AN OVER VIEW OF PUBLIC HEALTH SYSTEM IN GHANA: AN ADJUNCT OF THE PENDERS HEALTH MODEL

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Abstract: A health system, also sometimes referred to as health care system or as healthcare system, is the organization of people, institutions, and resources that deliver health care services to meet the health needs of target populations. Public health is the venn diagram in which the term epidemiology is a subset and it refers to the study of the distribution of disease in human populations, against the background of their total environment. In some countries, Public health system planning is distributed among market participants. In others, there is a concerted effort among governments, trade unions, charities, religious organizations, or other co-ordinated bodies to deliver planned health care services targeted to the populations they serve. However, health care planning has been described as often evolutionary rather than revolutionary.

Key Words: Health care sytem, health system, distribution pattern, community, primary health, medicine, public health, penders health model.

1.0 INTRODUCTION:

Public health is the science and art of preventing disease, prolonging life, and promoting physical health and efficiency, through organized community efforts, for the sanitation of the environment, the control of community infections, the education of the individual in the principles of personal hygiene, the organization of medical and nursing service for the early detection and preventive treatment of disease, and the development of the social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of health (winslow 1923).

2.0 DISCUSSION:

2.1 The Link between Public Health Services and Distribution

Public health service in Ghana in order to be able to reach the community’s need in terms of disease prevention, evaluation and monitoring should be able to conceptualise the three major questions which are usually asked in epidemiology,:

1. **Who?** What is the distribution of the disease in terms of persons? Who is affected? Women, children or farmers?

2. **Where?** What is the distribution of the disease in terms of place? Which place is this problem occurring? Along the coast, within forested areas or in the cities?

3. **When?** What is the distribution of the disease in terms of time? When did this problem begin, a few days ago, a week ago or months ago? Answers to these questions would either provide clues to the factors which determine the occurrence of the diseases or be a platform for more in-depth analysis to be carried out.

The public health services of Ghana through the ministry of health and the Ghana health services do not base their programmes wholly on the essential elements of modern public health (identified from Winslow's definition by Beaglehole and Bonita (1997), which states that there should be :

1. Collective responsibility;
2. Prime role of the state in protecting and promoting the public’s health;

3. Partnership with the population served;
4. Recognizing underlying socio-economic determinants of health and disease
5. Identifying and dealing with proximal risk factors;
6 Multidisciplinary basis for action.

2.2 Effectiveness of Data Collection to Augment Efficient Public Health service ;

Apart from data derived from the health services, information relevant to health can be obtained from other sectors of government:

(a) Education (literacy rates, especially in girls and women);

(b) Public works (housing, water supply, sanitation);

(c) Agriculture (food production and distribution);

(d) Economic planning and development (poverty, economic indicators).

Public health services should be able to educate and sensitise the community about the four terms that is commonly used to describe different aspects of public health which are;

(1)Preventive medicine;

(2)Social medicine;

(3)Community health;

(4)Community medicine

These aspects should be elaborated on in order to achieve about 80% of disease prevention and avoidance of illness rather than control and cure.

2.2 Brief Descriptions;

Preventive Medicine:

Preventive medicine description given to public health differentiates public health from the clinical disciplines that are primarily involved with the care of the sick.

Prevention was initially construed narrowly in terms of protective measures like vaccination and improved nutrition that target only healthy people with the aim of preventing the onset of disease.

This concept was extended to cover the early diagnosis and treatment of sick persons with the aim of preventing advanced diseases and in the case of communicable diseases, in preventing the spread within the community. A further extension of the definition covers the treatment of sick individuals aimed at reversing damage and restoring function. This concept led to the classification of prevention into three levels (1^0, 2^0 and 3^0) later to be differentiated into five stages.

Social Medicine:

The rise of social medicine coincided with increasing realization of the links between social status and the health of individuals and communities.

Statistical analyses of mortality and morbidity data show strong correlation between the social stratification in society and the pattern of health and disease. At one end of the scale, the affluent educated privileged groups, including professional persons, senior managers and employers, enjoy significantly better health than the poor, deprived, illiterate and unemployed.

Numerous studies in many countries confirm this association and point to the need for social interventions to complement biomedical tools in improving the health of the deprived sections of the community. The objective of social medicine is to identify the social determinants of health and disease in the community and to devise mechanisms for alleviating suffering and ill health through social policies and actions.

