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ANALYSIS OF THE CONTENT OF
THE EIGHT ESSENTIAL ELEMENTS
OF PRIMARY HEALTH CARE

Final Report to the HPC
by the
HPC Working Group on PHC
10 August 1981

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PREFACE

This document attempts to analyse in matrix format the desired or required "programme content" of the eight essential elements* of primary health care at the four basic levels: the home, the community, the first health facility and first referral level. Prepared for use within WHO in the first instance, it is fully appreciated that the finalization of the document must result from experiences gained in the practical integration of the different activities in country settings; but, even so, the document in its present form can be useful at the country level for the planning and management of PHC/HFA strategies.

Part I consists of an introductory paper, explaining the conceptual framework within which the work was carried out; a brief paper defining the four levels of care and the persons involved at these levels; and lastly, a set of narrative summaries which complement the matrices. Part II is a detailed analysis, in the form of 10 matrices, of the type of activities and tasks that have to be carried out at the four levels, of the persons or professional categories that will be involved and of the type of support or material they will need. Two of the elements (prevention/control of locally endemic diseases, and appropriate treatment of common diseases/injuries) have each been exemplified by two matrices (malaria and hypertension; diarrhoeal disease and accidents in the home). The matrices can serve the purposes of a "check-list" to assist in the analysis of the content of programme delivery in individual programmes.

It is fully appreciated that the analysis so far carried out has a number of limitations and weaknesses: several important health programmes have not been included (respiratory tract infections and health of the elderly, to mention only a couple); the contributions from sectors outside health have not been exhaustively dealt with; and no attempt has yet been made to "merge" horizontally the eight elements at each level. To reiterate, the latter activity can only be meaningfully carried out in a concrete country programme situation with defined infrastructure, policies and priorities. The intention is, therefore, to use the feedback from the use of this document in countries to update the content and refine or modify its structure.

*Primary Health Care: Report of the International Conference on Primary Health Care, Alma-Ata, USSR, September 1978. WHO, Geneva, 1978.

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PART II:

Glossary of terms

Matrices analysing the activities and tasks required within the eight essential elements of PHC:

1. Education concerning the prevailing health problems and methods of preventing and controlling them
2. Promotion of food supply and proper nutrition
3. Adequate supply of safe water and basic sanitation
4. Maternal and child health, including family planning
5. Immunization against the major infectious diseases
6. Prevention and control of locally endemic diseases
Examples:
 - (a) Malaria
 - (b) Hypertension
7. Appropriate treatment of common diseases and injuries
Examples:
 - (a) Diarrhoeal diseases
 - (b) Common accidents in the home
8. Provision of essential drugs

PART I

EXPLANATORY TEXT CONCERNING THE WORK
OF THE PRIMARY HEALTH CARE WORKING GROUP
SET UP BY HPC

I. INTRODUCTION

1. The purpose of this paper is to explain the way in which the Working Group set up by HPC interpreted its terms of reference, how it tried to implement them and the conceptual basis of its work. It would be recalled that at its 220th session, the HPC had recommended to the Director-General ". . . that an HPC Working Group be set up as soon as possible after discussion with Director SHS to examine how the essential elements of primary health care are and/or should be related . . .". The Director-General had commented as follows: "Please let the Working Group . . . deal with substance and not with theory so as to permit the group to identify options available to us and thereby to countries in building up their PHC system through pragmatic and progressive integration of at least the essential components specified in the Alma-Ata Declaration". These comments were taken to mean that as a first step a programmatic analysis of the essential elements of primary health care would enable WHO staff to comprehend the implications of health care delivery at this level of a comprehensive health system. Subsequently, through practical integration of the main tasks the difficulties and, therefore, the options for pragmatic technical cooperation at the country level would become more evident.

2. In this perspective, it was felt that the use of the matrix format would allow the identification of the main tasks involved in programme delivery at the various levels of a health system based on primary health care, the persons responsible and the skills required for the fulfilment of these tasks; and other modalities such as supplies and equipment, logistic support and community interaction. Put another way, the matrix format was used as a process of "thinking aloud" with the specialist personnel concerned with each programme element and guided, to the extent possible, by past country experiences (the 10 matrices that have been developed are annexed as Part II of the Working Group's report).

3. Therefore, in this first phase of bringing together a lot of what was already known, it was necessary to tackle each programme vertically - this being an indispensable building block to a second phase involving the integration of activities. Indeed, working with the different programmes directly concerned with primary health care, there could hardly have been an alternative basic approach. The matrices should, therefore, be seen in the context of a "document of content" to facilitate integration and to permit cross-checking and updating of information concerning programme delivery at the country level.

4. After finalization of the matrices, it was felt appropriate to produce a three-page summary of each matrix in narrative form. These summaries complement the matrices insofar as they are intended to elucidate the conceptual framework underlying their preparation.

II. PLANNING AND MANAGEMENT OF PRIMARY HEALTH CARE

5. It is not the mission of this explanatory paper to discuss at any length the complexities of "planning and management" with regard to health care delivery at country level. This notwithstanding, it is necessary to touch on some important points the negligence of which tends to strangle genuine efforts at the creation of efficient and effective health care delivery systems.

The meaning of primary health care

6. The Working Group used the definition of primary health care that was elaborated in the Alma-Ata Declaration. It saw the fundamental difference between primary health care and basic health services as the focus of the former on the "consumer" of health care delivery systems (therefore on his/her immediate needs and his/her active involvement) and on the multisectoral approach to health development - health benefiting from, as well as contributing to, overall socioeconomic development. In addition, primary health care is not seen as an entity in itself; but as an integral part of the comprehensive health system in any country (it being the first point of contact in most rural settings and urban slums) and being closely related to and supervised and supported by, higher levels of the system.

Planning and Management

7. The planning and management of health care delivery in any country is directed from the central level. This is as it should be, but there is always one fundamental shortcoming, and that is, the almost complete absence of decentralization with little focus on the peripheral services and the lack of involvement of members of the communities to be served and of non-health sectors with direct relationship to national health development. WHO has recently developed a process entitled the "Managerial Process for National Health Development" (MPNHD) for use in countries particularly preoccupied with the implementation of their policies and strategies for primary health care. WHO has a duty to help train national personnel in the practical application of the process at all levels of the comprehensive health system for the process is not only a national responsibility but also has to be applied with a great degree of flexibility. Once the work of integration has been finalized, the matrices can contribute to what should be a learning-by-doing process.

8. It is not intended to go into the catalogue of problems that will be encountered in countries in the practical implementation of programmes concerned with primary health care. Mention should however be made of the spectrum of difficulties that was taken into consideration during the preparation of the matrices. It includes: lack of appropriate political commitment and clear policy formulation, inadequate problem definition (unavailability or improper use of data) and selection of priorities in the face of limited resources (human, financial and material), lack of identification of resources (internal and external), non-definition of realistic indicators of progress, lack of target setting and of channels/mechanisms for constructive dialogue with the communities and the absence of continuing evaluation of these mechanisms and of the effectiveness of programme activities. Some of these constraints will be dealt with succinctly.

9. Political commitment is all too often taken to mean the commitment of the Head of State, or of the topmost executive authority within a country. This commitment is, of course necessary; but of much greater importance is the commitment of the masses themselves that is necessary to galvanize them into action, for without this, primary health care then becomes an empty slogan. This is the real litmus test of commitment at the country level and it is because of this that an awful lot of work still needs to be done in different settings to understand the inner dynamics of community involvement.

10. As regards resources of all kinds, it must be realized that for some time to come there will always be a shortage. In this connexion, mention must be made of the "re-allocation of resources" that has been talked about over and over again. In certain settings, re-allocation of resources is an urgent need; in others, and indeed the majority, it has to be admitted that it is just simply impossible as the centre itself is already stripped to bare bones, and any form of re-allocation is an impossibility and therefore a myth. However, it should be possible to allocate any additional resources (largely external) to primary health care.

11. It is difficult to discuss the problem of resources for primary health care without making a passing reference to capital and recurrent costs. For a large number of countries, a significant proportion of the capital costs will have to come from external sources. On the other hand, if primary health care is to be a going concern in any country, in the long run the recurrent expenditure must be generated from within the country itself. The realization and acceptance of this fact from the very outset is of crucial importance. From it stems the need, indeed the imperative that leaves no option but to think of the utilization of available human resources (community health workers and traditional birth attendants) that can be paid for in cash or kind by the communities themselves; of technologies that are socially and culturally acceptable, of low cost and of high relevance technically; of appropriate communication systems that can cut down on the needless dissipation of human effort and the wear and tear of limited transportation; and the definition of national drug policies including appropriate storage and distribution systems.

