

CHAPTER - 2

HEALTH PROMOTION AND DISEASES PREVENTION STRATEGIES IN COMMUNITY HEALTH

Dr. S. Vijayamalar¹, Mr. Syam Mohan lal ², Mr. Vasantha Malagi³

¹ Professor and Head of the Department of community Health Nursing,
Smt.Nagarathnamma College of Nursing, Bangalore, Karnataka, India

Email: svijayamalar23@gmail.com ,

²Associate Professor Department of Medical Surgical Nursing

³ Head of the Department of Mental Health Nursing

ABSTRACT

Two essential elements of public health that concentrate on enhancing the wellbeing of people and communities are illness prevention and health promotion. These are proactive measures meant to lower risk factors, stop diseases before they start, and increase people's understanding of health issues. Communities are crucial in helping people make better decisions and lowering the frequency of risky behaviours in light of the global rise in chronic and communicable diseases. According to the World Health Organization (WHO), health promotion techniques have a strong emphasis on empowering communities, establishing supportive environments, and developing health policies that encourage healthy behaviours. This is complemented by disease prevention, which emphasizes treatments including immunizations, screenings, and lifestyle changes that slow the progression of disease. By implementing these techniques in public places, you may greatly reduce these techniques seek to reduce the prevalence of sickness in the population by preventing infectious and chronic diseases by the early identification and treatment of risk factors. Promote healthy habits including eating a balanced diet, exercising, managing stress, and abstaining from bad habits like smoking and binge drinking. Inform people and families about health-related concerns and the resources that are accessible, allowing Boost community advocacy for health-promoting policies and services, fostering settings

that promote and facilitate healthy choices to enable individuals to make health-related decisions with knowledge. This study has the potential to lower the prevalence of infectious and chronic diseases in communities by comprehending and putting into practice efficient health promotion techniques. In addition to improving people's health and quality of life, this lessens the strain on healthcare systems. The study highlights how health education helps people make knowledgeable decisions about their health. The study can assist communities in enhancing health literacy by identifying successful educational interventions, which will promote preventive measures and healthier lifestyles.

Key words: Health Promotion, Disease Prevention, Community Engagement Sustainable Health Practices, lifestyle Modifications

2.1 INTRODUCTION

2.1.1 Demographic Trends

Low- and middle-income countries are currently going through the most change, even if this transition began in high-income countries (for example, 30% of the population in Japan is already over 60). The majority of individuals may now anticipate living into their 60s and beyond for the first time in history. The percentage of people over 60 will almost double from 12% to 22% of the global population between 2015 and 2050, by that time, there will be two billion people over 60, up from 900 million in 2015. Every nation in the globe faces significant, making sure that their social and health systems are prepared to capitalize on this demographic transformation presents significant difficulties for all nations in the world. As a result of this tendency, many people live to be 80, 90, or even 100 years old. 125 million individuals are 80 years of age or older now; the percentage of those over 80 years of age is rising the fastest.

Therefore, it's critical to make sure that the additional years of life are worthwhile, even in the face of chronic illnesses and diminished functionality. This is crucial for the older person as well as for their relatives, the neighbourhood, and the town. There isn't much proof, though, that older people today are healthier than their parents were

when they were older. The majority of patients with chronic illnesses nowadays are older, yet age is not a disease. Growing older is associated with a higher prevalence of various disabilities and functional and chronic comorbidities, which for many people necessitates medical care and varying degrees of nursing care. Consequently, a worldwide need is highlighted in the WHO's Action Plan on Aging and Health.

Furthermore, depression is currently the most prevalent psychological condition, impacting around 121 million individuals across all age groups globally. According to WHO, depression is the fourth largest contributor to the worldwide burden of disease and the primary cause of disability as indicated by Years Lived with Disability (YLDs). According to projections, depression will rank second in terms of Disability Adjusted Life Years (DALY) across all age groups by 2020.

There will be political, social, cultural, and economic repercussions from this demographic shift. Global health care systems will have a lot of obstacles to overcome in the years to come. Health promotion programs will become increasingly vital in helping the healthy population maintain their health, not just those with mental and physical disabilities and older adults living at home or in care facilities. Finding innovative and practical strategies to enhance people's health worldwide is crucial in light of these demographic trends. A key component of the health care systems ought to be health promotion.

2.1.2 Background of Health promotion

Nowadays, health promotion is more important than ever in tackling issues related to public health. The world is dealing with a "triple burden of diseases," which includes the unresolved issue of communicable diseases, newly developing and re-emerging diseases, and the extraordinary development of chronic non-communicable diseases. This puts the health situation at a unique crossroads. The elements that contribute to growth and development in the modern world include sophisticated technologies, urbanization, globalization of trade, and ease of international travel. Serve as a two-edged sword because, while they can result in favourable health results, they can also make people more

susceptible to ill health since they encourage sedentary lives and unhealthy eating habits. High rates of tobacco use, bad eating habits, and a decline in physical activity all contribute to a rise in biological risk factors, which in turn raises the incidence of non-communicable diseases (NCDs).(One to three)

Figure 1 below shows how problems related to lifestyle are causing an increase in non-communicable diseases. The negative consequences of global climate change, sedentary lifestyles, an increase in the frequency of natural disasters, financial crises, security concerns, etc., all contribute to the difficulties public health is currently facing.