Social medicine is based on certain fundamental assumptions:

1. Health as a birth right, which is, everyone has the right to enjoy the highest possible level of health.

2. The responsibility of the state ; It is the duty of governments to ensure that the people have the basic elements that would enable families and individuals to maintain good health and that they have access to good quality health care.

3. Development and health are inter-related; Good health promotes development, and development promotes good health.

4. Education promotes health; the strong association between health and level of education is particularly striking with regard to women's education. It affects their health status and behaviour as well as that of their children. The better educated a woman is the better health she enjoys.

5. Social factors have a profound influence on health; Culture, behaviour, social organization, to such lifestyle choices as the use of tobacco and alcohol, diet, nutrition and exercise.

The pandemic of HIV/AIDS has highlighted the health importance of sexual behaviour, making sex literally a matter of life and death: life in its reproductive function and death in its association with the risk of acquiring deadly diseases.

2.3 Local Ethics and its Impact on the Public Health Service;

Behavioural scientists are also interested in healthcare seeking behaviour of individuals and families ranging from the self-treatment at home, to consultations with traditional or orthodox medical practitioners. Information about beliefs, attitudes and behaviour provides the rational basis for developing programmes of health education for individuals and communities.

Social medicine emphasizes the relationship between social factors and health status. It draws attention to the need for a multidisciplinary approach to health with deep involvement of social and behavioural scientists, economists, ethicists and political scientists.

Community Health:

Community health deals with the services that aim at protecting the health of the community. The interventions vary from environmental sanitation including vector control to personal health care, immunization, health education etc. It includes an important diagnostic element – 'community diagnoses – aimed at surveying and monitoring community health needs and assessing the impact of interventions.

This usually refers to services that are provided at the community level and is now often encompassed in the new term primary health care. Community physicians, nurses and other healthcare personnel are involved in providing care at clinics, health centres and in people's homes.

2.4 Features of Public Health in relation to Community Health Promotion, Awareness and Restoration of Health

Important characteristic features of modern public health should include the following. It should be:

(a)Multi-disciplinary;

(b)Multi-sectoral;

(c)Evidence-based;

(d)Equity-oriented

Multidisciplinary; although medical practitioners constitute a vital segment of the public health practitioners, the contributions from other health-related disciplines are absolutely essential for achieving the goals of public health.

Thus, the public health team would include, as required; doctors, nurses, midwives, dentists and pharmacists; anthropologists, economists and other social scientists; philosophers, ethicists and other experts on moral sciences, as well as educationists, communications experts and managers.

It is noteworthy that at the peak of its achievements, the late James Grant, a lawyer by profession, led UNICEF. Leadership in public health has to be earned from demonstrated ability and performance and not granted as a matter of course to the individual with a medical degree.

Multi sectorial; the health sector has two distinct roles. It is primarily responsible for planning and delivering health services. It also has an important leadership function in mobilizing inter sectorial action.

It should work with other ministries: with public works on water and sanitation; with education on the health of school children and health promotion; with transport on the control of road traffic accidents; and with agriculture on food security, nutrition, use of pesticides and the control of zoonotic infections.

2.5 Evidenced based:

Modern public health demands that decisions should be science-based and knowledge-based. As far as possible, policy-making should be made only after objective analysis of relevant information. Where information is lacking, there is a clear indication for gathering data and carrying out research to inform decision-making. It is often stated that researchers should present their results in a way that decision-makers can apply their findings.

By the same token, policy-makers have the responsibility to ensure that their decisions are based on the best available scientific evidence. Both researchers and policy-makers with their common interest in promoting the health of the population need to work closely together in generating and using sound evidence as the basis of decision-making.

2.6 Equity based:

Public health programmes must be designed to promote equity as the ultimate goal of all health action.

The aim is to ensure for each member of society the highest possible level of health. Public health programmes should actively monitor equity and make necessary corrections.

Public health practitioners must adopt a strong advocacy role in persuading decision-makers and influential members of society that, in the long run, equity in health is to everyone's advantage as a means of securing sustainable development and strengthening the social contract among citizens from a wide variety of backgrounds and between them and their governments. It should be made clear that solidarity with the poor is not merely an act of charity but a mechanism for promoting the welfare of all peoples.

2.7 Functions of Public Health Services in Community Development;

Public health services perform a wide range of functions, which can be classified as four key elements:

(1) Assessing and monitoring of the health of the population;

(2) Planning, implementing and evaluating public health programmes;

(3) Identifying and dealing with environmental hazards;

(4) Communicating with people and organizations to promote public health

The main objective of the Ghana public health service is to identify and deal with health problems of the population.