12. Thinking exclusively of the different levels of primary health care, there are other important subjects that should be addressed and that call for constant vigilance if success is to be achieved. These include training and re-training of personnel by higher echelons in the comprehensive health system, continuing supervision and support, provision of appropriate supplies and equipment, and last, but by no means least, provision of the necessary logistic support. By way of example, such "mundane" subjects as the human interaction between a professional and a traditional birth attendant, the redesignation of tasks for health and other personnel, the regular controls necessary to ensure that vital supplies are always available, and the organization of vehicle maintenance to ensure their constant road-worthiness, often make for the success or otherwise of health programme delivery. In short, if a health system based on primary health care is to function properly, there should not be an over-concentration on what can be called the sophisticated aspects of health care to the total exclusion of these fringe, but very important, prerequisites for success.

13. These and other problems closely related to them should be the constant preoccupation of health systems or operations research in countries. The Working Group was unanimous in the conviction that unless solutions to such problems were urgently sought (and with the awareness that they will vary from country to country) the inevitable consequence would be that activities

concerned with primary health care would get bogged-down or stay or move from one pilot area to yet another. WHO's experiences with pilot areas in the past are replete with examples of such problems.

III. ROLE OF THE INDIVIDUAL/FAMILY IN PRIMARY HEALTH CARE

14. If Health for All is to become a reality, there is a need to shock each individual into an awareness of the fact that the prime responsibility for his/her health belongs to him/her and no-one else. If it is true that in the constitution of every nation the government authorities are implicitly responsible for the health of the population as a whole, it is also true that this in no way negates the importance of the role to be played by the individual or by the family as a collectivity. The Working Group also discussed the activities of what are currently called "self-care groups" which are on the increase not only in Europe and North America but in other parts of the world - albeit in other forms. It is not the intention to dwell on the arguments for and against especially those advanced by members of the medical "establishment". Suffice it only to say that their growing importance must be recognized and that, in this connexion, each matrix specifies tasks to be carried out at the home level for "health begins at home".

15. In the matrix for PHC Element No. 1 - Education concerning prevailing health problems and the methods of preventing and controlling them - considerable attention has been paid to the role of health promotion at the home level. In addition, in all the matrices, indications are provided of the promotional, preventive or curative aspects of health care that form part of the role of the individual or of the family. At first glance, it will appear that the individual is being called upon to submerge himself/herself in the problems of health care to the exclusion of the myriad of other problems that form part of normal daily life. This apparent paradox can only be ironed out in the second phase of horizontalization or integration of the tasks involved in the implementation of the essential elements of primary health care.

IV. ROLE OF THE COMMUNITY IN PRIMARY HEALTH CARE

16. As has been mentioned earlier in this paper, one of the key differentiating factors of the primary health care approach is its focus on the "consumers" of health care delivery systems: their problems, immediate needs, biases, aspirations, etc. This being so, the involvement and active support of the community are of crucial importance if primary health care is to succeed anywhere. The political commitment of the masses has already been touched upon; it has to be enlisted by education/information coupled with practical demonstration in a language which they can understand and with a cultural bias with which they are familiar. This political commitment can be enhanced by the involvement of some representatives of the communities in the planning of their primary health care system. In short, what the Working Group advocates is the complete involvement of the community in the planning, programming, implementation, monitoring and evaluation of the health system. This "bottom-up" approach cannot be minimized as it constitutes the key to success.

17. It is for this reason that in all the matrices areas for community support and interaction have been identified and given the place of importance they deserve. In order to advance the notion of the multisectoral approach to national health development, the creation of Community Development Committees has been advocated as against Village Health Committees. These

committees will gain in size and importance in the progression from the lower echelons upwards; but the point of importance is that there must be a dynamic interplay between these committees and the different administrative levels of government. It is one of the responsibilities of these communities to choose from among their own people persons of proven integrity to be trained as community health workers (CHWs) and traditional birth attendants (TBAs) including the organization of functional literacy classes. These committees will also have to decide on ways of remunerating this category of workers either in cash or kind, on their method of work, on ways of replenishing drug supplies initially supplied by the government, etc.

18. Community support is also necessary for the dissemination of relevant information concerning primary health care and the much needed interaction between health and other sectors. To cite but a few examples, the creation of "cooperatives" will go a long way to improve the production of cash and subsistence crops and therefore the nutritional status of the community; and the use of locally available media for transmitting information concerning an immunization campaign will have positive repercussions on the immunization coverage. In addition, the community can generate from within the necessary human and material resources for the construction of recreational facilities for health promotion.

V. ROLE OF THE MINISTRY OF HEALTH AND OF THE HEALTH SYSTEM INFRASTRUCTURE IN PRIMARY HEALTH CARE

19. There is a growing dissatisfaction with the conventional health care patterns as they have developed over the last few decades. All over the world, there are strong reactions against the over-reliance on advanced technologies, the abuse of drugs and of diagnostic and surgical procedures - such features lead to a dehumanization of health care and the appearance of new health hazards generated by a system supposed to protect people. In developing countries, little or no progress has been made in terms of coverage of health care. With the exception of a few countries, almost everywhere the major emphasis, in terms of expenditure for health, is placed on the care of the very sick, whereas the care of the healthy or less obviously sick has made far less progress. Such trends are being aggressively supported and promoted by vested commercial interests. Thus, the health care systems of practically all countries have little relevance to actual needs. As they have grown and consolidated over the years, the systems of affluent countries have become less flexible and less open to change, while in the developing countries a reorientation can be easier provided it starts forthwith.

20. Hardly anyone will question the statement that no viable society can any longer afford to limit the maintenance of health to the care of the sick. Only the societal and administrative structures whereby health is to be managed are subject to legitimate ideological variations; but whatever health system is chosen, the aim must be to make it a system for the whole man, not merely for the sick man. Maintaining health means the containment of all known major threats to public health (environmental, psychological and biological) by means of known technologies and the promotion of healthy life-styles among all; enabling all those who are in good health to remain so; and providing relief to those who are in ill-health. This approach requires a complete redefinition of the types and numbers of health workers needed and a shrewd appraisal of their training curricula and work schedules, including those of medical doctors. The technologies to be used must also be scrutinized so as to ensure that the simplest appropriate technology is applied to each case.

21. The exposé in paragraphs 19 and 20 epitomizes the new role of the Ministry of Health and the comprehensive health system embracing primary health care that it decides to establish. Traditionally, Ministries of Health have little political leverage and do not receive an important share of the national budget. But this very fact imposes a supreme responsibility to define objectives and priorities clearly, to select health care technologies judiciously, to maximize the use of essential drugs whose selection is the result of well-defined national drug policies, to mobilize community support and, once obtained, to ensure its involvement in all aspects of health care delivery and to inculcate sound principles of "management" that are so essential for success.

Health Systems Infrastructure

22. For countrywide health systems based on primary health care to function optimally in the delivery of health programmes to all sections of the population, the following points require serious consideration and constant vigilance: the appropriateness of the existing health infrastructure, the correct mix of different categories of health manpower needed at each level of the health system, the technical content of programmes, the appropriateness of the existing technology, support and management. Yet, in this age of technological advance, there is frequently a preoccupation with the sophistication of technologies to the detriment of establishing appropriate health systems infrastructure. The latter is just as important, if not more so, for the adequacy of the health infrastructure is a determinant factor in ensuring that health technologies are used with maximal cost-effectiveness.

23. There is no universal blueprint of a health system infrastructure. Each country must decide on the system that can best cater for its needs guided by the peculiarities of its political, administrative and cultural setting. This apart, there are however certain key factors to be borne in mind in order to ensure that actions taken at different levels are coherent and mutually supportive:

- (a) geographical and demographic characteristics of the various parts of the country;
- (b) quantity and quality of the available manpower;
- (c) definition of the function, scope and degree of sophistication of work to be undertaken at different levels;
- (d) definition of the lines of demarcation within the health infrastructure of the different levels of care - primary, secondary and tertiary - remembering that primary health care must remain the hub of the health system infrastructure;
- (e) siting of the first referral level or hospital in primary health care must be in a strategic location in view of its important coordinating, training and supervisory functions

24. In the matrices that have been formulated, the delivery of primary health care has been shared between four main levels which are more fully described in a separate paper. With the exclusion of the home and communal levels, the other two levels mean different things in different settings, e.g. the first health facility can mean a dispensary, health centre or even the consultation room of a general medical practitioner.

VI. SUPPORT NEEDED AT VARIOUS LEVELS OF PRIMARY HEALTH CARE

25. The importance of the support provided by the higher levels of the comprehensive health system for the different levels of primary health care needs no emphasis. This support embraces planning of health care delivery in its multiple dimensions, the definition of appropriate curricula for the training and in-service training of all categories of health personnel using modern educational methodology, the establishment of a carefully planned schedule for the provision of supplies and equipment and the provision and maintenance of the right type of logistic support.

