HEALTH SERVICES☆

by

Dr. P.N. GHEI,

M.B.B.S., M.S. M.H.A., By M.S. and A.P.H.A.,

All-India Institute of Medical Sciences, New Delhi.

Provisions of Health services to the community are to a large extent the responsibility of the government in India. Health services are services which are designed to promote, preserve and restore health, prevent disease and minimise effects of illness, provide rehabilitation of the individual, family and the community. Health *per se* is a state responsibility under the Indian constitution and, therefore, the patterns of organisation of health services do not conform in the states; though, in general now they are based on the common philosophy of providing integrated comprehensive health services to the entire rural and urban population through a basic health service complex. Health services from the consideration of organisational standpoint are broadly divided into:

Public Health

and

Personal Health Services

The organisation and administration of personal health services which are mainly for the diagnosis, treatment, and rehabilitation of those affected with disease or disability is called Medical case Administration.

It may be pertinent to examine the "Meaning" of "Integrated Health Services." This is a health service which has a unified rather than a segmental approach in dealing with health problems and, therefore, medical care of the sick and conventional public health programmes are under a single Director; operated in a unified manner at all levels of the hierarchy; so planned, organised and implemented that they fit together in a dove-tailed fashion so as to be complementary to each other; so that the needs of both the *sick and the healthy* are looked after; each is given the priority it deserves, so that a balanced community health programme results.

The present concept of health (W.H.O.) is that "Health is a complete state of physical, social and mental wellbeing and not merely the absence of disease or infirmity."

☆ Paper presented during the seminar on "Organisation of Health Service in Developing Countries"

Every country of the world has evolved health services-based upon many compelling social and historical considerations. In the following paragraphs it is intended to briefly trace the evolution of Health services in India.

1. Till the end of 19th century there were practically no organised health services in India. The first stimulus for this purpose came from epidemics in Calcutta, when considerable number of British Army Personnel died. This resulted in the appointment of Health and Sanitary commissioners in Calcutta, Madras and Bombay and a Port health officer in Bombay. The army was more and more associated with health administration and its main function was to fight epidemics. A central health commissioner was also appointed to co-ordinate the work of regional commissioners.

2. After the introduction of Montague-Chelmsford Reforms in 1922, a fair proportion of medicine and public health matters were placed under provincial governments. The centre, however, with its right to render advice and make suggestions had the upper hand and could direct the course of action of state governments even in those matters which were under their control. All sorts of dispensaries were established from 1922-1930. Director Health Services and Director Medical Services were appointed in states and were responsible for two parallel organisations. It was the Bhole Committee report in 1946 which recommended the amalgamation of these two services and gave a plan for comprehensive health care. It was only after 1950 that implementation of its report was taken up. More medical colleges and hospitals were formed, and integration of medical and health services at the central and state levels was started in different states. The process was also extended to Districts, where the offices of D.M.O.H and Civil Surgeon were combined.

3. The present structure of Health services operates at three levels—Centre, State and District. Summary of functions of various levels are given below:—

(a) Centre:

- (i) Planning and issue of directives;
- (ii) Research;
- (iii) International Control of diseases;
- (iv) Implementation of health services in centrally administered areas;
- (v) Medical education; and
- (iv) National programmes for control and eradication of diseases.

(b) State:

- (i) Planning at State level of Central sponsored schemes;
- (ii) Research at State level of problems, peculiar to the State; and
- (iii) Organisation, implementation and supervision.

(c) District:

- (i) Main responsibility for planning the details of health services and the integration of medical and health services;

- (ii) Implementation.
- (iii) Supervision;
- (iv) Education of paramedical personnel; and
- (v) Evaluation.

4. Beyond District level there are two kinds of health organisations:

- (i) Municipal/Corporation for urban areas; and
- (ii) Rural health services.

It may be pertinent to highlight the problems in health services in India before the subject is further discussed. The foremost problem is population explosion and we are almost *adding one Nepal every year. Two million deaths under 1 year of age and four million deaths take place under 14 years of age* and these are mostly attributable to the nutritional deficiencies and communicable diseases. The major communicable diseases which the health services are facing are tuberculosis, filariasis, leprosy, gastro-intestinal diseases, trachoma, smallpox, malaria, etc. Added to these are the problems of illiteracy, ignorance, poverty, superstitions and beliefs, particularly in the rural community. The incidence of stress diseases, accident cases, degenerative diseases and cancer is on the increase and are posing a challenge to the country's health service.