3.0 ANALYSIS:

3.1 Assessing and monitoring of health of population:

The activities range from the investigation of an acute epidemic outbreak to longer-term definition of the priority health problems and their determinants. The public health approach also includes a ranking of problems in terms of their contribution to the burden of disease and their amenability to control through cost-effective interventions.

The information gathered provides a sound basis for making decisions about the best approach for dealing with an acute emergency such as an outbreak of an epidemic disease like cholera; it also provides the basis for broader and longer-term decisions about policy, priorities and programmes.

3.2 Planning, implementing and evaluating public health programmes:

Public health practitioners are also concerned with the design and management of public health programmes at district, regional and national levels. Their role is dominant at the primary healthcare level but they are also involved in decisions that affect services for the referral and specialist centres.

3.3 Identifying and dealing with health hazards:

Protection of the population against environmental hazards including accidents is a prime function of public health. This is a well-recognized traditional role of public health with regard to the provision of safe water, the disposal of wastes, control of vectors and modern hazards from toxic wastes and radioactive chemicals.

3.4 Communicating with people and organisations to promote good health:

Effective communication is an important tool that public health workers use to bring about: change in the behaviour of individuals and communities as well as advising organizations within and outside the public sector on health-related issues

3.5 The Link between Public Health and Primary Health Care:

3.5(i) The Aspects of Primary health care

Primary health care is essential health care based on practical, scientifically sound, and all socially acceptable methods and technologies made accessible to individuals and families in the community. Primary health care is an approach to health care that promotes the attainment of good health by all people at a level that will permit them to live socially and economically productive lives. This type of health care is health care that is essential, evidence-based, ethical, accessible, equitable, affordable and accountable to the community (WHO, 2004).

Primary health care incorporates personal care with health promotion, the prevention of illness and community development. The philosophy of this type of care includes the interconnecting principles of equity, access, empowerment, community self-determination and inters sectoral collaboration. It encompasses an understanding of the social, economic, cultural and political determinants of health. Primary health care is, therefore, based on five main principles of equity, community participation, inter-sectoral approach, appropriate methods and health promotion and prevention as stated by Keleher (2001);

(a) Equity

The principle implies that health care services should be physically, socially and financially accessible to everyone. People with similar health care needs should have equal access to similar services. To ensure equal access, the distribution of resources and coverage of primary health care services should be greatest in those areas with the greatest need.

(b) Community participation

In addition to the health sector, families and communities need to get actively involved in taking care of their own health. Communities should participate in activities such as creating and preserving a healthy environment, maintaining preventive and primitive health activities, sharing information about their needs and wants with higher authorities and implementing health care priorities and managing clinics and hospitals.

(c) Inter-sectoral approach

Primary health care requires a coordinated effort with other health-related sectors whose activities impact on health for example, agriculture, water and sanitation, transportation and education. This is necessary to achieve social and economic development of a population. The health sector should lead this effort. The commitment of all sectors may increase if the purpose for joint action and the role of each sector is made clear to all concerned

(d) Appropriate methods

An increasing complexity in health care methods should be observed upward in primary health care. Care-givers should be trained to deliver services using the most appropriate and cost-effective methods and equipment for their level of health care.

(e) Health promotion and prevention

Primary health care requires a comprehensive approach that is based on the following interventions:

i. Primitive - addresses basic causes of ill-health at the level of society
ii. Preventive- reduces the incidence of disease by addressing the immediate and underlying causes at the individual level.
iii. Curative- reduces the prevalence of disease by stopping the progression of disease among the sick.
Iv. Rehabilitative- reduces the long-term effects of complications of a health problem.

3.6 PRIMARY HEALTH CARE:

Primary health care is the main vehicle through which an acceptable level of health could be achieved. It is concerned with the main health problems in the community and the services reflect the political and socio-economic patterns. In order to make this healthcare readily accessible and acceptable in the community, maximum self-reliance and community participation for health deployment are essential. Such involvement enables communities to deal with their health problems in the most suitable ways, and community leaders are in the better position to make rational decisions concerning primary health care and to ensure appropriate support for health projects (Helman, 2000; von Wolputte and Devisch, 2002).