26. The constant support and supervision required at the different levels of primary health care should not be lost sight of. Throughout the elaboration of the matrices the Working Group kept this fact in the fore-front and indications of what this support means in practical terms have been incorporated in the matrices. For the sake of reiteration, guidance, support and supervision from the first referral level to the first level health facility and from the latter to the communal and home levels include the right type of human interaction between professional and lay or traditional health personnel; provision of appropriate mechanisms for the acquisition of correct skills and knowledge for the accomplishment of prescribed tasks; constant guidance and supervision by the next higher level to ensure that the tasks are properly executed; regular distribution of the right type of supplies and equipment and organization on a strict basis of a system of maintenance on the spot of vehicles and equipment of all kinds.

27. A passing comment has been made of the importance of health systems research. This should be a built-in component of a comprehensive health system based on primary health care system. Experience has shown that operations research is not often attractive to the best researchers, few as they are; therefore, as for evaluation, simple mechanisms must be designed to allow those working on the job to collect the right type of information for objective and critical analysis.

VII. THE RELATIONSHIP BETWEEN PRIMARY HEALTH CARE AND OTHER SECTORAL PROGRAMMES

28. There is hardly any need to belabour a point which has practically received universal acceptance and, that is, that national health development is not the prerogative of the health sector alone. Other sectors such as agriculture, education, water resources, social welfare, communications, etc., contribute equally, if not more, to the improvement of the health status of populations. This is the multisectoral concept implicit in the primary health care approach and which calls for a continuing dialogue between the health sector and other national sectoral programmes.

29. Literacy programmes of all types (e.g. adult literacy, functional literacy for "lay" health personnel) can contribute in no small way to the success of primary health care. Health legislation is another important aspect, but the proliferation of legislation for its own sake can be counter-productive unless effective mechanisms (reflecting cultural variations) for its enforcement have been previously identified. The improvement of the health status of agricultural, industrial and migrant workers calls for special approaches involving control of occupational health risks, promotion of the humanization of work and a well coordinated programme of research. Here again, the need for continuing dialogue with industry, the Ministries of Labour and Health needs no emphasis.

VIII. POSSIBLE USE OF THE MATERIAL PRODUCED

30. The burning question that has troubled many minds is to what use should the material that has been formulated by the Working Group be put? As has been clearly indicated in the introduction, the first important use is to help us in WHO understand the complexities of programme delivery at the country level in our respective programme areas. This awareness should, in itself, facilitate the indispensable interaction between all programmes directly or indirectly related to primary health care. The very expression "primary health care" conjures up in our minds different things for different people; and yet there needs to be a unified concept if our motivation, approaches and practical identification with country activities are to be intensified.

31. Next comes the question as to what use can best be made of the material at the country level. It can be used for cross-checking purposes for individual programmes; but more importantly, it can become a useful tool at the country level only after the process of horizontalization or integration of programme activities has been undertaken and this, most ideally, in countries.

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Definitions of various levels of primary health care

1. These definitions are to be seen as working definitions for the purpose of analysing and describing the resources needed at the primary health care and supporting levels in order to carry out the activities making up the minimum eight elements of PHC. Emphasis is placed on the situation of a developing country with a low GNP, predominantly agricultural economy, with about 80% of the population living in rural areas and urban slums, high birth rates and infant and maternal mortality rates, and the following main health and health-related problems: malnutrition, infectious diseases, infant diarrhoea, malaria and other vector-borne diseases, complications of pregnancy and labour.

The details of what is available at the different levels will vary greatly between countries, but the definitions given hereunder, with the attached graphical illustrations of the levels (Figure 1) indicate what needs to be there, or developed, in order to effectively implement a primary health care strategy.

In order to develop a viable PHC strategy before the year 2000, it is not enough that the infrastructure, as described above, be set up. The essential prerequisite is a thorough commitment to the strategy, not only by the Government but even more so by the local community and by the supporting health personnel. This in turn requires that efficient and effective mechanisms be set up, or strengthened, for a continuous dialogue between the different levels, other national sectoral programmes, and the communities.

2. Definitions/descriptions of the levels (refer also to Figure 1).

Home level: This refers to the basic unit in any community: the household. The family members are the ones primarily responsible for activities at this level, whether they are seen as individuals, mothers of children or heads of the household. Persons from the neighbourhood, as well as home-visiting community workers of various kinds (including trained health workers) interact with the family and are directly involved in activities at this level.

Communal level: Activities at this level concern the health of a whole community (village/town or group of villages) and require common facilities and/or joint voluntary efforts of community members. Examples are cleaning campaigns, construction of facilities, information/education about immunization sessions, etc.

The Community Development Committee, or equivalent (see Figure 1) is the central coordinating mechanism for activities at this level, but it also provides support to activities at the other levels, in particular the home level (see the individual matrices - column for "community support"). The Community Development Committee interacts with, and is supported by, the individual community members, in addition to various community groups, as well as national sectoral programmes including health.

Community health workers (CHWs),¹ as well as other community workers and volunteers, function also at this level both in promotional/informational activities and in planning/implementation of communal health activities. Many communities have created an actual facility for the CHW at this level.

First health facility level: This refers to the first level where a trained health professional is available and where facilities are available for running clinic sessions. The kind of facility and the type of staff available will vary from country to country (see Figure 2).

In addition to the static clinical activities, the staff interact both with the home level (during home visits) and the communal level. This level also fills a major supportive role in training and supervision of all kinds of CHWs.

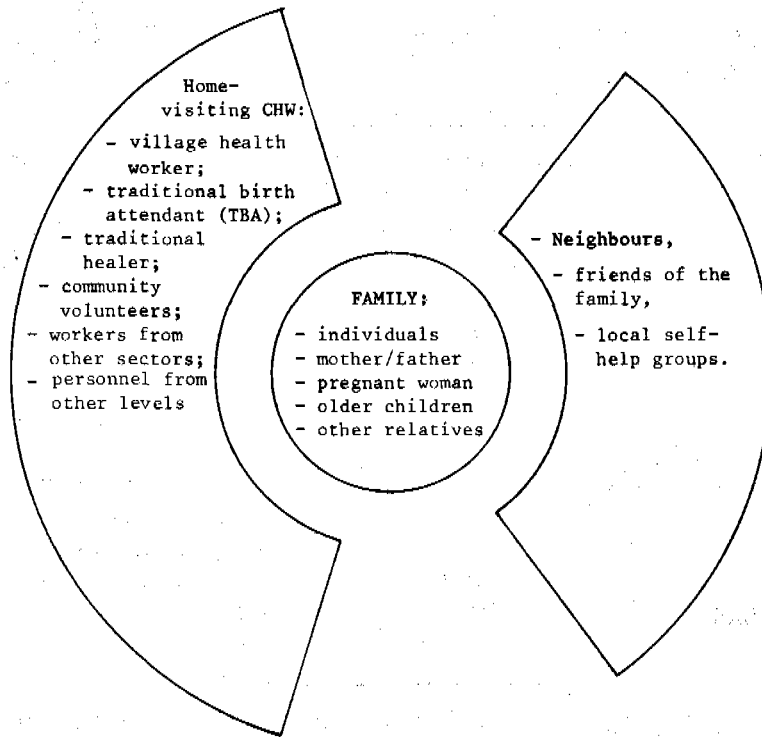
First referral level: There are two types of referral systems in a PHC strategy (Figure 2). The first is a clinical referral system which includes the supervision of performances at lower levels. The second is an administrative referral system - usually the District Health Office. This is the level involved in planning, management and support of activities related to sanitation, health education/information, disease control campaigns, etc.

¹ For the purposes of this paper a CHW is defined as a person selected by the Community for a course of training of varying duration organized by the national health authorities. It includes traditional healers of all kinds, particularly traditional birth attendants (TBAs) and village health workers (VHWs).