In order to understand the present position of Health services of the community it is essential to understand the natural history of disease and levels of prevention. This concept has been developed by Leavell and Clarke. The essential ingredients of this concept are that the disease occurs as a result of interaction between the agent, host (man), and environment. The agent is animate or inanimate, presence or absence of which initiates or perpetuates disease. The agent may be biological (bacteria, virus, fungus, rickettsia, protozoa, metazoa, etc), chemical, physical nutrient etc. The word environment is used in its broadest sense, meaning thereby that anything surrounding man constitutes environment which includes physical, social, biological and economic factors. Therefore, the word Preventive Medicine used in the aforesaid context, also means to include the so-called term Social Medicine which is used in U.K. and other countries. Interaction of agent, host and environment produces stimulus which acts on the man and produces disease which may end in convalescence, disability, chronicity or death.

This concept is applicable to all types of diseases. The period of interaction between agent, host, environment which always goes on in individuals of the community is called pre-pathogenic phase while the rest of the phase of disease is called pathogenic phase. In pre-pathogenic phase there are two levels of prevention; while in pathogenic phase, there are three levels of prevention. These levels of prevention are as under:-

I. Health Promotion:-

(Health education; good standard of living, provision of adequate housing, marriage):

2. Specific Protection:

(Immunisation, personal hygiene, environmental sanitation, protection against occupational hazards, use of specific nutrients, protection from carcinogens, accidents, etc avoidance of allergens).

3. Early Diagnosis and Treatment:

(Case finding both individual and mass screening surveys, selective examination to prevent and cure disease processes, to prevent the spread of communicable diseases, to prevent complication and sequelae, to shorten period of disability).

4. Disability Limitation:

(Adequate treatment to arrest disease process and provision of facilities to limit disability and to prevent death).

5. Rehabilitation:

(Provision of hospital and community facilities for retraining and education for maximum use of remaining capacities, education of the public and industry to utilise the rehabilitated for employment selective placement, work therapy in hospital and use of sheltered colony).

The provision of health services (medical care) for any community is a varied and complex process. It has to be based on a wide range of methods of financing and multiplicity of organised framework for delivering health. It is very desirable that the "marriage" of financing and delivery of health services be under a unified organisation if possible. The author had occasion to recently discuss this aspect with the vice-president of Blue Cross Association of U.S.A. The patterns of health services can be generalised as under:

- (I) PRIVATE ENTERPRISE
- (II) SOCIAL ASSISTANCE
- (III) SOCIAL INSURANCE
- (IV) PUBLIC SERVICE.

In no country any of the above systems are found in a cent percent pure state. Different permutation and combination of these are found in different countries. The usual trend is to start with the Private Enterprise and develop towards a public service system, through intermediate phases of social assistance and social insurance.

Let us in brief review the essential conditions and ingredients of the aforesaid four systems.

Private Enterprise:

Under this system the main source of providing medical care is by the private practitioner—the patient paying for the services. This practice has been giving

place to "group practice" in recent years. Similarly hospitals are voluntary hospitals where every one pays for service utilised except medical indigent, either directly or through Health Insurance (Blue Cross non profit voluntary prepaid insurance scheme having a coverage of 90 million in U.S.A.—reimbursement to the extent of 35 per cent of expenses incurred by the beneficiary). The best example of this system is in U.S.A.

Social Assistance:

Under this system medical care is included as a social welfare measure and is provided for those who cannot pay for themselves, by the state either by utilizing the services of private practitioner and private hospital or by providing the medical care services by maintaining dispensaries and hospitals. Personnel employed to run these services are maintained by the state.

Social Insurance:

In this system there is usually a compulsory insurance premium to be paid by the people and the agency provides monetary assistance whenever medical care services are required, but usually they do not provide the services themselves and are not responsible for the standards of medical care. The best example is National Health Services in England and Wales.

Public Service System:

In this the government not only finances the medical care services but also actually provides such services for which it is entirely responsible. The best example is the U.S.S.R.

The "Hospital" for the purpose of delivery of health service in any of the aforesaid systems is assuming greater and greater responsibility every day. Truly, community hospital is the focal point of all health services. The Hospital is the most costly portion of Health services today.

The concept of hospital at present held by most of the health workers in India and abroad is as under:-

Hospitals which were previously performing custodial and segregation functions are no longer considered from that point of view. There are number of definitions giving scope of hospital available at present. The most comprehensive definition is one given by World Health Organization (Technical Report Series No. 122).

This is as under:-

"The Hospital is an integral part of a social and medical organization, the function of which is to provide for the population complete health care, both curative and preventive; and whose out-patient services reach out to the family in its home environment. The hospital is also a centre for the training of health workers and for bio-social research."

The hospital of today is a social entity and a community institution, that we have inherited from a long tradition of sheltered institutions which have been developed slowly to a curative institution. But with a growing appreciation of human values and the development of health consciousness as an aspect of social consciousness, it is imperative to review the role and the functions of the modern hospital, in order to place it within the general framework of public health services of the community.

