference to the rural community.

World Health Organization also endorsed the Astana decoration for a newly amended frame for primary health care with special emphasis on the rural community. The four key areas are as follows: (i) make bold political choices for health across all sectors; (ii) build sustainable primary health care; (iii) empower individuals and communities; and (iv) align stakeholder support to national policies, strategies, and plans.

#### (i) First Astana declaration

The first declaration refers to "make bold political choices for health across all sectors." The basic theme of the declaration is to promote multisectoral action through the health care system, as per the WHO protocol [1].

The main target is to convince the stakeholders about the current challenges in primary health care for the complete and successful implementation of health-care services, as per schedule. At the international forum, there are policies and toolkits to handle conflicts of interest; for example, the National Health System (NHS) in England [18].

The governments at all levels should protect the right of the each and every person to get the maximum privilege of health services. In addition, emphasis is also given to promote multisectoral action and UHC, involving relevant stakeholders and empowering local communities to strengthen PHC. The Astana declaration also mentioned that the government policy decision should consider economic, social, and environmental determinants of health at the rural community level.

#### (ii) Build sustainable primary health care

The second Astana declaration is to "build sustainable primary health care." Primary health-care service should not be targeted to a simple implementation of policy but the emphasis is to be given on how efficiently it is to be worked out to bring sustainability in health service. For example, the Australian health-care reform agenda is based on high priority to integrated, compressive PHC services that are sustainable and responsive to community needs [19].

#### (iii) Empower individuals and communities

The third commitment of the new declaration is to "empower individuals and communities." The basic intentions of the third commandment are community involvement, public participation, and empowerment and health literacy. In addition, Astana post declaration includes increasing people's knowledge on health maintenance through affective camping on health management awareness.

The European Patients' Academy on Therapeutic Innovation is an example of an institution established to bring awareness among patients through education. (iv)*Align stakeholder support to national policies, strategies, and plans* 

Align stakeholders to support national policies, strategies, and plans related to health services, especially in rural communities. The stakeholders include health professionals, academia, patients, civil society, local and international partners, agencies and funds, the private sector, and NGOs. Stakeholder support can be helpful for developing sufficient well-trained health professions, health care-related technologies easily acceptable to physicians and other health-care workforce, and financial and information resources to PHC.

# 8.12 Overall target to upgrade PHC for COVID-19 control

The overall target of the Astana declaration is to revitalize the entire decision taken on primary health care in past and strength PHC by prioritizing disease prevention and health promotion and aims to meet all people's health needs across the life course through compressive preventive, promotive, curative, rehabilitation services, and palliative care. So, it is high time to find out comprehensive data survey report on COVID-19 and bring stagnation in the further progress of pandemic situation with the guidelines of 2020 World Health Organization Operational "framework for primary health care."

In addition, to strengthen the present scenario of PHC, global level initiative requires to have control over COVD-19. This needs political commitment and leadership, governance and policy, funding and allocation of resources, and engagement of communities and other stakeholders. For example, India, the world's second-highest populated country, with the guideline of WHO could launch the largest COVID-19 vaccination drives in the world. The WHO Country Office for India (WCO India) has been closely associated with the COVID-19 eradication drive linked to surveillance and contact tracing, clinical diagnosis, emergency health workforce management, infection prevention and control, timely vaccination, etc. at national, state, and district levels. At the national level, WCO India is actively involved with the Ministry of Health and Family Welfare (MoHFW) in collaboration with the Joint Monitoring Group (JMG) and National Center for Disease Control (NCDC), Indian Council of Medical Research (ICNR), National Disaster Management Authority, and NITY Aayog. Additionally, WHO teams are also closely associated with the National and State Governments in primary health services like immunization, reproductive, maternal, newborn child, and adolescence health (RMNCAH), and noncommunicable diseases prevention and control. So, the COVID-19 controlling system in India can be a good model to control the pandemic, under various adverse conditions.

## 8.12.1 How to bring sustainability

Challenging guarantee healthy and progressive well-being at all ages is indispensable to sustainable development. At present, the world is in the grip of the pandemic COVID-19 and bringing disaster in public life with complete disruption of the global economy, and dismissing the life of billions of people all around the world. The PHC service is the initial phase to control contagious communicable disease. Any lacunas leftover in PHC may lead to an epidemic followed by a pandemic. So, it is necessary to strengthen PHC in order to bring sustainability to the health system, especially in rural and remote areas. It is obvious that changes in nature are supposed to occur (biological or natural disasters) during a pandemic situation. But we have to find out possible controlling strategies which include workforce supply, to find a way-out to send health workforce professionals to a rural and remote communicable diseases, especially of elderly people (because rising chronic disease burden may increase the number of causality in pandemic condition), temporary infrastructure demand, and leadership and management accountability.

Sustainability in PHC is the primary need of the day for each and every body, irrespective of nationality. There are a lot of differences that exist between countries in the organization of primary health care and availability of human resources. In SDG3, challenges to overcome such problems (related to reproductivity and child health, communicable diseases, chronic illness, addiction, and other mental health problems) are explained clearly how effectively one can go ahead with the population-based approach to primary health care [19–23]. In addition, it is also explained that the strategies for delivering vaccines and drugs need a functioning primary care system. So, during pandemic situations well-integrated and prepared primary health care has a key role in health emergency responsiveness, and it is essential for the achievement of equitable and cost-effective UHC [24–26].

