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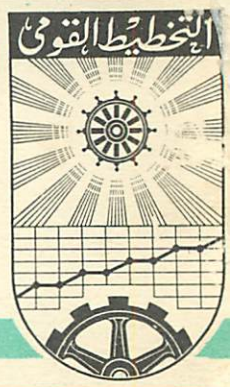


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# PROGRAMME CONTENTS OF HEALTH SERVICES IN RURAL AREAS INCLUDING INTEGRATION OF SPECIAL HEALTH PROGRAMME INTO BASIC HEALTH SERVICES

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# PROGRAMME CONTENTS OF HEALTH SERVICES IN RURAL AREAS IN INCLUDING INTEGRATION OF SPECIAL HEALTH PROGRAMME INTO BASIC HEALTH SERVICES

## I. INTRODUCTION

When one tries to discuss the programme contents of health services in rural areas, it is essential to note that there are cetain phenomena which usually characterize rural communities and rural environment, and consequently have an effect on the pattern of rural health services and their programme contents:

One phenomenon is that the health standard of rural environment and rural communities in most countries is usually lagging behind that of urban living. The village is usually much more under-developed than the city. There are certain variations: occupational, socio-economic, and cultural between rural and urban life. Rural life has is own peculiarities from these different aspects; and these peculiarities affect the health problems and intensify others; they also have a direct bearing on the details of the programme contents of health services necessary to fact these problems in a proper way which conforms with local conditions.

Of course the basic health needs will remain the same in principle with certain adaptations in the details to meet these local variations. These basic health needs are the promotion of health, protection from disease and treatment of the sick plus first aid in case of accidents or emergencies. They include:

1- Protection of health and prevention of disease i.e., communicable disease control, environmental health, nutrition and food control, mental health, etc.

2- Provision of adequate health services to special vulnerable groups. This includes maternal and child health and family planning, and school health programmes.

3- General medical care for diagnosis and treatment of disease and accidents, with priority to diseases of local rural importance.

4- Health education.

Another phenomenon is that related to demographic and geographic characteristics: in rural areas the people live in villages of various sizes at various distances from each other. There are variations from country to country. But in general, this phenomenon governs the shape or pattern of health services that can be adequate to rural areas. Another factor which adds to this is the degree of availability of good roads

and good transportation in rural areas. In the light of these factors and in order that the health services become accessible and easily available to the people, one cannot think of specialized separate health facilities. On the contrary, it is needed to have rural health centres or units each of them providing an integrated health programme for a limited number of rural population.

So the mucleus of rural health services will be the rural health unit. This may be defined as can organization providing or making accessible uner the direct supervision of at leat one physician the basic health services for a community."

Therefore some services will be provided to the people directly by the unit i.e., communicable disease contol including vaccinations, health education, maternal and child health, family planning, school health and some phases of general medical care.

Other services will be made accessible to the people through co-ordination with other health services e°g. dental care and other consultation clinics, and a referral system to tie up these rural health units with the specialized hospitals and centres for referral of cases that need specialized service.

In addition, special disease control programmes, when developed in the country, should be integrated into the basic health services, and the rural health units with additional supplementation and training can and should have an active role in this direction e.g., malaria eradication, bilharziasis control, tuberculosis control, etc. This will be discussed later on.

## II. CONSIDERATION OF STAFFING AND ORGANIZATION

This rural health unit should be equipped by the adequate number and quality of staff and equipment that can enable it to fulfil its objectives. Again there are variations here according to the socio-economic structure of the country, the availability of staff, etc. However, in general, the basic staff required would include:

1. Physician: at least one physician: He should be community-oriented, doing both preventive and curative medicine.

He should be fully responsible of preventive medicine with technical guidance from intermediate levels. As regards curative medicine the situation varies according to the system of medical care existing in the country; however, in general, he will carry on his curative medicine duties at the general practitioner's level. Cases that need specialized care would be referred to the specialized hospitals and centres.

