



Social Science Approach Theory in Public Health

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Article Info	ABSTRACT
Corresponding Author: Maida E-mail: maidanika@gmail.com	<p>Public health is influenced by various interrelated social factors. The social science approach to public health views disease not solely as a disease agent, but also as an imbalance between the host, the environment, and the agent itself. This article discusses various social science theories, such as John Gordon's epidemiological theory, Blum's theory, Maslow's behavioral theory, the Health Belief Model, and Lawrence Green's theory, which explain the factors shaping health behavior. In addition, sociological, anthropological, and demographic approaches are also discussed as a foundation for understanding the dynamics of public health. Qualitative and quantitative methods in the social sciences are explained as tools for analyzing health phenomena. This knowledge is essential for designing appropriate health programs, oriented towards the behavior, culture, and social conditions of the community.</p> <p>Keywords: social science theories, public health</p>

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INTRODUCTION

Public health is a dynamic condition influenced by various factors, not only biomedical but also social, cultural, environmental, and individual behavior. The classical approach to health tends to emphasize the disease-causing agent as the primary factor. However, as science advances, this approach is deemed insufficient to explain the complexity of health problems in society. Therefore, a multidimensional approach involving social sciences has begun to be used in an effort to more comprehensively understand the determinants of health.

Social sciences, including sociology, anthropology, psychology, and demography, provide a broad perspective on how people live, behave, and shape value systems and social structures that influence their health status. Theories such as John Gordon's epidemiological triangle and Blum's theory emphasize the importance of the balance between host, agent, and environment, as well as the role of behavior and social systems in determining health status. Therefore, understanding the social determinants of health is crucial for health interventions to be not only curative, but also promotive and preventive.

The behavior of individuals and groups in society is influenced by various factors, both internal factors such as motivation, perception, and needs, and external factors such as culture, social environment, and access to health services. Psychological theories such as Maslow's hierarchy of needs and health behavior models such as the Health Belief Model and Lawrence Green's theory demonstrate how health behavior change can be designed through an approach based on predisposing, enabling, and reinforcing factors. Therefore, health policies and programs need to consider social and cultural aspects to be more effective and contextual.

In the context of implementation, understanding social dynamics cannot be separated from appropriate social research methods. Quantitative and qualitative approaches in the social sciences are used to analyze health phenomena from various perspectives. The use of these methods not only provides accurate data and information but also assists in formulating evidence-based health policies. Therefore, the integration of social sciences and public health is an urgent need to address the health challenges of the modern era.

METHOD

This study uses a descriptive-qualitative approach, reinforced by a quantitative approach in several aspects. The qualitative approach is used to understand the social, cultural, and behavioral dimensions of public health through a literature review of theories such as epidemiology, Blum's theory, the Health Belief Model, and Lawrence Green's theory. The methods used include document analysis, conceptual observation, and case studies from relevant literature. In addition, quantitative methods such as polling and descriptive statistics are used in social science studies to measure social phenomena related to health behavior. Other approaches, such as deductive, inductive, empirical, rational, and functional, are also explained as alternative methodologies in social science-based public health research.

RESULTS AND DISCUSSION

Public health, whether or not a person is sick, is not solely influenced by the presence or absence of a single factor, namely the disease (agent) that enters the body and affects the public's health. Illness or not being sick can occur due to an imbalance between the host, the environment, and the agent (John Gordon).