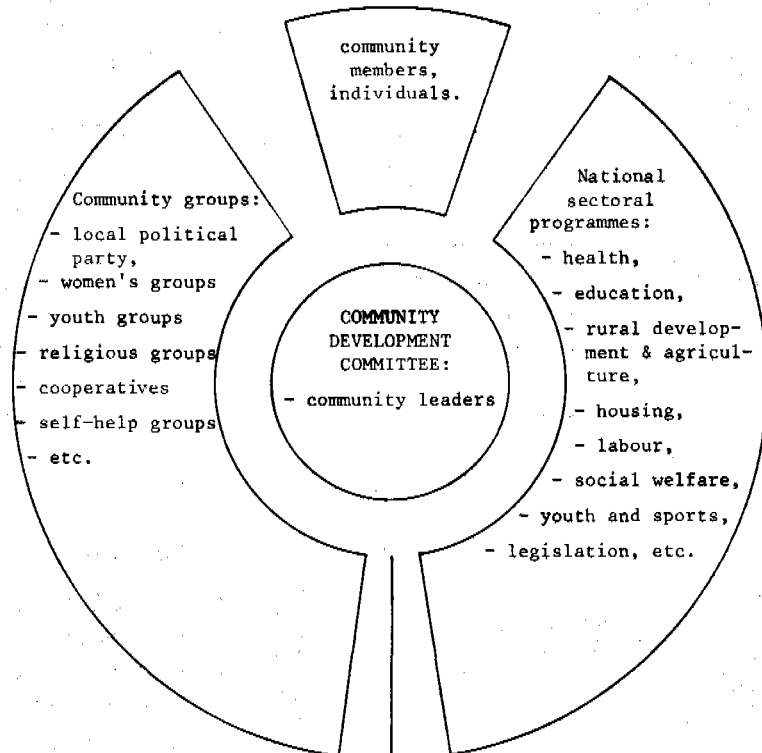
Figure 1

PERSONS, GROUPS, CATEGORIES OF PERSONNEL
INVOLVED IN PHC AT HOME AND COMMUNAL LEVELS
AND SUPPORTING PROGRAMMES

HOME:



COMMUNAL:



- *
- local health workers
 - CHW
 - pharmacy assistant, etc.

*These workers need not be members of the Community Development Committee but do constantly interact with it.

Figure 2

PHC HEALTH SERVICE INFRASTRUCTURE

FIRST LEVEL
HEALTH FACILITY:

- "health house" or similar,
- dispensary,
- health centre with or without beds.

- nurse and/or
- nurse/midwife
- assistant nurse or other auxilliary staff, incl. CHW

Sometimes:

- medical assistant or physician
- sanitary inspector
- dietician
- pharmacy assistant
- laboratory assistant

FIRST REFERRAL
LEVEL:

Clinical:

- rural hospital,
- district hospital, etc.

- physician (G.P.)
- nurse
- midwife
- hospital aide
- laboratory technician
- X-ray technician

Sometimes:

- pharmacist
- medical assistant

Administrative:

- District (or province) health office

- public health medical officer
- public health nurse/supervisor
- sanitarian
- nutritionist/dietician
- storekeeper

Sometimes:

- health education assistant
- laboratory technician
- water agency technician
- statistical assistant.

PHC ELEMENT No. 1: EDUCATION CONCERNING PREVAILING HEALTH PROBLEMS AND METHODS OF PREVENTING AND CONTROLLING THEM

- Narrative Summary -

INTRODUCTION (General Objectives)

Education for the promotion of health and the prevention of disease is the first of the eight essential elements of primary health care mentioned in the Alma-Ata Declaration. This emphasizes the fact that in the final analysis it is the individual who will decide to be healthy or not, to accept health measures, to work with others in creating a healthy environment and to work for the promotion of health for himself/herself or the community in which he/she resides. This should not, however, be construed as meaning that the individual is the sole person responsible for his own health. There are a number of issues outside the control of the individual that govern his own health: socioeconomic conditions, political issues, cultural trends and norms, religious beliefs, etc. It is within this framework that health education and information must work in order to be successful.

Information and education, therefore, must foster activities leading to a situation where people: want to be healthy; know how to attain health; do what they can individually and collectively to seek help when needed.

CONTENT AT DIFFERENT LEVELS OF CARE

The health of the individual, family and of the community depends on a number of factors including the environment and lifestyle. It will be futile to try to maintain health and promote healthy living without changes or modifications in the environment and in unhealthy habits and life-styles of individuals. In addition, outside forces may also influence the individual and the community to change some of the more healthy lifestyles in order to replace them with what seems to be acceptable in other cultures. It is evident, therefore, that information and education must not only deal with those trends that need to be changed but also with the maintenance of others that seem to be appropriate.

Specific tasks and ways of providing for their attainment are outlined in the matrix. The activities are sub-divided into three interdependent areas of involvement: health promotion, prevention of disease and maintenance of health and education to deal with disease. Some of the types of action required at different levels are detailed hereunder:

Home level:

The family is the basic unit of self-reliance in health and the prime focus for most information and education activities. Specific tasks include:

- acquisition of basic knowledge in order that the individual will come to value health and know how to maintain it;
- acquisition of an understanding of local health hazards and how to avoid them;
- recognition of health variants and of disease and acquisition of the ability to take proper self-care decisions or to seek help.

Communal level:

Without adequate communal support, health will be difficult to attain or maintain. Collective action is required to create the socioeconomic and environmental conditions within which individuals will be motivated to take their health into their own hands to the greatest extent possible. This includes:

- easy access to sound and useful information on prevailing health problems and methods of preventing and controlling them;
- a clear understanding of the technologies and services available and their advantages and disadvantages;
- positive health information through the mass media, including the avoidance of its use to promote the utilization of products which may be detrimental to health or creating an undue dependence on non-essential medicaments and practices.

Health services (including first health facility and first referral level):

The health services have a responsibility for encouraging and facilitating family self-reliance and the involvement of the community in the planning and implementation of health care systems. Unless this is understood, people will continue to be "recipients" of health care, i.e. passive observers rather than taking the responsibility for their health into their own hands. Specific tasks include:

- counselling of patients including promotion of healthy behaviour;
- provision of sound health information;
- organization of formal health education activities;
- fostering interdisciplinary approaches to support the family and individual;
- close cooperation with the mass media to foster positive health information.

INDICATORS OF PROGRAMME EFFECTIVENESS

Realizing the fact that the effectiveness of information and education programmes should eventually be manifested by the attainment of a better level of health in the population, their evaluation becomes a very complex process. For, indeed, the attainment of a better level of health in any population is dependent on a number of factors of which information and education of the individual and of the communities constitute just one element. Recourse would therefore have to be had to the use of interim evaluation, that is, to compare the output (knowledge or participation) as against the input (provision of information and encouragement and organization for action). In that case information and education programmes might have to use the following as indicators:

- increased knowledge of the importance of proper nutrition, common health hazards and how to avoid them;
- increased competence in dealing with disease or accidents;

- reduction of those diseases or conditions in which the role of the individual is of primordial importance, such as, reduction of infant morbidity and mortality due to diseases preventable by personal hygiene, reduction of home accidents, etc.;
- sustained participation in individual or group recreational activities;
- increased utilization of health facilities;
- increased coverage of health topics in the mass media and the use of advertising practices which foster healthy living.

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PHC ELEMENT No. 2: PROMOTION OF FOOD SUPPLY AND PROPER NUTRITION

- Narrative Summary -

INTRODUCTION (General Objectives)

Nutrition is one of the most important factors influencing the quality of human life in most parts of the world. While over-nutrition is sometimes a problem, undernutrition is, and will likely remain, one of the main contributing causes to the very high rates of infant and young child deaths; and in those who survive it retards growth and development and lowers resistance to infections or environmental hazards. It is estimated that around 200 million children under the age of five years are moderately or severely malnourished. Maternal malnutrition is widespread, being especially important because of its serious implications for the health of the women and their infants. Subclinical malnutrition in adults reduces their work capacity interfering therefore with socioeconomic development. The determinants of food supply and nutritional patterns at the national level are primarily socioeconomic factors which are beyond the responsibilities and capabilities of the Community Health Worker (CHW). This worker, however, can collaborate in promotion of the necessary intersectoral coordination at the communal level. She/he can also, within the existing situation, undertake direct actions at the family level to improve dietary practices of the most vulnerable family members and undertake some specific measures addressed to the control of nutritional diseases.

The objectives of the nutrition component of primary health care include: promotion of activities that can improve food supply at the family level; correction of faulty feeding practices in infants and young children (0-3 years of age); treatment and rehabilitation of malnourished children; treatment and prevention of prevalent nutritional diseases such as anaemias and vitamin A deficiency; and promotion of better nutrition for pregnant and lactating women.

For programme success it is mandatory that these activities should be accompanied by simultaneous actions directed towards other non-dietary factors contributing to malnutrition, such as diarrhoeal and other infectious diseases.

CONTENT AT DIFFERENT LEVELS OF CARE

Home Level:

This is the most important level where actions are needed for the improvement of nutrition. The activities to be promoted by the CHW and carried out by the family members include:

- efficient utilization of available resources to increase and improve food supply;
- maintenance of breast-feeding and timely and adequate introduction of complementary foods (weaning) from the family diet;
- improvement of food processing, preservation and utilization through use of appropriate technology;
- proper intrafamilial distribution of available food;
- early detection and proper care of malnutrition.