The number of physicians required would be estimated within these variations, as at least one per 5,000 population. Therefore, if the unit serves 5;000 population it needs at least one physician; if it serves 10,000 population it needs two physicians and so on.

2- A sanitarian: At least one sanitarian is necessary, particularly for environmental health, food control, communicable disease control, etc. If the unit serves a big number of population i.e., 10,000 it needs two, one of them may be a sanitary aid or assistant according to the availability of personnel in the country.

3- Laboratory technicians or assistants with adequate training. Usually the number needed would be equal to the number of physicians.

4- Nurse-midwives: Trained nurse-midwives are necessary for MCH services. The number of required is usually at least one per 2,500 population. Some of them would be qualified registered nurse-midwives, others may be assistant nurse-midwives according to the availability of personnel in the country; but there should be at least one fully qualified nurse-midwife in the unit if possible.

As regards the number of population to be served by the Rural Health Unit, this varies according to the socio-economic structure of the country and particularly according to the size of the villages, the distance bteween villages and the condition of roads and availability of adequate transportation. Usually it can vary between 5,000 and 15,000 population per unit. A big number of population and a big rural health unit is more advantageous than smaller ones if adequate transportation both for the people and for the staff of the unit are available; it allows of better service, better specialization, better co-ordination of functions, and can allow of some in-patient medical care particularly for maternities and deliveries, and for some hospitalization of cases that need in-patient medical care within the technical ability of the staff of the unit. Otherwise, a small health unit serving about 5,000 population or sometimes less, becomes a necessity.

Therefore, the number of staff is decided by the number of population to be served by the unit and this latter is decided by the size of villages, distances between villages, condition of roads and availability of adequate transportation.

For small scattered communities where villages have less than 1,000 population and at long distances from each other these create a problem and they may be served from the nearest rural health unit on the following pattern: a local health post in the local community to be visited by the doctor and his assistants on regular schedules set for this purpose; with suitable means of transportation or ambulance, and a workable means of telephone communication for emergency calls; with local health agent to be present in the local health post, to assist the doctor and his staff during their visits to maintain local files and simple statistics, to make telephone calls in emergencies, to report on any communicable disease or other important event, and to carry on vaccination and simple first aid care; and he should be trained on these matters.

## III. PROGRAMME CONTENTS

As mentioned before, the programme of the rural health unit, being the nucleus of rural health services, should be an integrated well-balanced programme to meet the health needs of the rural population, containing both preventive and curative medicine as two aspects of the same service which cannot be separated at this level.

1. Preventive medical services

1.1 Communicable disease control

This is a principal function of the rural health service. In its area of jurisdiction it is the responsibility of the rural health unit. In this respect technical guidance from intermediate levels is both useful and advisable but the service itself is a direct responsibility of the unit.

Particularly in this function of communicable disease control, the doctor works in immediate relation with the administrative authorities. He has the laws and regulations which he enforces, but it also requires good working relations, cooperation, and health education, so that he can succeed, and gain the interest, and cooperation of every one concerned. It is essential that he should succeed in inculcating in their minds that this is a service for the people, not against them.

Communicable disease control includes:

a) Immunization against communicable diseases: This includes: primary vaccination in infancy and childhood against smallpox, diphteria, poliomyelitis, tuberculosis, as well as other vaccination programmes introduced in the country, e.g., triple diphteria, tetanus, pertussis vaccination, measles vaccination etc. It includes also repeat and booster vaccination

at later ages and for special groups, i.e., food handlers, contacts, travellers, etc.

In this respect, the unit should be equipped by both adequate training and the necessary equipment including a suitable refrigerator. Immunization can be performed by both the doctor, the sanitarian and the nurses. It should not be restricted to work within the premises of the unit; it should extend beyond that to the community itself, e.g., in schools and other places especially for people living at distances from the unit. In this respect the unit should preferably and whenever possible have available transportation. As a matter of fact, a car or other suitable transportation is required in many facets of its programme content so that it would be dynamic rather than static, i.e., to go out to the community rather than being confined within its own premises.