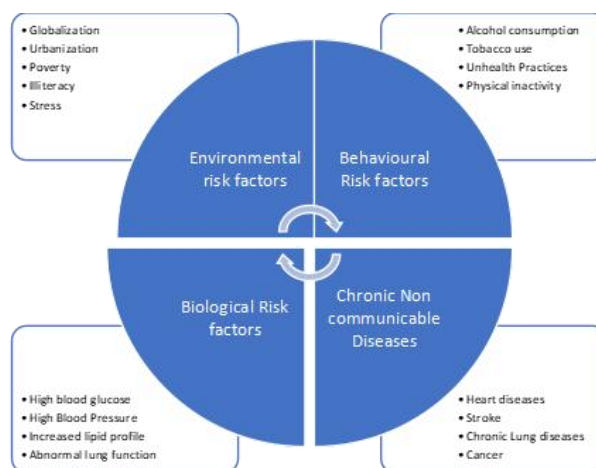


Figure 1: Illustration of how lifestyle-related issues contribute to increase in non-communicable diseases

According to the World Health Organization (WHO), health is more than just the absence of illness or disability; it is the state of whole physical, social, and mental well-being. One of every person's fundamental rights is thought to be the enjoyment of the best possible condition of health.

In recent decades, there has been a growing understanding that improved health cannot be ensured solely by biomedical therapies. Factors outside the purview of the health sector, including social,

economic, and political pressures, have a significant impact on health. These factors significantly influence how people develop, live, work, and age, as well as the institutions established to address medical requirements, which eventually results in health disparities both within and between nations. Therefore, the achievement comprehensive, holistic strategy that goes beyond traditional curative therapy is necessary to achieve the highest possible state of health, incorporating communities, medical professionals, and other interested parties. This all-encompassing strategy need to enable people and communities to act for their own well-being, promote leadership in public health, encourage cross-cutting efforts to develop sustainable health and wholesome public policy. social systems. These components encapsulate the core concept "health promotion," which aims to empower individuals to assume responsibility for their health and its factors, and consequently, their health will improve. It consists of actions at the social, political, organizational, and individual levels to aid in adaptations (environmental, lifestyle, etc.) Favourable to enhancing or safeguarding health.



Figure 2 shows Levels of Health Promotion

Promotion of Health

The range of health promotion initiatives encompasses organizational, political, educational, and regulatory measures that create favourable circumstances for people, communities, and groups.¹⁰ An increase in the incidence of obesity, particularly among children during school closures

and social distancing practices, is evidence of the pandemic's long-lasting, if uneven, effects on health promotion behaviors.¹¹ Not only do disparities exist in health outcomes, but they have also grown significantly between different populations, including men and women, racial and ethnic groups, the rich and the poor, and those with varying levels of education, when it comes to health-promoting activities like physical activity.

Protection of Health

The goal of health protection is to use laws, rules, and governmental policies to protect population health from outside dangers. Access to high-quality, easily accessible, and reasonably priced healthcare is the duty of local, state, and federal government organizations. In addition to directly influencing health care delivery, governments play a special role in promoting health and well-being through societal, economic, and environmental contexts.¹³ The evolution of governments and the voters in guiding public health objectives based on ethical and societal values, as well as the handling of contradictory public health recommendations and communications, are crucial elements that may have an impact on health protection.

Prevention of Disease

In order to reduce harmful exposure, illness start, and progression across all life stages, populations, and circumstances, disease preventive efforts investigate and evaluate health hazards as well as create and test solutions.¹⁶ Apart from the targeted protection of high-risk elderly populations, opinions that support individual liberty and oppose widespread restrictive measures are sometimes seen as unjust to less susceptible people, which makes disease prevention initiatives more difficult.¹⁷ The idea of equality and utility, on the other hand, has also been promoted. It holds that restricting measures should be implemented universally in order to reduce illness and death as much as possible for the entire population.¹⁸ A new universe of public health policy for disease prevention is brought about by these ideological divides, where the extent of public health regulations heavily depends on shared ethics and values.

Health Promotion: Historical Evolution

The idea of health promotion is not new. It has long been understood that not only do external variables influence health, but also internal elements do. The precise cause of the majority of diseases was thought to be "miasma" during the 19th century, when the germ theory of disease had not yet been established. However, it was acknowledged that poverty, destitution, substandard living circumstances, illiteracy, etc., all contributed to illness and death. Louis Rene Villerme's report (1840) on a survey of the physical and moral circumstances of the workers in the cotton, wool, and silk factories, and William Alison's reports (1827–28) on epidemic typhus and relapsing fever. This growing awareness is demonstrated by John Snow's seminal research on cholera (1854), among other works on the web of disease causation.

The renowned medical historian Henry E. Sigerist first used the word "health promotion" in 1945. He outlined the four main responsibilities of medicine as rehabilitation, sickness prevention, restoration of the sick, and health promotion. According to his assertion, promoting health necessitated the coordinated efforts of statesmen, labour, industry, educators, and physicians and was achieved through the provision of a respectable standard of living, favourable working circumstances, education, physical culture, and means of leisure and amusement. Forty years later, it was reflected in the Ottawa Charter for Health Promotion. Sigerist's statement that "health promotion obviously tends to prevent illness, but effective prevention calls for special protective measures" emphasized the importance of both specific and general factors in the development of disease. The part health promotion plays in tackling these broad issues. J.A. Ryle, the first professor of social medicine in Great Britain, recognized the dual causality of diseases around the same period and highlighted how it applied to non-communicable diseases.

The terms "health promotion" and "health education" are occasionally used interchangeably. Giving people and communities health information and knowledge, as well as the skills necessary to encourage voluntary adoption of healthy habits, is the goal of health education. In contrast to health promotion, which takes a more comprehensive approach to

promoting health by involving various players and focusing on multispectral approaches, it is a combination of learning experiences intended to help individuals and communities improve their health by increasing their knowledge or influencing their attitudes. With a much wider view, health promotion is able to adapt to changes that affect health directly or indirectly, such as disparities, shifts in environmental conditions, cultural attitudes, and consumer habits.