Communal Level:

The area of nutrition provides a typical example of the need for the CHW and local health authorities to be concerned and to try to influence communal activities which are not traditionally within the health sector, but are fundamental determinants of health. At this level the CHW and community leaders should be concerned with:

- assessing the overall situation of food and nutrition in the community;
- stimulating and cooperating in activities to improve food production, storage and marketing, including home gardening, the use of irrigation for food crops, the establishment of cooperatives, communal facilities for food storage and processing;
- activating communal organizations for health and nutrition education;
- stimulating and facilitating cooperation among community members, such as self-help for day care of children by the women in the community.

Health Services (first level health facilities and first referral level):

The health services will be responsible for:

- technical and logistic support to facilitate work at the home and communal level, including training and supervision of CHWs, provision of growth charts, scales, educational materials, food supplements, etc., as required;
- identification and canalization of external resources to the communities, such as agricultural extension services, credit sources, supportive technological facilities;
- organization of an adequate referral system for the care of severely malnourished subjects.

INDICATORS OF PROGRAMME EFFECTIVENESS

A few examples of indicators relevant to the nutrition component of primary health care are:

- proportion of communities benefiting from cooperatives or other organizations/activities aimed at improving food supply;
- percentage of children under five years of age whose growth is monitored with a growth chart;
- percentage of malnourished children (grade 2 and 3) receiving adequate attention;
- percentage of children under five years of age who are malnourished;
- reduction in prevalence of specific nutritional diseases such as protein-energy malnutrition, anaemia or xerophthalmia, in the total population.

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PHC ELEMENT No. 3: ADEQUATE SUPPLY OF SAFE WATER AND BASIC SANITATION

- Narrative Summary -

INTRODUCTION (General Objectives):

Preventable diseases linked with drinking water and lack of sanitation are major health problems in developing countries. They are among the major contributors to high infant mortality and poor quality of life. Safe, adequate and accessible supplies of water together with proper sanitation are, therefore, amongst the foremost basic health measures and essential component of primary health care. Improvement of this component is a must in most rural areas and also in urban slums.

The main objectives of this PHC element are to prevent such diseases and improve the quality of life and well-being of populations by promoting personal and community hygiene, ensuring availability of safe water supply and sanitation facilities through self-reliant community action and also by associating water supply and sanitation with other health and/or development programmes.

CONTENT AT DIFFERENT LEVELS OF CARE:

The principal function of this PHC element is the provision and utilization of sanitary measures in communities. It involves five major activities: (i) promotion of personal and community hygiene; (ii) provision of safe drinking water supply; (iii) provision of excreta disposal; (iv) protection of water sources and surveillance of drinking water quality; and (v) linkage with other related sectors.

Obviously, if this element of PHC is to bring about the desired results on health development, it must not only depend on the physical part of the programme but also on the utilization of the facilities resulting from proper understanding and appreciation by individuals and the community as a whole. While the target groups include all members of the community, the emphasis will need to be placed on school children with support from community leaders. Thus, manpower for these activities has to be mobilized at all levels, i.e. from government officials concerned (health, water and community development workers, teachers) down to community leaders, volunteers and individuals.

Home level:

The home may be considered the primary base where change and improvement in health and hygiene habits must be encouraged and enforced. This can be accomplished by:

- making the household members aware of the relationship between unhygienic practices and ill-health;
- introducing sound practices of personal hygiene;
- promoting the use of latrines or similar sanitary facilities;
- ensuring that potable water is used for drinking and other domestic purposes.

Communal level:

Next to the household level the community has a lot to contribute and constitutes a good entry point for the development and implementation of health and environmental sanitation measures. Community groups such as schools and village committees can be used to disseminate information about and promote the use of safe water, adequate sanitation and hygiene habits as well as to implement schemes through communal and self-help efforts. Activities that can be considered will include:

- demonstration of community sanitary facilities and usage at school or community centres;
- community involvement in planning, construction, operation and maintenance of systems as well as their financing;
- participation in arranging village "cleaning" campaigns.

Health services (including first health facility and first referral level):

Personnel from this level have a number of important responsibilities in relation to both the home and the communal level, such as:

- undertaking home visits to provide guidance to families on personal hygiene practices and encourage them to use existing sanitary facilities;
- promotion of family contributions to community activities listed above, as well as appropriate upgrading of their own sanitary facilities;
- carrying out demonstrations and campaigns related to environmental health;
- promotion of community involvement in activities for communal water supplies and sanitation facilities, and the establishment of a local mechanism for operation, maintenance and continuous financing of such a programme;
- organizing "clean-up" campaigns of household premises and compounds;
- training of local workers and health volunteers.

INDICATORS OF PROGRAMME EFFECTIVENESS:

Specific indicators that can be used for monitoring the primary health care element of safe water and basic sanitation in a country could include:

- percentage of households, by geographical area,* having ready access to safe water;
- percentage of households, by geographical area, having ready access to safe excreta disposal systems;
- percentage of workers and health volunteers trained for promotional work with families and communities as compared to stated targets;

* "geographical area" refers not only to rural/urban areas, but also to areas with particular geographical/climatic characteristics, e.g. mountain versus coastal regions.

- percentage of communities, by geographical area, served with safe water and systems for waste and excreta disposal;
- percentage of communities, by geographical area, having communal water and sanitation programmes based on self-help;
- percentage of communities having arranged and carried out "clean-up" campaigns;
- percentage of different categories of personnel trained for construction, operation and maintenance of water and sanitation systems as compared to stated targets.

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PHC ELEMENT No. 4: MATERNAL AND CHILD HEALTH, INCLUDING FAMILY PLANNING

- Narrative Summary -

INTRODUCTION (General Objectives)

Maternal and child health care (MCH/FP) as part of PHC aims at promoting and protecting the health of children and women of childbearing age, so that all children have the possibility for healthy growth and development and so that the reproductive life of women is compatible with a state of health and wellbeing. It is a vital part of national strategies for PHC; it concerns some 60-70% of the population in all developing countries; it deals with health problems of great magnitude; and it is basic to the achievement of a healthy population in the future. To enable the programme to be effective, MCH/FP must include substantial components of all the other PHC elements.

CONTENT AT DIFFERENT LEVELS OF CARE

MCH/FP care includes at least four main functions: antenatal care, delivery care, child care and family planning care. In a PHC context, activities related to these functions involve not only health personnel, but groups of people in the individual home, and the neighbourhood as well as in the community. At each of these levels a number of tasks have to be carried out in order to achieve the above objectives and for this support is required in terms of, for instance, appropriate information, appropriate technologies, equipment and supplies, improved communication, supervision and technical support, protective legislation, etc. The need to expand the intersectoral support and coordination in this area cannot be overemphasized.

A detailed description of the relevant tasks and the support required to carry them out is given in the matrix for PHC ELEMENT No. 4. Listed hereunder are examples of types of decisions and actions relevant to MCH/FP at different levels of care.

Home level:

This is where a number of primary decisions and actions take place, without which the rest of the programme will not benefit the women and children:

- obtaining and utilizing adequate and sufficient food;
- recognition of advantages of preventive measures, such as immunization and family planning; and of the need to maintain healthy behaviour and practices;
- recognition of the need for curative care, e.g. for infant diarrhoea;
- actions for self-help, like first aid for child accidents, building latrines, etc.;
- decision to contact and/or utilize health services, e.g. attending a clinic for antenatal care;
- carrying out actions as advised, e.g. taking medications as prescribed;
- participation in communal actions for health, such as malaria spraying, cleaning campaigns, etc.

Communal level:

The community has a number of ways of giving support to the home level as well as to the health programme itself, particularly through its various bodies and groups. In addition, there is a number of tasks related to MCH/FP that can, or should, take place as communal actions, initiated by the Community Development Committees or similar bodies and involving community groups as well as volunteering or selected community members. Some examples are:

- selection of community members for training as CHW or trained TBA;
- plan and conduct campaigns, e.g. health education campaigns in schools, mosques, etc., campaigns for cleaning up of garbage, etc.;
- cooperative activities like organizing day care activities for working mothers and for mothers who have to be hospitalized; or production of weaning foods;
- improvement of public transport systems and cooperation in arranging a system for emergency transport of pregnant women or sick children.

Health services (including first health facility and first referral level):

The health personnel carry out very important supportive activities and tasks within all the above functions, that can be grouped under the following categories:

- home visiting for promotive and preventive MCH care;
- provision of integrated clinical services for mothers with children and for other women in reproductive ages (preventive and curative, including nutrition);
- participation in community activities;
- education/information activities;
- training and supervision of MCH/FP tasks for health workers and different types of community workers under them;
- recording and reporting health problems and service data related to mothers and children, and participating in interpreting and utilizing these data.