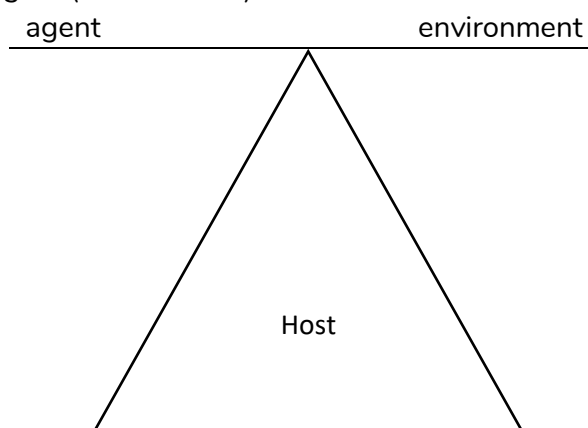


Figure 1. Epidemiological Triangle (Epidemiologic Triangle) Balance of Host, Agent, and Environment by John Gordon Agent Environment

Source: Wordpress.com

- a. Agent (disease agent): A substance or element of a living/non-living creature whose presence/absence can cause/influence the course of a disease.
- b. Environment: The aggregate of all external conditions and influences that affect the life and development of organisms, for example: physical, biological, socio-economic.
- c. Host: All factors within a person that can influence the onset and course of a disease. For example: heredity, age, gender, race, marital status, occupation, and lifestyle.

From this theory, we can conclude that in finding the cause of health problems in a community group, it is not only based on the disease (agent) but also needs to look at other factors, namely the environment.

Henrik L. Blum (1974) in his book, *Planning for Health: development and application of social change theory* in Hartono, B (2010) stated that the level of health is not only influenced by one factor, but by a combination of four health determinants as outlined in his theory.