b) Early discovery of cases of communicable disease together with discovery of other sources of infection e.g., carriers and animals. This again is another principal function of the unit. The doctor and his staff are in an advantageous situation in this respect, through their integrated programme of preventive and medical services, and through their continuous relation with the community, community leaders, and members of the medical profession. The doctor should not await or depend only on cases reported to him; he should use his epidemiologic sense and his

current knowledge and follow-up of the events going on in the community to enable him to be conscious of the situation in this area and this will help him to discover early cases of communicable disease. His work in the out-patient clinic of the unit and his study of the vital statistics of the unit also help a great deal in this respect.

c) Isolation and treatment of cases: If a case of fever is spotted and is to be isolated in a fever hospital, then the role of the unit is to notify the case, to call for a special ambulance to transfer it, to carry the necessary precautions, e.g., disinfection, surveillance of contasts, investigation of the source of infection, search for other cases, etc. If the case is to be isolated at home, additional duties of the unit would be to take the necessary precautions to ensure that isolation at home is under adequate sanitary conditions, that the patient receives adequate treatment, and to give the necessary health education and guidance to the family.

d) Control of the mode and vehicle of infection: This includes insect control, food control, supervision of sanitary conditions of public places, and other items of environmental health which will be discussed below.

1.2 Nutrition and food control

In many countries malnutrition is an important rural health problem especially among infants and children. Important contributing causes are low economic conditions, deficient nutrition education and the prevalence of intestinal and other parasitic infections. Early discovrey and treatment of these parasitic infections together with adequate nutrition education can help. The nurses of the rural health unit can contribute in this respect both in the unit and by home visits. To enable them to do it effectively they should be trained and guided by nutritionists at the intermediate level. Their tarining should include knowledge, of the food-consumption levels of their local communities, the influences which contribute to the pattern of the diets including the attitudes and economic needs of the people, the weaning practices and the availability of different foodstuffs, so that they would know the practical methods of improving the state of nutrition in rural families.

As regards food control this includes sanitary supervision of food establishments, dairies, public markets, slaughter places, and other similar public places in rural areas. This supervision should be always accompanied by technical guidance and health education.

In addition this service also includes examination of food handlers to exclude carriers. The unit can do clinical examination and take the required specimens for bacteriological examination to be sent to the appropriate laboratory service, and then the unit can certify the food handlers, follow them up and give them health education.

Food control also includes taking of specimens from foodstuffs and sending them for laboratory examinations.

In all instances adequate health education should accompany these procedures.

1.3 Environmental health

Raising the standard of environmental health includes programmes for rural housing, water supply, excreta disposal, refuse disposal, etc. This is principally the function of the local community authorities for housing and public utilities and the village councils. However, the health service should always be ready to play its role: in promoting local public interest in these matters; in giving technical guidance to correct sanitary defects; and sometimes in establishing some demonstration projects either directly by itself or in cooperation with other agencies.

1.4 Public health education

This is a principal function of the health service. The doctor and all his assistants should assume this responsibility and practice health education during their daily activities both inside the health unit and in the community.

Health education is not only by lectures and audio-visual aids. A good work for guidance and advice, and a good example to initiate sound and healthy practices in the every-day behaviour of the staff and in the way the service is delivered or the facilities maintained, are all useful means to health education.

In addition to giving incentives for a change in the attitude of people, health education should also aim towards creating an effective demand for health services among the population through direct relations with them, arousing their interest in order to crystalize their subjective health nedds, and get them to embark positively on a programme that effectively meets the objective local health needs. In this respect health surveys, demonstration projects plus the other activities of the unit can be good tools of health education.

Health education is a team work. At the local level it needs cooperation with the school teachers and the village

leaders; at the intermediate level it needs guidance and support both technical and material, i.e., audio-visual aids and other education material.