Health promotion emblem

An overview of the WHO logo since the First International Conference on Health Promotion in 1986, which took place in Ottawa, Canada. For a detailed explanation of a particular logo element, pick it out or continue reading for the full explanation. For the First International Conference on Health Promotion, which took place in Ottawa, Canada, in 1986, this logo was made. The Ottawa Charter for Health Promotion was introduced during the summit. Since then, WHO has continued to use this image as the Health Promotion logo (HP logo), which represents the Ottawa Charter's approach to health promotion. The logo is a three-winged circle. It integrates three fundamental HP tactics (to empower, mediate, and advocate) and five major action areas in health promotion (grow personal skills, increase community action for health, promote healthy public policy, and reorient health services).

One outer circle, one circular spot inside the circle, and three wings that emerge from this inner spot—one of which breaks the outer circle—are the primary visual components of the HP logo.

a) The outer circle, which was initially red, symbolizes the objective of "Building Healthy Public Policies" and the necessity of policies to "hold things together." The three wings of this circle represent the necessity of addressing the Ottawa Charter's five main action areas for health promotion in a complementary and coordinated way.

b) The round location inside the circle represents the three fundamental health promotion tactics—"enabling, mediating, and advocacy"—that are required and used in all areas of health promotion

activities. (All of these concepts have full definitions in the WHO/HPR/HEP/98.1 Health Promotion Glossary.)

c) As stated in the Ottawa Charter for Health Promotion in 1986 and reaffirmed in the Jakarta Declaration on Leading Health Promotion into the 21st Century in 1997, the three wings symbolize (and include the phrases of) the five major action areas for health promotion.

More precisely, the upper wing that is breaking the circle signifies that in order to "develop personal skills" and "strengthen community action," action is required. This wing is splitting the circle to represent the idea that people, communities, and society are always changing, and that the policy domain must always adapt and evolve to take these changes into account: action is required to "create supportive environments for health"; a "Healthy Public Policy" is required; and the bottom wing indicates that action is required to "reorient health services" towards illness prevention and health promotion.

Approaches to Health Promotion

Priority health issues that affect a large population and encourage several actions can be the focus of health promotion initiatives. It is best to use settings-based designs in conjunction with this issue-based approach. By taking into consideration the complex health determinants such as behaviours, cultural beliefs, practices, etc.—that function in people's homes and places of employment, settings-based designs can be implemented in schools, workplaces, marketplaces, residential neighbourhoods, etc. to address priority health concerns. With respect for current local circumstances, settings-based design also makes it easier to include health promotion initiatives into social activities.

2. OBJECTIVES

This chapter explores Diseases prevention and health promotion strategies in community health, outlining the methods used, important discoveries, and practical ramifications.

2.3 METHODOLOGY

Research Methodology

The research study is using the descriptive research design. In the research study the researcher has used secondary data. The secondary data has been collected from research papers, published materials, online websites and survey reports published by various research organizations.

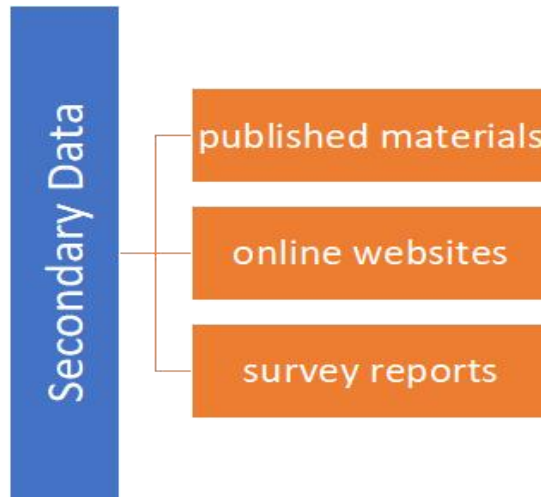


Figure 3 shows conceptual framework of research Methodology

2.3.1 conceptual framework

The methods for promoting health are summed up in the conceptual framework shown in Figure 3 below. It considers the needs of the entire populace. Any disease's population can be separated into four groups: those who are healthy, those who have risk factors, those who have symptoms, and those who have the disease or disorder. To fully address the needs of the entire community, specialized interventions must be implemented for each of these four population categories. In a nutshell, it covered everything from primary prevention for the healthy population to the treatment and rehabilitation of the sick population. The goal of primordial prevention is to create and preserve circumstances that reduce health risks. It includes activities and policies that prevent environmental, economic, social, and behavioural situations from developing and being established.