The specific roles played by hospitals (including out-patient department polyclinics P.H.C.) are of great significance and briefed here under:-

It is to the out-patient department and hospital wards that many cases of communicable diseases go in the first instance, and therefore, hospital records and statistics provide early signals of oncoming epidemics and have an important role to play in epidemiological intelligence. The prompt notification and reporting by hospitals is very valuable as it is based on sound clinical judgement of physicians, laboratory diagnosis etc. By the use of this information, necessary steps are taken by the health authorities and thus prevent the spread of a communicable disease epidemic. However, more often than desirable these cases are not reported to the responsible public health agency for the purpose of taking prophylactic measures with regard to other persons in the household. A reporting system between hospital and public health agency must be so organised that any case of communicable disease is reported within a few hours. Vital statistics from hospitals are useful, especially in diseases like malaria, where surveillance is required, cholera, where early epidemic intelligence is essential; and tuberculosis, where domiciliary care is the established policy.

The hospital laboratory also provides laboratory service for communicable disease control in a programme where a co-ordinated pattern of control is worked out. The responsibilities of separate hospital and public health laboratories are fast over-lapping, therefore the unified hospital laboratory of a community hospital will serve equally the prophylactic and the diagnostic needs of the community and the individual. Such a laboratory makes tremendous contributions to sanitary measures.

The hospital also provides facilities for case-finding by screening procedures carried out among certain strategic groups, e.g. pregnant women for syphilis, children and hospital personnel for tuberculosis, surgical patients for filariasis, etc.

Hospital can also provide immunisation for tuberculosis (B.C.G.), poliomyelitis (oral vaccine), smallpox vaccination, D.P.T. (Diphtheria, Pertuses, Tetanus), T.A.B. etc. carried out either in special immunisation clinics or immunisation as part of general care, e.g. in M.C.H. clinics, for hospitals employees health clinic, baby health centre, infectious disease clinics, etc, is also provided by the out-patient department of hospital.

The hospital obtains and transmits important epidemiological information regarding possible sources of infection of hospitalised cases and of possible transmission as in the case of staphylococcal infection, infective hepatitis, poliomyelitis etc. The statistical and epidemiological study of communicable diseases is primarily the responsibility of the

health services where they have equipment and the skills to deal with such problems. In small communities there is no reason why the public health office should not be located within the premises of the out-patient department. It would help the epidemiological studies and simplify the reporting system, to have the diagnostic facilities of the epidemiological set-up under one roof. The departments of preventive and social medicine of teaching hospitals can co-ordinate such studies with the hospital's infection control officer. The best contribution the hospital can make towards epidemiological work is the organisation of a good medical record system and reliable hospital medical service.

Hospitals provide appropriate isolation for patients with certain communicable diseases such as diphtheria, smallpox, poliomyelitis, typhoid, infective hepatitis, enteritis etc. either in isolation rooms of a ward, isolation wing of hospital or in infectious disease hospitals. In case of an epidemic, the hospital sets aside the number of beds necessary.

Hospitals provide specialised services of complex diagnosis as in cases of filariasis, hepatosplenomegaly, special intensive treatment as in case of acute infective diseases, acute poliomyelitis, acute gastro-enteritis etc., surgical procedures in complicated cases of smallpox, or trachoma, poliomyelitis, leprosy, etc. Hospitals also provide facilities for public health authorities to carry out the examination of contacts not only from the point of the view but also with laboratory tests and X-ray.

Hospitals fight sometimes with the help of communicable disease consultant from the community in epidemics of communicable disease within the hospital e.g. hospital infection, cross-infection particularly in nurseries, maternity wards etc.

Hospitals, because of the sources of specialised knowledge available (particularly in teaching hospitals) take extramural interest, and help in the prevention of communicable diseases, particularly in helping the formulation of policies regarding the protection of the community, supply, sewage disposal, food supervision, milk sanitation etc. of the community.

Hospitals also take part in controlling communicable diseases in selected groups of the population served by health insurance or otherwise, as in the case of school population, industrial population, railway workers, melas, religious fairs etc.

The home care service and followup as in cases of tuberculosis etc. are also better when they are hospital based.

The hospital's sterilization centre located as part of the central supply services (C.S.S.D.), also provides facilities for disinfection and sterilizations of fomites in communicable diseases in the community. The absence of incinerators in most of the hospitals is a public health hazard. The availability of incinerators will help in the control of communicable disease. Some of the most modern community hospitals of the advanced countries also provide syringe services to the physician in the community to avoid the spread of serum hepatitis etc. Hospitals provide facilities for research, demonstration,

teaching and training in communicable diseases which are the backbone for advances in the control of such diseases.