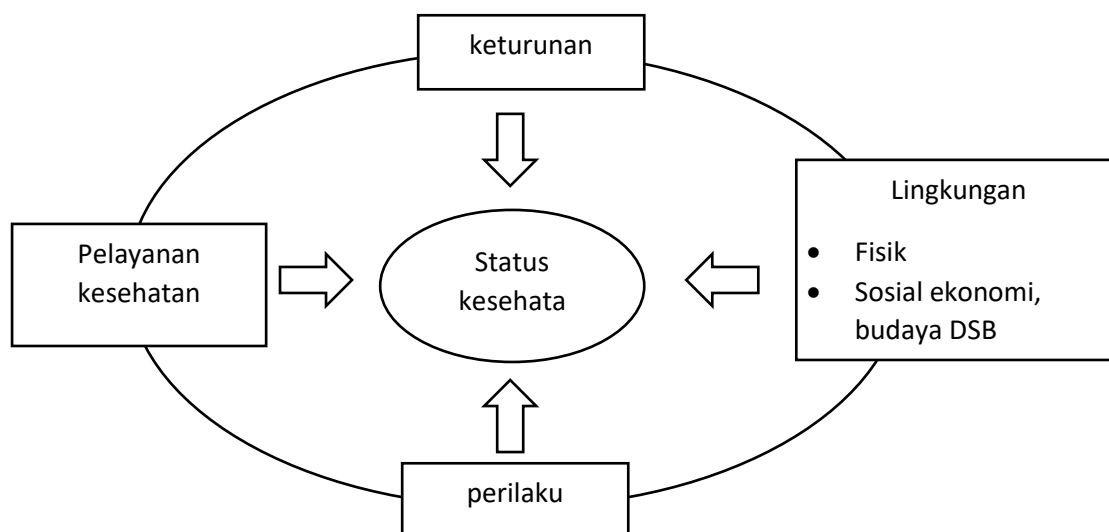


Figure 2 Blum's Theory, 1974

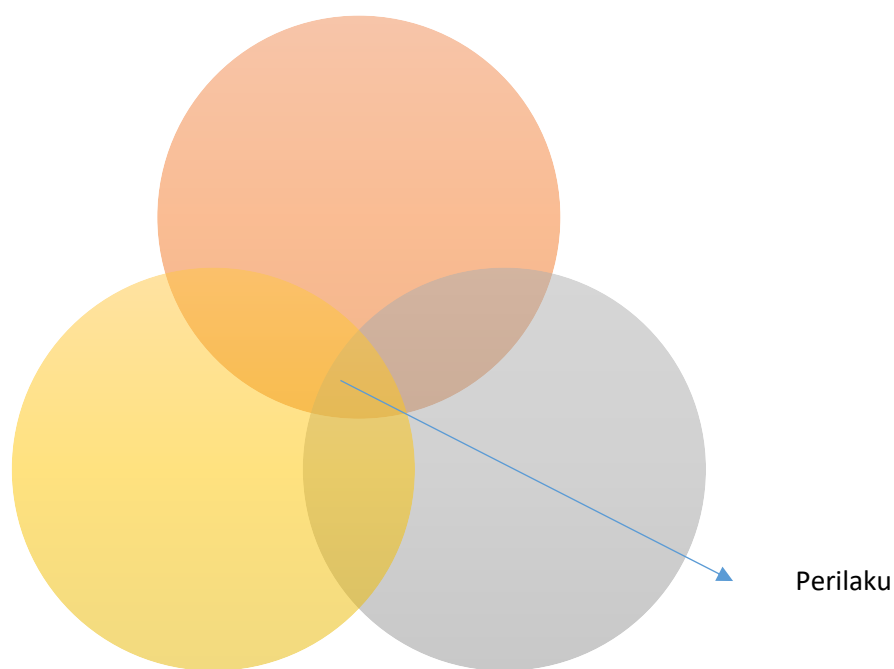
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Furthermore, humans live in society, and the cultural system in which they live also influences their health. In other words, the environment with which individuals interact also determines their quality of life and health. 4.1 Behavior and Public Health 4.1.1 Factors Influencing Behavior

Public behavior and health

Factors that influence behavior

From a biological perspective, behavior is an activity or activity of an organism (living creature). Behavior also influences the health of a community. Soekidjo Notoatmodjo, in his book *Health Promotion and Health Behavior*, states that individual behavior is influenced by psychological, anthropological, and sociological aspects.



Information:

Sociology
Anthropology
psychology

Figure 3. Factors influencing behavior

Social factors are external factors that influence behavior through the social structure of social institutions and existing social problems. The science that studies this is called sociology. Cultural factors, as external factors that influence a person's behavior, include values, customs, beliefs, social habits, traditions, and so on. The science that studies this issue is anthropology. Meanwhile, internal factors that influence the formation of behavior, such as attention, motivation, perception, intelligence, fantasy, and so on, are the science of psychology. It can be concluded that behavioral science is formed or developed from these three branches of science.

Psychology

Psychology, in its context, influences behavior, which in turn impacts public health. Some psychological theories related to behavior include:

Maslow's Theory

Maslow, 1954 in Hartono, B, 2010, stated that behavior occurs due to internal drives in the form of needs. This is outlined in Maslow's pyramid of needs below:

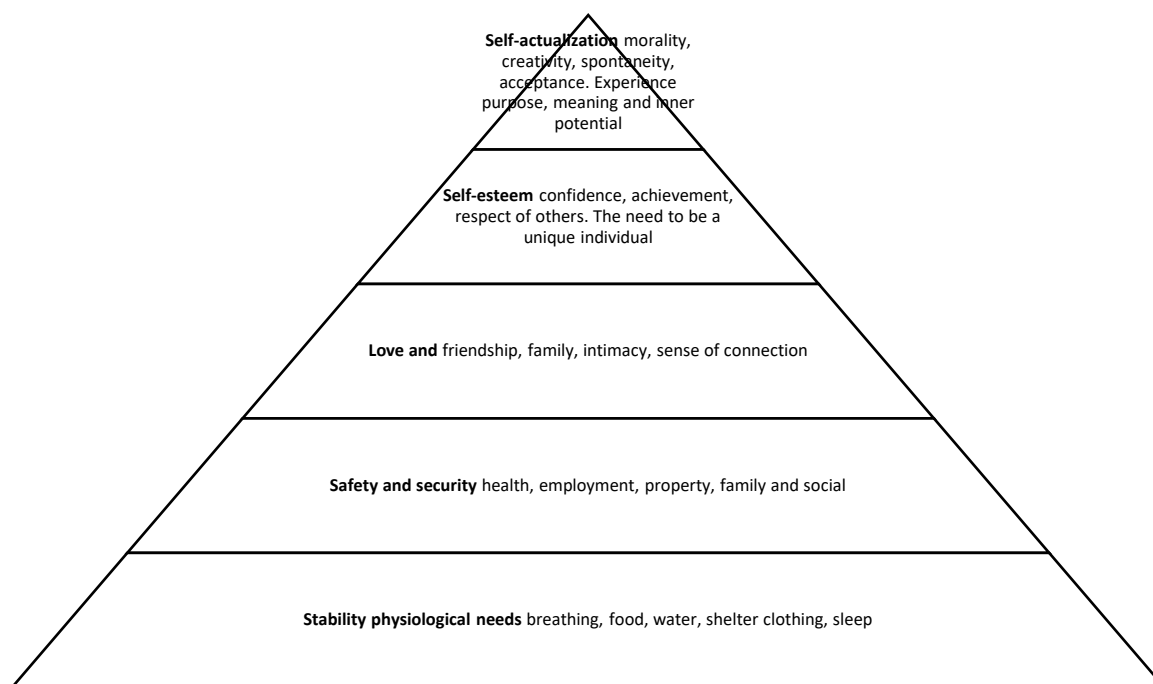


Figure 4. Maslow's Theory

These needs are ranked from the most pressing to those that will emerge naturally once the previous needs have been met. Everyone progresses through these levels and strives to fulfill them, but only a few reach the highest levels of the pyramid. Maslow's five basic needs are as follows:

1. Physiological needs Examples are: clothing, food, shelter, and biological needs such as defecating, urinating, breathing, and so on.
2. Safety and security needs Examples are: freedom from colonialism, freedom from threats, freedom from pain, freedom from terror and the like.
3. Social needs Examples are: having friends, having family, the need for love and the opposite sex, etc.
4. The need for appreciation in this category is divided into two, namely external and internal.
 - a. External includes: praise, certificates, awards, prizes, and others.
 - b. Internal includes: the internal category is higher than the external, individuals at this level do not need praise or appreciation from others to feel satisfied in their lives.
5. Self-actualization needs