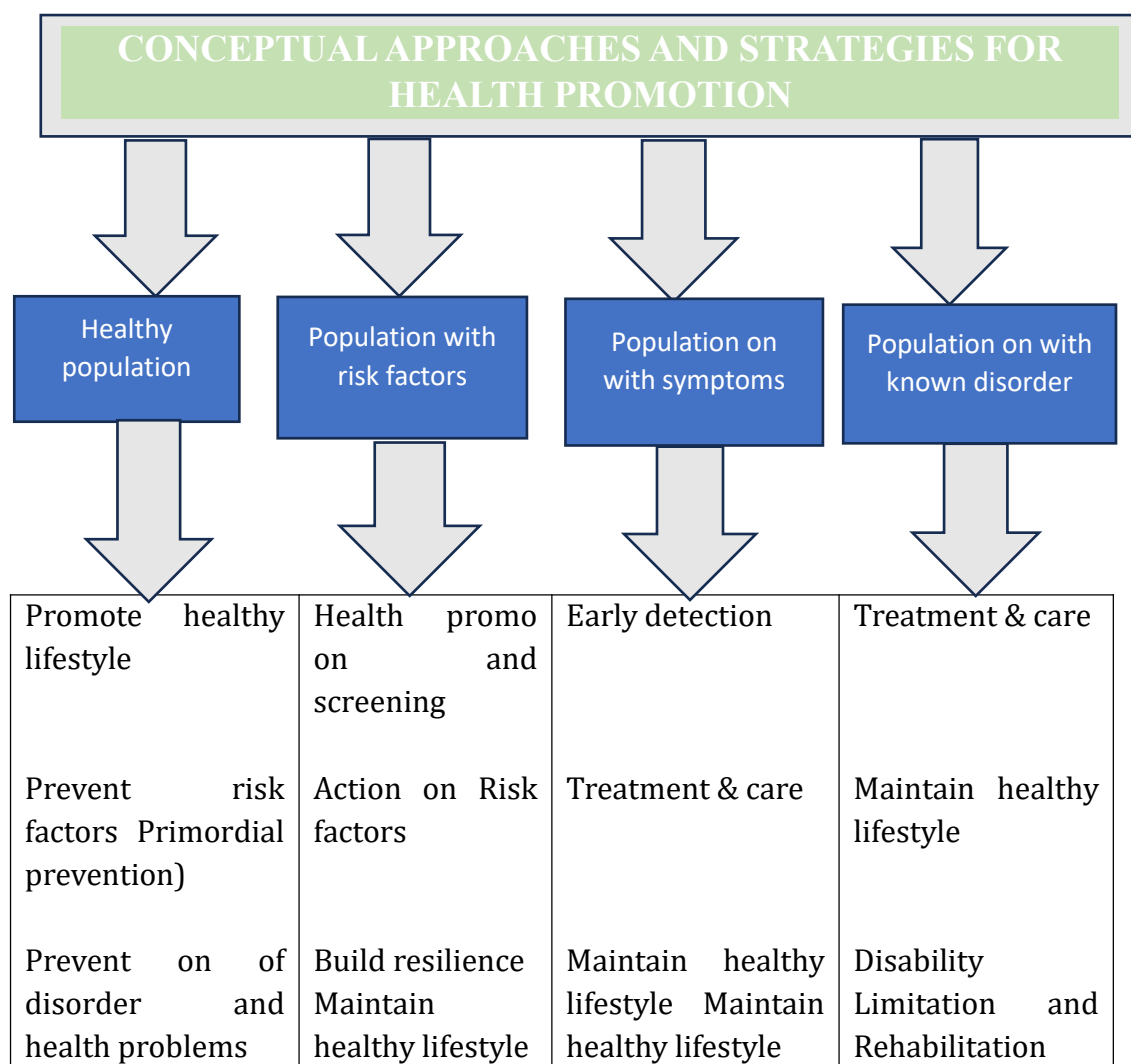


Figure 4 conceptual approaches and strategies for health promotion

2.3.2 Application to Chronic Disease

Although the original purpose of epidemiology was to control and prevent communicable disease epidemics, the concept was later extended to include both communicable and non-communicable illness prevention. Additional techniques were created at the end of the 20th century to apply the paradigm to chronic illnesses as well (CDC, 2012). Chronic diseases are those that last three months or more and necessitate

continuous medical care, according to the National Centre for Health Statistics. The disease cannot be cured, although treatments including immunizations and drugs can help control it. According to the CDC (2018), the main causes of death and disability in the US are chronic illnesses like diabetes, cancer, and heart disease.

The Epidemiological Triad of Chronic disease studies the distribution and the causal factors of the disease, which are then applied to the study of controlling and preventing the chronic health problem (CDC, 2012).

Application of Epidemiology Triad to Asthma:

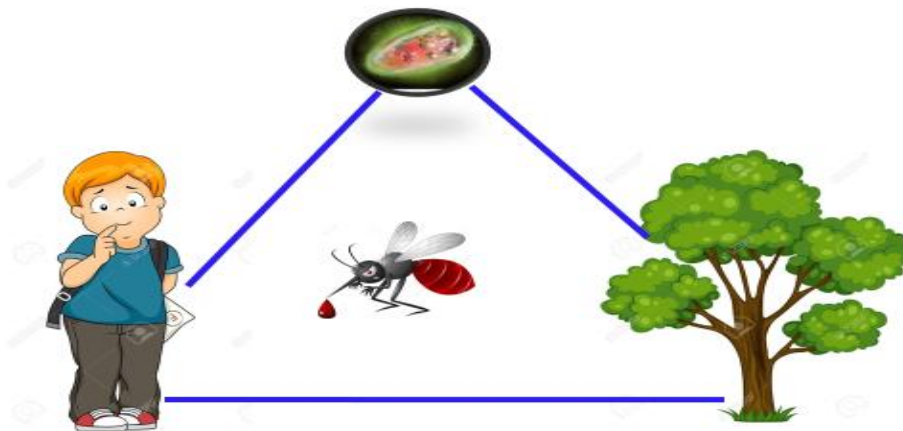


Figure 5 Epidemiology Triad to Asthma

One of the most common respiratory conditions in the world, asthma primarily affects youngsters but can affect people of all ages. Asthma is a long-term lung disease that narrows the airways and produces inflammation. The lungs receive less air as a result of the swelling and constriction, which makes breathing harder and results in symptoms like coughing, wheezing, chest tightness, etc. According to the Global Initiative for Asthma (GINA), asthma is a serious illness that affects more than 300 million people globally, although it is more prevalent in school-age children and members of underrepresented groups who live in impoverished metropolitan areas (Paul, 2017).

Agent

The microorganisms that cause the sickness are known as agents. Microorganisms that cause disease include bacteria, viruses, fungus, and protozoa. There are numerous substances that might induce or provoke non-atopic asthma, despite the fact that no known chemical can cause atopic asthma. Chronic Mycoplasma pneumonia and Chlamydia pneumonia are among the agents that cause non-atopic asthma (Hong, 2012).