1.5 Vital statistics

This is a basic function of any health service. It is vital for the rural health unit to have sound and reliable vital statistics about the community it serves. It is vital for the success of the service in fulfilling its objectives, and it is also vital for the validity of the vital statistics of the country. The local health unit is the local source of collecting statistical data, the validity of which depends on the validity of their source, and this requires good record keeping . Vital statistics by the local health unit should include basic data about the population characteristics, morbidity data, and mortality data. Among those are the following:

- Number of population in every village, age, and sex distribution.
- Births and birth rate.
- Infant deaths, infant mortality rate, neo-natal mortality rate, and still-birth rate; leading causes of infant mortality.

- Total deaths, crude death rate, and specific death rates by age groups, and by causes of death. The international classification of the causes of death should be utilized.

- Incidence and prevalence of various diseases and infections.

With these basic data, basic tables, and charts, and maps should be done for easy reference and to show variation and trends along several years or in the various seasons.

In this connection, and as a part of the function of vital statistics, the ocal health unit is, in many instances, the local agent legally responsible for registration of births and deaths. This is advantageous because it gives the local health service better insight into the vital events of the community, and this helps particularly in the MCH programme, in vaccination programme, as well as in the communicable disease control programme.

With registration of deaths, there comes also another function, again in many instances, and that is the medical examination of the dead, certification of the cause of death and issuing the burial permit. In this respect, the international classification of the causes of death should be observed.

The accuracy of this certification cannot relay only the medical (surface) examination after death; it depends on history-taking and on the knowledge of the previous medical care received by the person before death in the rural health units and here a good filing system would be a useful reference.

2. Maternal and child health

This is a basic and essential function of the rural health service. The rural health unit should always have MCH service as a fundamental part of its programme. In most countries of the region infant mortality is high and at the same time most of the causes of infant portality and morbility are preventable. There may be some kind of obstetric care to mothers and children, but it is usually insufficient in those rural areas. Therefore, the rural health service should have a MCH division with trained nurse-midwives of adequate number under supervision of the doctor who should be trained for this purpose. The unit should also be supplied by the required equipment for this purpse, and an ambulance for transportation and for referral of cases is essential.

MCH work is a dynamic service, it cannot be statically limited to work within the rural health unit. Most of this function is done by sone visits to mothers and children, in addition to deliveries, and in this way should be looked upon as an emergency service that needs ready transportation.

The programme content of MCH service of the rural health unit should include:

a) Pre-natal care, starting early in pregnancy, and extending on through the months of gestation.

b) Care during delivery to accomplish a safe child-birth resulting in a living healthy baby and a healthy mother.

Although hopital delivery is always preferable to home delivery, yet in many instances the people especially in rural areas are usually accustomed to home deliveries, and a maternity section attached to the rural health unit, although desirable, is the refore not a requisite. However, if the rural health unit has an in-patient division, some of its beds may be utilized for this purpose. Speaking of deliveries the unit usually copes with normal cases, which constitute the vast majority. Difficult labour are referred to the nearest specialized centres and there must be a good functioning ambulance service for this purpose.

c) Post-natal care during the puerperium to the mother and her child.

d) Infant and child care which should include both medical care to sick babies as well as a well-baby clinic to follow-up their growth and development, advise on nutrition and protection against communicable diseases by vaccinations, health, education, etc. There should also be provision for care of the pre-mature babies. If separate rooms and incubators cannot be provided, there must be at least provision for simpler means necessary for preservation of body heat, to care for nutrition, and protection from communicable disease. Child care should extend to cover the child in the pre-school age i.e., until he is taken care of by the school health programme.

e) Family planning: The national family planning programme can best be carried out in rural areas by the rural health service and it can then be considered as a supplement to maternal and child health with the concept of extension of this care to the period before conception. The rural health unit is the best place in the village to carry on this service with its two main components, i.e.

   i. Health education to make the public conscious about the problem and its health and socio-economic implications, and about the real objectives of the programme.

ii. Dispensing of the contraceptive drugs and/or application of other contraceptive equipment.

In this respect it is useful that while the rural health service carries on this programme, the people should also feel that it can also help cases of sterility. and make accessible to them the services necessary for investigation and treatment of the cause of sterility.

f) Pre-marital examination and care: With the same concept, the service of the rural health unit may extend before marriage to give medical guidance for those proposing to marry. This requires privacy and good tact to maintain confidence.