Health Belief Model Theory

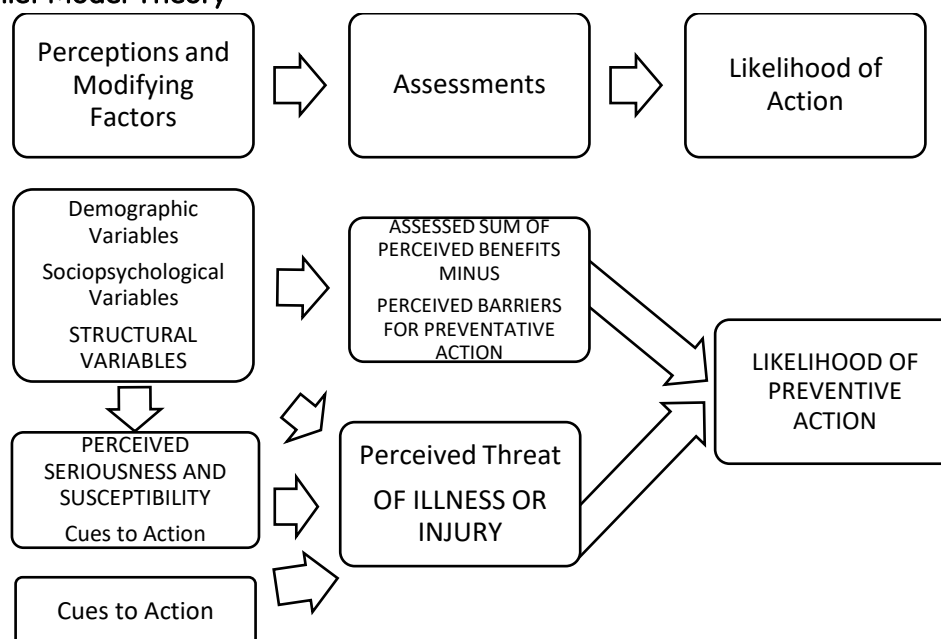


Figure 5. Health Belief Model Theory

This theory was developed in the early 1950s and is based on community participation in early tuberculosis detection programs. Analysis of the factors influencing this community participation was then developed into the behavioral theory of the Health Belief Model. The Health Belief Model is based on three factors:

1. Individual readiness to change behavior, to avoid disease and minimize health risks.
2. Encouragement from society that influences individuals to change behavior.
3. The behavior itself.

The three factors of the Health Belief Model theory are influenced by other factors related to the individual's personality, the environment in which the individual lives, and their experience using health facilities and services. Individual readiness is influenced by perceptions of vulnerability to disease, motivation to minimize vulnerability to disease, potential threats, and the belief that behavioral change will provide benefits. Meanwhile, factors influencing behavioral change are the behavior itself, which is influenced by individual characteristics, the individual's assessment of the change, interactions with providers, and experiences with similar behaviors.

Lawrence Green's theory

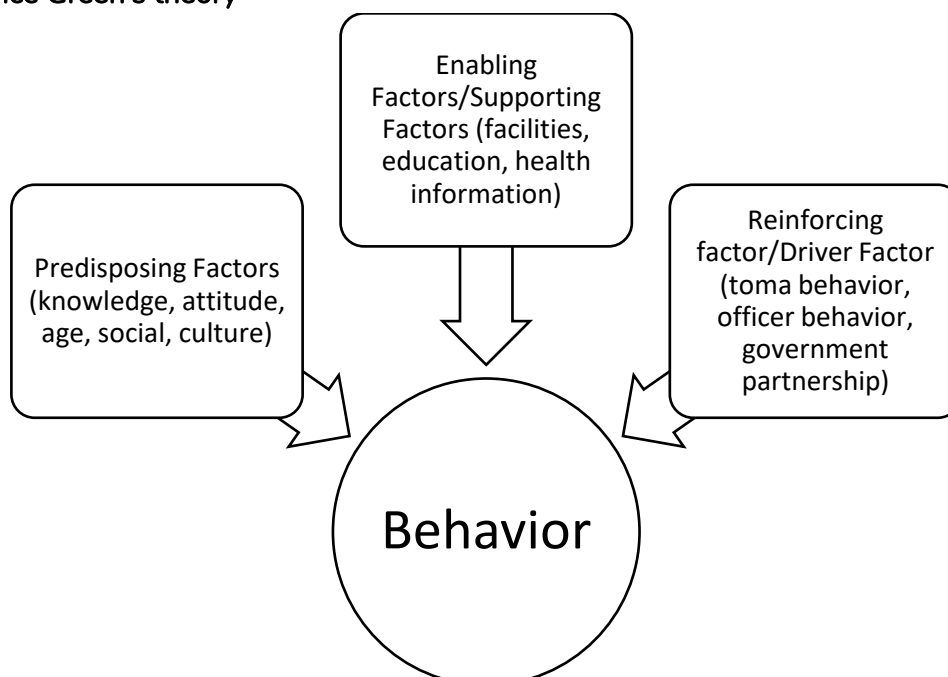


Figure 4. Lawrence Green's theory

Green's theory says that behavior is influenced by three factors, namely:

1. Predisposing factors are factors that can facilitate changes in behavior and are manifested in knowledge, attitudes, beliefs, values, and culture.
2. Supporting factors are factors that support and facilitate behavioral changes, such as health service facilities, education, and health information. The 1950s and were based on tuberculosis. Analysis of Falun Gong was then developed into: to avoid basic diseases
3. Reinforcing factors are factors that strengthen the occurrence of behavioral changes in both individuals and society.