Due to the high cost of primary health care, there was a dire need for developing countries to redistribute functions and responsibilities with the purpose of reducing costs and at the same time increasing efficacy and productivity. On the whole, facilities and health manpower were reasonably adequate. Many such countries, due to lack of adequate resources to fulfill these, adopted unorthodox measures such as the exploitation of useful traditional health practices. These included a wider use of locally produced herbal medicines and the incorporation of traditional health practitioners into the health team (WHO, 2002).

4.0 FINDINGS:

4.1 Public Health Service in Ghana and it's relation to the Perspectives of Primary Health Care:
Many health care problems, such as poor sanitation and lack of clean running tap water supply, lack of proper health services, together with poor housing and poverty were mostly experienced during the 1970s, particularly in the rural areas in the African Continent.

These problems contributed to high morbidity and mortality rates of children that could have been prevented with the correct measures. The WHO considered primary health care as one of the strategies comprehensive enough to

address the financial, developmental, health, educational and other problems that existed in these countries and which affected the quality of life (Dennill et al, 1999).

4.2 South Africa as an Exemplary Module for Ghana:

The Republic of South Africa experienced problems of sanitation and lack of clean running tap water supply, lack of proper health services, together with poor housing and poverty, though to a lesser extent, the proposed primary health care strategy in the country was seen as a way of providing quality comprehensive health care to all citizens. The Department of Health subsequently adopted primary health care. In 1996 this strategy was incorporated into the country's National Health Plan for South Africa (Dennill et al, 1999).

Throughout much of the twentieth century, South Africa was a global leader in the conceptualization and development of the Primary Health Care approach. It's seminal contributions include: the Pholela Health Centre Model; the pioneering health system policies of the Gluckman Commission; development of the community-oriented primary care movement; the apartheid-era emigration of South Africa's leading community-oriented primary care proponents and subsequent dispersion and development of community-oriented primary care internationally; the development of progressive

Primary Health Care Movement; and experimentation with new models of health service delivery and primary care.

These achievements remained fragmented and of limited impact as a result of hostile state interventions and an egregious policy environment prior to and throughout the apartheid era (SAHR, 2001)

Despite structural reform and genuine commitment to achieving 'Health for All' over a decade, a series of obstacles continue to limit the full implementation of Primary Health Care strategies today. These include: the HIV and AIDS pandemic; health worker shortages and inequities in resource distribution; shortcomings of political, public sector and medical leadership; and a complex and protracted health transition. While there is strong justification for a renewed commitment to, and major investment in Primary Health Care today, this effort must go beyond addressing these persisting challenges, and more broadly incorporate innovative health system designs and experimental work at scale, in order to reorient today's over-bureaucratized and often rigid primary care system (Baloyi, 2009).

4.3 Primary Health Care: The health care provider's perspective

Since the Alma Ata Recommendation in 1978, many health care providers were selected and offered training in primary health care. Primary health care providers are medical doctors, nurses and community health care workers whose task is to improve the health of communities, often in co-operation with the communities or agencies and organizations.

They provide health care services that range from curative and preventive strategies, child care, family planning, healthy nutrition, immunization and hygiene. The health care providers perceive primary health care services as the first hand accessible health care services provided to the patients and communities at an affordable cost. Primary health care was accepted as the first and nearest contact between the individual and the health care system (Helman, 2000).

4.4 BASICS OF PUBLIC HEALTH IN GHANA AND THE PENDERS HEALTH PROMOTION MODEL

Pender's framework purported that the acquisition and maintenance of health-promoting behavior depends upon three components: cognitive/perceptual actors, modifying factors and cues to action. The framework supports the theory that attaining and maintaining health depends on actions and behaviors undertaken by the individual threatened by real or potential disease.

The theory hypothesizes that some individuals or groups develop life styles and patterns of behavior which are aimed at the attainment of higher levels of wellness and positive health states, not just the avoidance of disease.

The model contains cognitive-perceptual factors, modifying factors and cues to action. Each category addresses an aspect of human behavior (Pender, 2005).

The Health Promotion Model (HPM) categorizes the factors influencing behaviors similar to the HBM. Modifying factors, cognitive-perceptual factors and variables influencing the likelihood of action, are delineated. The health belief model (HBM) is a health protective model whereas the HPM is focused more on achievement of higher levels of well-being and self-actualization.

Modifying factors include behavioral and situational factors, interpersonal influences, and biological and demographic characteristics.