3. School health

School health is another basic function of the rural health service in the local community, and the rural health unit should assume and fulfil its responsibilities for this sector of the population. It comprises visits of the doctor and his staff to the school and also visits of the school children to the health service to receive the required medical and health care. School health includes:

a) Sanitary supervision of the school enviroment, and giving guidance and advice to ensure healthful school living.

b) School medical care to school children. This includes periodic medical examination, and to ensure that treatment of sick children and first aid in case of emergencies and available to school children.

c) Vaccination and other communicable disease protection and control activities.

d) School health education which is a mutual function of both the health personnel and the school teachers.

4. Medical care

It is agreed that medical care should form an integral part of the programme content of the rural health service and should be provided to the people, or made accessible to them by the rural health unit, especially when the economic level of the population is low, and when there is a deficiency of other kinds of medical care in the community, as is the case in most instances. When treatment is important in the control of a health problem, e.g., Bilharziasis or Malaria or Syphilis, etc., these should have a high priority. In this respect the preventive as should have a high priority. In this respect the preventive as pect of the function must be stressed even in medical care, i.e., to give a preventive emphasis not so much on the disease in the individual but rather on dealing with community afflictions as a whole.

Medical care at this level of the rural health unit is usually ambulatory or out-patient medical care, with a simple laboratory service attached to it. As regards the dispensing of drugs this may be also provided from the rural health unit especially when there is no private pharmacy in the local area, and when it is intended that the people would not pay for the medicines. It is realized that there are variations of opinion regarding this point.

In-patient medical care can better be provided in hospitals and specialized centres and this needs co-ordination of these levels of service in a well organized referral system so that important cases requiring more elaborate diagnostic and treatment facilities unavailable at the standard of the rural health units should have access to visit and attend staff meetings in the hospital to follow the referred cases and gain more experience and interest. It is useful also that specialists from the hospitals would on regular intervals visit the rural health units affiliated to them and contribute in the technical guidance of their staff. At the same time it will be very profitable if consultation clinics would be arranged in the rural health unit where interesting cases would be assembled locally and be seen by specialists who come to these clinics on a regular schedule. If dental service is not available as

a full service in the rural health unit it can be provided to the local community by organizing such a dental clinic and the dentist would therefore visit the area and provide dental service to the school children and to the community in general; by this way one dentist can cover about three rural health units.

Another example is the ophthalmic clinic for treatment of eye disease and during his visit he can examine and give care to school children and others, and he can also cover about three rural health units. Of course, minor ailments would be taken care of by the unit itself.

Mental health

It is understood that established cases of psychiatric disorders cannot be dealt with at the local level; this needs specialized care which is not expected at the level of the workers of the local unit. Nevertheless, there may be a number of psychological problems, particularly in childhood which may be handled locally; if the local staff are adequately trained in this respect, they can do much to create the necessary conditions for the healthy psychological development of children, and they can aid many individuals to react constructively to psychological stresses. This approach can be improved if a mental health consultation clinic would be arranged, e.g., once a week, where a mental health specialist - if available - would visit the local unit to participate and give guidance in this activity.

Integration of special health programme into the basic health service and requirements

The programme content of the basic healtj service described the minimum adequate level to satisfy the basic health requirements at the local level. Nevertheless, the rural health units should also be considered as a nucleus or base for special disease programme organized by the country for the control or eradication of special health problems existing locally and they can contribute a great deal towards the success of such programmes.

There are certain requirements for the success of this integration of any specific disease control programme into the basic health service:

a) There should be a national health plan for the specific disease control programme constructed on sound, organizational principles, and a functioning control service actually operating in the country for the specific health problem, with good technical and administrative competence.

b) The basic rural health service should not be harmfully affected by this integration, i.e., the special disease control activity should not be implemented at the expense of the basic health service. For

this purpose the basic health service should be supplemented by any additional staff and equipment required together with adequate training, guidance and supervision.