Sociology

Sociology is a branch of social science that studies society. One subfield of sociology is the sociology of health, which places issues of disease and health within a sociocultural and behavioral context. This includes an overview of theories related to the distribution of disease in various social groups; the behaviors or actions taken by individuals to improve health, prevent, and treat disease, as related to cultural values and social factors related to the health care system.

The sociology of health is an approach that views various health issues as social problems of individuals, therefore requiring good public policies such as housing and environmental policies to support disease prevention and health promotion. Changes occurring in society can encourage not only changes in lifestyle and social patterns in society but also changes in disease patterns from infectious diseases to degenerative diseases. Furthermore, these changes can impact people's decisions to obtain more participatory health care.

Anthropology

Anthropology is a social science that studies humans in relation to human culture and society. Anthropologists often define anthropology as the study of humanity, observing and studying humans and how they behave according to culture and social norms.

Medical anthropology is a branch of anthropology that explains various problems regarding the relationship between human behavior, culture and biology with healthy and sick behavior that influences the level of health and disease, including prevention efforts, seeking treatment, and efforts to cure disease. Methods with an anthropological approach used to understand behavior can be done through observation and interviews.

Demographics

Demographics, or population statistics, and population data are needed to develop policies and programs, for example, to reduce birth rates, improve health services, and improve population distribution. Demographic data can also be used to describe the socioeconomic status of a country's population.

The benefits of demographics include:

1. To study the quantity, composition, distribution of population in an area and its changes.
2. Past growth and estimates of population growth and socio-economic development aspects.
3. C. Studying and anticipating the possible consequences of population growth in the future.
4. As an analytical tool used to dissect issues related to population problems.

The process of collecting population data is carried out in the following ways:

1. Enumeration/registration
2. Survey
3. C. Census
4. Questionnaire
5. Form

Population policy in the health sector aims to reduce mortality, particularly maternal, infant, and child mortality. Population policy is essentially a policy aimed at influencing three main demographic variables: mortality, fertility, and mobility. According to the 2012 Indonesian Demographic and Health Survey (SDKI), the maternal mortality rate was 359 per 100,000 live births and the infant mortality rate was 32 per 100,000 births. Meanwhile, the Total Fertility Rate (TFR) in Indonesia has stagnated for 10 years, remaining unchanged at 2.6 per woman aged 14-49 years, while the Age-Specific Fertility Rate (ASFR) for 15-19 years decreased slightly from 51 per 1,000 women aged 15-19 years to 48 per 1,000 women aged 15-19 years. Therefore, acceleration and revitalization of the Family Planning (KB) program are necessary to achieve a TFR of 2.

Five Levels of Disease Prevention

Health Promotion

At this level, general measures are taken to maintain a balance between pathogens, hosts, and the environment, thus benefiting humans by increasing immunity and improving the environment. These measures are performed on healthy individuals. Examples include the following.

1. Provision of healthy and sufficient food (both quality and quantity).

2. Improvement of environmental hygiene and sanitation, for example provision of clean water, garbage disposal, disposal of feces and waste.
3. Public health education, for example, for the upper-middle class in developing countries regarding the risk of coronary heart disease.
4. Exercise regularly according to individual ability.
5. Opportunity to get entertainment for mental and social development.
6. Responsible marriage advice and sex education.
7. Recreation or entertainment for mental and social development

General and Specific Protection Against Certain Diseases

This is a procedure still intended to prevent disease, halting the interaction between the pathogen, host, and environment in the prepathogenesis stage, but is already targeted at a specific disease. This procedure is performed on a healthy individual who is at risk of developing a particular disease. For example:

1. Providing immunizations to vulnerable groups to prevent disease through National Immunization Week (PIN) activities.
2. Isolation of sufferers of infectious diseases, for example those with bird flu are placed in an isolation room.
3. Preventing accidents in public places and workplaces by using personal protective equipment.
4. Protection against carcinogenic, toxic and allergenic substances.
5. Controlling sources of pollution, for example by carrying out "jumsih" (clean Friday) activities to clean rivers or gutters together.
6. Use of condoms to prevent transmission of HIV/AIDS.