Behavioral factors describe the person's prior experiences with a given activity. The activity and associated information previously learned may influence the person's self-efficacy in resuming participation in the activity.

Situational factors may influence behavior as it relates to the surrounding environment. For example, if a person desires to lose weight, but only has high calorie or high fat food/meal options available they will be more challenged.

Interpersonal influences relate to social support and expectations of others. A respected clinician that advises a client to quit smoking can provide the impetus for the client to quit. Families and work colleagues are other sources of encouragement or discouragement toward a change of behavior.

Age, gender, income, ethnic, racial and educational background comprises the demographic characteristics associated with the model. For example, as an individual's income increases there is a greater likelihood the participant will engage in preventive services. This aspect provides meshing of the HPM with the concept of self-actualization.

Cognitive/perceptual factors, for example perceived self-efficacy, perceived health, definition of health and perceived barriers are considered to be the primary mechanisms directly affecting the chance of adopting health-promoting behavior. Modifying factors, for example demographic characteristics, biological characteristics and interpersonal influences, are mediated through the cognitive perceptual factors.

Cues to action may be internal or external and serve to stimulate behavior actions such as feeling of elation after exercise, peer encouragement and mass media (Pender, 2005).

Basic needs must be met before the client aspires to higher levels of self-actualization. These modifying components are suggested to indirectly affect health behaviors; however, cognitive-perceptual factors are the primary motivating mechanisms for acquisition and maintenance of health promoting behaviors.

The cognitive-perceptual elements include items such as, importance of health and perceptions of control of health, self-efficacy, and definition of health, health status, benefits of and barriers to health-promoting behaviors. The importance of health is clearly within the client's value scale; however, if health is not a priority or highly valued, the client may be less likely to act. It is at this juncture that a spiritual component could possibly be inferred given the definitions of spirituality and the relatedness to sense of purpose and values.

Different types of programs will be required for individuals with an internal versus external locus of control. The locus of control determines the individual's program expectations and outcomes. Externally controlled participants may not do well with an individual or self-directed program, and consequently require a group format. Research has demonstrated that locus of control can be accounted for by the perceived control of health, which directly relates to the client's confidence in their personal ability to accomplish the task.

5.0 RECOMMENDATIONS:

Limitations of Community Health Services in Ghana in relation to Penders model of health promotion

There are enormous problems with the public health system in Ghana ranging from lack of skilled labour to lowered self-esteem which moves parallel to penders model that brings health freedom, self-esteem and sound mind to the individual, community and organization he/she finds himself. Below are few major ones if dealt with could bring progress to the public health systems in Ghana and become a complement of penders model of health promotion:

(a) Avoidance of autocratic decision making by mangers, Policy makers and political powers in charge of health systems.

(b) Effective supervision, independent auditing from basic level to the highest hierarchy

(c) Staffs should be motivated and recognized, this will let them give in their best.

(d) Public health personnel should have time to interact with the community and its opinion leaders in other to be able to use the problem based methodology .

(e) Well-structured budget are to be allocated to the health systems with supervision since health care is sparsely scattered.

(f) NGO'S in public health and donor agencies should be given tax exemptions, a serene and conducive environment to work and this can bring more help to improve various communities and rural areas.

(g) Communication should be enhanced effectively since there are numerous tribes and and ethnic groups in Ghana

(h) There should be advancement in community assimilation and involvement in public health practices, health promotion/campaigns, awareness creations.

(i) Effective consultation and information using the mass media to promote primary health

6.0 CONCLUSION:

The writer thinks that if below listed practices are taken, then in no time the public health service of Ghana would be a model to many other developing countries

(a) The use of indigenous knowledge in primary health care will let the community understand completely what is been done.

(b) Promotion and respecting the culture of our communities will let the community to embrace public health and this could act as a health tool and determinant

(c) strong and regular mass education on other public health issues like sanitation, water purification system, waste disposal system will help public health to achieve its aim apart from disease control through immunization, vaccinations etc.

(d) Assimilation and community involvement in health promotions, campaigns etc will improve the public health system.

(e) Policy makers on public health should involve district health officers and other sector leaders in order to get an integrated policy.

(f) There should be a good understanding and openness between community traditional healers and the orthodox practitioners in order to promote good and safety health

(g) There should be more research and publications on community health and policy makers should also use their finding in their draft

(h) There should be management information systems, monitoring and evaluation on all public health programmes.

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