The detailed content of the above-mentioned matrix will of course have to be modified in each individual country setting, depending on the priorities decided upon in relation to MCH/FP and the resources available. It represents, however, the type of programme which WHO considers ultimately has to be made available in order to achieve health for all mothers and children, and this can to a large extent now be achieved within the setting of developing countries by a reallocation of present resources to the extent possible.

INDICATORS OF PROGRAMME EFFECTIVENESS

The choice of indicators for monitoring and evaluation of programmes, again, will vary with the setting and the priorities, but the following are some suggestions for the type of indicators to be used for assessing the MCH/FP component of PHC:

- percentage of pregnant women receiving antenatal care at least once during pregnancy;
- percentage of pregnant women having heard of the importance of preventing malaria and means and ways of doing it;
- percentage of deliveries attended by trained staff including TBAs;
- percentage of children under one year having been weighed at least twice;
- percentage of couples currently using a family planning method;
- percentage of babies with a birthweight below 2500g;
- where feasible, birthweight-specific perinatal mortality;
- percentage of CHWs and TBAs having received a supervisory visit by a nurse/midwife within the last month;
- percentage of communities having a Community Development Committee or similar body with a clear understanding of and policy regarding MCH/FP.

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PHC ELEMENT No. 5: IMMUNIZATION AGAINST THE MAJOR INFECTIOUS DISEASES

- Narrative Summary -

INTRODUCTION (General Objectives)

Immunization programmes seek to reduce morbidity and mortality by providing immunizations against the major killers of children. In the developing world, priority is usually given to the following six: diphtheria, whooping cough, tetanus, measles, poliomyelitis and tuberculosis. Some countries may have selected other priorities among the vaccine-preventable diseases.

At present only some 10% of the 85 million children* born annually in developing countries are being immunized and each year these diseases are estimated to kill some five million children and to disable five million more with paralysis, blindness, deafness or mental retardation.

The goal is to provide immunizations for all children of the world with special priority given to those in developing countries. This is neither a question of a single mass campaign nor of a series of mass campaigns: permanent immunization delivery systems must be established which can reach a high proportion of children during their first year of life as they continue to be born into the population. In addition, such systems must be able to ensure that pregnant women have received adequate tetanus immunizations to protect them during delivery and to protect the newborns until the umbilical cord has healed.

CONTENT AT DIFFERENT LEVELS OF CARE

Immunization services can be provided more economically if they are integrated into other health care delivery services. Therefore, a basic programme strategy is to promote an expanded programme of immunization in consonance with other health care delivery services within the health system based on primary health care, particularly maternal and child health services.

Activities related to immunizations involve individual family members, members of the community, and health personnel at first health facility and the first referral level. A detailed description of the tasks at different levels is given hereunder:

Home level:

The woman with her child constitutes the focal point of the programme. It is at the home level that she must take decisions about the health services and their use:

- to participate in educational activities or information gatherings at the community level;
- to recognize the need to immunize her child and herself;
- to recognize the need for cleanliness during home delivery to prevent neo-natal tetanus;
- to be willing to cooperate and communicate with health personnel.

* Excluding China.

Communal level:

It is of utmost importance to involve members of the community to:

- participate in the planning of the programme, e.g. immunization session schedules, time and place to conduct immunization sessions, etc.;
- participate actively in immunization sessions;
- participate in planning and conducting educational programmes in schools, churches, mosques, etc.;
- arrange pre-campaign meetings to inform community teachers, politicians, etc., about the programme;
- improve public transport systems.

First health facility level:

The health personnel in the first health facility will carry out MCH activities including immunizations. The tasks can be grouped under the following categories:

- motivation/education of individuals and groups;
- administration and maintenance of vaccine and equipment;
- participation in planning and evaluation of the programme;
- communication and cooperation with District Health Office staff and participation in health activities at the community level;
- provision of training, supervision and guidance for different categories of staff;
- recording, reporting and participation in the interpretation and utilization of these data.

First referral level (District Health Office):

- Production and provision of training aids;
- provision of information/education concerning the programme to the public;
- programme planning and allocation of resources;
- execution of coverage evaluation, surveys and disease surveillance;
- provision of support to health service personnel in training and supervisory activities.

INDICATORS OF PROGRAMME EFFECTIVENESS

The following are some indicators for monitoring and evaluating immunization programmes:

- percentage of pregnant women and mothers of children below one year of age who are aware that the target diseases can be prevented by immunization;
- percentage of children below one year of age and of pregnant women who are immunized;
- proportion of vaccine doses administered that have adequate potency;
- proportion of planned techniques and procedures that are executed;
- reduction in morbidity and mortality for the target diseases.

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PHC ELEMENT No. 6: PREVENTION AND CONTROL OF LOCALLY ENDEMIC DISEASES

(a) Malaria

- Narrative Summary -

INTRODUCTION (General Objectives)

Malaria remains one of the most important widespread endemic diseases; there are about 120-150 million cases annually; and the disease hampers the socioeconomic development of many countries. The malaria control strategy, objectives and activities have to be adjusted to the epidemiological and socioeconomic conditions in countries. The implementation of efforts to prevent and control malaria using appropriate technology requires the involvement of the community.

CONTENT AT DIFFERENT LEVELS OF CARE

Antimalaria activities include various combinations of approaches involving man, vector, parasite and their environment. The alternative approaches adopted are dependent upon the objectives and prevailing epidemiological situation in each country. The objectives may range from reduction of mortality in some areas to full-scale country-wide malaria eradication.

In order to carry out these activities not only personnel at different levels of the health system are involved but also other groups of people, ranging from the individual, the family, the community, as well as personnel in other sectors such as agriculture and environmental sanitation.

The activities are broadly categorized into:

- the early recognition of suspected malaria cases, appropriate treatment and referral;
- preventive treatment to high-risk groups of populations (e.g. expectant mothers, children 0-4 years and adults in communities of high economic importance);
- reduction of the prevalence of malaria, through a reduction in vector longevity, man/vector contact and vector population;
- interruption of transmission of malaria.

A description of the different types of antimalaria activities and the relevant tasks and support required to carry them out is provided in the matrix. In most instances the use of a combination of antimalaria control activities is required.

Listed hereunder are examples of the types of decisions and actions relevant to the prevention and control of malaria at different levels.

Home level:

- recognition of usual symptoms of malaria, particularly fever;
- decision to contact and/or utilize health services to seek care;

- acceptance of the prescribed treatment, e.g. preparation of blood slides from and administration of essential drugs to fever or suspected cases;
- acceptance of and cooperation in operations concerned with the spraying of residual insecticides;
- involvement in environmental activities aimed at the prevention of malaria, e.g. selection of building sites, peri-domestic sanitation, etc.

First health facility:

- preparation and microscopic examination of blood slides or referral to hospital;
- recording and reporting data on malaria morbidity and mortality;
- training community members and community health workers whenever possible;
- monitoring and evaluation of malaria chemoprophylaxis and treatment;
- promotion of information/education concerning malaria treatment, chemoprophylaxis, spraying operations, etc.;
- application of larvicides, particularly in urban areas.

First referral level:

- provision of adequate management for severe/referred cases;
- participation in the guidance, supervision and continuing training of community health workers and health services' personnel;
- epidemiological and operational evaluation of antimalaria activities on a continuing basis.

INDICATORS OF PROGRAMME EFFECTIVENESS

Some types of indicators for the assessment of the effectiveness of malaria control activities are listed below:

- percentage of people, particularly of pregnant mothers and parents, having heard of the importance of malaria prevention and control and the means of achieving them;
- percentage of people covered by malaria chemoprophylaxis and of patients correctly diagnosed and adequately treated;
- percentage of reported malaria cases confirmed by laboratory diagnosis;
- number of deaths due to diagnosed malaria.

In more advanced malaria control programmes, the indicators could refer to spleen and/or parasite rates, larval and adult vector densities, etc.

PHC ELEMENT No. 6: PREVENTION AND CONTROL OF LOCALLY ENDEMIC DISEASES

(b) Hypertension

- Narrative Summary -

INTRODUCTION (General Objectives)

High blood pressure is an ubiquitous health problem and from 8 to 18% of adults in most countries, both developed and developing, have pressures above 160mm Hg. systolic and/or 95mm Hg. diastolic.

A community approach to its control is feasible because high blood pressure is easily identified and the benefits of adequate control, e.g. in preventing cerebral stroke, are well-established; furthermore, hypertension control measures at the community level do not involve highly specialized activities and can be incorporated into PHC as part of the existing health systems infrastructure.