Early Diagnosis and Prompt Treatment

This is the act of detecting disease as early as possible and administering immediate treatment with appropriate therapy. For example:

1. Pregnant women who already have signs of anemia are given Fe tablets and advised to eat foods that contain iron.
2. Identifying sufferers in the community through examinations, such as blood tests and chest X-rays.
3. Look for all people who have been in contact with people with infectious diseases (contact persons) to be monitored so that if the disease arises, treatment can be given immediately.
4. Carry out screening for early detection of cancer.

Disability Limitation

It is the appropriate therapeutic management of patients with advanced disease to prevent the disease from worsening, cure the patient, and reduce the likelihood of future disability. Examples:

1. Perfect treatment and care so that the patient recovers and no complications occur, for example using a cane for a disabled leg.
2. Prevention of complications and disabilities by not performing heavy movements or forced movements on the disabled leg.

3. Improvement of health facilities to support the possibility of more intensive treatment and care.

Health Recovery (Rehabilitation)

This is a procedure intended to return patients to society so they can live and work normally, or so they don't become a burden on others. Examples:

1. Develop rehabilitation institutions that involve the community. For example, institutions for the rehabilitation of former commercial sex workers (CSWs), former users of narcotics, psychotropics, and addictive substances (NAPZA), and others.
2. Raising public awareness and accepting them back by providing moral support, at least to help them survive. For example, by not ostracizing former sex workers in their communities.
3. Developing social rehabilitation villages so that every disabled person is able to defend themselves.
4. Counseling and follow-up efforts that a person must continue to undertake after he has recovered from an illness.

Social Science Methods and Techniques

Quantitative Methods

Methods used to examine social phenomena from a measurable perspective using a number of variables, including statistical methods, quantify societal phenomena before analysis. One such quantitative method is polling.

Qualitative Methods

A method used to examine social phenomena from a perspective that is difficult to measure numerically or mathematically, even though the observed social phenomena exist within society. Qualitative methods are used to obtain information for drawing conclusions and making decisions. Types of qualitative methods:

1. Historical method: a method of observation that analyzes past events to formulate general principles.
2. Comparative method: an observation method for comparing various types of societies and their fields to obtain differences and similarities as an indication of past and future societal behavior.
3. Case study method: an observation method that observes the conditions of individuals, groups, communities and institutions.

The instruments commonly used in qualitative methods include:

- a. In depth Interview (In depth interview)
- b. Direct observation
- c. C. Focus Group Discussion (FGD)
- d. Group Discussion
- e. Documentation study/archive study

Other Methods

Apart from quantitative and qualitative methods, there are several other methods, namely:

1. Deductive method: A method that studies things that apply generally to get specific conclusions.

2. Inductive method: A method that studies specific things to reach general conclusions.
3. Empirical method: A method that prioritizes real conditions in society.
4. Rational method: A method that prioritizes reasoning and common sense logic to achieve an understanding of social problems.
5. Functional method: A method used to assess the function of social institutions and the social structure of society.

CONCLUSION

A social science approach is crucial for understanding and addressing various public health issues. Disease is not solely biological but is also influenced by the physical, social, and cultural environment, as well as individual behavior. Theories such as the epidemiological triangle, Blum's theory, Maslow's theory, the Health Belief Model, and Lawrence Green's theory demonstrate that health behavior is shaped by the complex interaction of predisposing, enabling, and reinforcing factors. Furthermore, understanding through sociological, anthropological, and demographic perspectives provides in-depth insights into designing community-based health interventions. Therefore, utilizing both qualitative and quantitative social research methods is key to formulating more effective and contextual health policies.

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