Host

As stated in the introduction, the term "host" refers to the person who has the potential to contract the illness. The occurrence of asthma is influenced by a number of host characteristics, including sex, gender, ethnicity and socioeconomic position, and genetics.

- **Genetics:** Numerous research on twins and families have shown that genetics is a significant factor in the development of allergies and asthma.
- **Gender and Sex:** The prevalence of asthma is influenced by both genders. Males are more likely to acquire asthma until they are 13 or 14 years old. According to studies, women are more likely to get asthma in their teens than in their early adult years.
- **Lung Function:** Numerous studies have linked the onset of asthma later in life to a lower airway caliber. The chance of having asthma later in life is raised by decreased airway caliber, which has been linked to greater wheezing symptoms and higher bronchial reactivity.

Environment

Everything outside the host is considered an environmental component, and it demonstrates how exposure to the environment affects the disease. The following environmental factors might cause or aggravate asthma: socioeconomic level and ethnicity, secondhand smoking, as well as smoking by mothers.

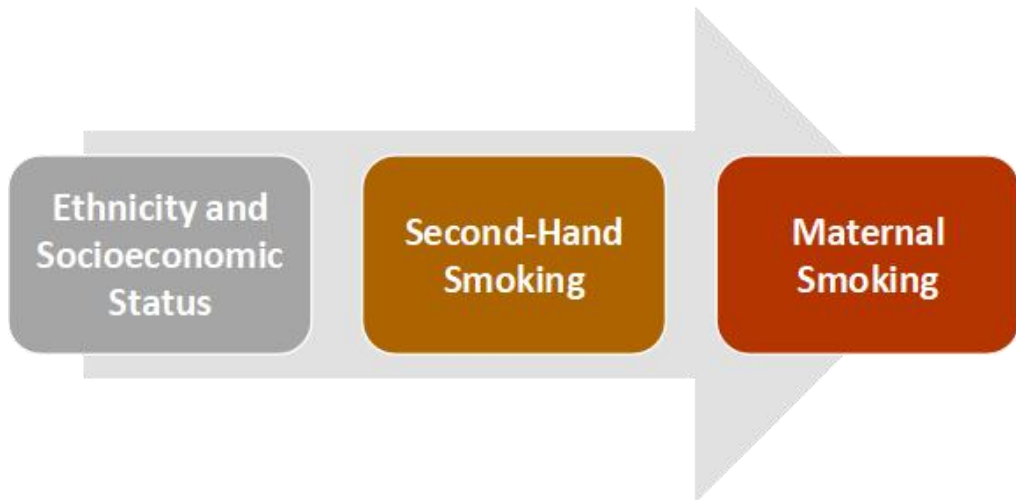


Figure 6 Environment factors to causes Diseases

- **Ethnicity and Socioeconomic Status:** In the US, families from poorer socioeconomic backgrounds and ethnic minorities typically have higher rates of asthma morbidity cases, including more severe cases. Children who live in impoverished metropolitan areas typically lack access to the tools they need to strengthen their lungs. This includes lower nutrient intake, poor hygiene, less exercise, and more hospital expenses. In the United States, people living in impoverished neighborhoods are three times more likely to be hospitalized and have a higher prevalence of the condition than people in affluent communities (NYC Department of Health, 2003).
- **Second-Hand Smoking:** Since tobacco is one of the most prevalent and dangerous triggers for asthma, second-hand smoke is another environmental element that makes the condition worse. About 70 of the more than 7000 compounds found in cigarette secondhand smoke are hazardous (CDC, 2012). A child's airways may be triggered by smoking, resulting in more frequent flare-ups, missed school days owing to emergency room visits, increased medication use, and asthma that is more difficult to manage even with medication (Hong, 2012).

- **Maternal Smoking:** Maternal smoking is one of the primary environmental factors that contribute to the development of asthma. Research has linked maternal smoking to wheezing in early children and a decline in airway calibre, which may later develop into asthma (Hong, 2012).

A descriptive examination of academic programs pertaining to health promotion was part of the study. The information was collected and compiled using a methodical, pre-planned approach. A matrix was created by compiling and integrating the data. The approach taken was comparable to that of a previous study that involved the following procedure. To gather publicly available information about health promotion, health education, and health communication courses in India, a comprehensive internet search was conducted. Google, Dogpile, and other search engines were used in the search. Health promotion, health communication, health education, public health, public health education, health behavior, social determinants of health, behavioral change communication, healthy community, and healthy lifestyle were among the keywords utilized in the search.

Definitions and Examples of Health Promotion, Health Protection, and Disease Prevention

Table 1 Shows Definitions and Examples of Health Promotion, Health Protection, and Disease Prevention

Levels of prevention	Health promotion	Health protection	Disease prevention
Definition	Encouragement of activities that facilitate healthy living and well-being	Safeguarding the public's health against external threats	Assessment of health risks and development of interventions that halt disease progression
Example interventions	Primal and primordial prevention- Physical activity guidelines- High-quality and safe housing	Primary prevention- Emergency preparedness- Communicable disease control	Secondary prevention- Cancer and other disease screenings- Chemoprophylaxis

2.4 RESULTS

Table no -02 Incidence rate of mortality rate of Non-communicable diseases

Statistic	Details
Annual Deaths from NCDs	41 million deaths, 74% of all global deaths.
Premature Deaths (<70 years)	17 million annually.
Premature Deaths in Low- and Middle-Income Countries	86% of the 17 million premature deaths.
Proportion of NCD Deaths in Low- and Middle-Income Countries	77% of total NCD deaths.

Non-communicable diseases (NCDs) account for 74% of all deaths worldwide, killing 41 million people year. 17 million people die from an NCD before turning 70 every year; low- and middle-income nations account for 86% of these premature fatalities. 77% of deaths from NCDs occur in low- and middle-income nations.