The long-term objectives of such efforts are: first, to prevent hypertension if possible, and second, to reduce the mortality and morbidity due to the consequences of high blood pressure. The main approaches to these goals are through education of the public and the provision of progressive patient care, including patient education and rehabilitation when necessary.

CONTENT AT DIFFERENT LEVELS OF CARE

In any community where the problem of hypertension warrants community control measures, the range of actions outlined in the matrix for PHC Element No. 6(b) must be realistically adapted to local circumstances, resources and constraints. For example, extensive screening surveys should not be carried out unless resources are available to provide for the care and long-term follow-up of the patients. However, incidental screening, i.e. the routine measurement of blood pressure in all middle-aged people (40-65 years) who report for medical attention, irrespective of the reason for their attendance, is a minimal requirement that is both realistic and feasible.

Home level:

There is a certain basic, minimum knowledge concerning the promotion and preservation of cardiovascular health, that every citizen is entitled to be informed about. Where appropriate, this information will be provided as part of the activities covered under PHC Element 1 - "Education Concerning Prevailing Health Problems and the Methods of Preventing and Controlling Them".

In addition, direct health education efforts will be made by CHWs and other home visiting health personnel to obtain the cooperation of individual patients and their families in maintaining continuity of patient care.

Health service (including first health facility and first referral level):

The responsibilities of the health service in a hypertension control programme include:

- appropriate training of health personnel and volunteers;
- preparation of the technical information required for the community health education programme;

- detection, treatment and follow-up of hypertensive patients;
- maintenance of functioning two-way referral links with PHC, through supervisory and other supporting services;
- monitoring and evaluation of the programme.

INDICATORS OF PROGRAMME EFFECTIVENESS

A number of indicators may be devised to assess whether the programme is moving in the right direction. In order to obtain the information required for these indicators, it is essential to develop an appropriate system for recording, storage and retrieval of data, based on available facilities. The choice of indicators may include, e.g. the percentage of:

- people who have heard of high blood pressure and know that it can be effectively treated;
- hypertensive patients under medical care;
- hypertensive patients continuing treatment or lost to follow-up after a predetermined period, e.g. two years;
- treated patients in whom blood pressure control is adequate;
- referred patients who actually receive the necessary specialized attention and continue in the system;
- stroke patients receiving rehabilitative care;
- people expressing satisfaction or dissatisfaction with specified aspects of the programme.

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PHC ELEMENT No. 7: APPROPRIATE TREATMENT OF COMMON DISEASES AND INJURIES

(a) Diarrhoeal Diseases

- Narrative Summary -

INTRODUCTION (General Objectives)

Appropriate treatment of common diseases and injuries in PHC aims at prevention of death and disability resulting from common diseases and injuries so that all children have the possibility for healthy growth and development. Prevention of diarrhoeal morbidity and mortality is a vital part of national strategies for PHC. As diarrhoeal diseases affect almost 100% of the population under five in all developing countries, their control is basic to achieving a healthy population in the future. To enable the programme to be effective, diarrhoeal disease control activities must include substantial components of other PHC elements, such as:

- PHC Element 2 : Food Supply and Proper Nutrition
- PHC Element 3 : Safe Water and Sanitation
- PHC Element 4 : Maternal and Child Health.

Diarrhoeal disease control itself includes at least three main functions, namely: diagnosis of diarrhoeal disease and provision of appropriate treatment; management of outbreaks of diarrhoeal disease; and prevention of diarrhoeal diseases. In a PHC context, activities related to these functions involve not only health personnel, but groups of people in the individual home, and the neighbourhood as well as in the community. At each of these levels a number of tasks have to be carried out in order to achieve the above objectives and for this support is required in terms of appropriate information, appropriate technologies, equipment and supplies, improved communication, supervision and technical support.

CONTENT AT DIFFERENT LEVELS OF CARE

A detailed description of the relevant tasks and the support required to carry them out is given in the matrix (see PHC ELEMENT No. 7(a)). A few examples of types of decisions and actions relevant to diarrhoeal diseases control at different levels of care may be listed as follows:

Home level:

This is where a number of primary decisions and actions take place, without which the rest of the programme will not benefit children. These actions include:

- correct feeding of the child who has diarrhoea (i.e. continuing breastfeeding and maintaining adequate fluid intake, using safe and appropriate solutions);
- recognition of dehydration and ability to take appropriate action when it occurs, e.g. seeking care, obtaining ORS packets and using them correctly;

- knowledge and practice of personal hygiene with regard to the handling of food and water, proper use of latrines and the disposal of excreta;
- informing health authorities of suspected outbreaks of diarrhoeal disease as soon as possible.

Communal level:

The community has a number of ways of giving support to the home level as well as to the health programme itself, through its various groupings. In addition, there are a number of tasks related to diarrhoeal disease control that can, or should, take place as communal actions, initiated by the Community Development Committees or similar bodies and involving community groups as well as volunteering or selected community members. Some examples are:

- performance of tasks related to the provision of safe water and basic sanitary facilities (as in PHC ELEMENT No. 3: Adequate Supply of Safe Water and Basic Sanitation);
- informing health authorities of suspected outbreaks of diarrhoeal diseases as soon as possible;
- implementation of appropriate measures to control outbreaks e.g. decontamination of water, proper waste disposal.

Health service (including first health facility and first referral level):

The health personnel carry out very important activities in support of those performed at the home and communal levels. These include:

- determining the cause of diarrhoeal disease (as far as possible) and providing treatment that is appropriate to the cause and to the degree of dehydration;
- packaging and supplying oral rehydration ingredients;
- investigating the cause of outbreaks of diarrhoeal diseases and determining appropriate methods for their control;
- establishing and managing temporary treatment centres during serious outbreaks of diarrhoeal diseases;
- training and supervising all categories of health workers, including non-medical personnel, required in support of the necessary treatment and control measures;
- educating family members and the community about the importance of the tasks related to the provision of safe water and basic sanitary facilities.

INDICATORS OF PROGRAMME EFFECTIVENESS

The choice of indicators for monitoring and evaluation of programmes will vary with the setting and the priorities, but the following are some suggestions for the type of indicators to be used for assessing the effectiveness of diarrhoeal disease control activities:

- diarrhoeal disease morbidity rate;
- diarrhoeal disease mortality rate;
- proportion of health posts by geographical location from which OR packets are available;
- percentage of cases of children with diarrhoea treated with OR therapy;
- percentage of reported diarrhoeal disease outbreaks receiving appropriate response within 48 hours of report;
- percentage of the population receiving a message about proper use and maintenance of water supplies and proper excreta disposal practices.

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PHC ELEMENT No. 7: APPROPRIATE TREATMENT OF COMMON DISEASES AND INJURIES

(b) Common accidents in the home

- Narrative Summary -

INTRODUCTION (General Objective)

Accidents are among the 10 highest causes of death in most countries. Amongst children it is often the most common cause of death, in developing as well as developed countries, and these accidents to a large extent occur in or around the home. They often result in lifelong disability, and the care of injured and disabled people consumes much of the health budget in many countries.

The aim, therefore, must be not only to provide first aid on the spot and adequate treatment at the appropriate level of care, but also to prevent the occurrence of similar accidents in the future and to provide programmes for active rehabilitation of disabled persons, children as well as adults.

CONTENT AT DIFFERENT LEVELS OF CARE

Three types of home accidents have been chosen as examples; namely cuts, burns and scalds, and poisoning. The detailed tasks related to activities or treatment of these accidents have been elaborated in the matrix for PHC Element No. 7, together with the types of support needed, as well as competence and knowledge (see also the matrices for Elements Nos 1 and 8). Some types of action needed at different levels of care are given below:

Home level:

Since the example chosen deals with accidents occurring in the home, and since most of these accidents will involve children, the persons primarily responsible for actions at this level will most often be a parent or another adult family member, who will have to:

- participate in courses in first aid or other education activities;
- recognize the type and the extent of the injury;
- take limited action of emergency nature, avoiding potentially harmful actions;
- call for more skilled help at home or take the injured to the nearest treatment facility;
- take measures to prevent reoccurrence of similar accidents;
- if needed, continued activities in the home for rehabilitation of functions.

The trained health workers in the same community will have to:

- respond to emergency calls and take adequate measures;
- inform the family how to prevent accidents;
- give follow-up support for rehabilitative actions.

Communal level:

Activities at this level will be more important and more extensive in relation to road accidents, accidents at work, etc. However, for home accidents the community can still give important support, such as:

- inclusion of teaching about first aid and accident prevention in school health programmes, activities by community groups, etc.;
- assistance with emergency transport;
- development of rehabilitation programmes, employment schemes for disabled persons, etc.

Health services (including first health facility and first referral level):

- emergency treatment and referral, if needed;
- comprehensive treatment of injury to prevent disability;
- when appropriate, rehabilitative treatment and referral for reconstructive surgery, etc.;
- participation in health information programmes;
- training and supervision of health workers.