Last but not least, the most important specific role is the health education programme planned for the entire community, particularly in the education of communicable disease patients and their families, education of the community to accept small families and on the availability of facilities for controlling the population explosion. Hospitals play a decisively crucial role in the country's time target laid down for the family planning programme. Another important role of health education is to motivate the community towards the current fourth Five-Year-Plan.

In organising for improved and effective health services one must make certain assumptions and adopt certain concepts. The following statements have been found useful in many places.

1. Disease, injury and other disorders, as well as health, have definable natural histories which may be studied and ultimately understood.
2. Research—basic, clinical and epidemiological—will continue to provide needed "tools" to influence these natural histories favorably for man.
3. The knowledge which comes from this basic, clinical and epidemiological research must be applied in the community if man is to benefit. It is this application which is the job of the practitioner.
4. The natural histories which concern us tend to be made up of, on the one hand, biologically determined "Universals" which vary relatively little from one part of the world to another, and, on the other hand, of environmentally influenced "Specifics" which vary considerably from one locality to another. The public health practitioner needs the type of education which will enable him in his thinking to separate the biologically determined "Universals" from the environmentally determined "specifics." Then for each local situation the "Universals" and the local "specifics" may be amalgamated in a program which is locally suitable.
5. As disease susceptible to control by mass measures are conquered, the needed health services come more and more under the heading of personal health services, so that hospitals and other agencies concerned with medical care become increasingly involved.
6. The importance of the concept of comprehensive care for the individual and for his family will be accepted more widely with the passage of time. This involves the provision of care at each of the five levels of prevention: health promotion, specific protection, early diagnosis and prompt treatment, limitation of disability, and rehabilitation.
7. There is every indication that societies will become more complete rather than less so. Therefore it is logical to assume that the need for organised community action in the health field will increase in relative importance. It is with organized

community action that the public health practitioner deals, whether working in government or outside it. There is every reason to suppose that his services will be needed even more in the future than at present.

8. Public health is but one of many aspects of community development. Therefore, for the good of the community the public health practitioner must be educated with other community groups and agencies both within and outside the health field.
9. Community health work must be done by a multi-disciplinary team of persons. Skill in teamwork is therefore an essential element in the armamentarium of the community health practitioner.
10. The provision of personal services, the community itself and organized action for health—all involve human behavior. Even though many variables must be taken into account there is massive evidence that human behavior may be studied scientifically with profit. Use of the investigational tools of the behavioral sciences and the insights provided by mental health research are valuable in such studies.
11. "Administrative research" refers to the health agency's attention to the study, development, evolution and application of improved measures to the planning and organization of hospital and health services.
12. Change will occur, probably at an accelerated rate. Practitioners must be so well grounded in basic essentials and in personal integrity that they may be prepared to cope with change.

Newer Concepts In Health Services Organisation

Health Insurance: This is a system or a programme generally organised under government auspices for the prepayment of Health care and under which Health benefits etc. are provided to beneficiaries. Private Insurance or non-profit insurance programmes for Health care also comes under this.

Regionalisation

This is the organisation and co-ordination of all the health resources within a defined area for the purpose of maintaining the highest level of medical care and adopting a comprehensive health programme to the characteristic needs of the area (GRANT J.B.) Regionalization has *three goals*: first, to co-ordinate a two-way flow of service from the local community through intermediate agencies to the base regional center and back to the local community; and second, to provide a continuing system of education for all health care professionals working in the area; and third, to develop a technical consciousness of their need for health care services among the consumers of each local consumers of each local community.

Progressive Patient Care

This is the organisation of hospital facilities, services and staff around the medical and nursing needs of the patient. It is also described as "the right patient in the right bed with the right services at the right time." The elements of Programme Patient Care (P.P.C.) are:-

- Intensive care,
- Intermediate care,
- Self care,
- Long term care,
- Outpatient care, and
- Home care.

Basic Health Services

It is understood to be a network of peripheral and intermediate health units with a central administration capable of performing effectively a selected group of functions essential to the health of an area, and assuring the availability of competent professional and ancillary personnel to perform the function.

Health Care Measurement

Health care being the result of the interplay of a number of factors, is considered to be multidimensional, and such a multidimensional activity does not lend itself to simple units of measurement. As service being the *outcome* of a health centre operation, evaluation of the quality of medical care cannot be divorced from assessing the efficiency of the operation of a health centre service since both are interrelated.

To effectively maximise on the resources *vis-a-vis* the delivery of health services, it is absolutely imperative to have a cadre of "Managerial Physicians." The facilities for training of managerial physicians and so also middle managers and front-line workers in health services is the urgent need of the hour if we are to justify the trust and confidence entrusted into us by the society. The "four pillars of community health services" viz., the government agencies, the voluntary organisations, the professional organisations and the community co-ordination must be ensured for building up solid foundations for these services for years to come.