Table no 03 02 Incidence rate of non-communicable diseases

Disease Category	Annual Deaths (Millions)	Proportion of Premature NCD Deaths
Cardiovascular Diseases	17.9	-
Cancers	9.3	-
Chronic Respiratory Diseases	4.1	-
Diabetes (including kidney disease caused by diabetes)	2.0	-
Total (4 groups)	33.3	Over 80%

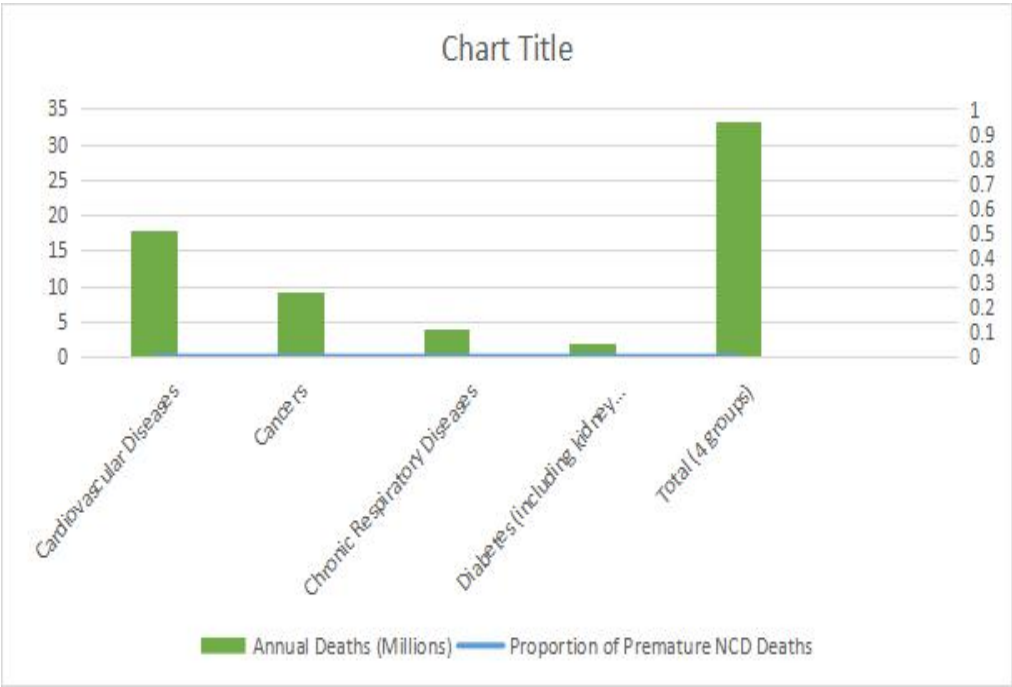


Figure 7 Incidence rate of non-communicable diseases

The majority of NCD mortality, or 17.9 million deaths per year, are from cardiovascular illnesses, which are followed by cancer (9.3 million), chronic respiratory diseases (4.1 million), and diabetes (2.0 million, including deaths from renal disease brought on by diabetes). More than 80% of all premature deaths from NCDs are caused by these four disease types. Tobacco use, physical inactivity, the harmful use of alcohol, unhealthy diets and air pollution all increase the risk of dying from an NCD. Detection, screening and treatment of NCDs, as well as palliative care, are key components of the response to NCDs.

The incidence and prevalence of communicable and non-communicable diseases are fundamental epidemiological measures that help in arriving at the burden of disease in a given human population. Knowing how these measures work is therefore very important for those persons deciding on prevention and control strategies. Communicable diseases are caused by infectious agents, including bacteria, viruses, fungi,

and parasites, with varied incidence and prevalence in various regions and populations. Transmission of communicable diseases often occurs by directly contacting patients, inhaling respiratory droplets, ingesting contaminated food or water, or through vectors, including mosquitoes. The incidence rate of a communicable disease is defined as the number of new cases appearing in a population in a specified period, while prevalence denotes both new and existing cases existing at a defined period. In the WHO's estimation, tuberculosis (TB) is one of the greatest globally prevalent infectious diseases, with an annual incidence of about 10.6 million new cases. The global prevalence is defined in terms of a much greater number, as tuberculosis has many latent forms in people, which have the potential of becoming active. Tuberculosis is especially rampant in low-income countries, where poor sanitation, overcrowding, and weaker health infrastructure enable its endurance. Another major communicable disease is HIV/AIDS, which also has significant proportions of burden across the world. It was estimated that there were 1.5 million new HIV infections worldwide in 2021; number of people living with HIV at the end of the year was approximately 38.4 million. ART greatly helped increase survival rates; these saw a high prevalence despite a declining incidence in some regions. In 2021, malaria, a vector-borne parasitic disease, was estimated to have witnessed around 247 million new cases especially in sub-Saharan Africa. Once again, prevalence remains high in tropical and subtropical regions where environmental conditions conducive to mosquito breeding exist. The global disease burden from dengue fever is also on the rise, with current estimates of annual viral infections varying between 100 and 400 million. More than 125 countries are affected, especially in Asia, Latin America, and the Caribbean. COVID-19 left massive global footprints, with millions of new cases reported daily at its peak, caused by the SARS-CoV-2 virus. Following vaccines and control measures, it is still endemic in many regions of the world, with mutations leading to periodic spikes in infection. Hepatitis B and C, measles, cholera, and a few other communicable diseases are equally responsible for morbidity and mortality worldwide, each having a distinct incidence and prevalence

influenced by geographical, socio-economic, and environmental factors. On the contrary, we have the remaining noncommunicable diseases (NCD) arising from pathologies unrelated to infections, which primarily refer to genetic predisposition, lifestyle, etc.