Examples of integration in which the basic rural health service can take active part in special disease control programmes are varied, and this depends on the local situations in different instances, i.e., the kinds of specific health problems existing, the efficiency of the specific disease control activity existing, and the degree of coverage of rural areas by the basic health infrastructure and its functioning ability, and the nature of the administrative structure in the country as regards its repercussions on public health administration. The following are illustrations:

Malaria eradication

If there is a plan for Malaria Eradication in the country of if there is an effective malaria control service, then the rural basic health services can add more potentialities of success by co-operating in all its operations and phases, e.g., in active and passive surveillance and taking blodd samples, examination and treatment of cases, epidemiological investigation, etc. These rural health units can also act as the local posts for the spraying activities and this would save time and transportation. Of course, all this work has to be guided and

supervised by the malaria stations that would be located principally in the towns.

Biharziasis control

When bilharziasis is a problem as is the case in many countries of the region, then the rural basic health service will be the best nucleus for its control activities, this would include:

a) A complete census and a full survey of all the village population and treatment of all cases in the out-patient medical care division with family folders and personal cards to the people. Urine and stool samples would be collected and examined in the unit and treatment can be administered locally to make it easy for the population and to minimize missed cases.

b) The rural health service will be the base or headquarters for the snail control activities for the area.

c) In addition, health education as well as technical guidance towards improvement of environmental sanitation can best be carried out from the unit.

Tuberculosis control

The basic health service can share as follows:

a) Case finding: both by assisting in the organization of local mass radiography campaigns, and also through organization of local tuberculosis consultation clinics whereby suspected cases can be assembled for the visit of the tuberculosis specialist or referred to him in the tuberculosis dispensary.

b) Treatment of cases: by carrying out a domiciliary treatment programme under guidance of the national anti-tuberculosis service; by home visits and follow-up of cases and their contacts; and by sending cases either to hospital when hospitalization is decided or to the tuberculosis dispensary for periodic follow-up. Also care of convalescents and rehabilitation can be secured or rendered avaliable through the basic health service.

c) Tuberculin testing and BCG vaccination programmes can also be carried out locally after adequate training of the local personnel. Again this has to be within the framework of the national tuberculosis control programme.

d) Social welfare to families of tuberculosis patients in the form of social assistance and guidance, etc. Here the basic health service can be a good liaison between the social welfare agencies, the cases and their families.

e) The health education programme of the basic health service, no doubt, can play a good role in tuberculosis control both by working with families and cases on the one hand and with the population at large on the other hand.

Venereal disease control

If syphilis or other venereal disease is a problem and if there is a national venereal disease control programme, then the rural basic health service with its medical care division, its MCH division and its health education and home-visiting services can participate to a great extent in this spefific control programme, both in case finding and in treatment, as well as in personal protection and health education. Here also there should be a national specific control programme, competent diagnostic laboratory service, adequate training and the provision of the necessary supplementary equipment and drugs, etc.

Egy-disease control

When trachoma and other ophthalmias are a health probelm, the rural health service, with adequate training, can help in the control programme by early discovery and treatment of minor and simple cases and referring the other cases to specialized centres in addition to the possibility of organizing local ophthalmic consultation clinics.

In addition, this control programme will be assisted by the other activities of the rural basic health service in raising the standard of environmental sanitation especially as regards the problem of house flies, and in health education to promote cleanliness and personal hygiene for the protection against the speard of these diseases.

## IV. SUMMARY

The list of health activities which can usefully be undertaken in a comprehensive health centre is very large. The programme content in final analysis will depend upon the degree of development of health services, availability of health personnel, the level of health education and the economic level of the population which is being served by the health centre.

The age structure and demographic characteristics of the population, their social, cultural and economic requirements by and large, influence the nature of services which are to be provided from the health centre. Therefore, there can be no hard and fast rules about the type of health activities which are to be undertaken, or the number of the staff to be employed or their preparation. Each situation will have to be examined individually and a solution found for it. However, a modular pattern for each country or region shall have to be established to satisfy the basic health needs as a basis for planning and organization of health services in the area.