Basically, sustainability means the ability of a health service to provide ongoing access to appropriate quality care in a cost-efficient and health-efficient manner. In order to bring sustainability in health care, 17 sustainable development goals (SDGs) were adopted at the 70th session of the United Nations (UN) General Assembly in 2015. Detail, in this connection, has already been described in the earlier section of this chapter (Section 8.1). It is also necessary to implement other health-related SDGs like SDH-2 on the basis of a multisectoral approach. For this purpose, we need strong governance. For example, to end hunger (SDG2), primary health care can support community-based therapeutic care using ready-to-use therapeutic foods for severe acute malnutrition.

For a successful implementation of SDH 11 and development of sustainable cities and communities, primary health care can support the monitoring of air pollution, issue health warnings when the particulate matter of diameter less than  $2.5 \,\mu\text{m}$  in the air exceeds limits, and advocate for the reduction of indoor pollution through the use of clean energy. All this could possible through policies that address industrial, residential, and vehicular sources of pollution. But, still, the rural areas and remote areas of developing and underdeveloped countries are lacking basic PHC services mainly due to extremely poor transportation and other communication facilities; lack of economies of scale; difficulty in maintaining an adequate workforce, poor management structures, and geographic isolation. So, people suffer from acute and chronic diseases. So, it is necessary for a government to increase its financial commitment to the health sector. It is true that a sound health system is a complement to sustainable development. In this connection, we should collaborate and focus on broader economic and social inequalities, urbanization, climate crisis, continuing burden of HIV and other infectious diseases, and non- communicable diseases, as prescribed in SDGs.

#### References

- Bhore Committee, https://pgblazer.com/bhore-committee-1946/?\_e\_pi\_=7%2CPAGE\_ ID10%2C4365817816; 1946.
- [2] Newell KW. Health by the people. Geneva: World Health Organization; 1975. p. xi.
- [3] Canadian Department of National Health and Welfare. A new perspective on the health of Canadians. Ottawa; 1974.
- [4] Tangcharoensathien V, Mills A, Palu T. Accelerating health equity: the key role of universal health coverage in the sustainable development goals. BMC Med 2015;13(1):101. https:// doi.org/10.1186/s12916-015-0342-3.
- [5] International Conference on Primary Health Care. Declaration of Alma-Ata. WHO Chron 1978;32(11):428–30.
- [6] A vision for primary health care in the 21st century: towards universal health coverage and the Sustainable Development Goals. Geneva: World Health Organization, United Nations Children's Fund; 2018. Available from: https://apps.who.int/iris/handle/10665/328065.
- [7] Hone T, Macinko J, Millett C. Revisiting Alma-Ata: what is the role of primary health care in achieving the sustainable development goals? Lancet 2018;392(10156):1461–72. https://doi.org/10.1016/S0140-6736(18)31829-4.
- [8] Starfield B. Politics, primary healthcare and health: was Virchow right? J Epidemiol Community Health 2011;65(8):653–5. https://doi.org/10.1136/jech.2009.102780.
- [9] Walsh J, Warren K. Selective primary health care: an interim strategy for disease control in developing countries. N Engl J Med 1979;301(18):967–74.
- [10] Ruxin J. Magical bullet: the history of oral rehydration therapy. Med Hist 1991;38:363–97.
- [11] Cueto M. The origins of primary health care and selective primary health care. Am J Public Health 2004;94:1864–74.
- [12] Bud R. Penicillin, triumph and tragedy. New York: Oxford University Press; 2009. p. 75–112.
- [13] World Health Organization. Primary health care: Report of the international conference on primary health care, Alma-Ata, USSR. Geneva: World Health Organization; 1978.
- [14] United Nations. Transforming our world: the 2030 agenda for sustainable development, https://sustainabledevelopment.un.org/post2015/transformingourworld/publication.
- [15] Battye KM, McTaggert K. Development of a model for sustainable delivery of outreach allied health services to remote north-west Queensland, Australia. Rural Remote Health 2003;3(3):194.

- [16] Hoodless M, Evans F. The multipurpose service program: the best option for rural Australia. Aust J Prim Health 2001;7(1):90–6. https://doi.org/10.1071/PY01015.
- [17] World Health Organisation. WHO Coronavirus (COVID-19) Dashboard, http://Covid19. who.int; 2021.
- [18] Mahler H. Primary health care comes full circle. Bull World Health Organ 2008;86:747–8.
- [19] Bhutta ZA, Ali S, Cousens S, et al. Interventions to address maternal, newborn, and child survival: what difference can integrated primary health care strategies make? Lancet 2008;372:972–89.
- [20] Beaglehole R, Epping-Jordan J, Patel V, et al. Improving the prevention and management of chronic disease in low-income and middle-income countries: a priority for primary health care. Lancet 2008;372:940–9.
- [21] Kaner E, Beyer F, Dickinson H, et al. Effectiveness of brief alcohol interventions in primary care populations. Cochrane Database Syst Rev 2007;2, CD004148.
- [22] Kruk ME, Porignon D, Rockers PC, Van Lerberghe W. The contribution of primary care to health and health systems in low- and middle-income countries: a critical review of major primary care initiatives. Soc Sci Med 2010;70:904–11.
- [23] Gibbons DC, Bindman AB, Soljak MA, Millett C, Majeed A. Defining primary care sensitive conditions: a necessity for effective primary care delivery? J R Soc Med 2012;105:422–8.
- [24] Lewin S, Lavis JN, Oxman AD, et al. Supporting the delivery of cost-effective interventions in primary health-care systems in low-income and middle-income countries: an overview of systematic reviews. Lancet 2008;372:928–39.
- [25] Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. Milbank Q 2005;83:457–502.
- [26] Rao M, Pilot E. The missing link- the role of primary care in global health. Glob Health Action 2014;7:23693.