Table 4 Global burden of Diseases

Diseases	Percentage
<u>Cancer</u>	8%
Cardiovascular diseases, principally heart attacks and stroke	14%
Infectious and parasitic diseases, especially lower respiratory tract infections, diarrhoea, AIDS, tuberculosis, and malaria	37%
Injuries, especially motor vehicle accidents	14%
Neuropsychiatric conditions, such as depression	2%
Premature birth and other perinatal deaths (infant mortality)	11%

"Standard DALYs (3% discounting, age weights): WHO sub regions (YLL)" (XLS). Disease and injury regional estimates for 2004. World Health Organization (10)

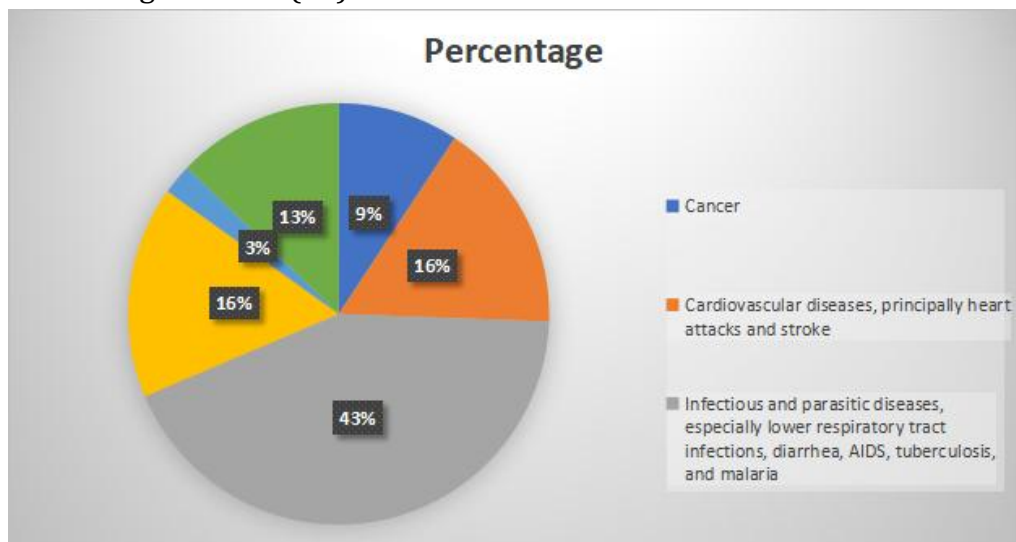


Figure 8 Global burden of Diseases

2.4.1 Risk factors

Modifiable behavioural risk factors

The risk of NCDs is increased by modifiable behaviours, including tobacco use, physical inactivity, poor diet, and problematic alcohol consumption. Including the consequences of second-hand smoke exposure, tobacco use causes more than 8 million deaths annually. Excessive consumption of salt and sodium has been linked to 1.8 million fatalities per year. NCDs, such as cancer, account for more than half of the 3 million fatalities linked to alcohol use each year. Inadequate physical activity is a contributing factor in 830,000 fatalities every year.

Metabolic risk factors

Metabolic risk factors lead to four important metabolic alterations that enhance the risk of NCDs: hyperglycaemia (high blood glucose levels), hyperlipidaemia (high blood fat levels), elevated blood pressure, and overweight or obesity. Increased blood pressure is the primary metabolic risk factor for attributable fatalities worldwide, accounting for 19% of all deaths. This is followed by increased blood glucose and overweight/obesity.

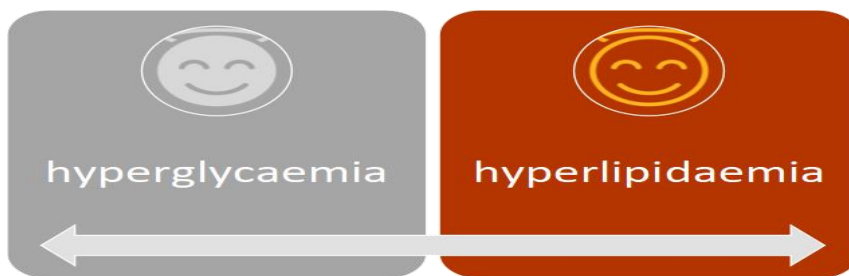


Figure 9 Metabolic risk factors

Risk factors related to the environment

NCDs are caused by a number of environmental risk factors. The greatest of them is air pollution, which causes 6.7 million fatalities worldwide, of which roughly 5.7 million are attributable to NCDs such as lung cancer, ischemic heart disease, stroke, and chronic obstructive pulmonary disease.

2.4.2 Impact on society and economy

NCDs pose a danger to the 2030 Agenda for Sustainable Development, which calls for a one-third reduction in the likelihood of dying from any of the four major NCDs by the age of 70.

NCDs and poverty are tightly related. It is anticipated that the sharp increase in NCDs will hinder efforts to reduce poverty in low-income nations, especially by raising household health care expenses. Because they have less access to health care and are more likely to be exposed to dangerous items like tobacco or poor eating habits, vulnerable and socially disadvantaged persons are more likely to become ill and pass away sooner than those in higher social positions. The expenses of treating NCDs swiftly deplete household finances in low-resource environments. The Millions of individuals are forced into poverty every year by the high expenses of NCDs, which hinder development. These costs include treatment, which is frequently time-consuming and costly, as well as lost income.

Challenges and Opportunities

The growing problem of misinformation and disinformation coexists with the intricate function of government in managing public health. To combat an infodemic of false information that seriously jeopardizes the efficacy of public health communication, public health authorities have prioritized new collaborations with social media and search engine platforms.¹⁹ In addition to the proliferation of false information, disparities in how significant health data is presented at the federal and state levels lead to significant communication issues within government systems. Disparate access to healthcare is another issue. Access to healthcare may be hampered by obstacles like lack of transportation, job constraints, and geographic remoteness. The already widespread digital divide was widened by COVID-19, leading to disparities in the use of health-related technology, where those with access to telehealth significantly improve the management of chronic illnesses.

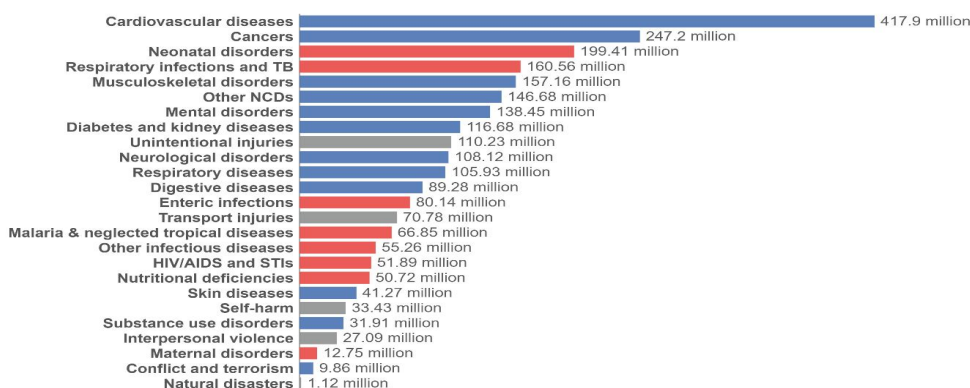
There are chances to improve public health responses in the areas of illness prevention, health promotion, and health protection. First, these structures may address health inequalities and advance health equality through a range of approaches by working with and empowering our

most marginalized and vulnerable groups. For instance, we can empower communities to live healthier, prevent disease through holistic care and addressing underlying causes, and protect health by utilizing available government tools by concentrating efforts on the social determinants of health, incorporating health equity education into medical school curricula, and enhancing collaboration efforts among communities, the public health sector, and medical professionals. There are chances to improve the public health response. Second, as a result of the COVID-19 pandemic, there has been a regrettable decline in public faith in health authorities.²⁵ Health authorities can regain the trust of their communities in practical ways through the execution of illness prevention, health promotion, and health protection. Health officials can gain the support and trust of the community and convince skeptics of the value of public health and prevention by incorporating community stakeholders, fostering open and sincere relationships, and developing long-term, community-driven programs.

A wide range of public health principles that can be used in clinical settings, organizations, communities, and by governmental bodies are covered under the terms "health promotion," "health protection," and "disease prevention." When applied at each of these

Burden of disease by cause, World, 2019

Total disease burden, measured in Disability-Adjusted Life Years (DALYs) by sub-category of disease or injury. DALYs measure the total burden of disease – both from years of life lost due to premature death and years lived with a disability. One DALY equals one lost year of healthy life.



Data source: IHME, Global Burden of Disease (2024)

OurWorldinData.org/burden-of-disease | CC BY

Note: Non-communicable diseases are shown in blue; communicable, maternal, neonatal and nutritional diseases in red; injuries in grey.

Figure 10 Source from IHME

SUMMARY

Thus, the last chapter of this book denotes the need for integrating individual, community, and policy-level interventions into one approach. Sustainable health promotion and disease prevention strategies call for the cooperation of healthcare providers and politicians with communities. Community health will thrive in the future through continuous research, technological advancements, and evidence-based policymaking that save long-term health improvements. This summary has given the most comprehensive outlooks on health promotion and disease prevention strategies as they apply to community health. The inherent contents on the chapters reveal effective intervention and policy measures that could help improve public health outcomes.

REFERENCES

1. Barakat, C., & Konstantinidis, T. (2023). A Review of the Relationship between Socioeconomic Status Change and Health. *International Journal of Environmental Research and Public Health*, 20(13), 6249. <https://doi.org/10.3390/ijerph20136249>
2. Pati, S., Sharma, K., Zodpey, S., Chauhan, K., & Dobe, M. (2012). Health promotion education in India: present landscape and future vistas. *Global journal of health science*, 4(4), 159–167. <https://doi.org/10.5539/gjhs.v4n4p159>
3. Caron, R. M., Noel, K., Reed, R. N., Sibel, J., & Smith, H. J. (2023). Health Promotion, Health Protection, and Disease Prevention: Challenges and Opportunities in a Dynamic Landscape. *AJPM focus*, 3(1), 100167. <https://doi.org/10.1016/j.focus.2023.100167>
4. Centers for Disease Control and Prevention (CDC). Ten essential public health services. <https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html>. Accessed June 13, 2022.
5. World Health Organization (WHO). Health Promotion <https://www.who.int/westernpacific/about/how-we-work/programmes/health-promotion>. Accessed June 13, 2022.

6. Centers for Disease Control and Prevention (CDC) Ten great public health achievements - United States, 1900–1999. *MMWR Morb Mortal Wkly Rep.* 1999;48(12):241–243
7. World Health Organization. WHO Director-General's opening remarks at the media briefing on COVID-19—11 March 2020; 2020.<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19-11-march-2020>
8. Nouri S, Khoong EC, Lyles CR, Karliner L. Addressing equity in telemedicine for chronic disease management during the COVID-19 pandemic. *NEJM Catal Innov Care Deliv.* 2020;1(3) doi: 10.1056/CAT.20.0123.
9. Rój, J., & Jankowiak, M. (2021). Socioeconomic Determinants of Health and Their Unequal Distribution in Poland. *International journal of environmental research and public health*, 18(20), 10856. <https://doi.org/10.3390/ijerph182010856>
10. "Standard DALYs (3% discounting, age weights): WHO sub regions (YLL)" (XLS). Disease and injury regional estimates for 2004. World Health Organization