INDICATORS OF PROGRAMME EFFECTIVENESS

The indicators listed below are to be seen as examples of indicators illustrating either effectiveness in avoiding death or disability (curative care component) or effectiveness in preventing accidents (preventive measures/education-information). They are related, although not confined to accidents in the home:

- percentage of households with at least one person having participated in a first aid course;
- percentage of communities having developed rehabilitation programmes for disabled;
- reduction of mortality due to accidents in the age group below five years;
- reduction of incidence of disability among children below five years;
- reduction of number of accidents among children under five years.

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PHC ELEMENT No. 8: PROVISION OF ESSENTIAL DRUGS

- Narrative summary -

INTRODUCTION (General Objectives)

A major contributor to increasing costs in a country's health budget is the drug component. Drugs are too often produced and procured in response to the marketing imperatives of pharmaceutical industries rather than to health policies and priorities. There is a need for health systems based on primary health care to regulate both the production or purchasing of drugs and the prescription or usage practices at all levels in order to improve both the cost-effectiveness and the safety of drug management.

WHO has promoted the preparation of an international list of some 200 "essential" drugs, the aim of which is to provide guidance in drug management. However, it is the responsibility of each country to elaborate its own list of essential drugs, guided by the prevailing health problems that have to be tackled. The provision of essential drugs aims at making these drugs available to the users of the health systems at all levels of primary health care, all over the country, at all times by instituting an efficient system of drug acquisition, storage, distribution and utilization.

To achieve this, it is necessary for all persons concerned with primary health care to participate actively in the "management" of drugs at their own level. Drug management in primary health care is an integral part of the overall drug management plan for a country-wide health system.

CONTENT AT DIFFERENT LEVELS OF CARE

Before discussing this heading in any detail, two clarifying remarks are needed.

For easy reference, the essential drugs have been divided into groups as follows:

- A - Drugs provided by the system to different levels of PHC for free distribution to the patients; this group is subdivided into:
 - A₁ - drugs supplied to individual patients, and
 - A₂ - drugs distributed to homes for constant use, e.g. preventive drugs, disinfectants, etc.;
- B - Drugs bought with prescriptions from private pharmacies;
- C - Drugs bought without prescriptions including locally available herbal medicines and home remedies.

The activities and tasks assigned to responsible persons in each level of PHC have to be realistically adapted to local conditions. They may differ from country to country or even within the same country depending on several constraints: human, financial and material resources, geographical (climatic), demographic and cultural patterns, etc.

Home level:

Persons responsible in the home should know about the existence and capability of health facilities and pharmacies in order to obtain the drugs in Group A. This is also applicable to the drugs in Group B; but for drugs in Group C the family members should be able to recognize the general symptoms of disease and to make decisions about giving self-care or to contact the health facilities.

When drugs are acquired, they have to be kept away from dampness and heat and must be made inaccessible to children.

The responsible person(s) should administer the drugs to the sick person(s) at the right time and in the right amount and should also observe and report on the overall effects of the drugs.

First health facility:

The responsible persons should know how to project drug needs and how to requisition drugs.

When received, the drugs should be kept under favourable conditions (away from dampness and heat, rodents, insects, dust and dirt) possibly in closed drug cabinets. The implementation of the rules of stock rotation, including consideration of expiry dates, is of crucial importance. The responsible health personnel should know about drug reserve and emergency stock and should be able to keep a record of drugs.

The staff in charge should distribute the drugs to patients, provide them with information about their utilization, and keep records of overall effects that have been reported. The responsibility to teach and guide the community and home level is an important function of the first health facility.

First referral level:

The duties regarding drug management are basically the same as for the first health facility except that the persons responsible for other aspects of drug management (pharmacist or drug store-keeper) may be different from those responsible for the utilization (prescription) of drugs (doctor).

In addition to stock-keeping, stock rotation and allocation of drugs to different outlets, this level is responsible for the training of personnel in the first health facility.

The reports on efficacy or side effects of drugs, changes in local needs and priorities have to be assessed at this level and transmitted to higher levels for necessary action.

INDICATORS OF PROGRAMME EFFECTIVENESS

A number of indicators can be devised to assess the effectiveness of provision and management of essential drugs in primary health care:

- percentage of households eligible for constant distribution of drugs in group A₂ that actually receive the drug;
- percentage of individual patients supplied with drugs from group A₁ who use it properly;

- percentage of pharmacies, health facilities and first level referral hospitals that have:
 - proper and operational storage facilities;
 - sufficient quantities of specified essential drugs to last for the period between two stock deliveries, including emergency stocks;
 - proper and operating systems for stock rotation and stock keeping;
 - appropriately trained responsible personnel;
- percentage of health facilities/first referral level hospitals, that have a functioning system for monitoring and recording the effectiveness and side effects of selected essential drugs;
- percentage of such facilities that have an operational system for regular sampling of drugs for quality control;
- percentage of the drug samples taken during quality control surveys that were found adequate according to accepted quality standards.

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PART II

GLOSSARY OF TERMS

The purpose of this glossary is to explain the terminology used in the framework of the matrices.

- Element: Refers to the eight elements of primary health care, as defined in the Alma-Ata Declaration.
- Activity: Refers to broad activities that constitute essential components of the content of a particular PHC element.
- Level: Home, communal, first health facility and first referral level. See the paper on "Definitions of various levels of primary health care".
- Tasks: The core content of primary health care: the detailed tasks that have to be performed in order to improve/maintain health. The decision as to which tasks are essential (i.e. priority tasks) has to be taken at the national level, based on the priority ranking of health problems and strategies.
- Person(s) responsible: Refers to the various persons at different levels who will have full or partial responsibility for carrying out the tasks required. Who is exactly responsible for a specific task will vary from country to country, depending on existing legislation, health system infrastructure, cultural factors, etc.
- Competence and knowledge required: Skills and knowledge that persons who are going to carry out the specific tasks need to possess, i.e. the content of education or professional training programmes. The type of knowledge needed may often be the same, for example, for a physician and the mother of a child; while the depth required will vary considerably.
- Supplies and equipment: The "hardware" support needed at different levels for specific tasks, such as, clothes for the newborn baby at home; obstetric equipment at the first health facility or referral level; material for preparing blood slides; microscope; drugs, etc.
- Logistic support: Various types of support activities from higher levels, such as supervision, educational programmes, referral systems, consultant expertise, etc. It also includes facilities for transportation, transport and equipment maintenance, etc.
- Community support: Refers to a variety of intersectoral programmes or activities at the level of the community that can provide direct support to activities at the other levels in the matrix.

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Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Health Promotion</u>	1.1 Home	<p>a) Acquisition of basic knowledge of personal hygiene, proper nutrition, common health hazards and how individual and group behaviour influence and promote health</p> <p>b) agreement to act on the basis of knowledge acquired</p>	- family members	<ul style="list-style-type: none"> - knowledge of available health facilities - ability to impart knowledge to others - knowledge of functional literacy techniques - knowledge of how health contributes to individual family welfare - as above 	<ul style="list-style-type: none"> - health promotion literature - demonstration materials including material for functional literacy classes 	<ul style="list-style-type: none"> - adequate means of communication to facilitate health education/information efforts, e.g. informal networks of village communicators, local radio, local newspapers, etc. - public recreational facilities for individual and group activities - provision of appropriate literature 	<ul style="list-style-type: none"> - volunteers to help in health promotion - activities of self-help groups - promotion of the concept of healthy behaviour by community leaders - support for functional literacy programmes - support for functional literacy programmes
		c) support to family members	community health workers volunteers teachers	- as above	- as above	- as above	- as above
	1.2 Communal	<p>a) mobilization of community groups to promote positive health, e.g. parent-teacher associations</p> <p>b) involvement of families in decision-making concerning their health, through self-health groups, etc.</p> <p>c) acquisition of knowledge on available health resources and</p> <p>d) community work on recreational facilities such as sports fields</p> <p>e) awareness by industry of its responsibilities for health promotion</p>	community health and development workers teachers volunteers self-help groups	<ul style="list-style-type: none"> - knowledge of human resources within the community - knowledge of the fact that health care delivery is an integral part of overall community development - skills in motivating community groups and in assisting them in mobilizing their energies for health promotion and protection 	<ul style="list-style-type: none"> - as above in 1.1 - appropriate tools and building materials 	<ul style="list-style-type: none"> - voluntary and non-voluntary codes of practice by industry, advertisers, etc., e.g. on labelling, advertising and marketing - provision of supplies and equipment not available locally - tax allocations for promotion of recreation 	<ul style="list-style-type: none"> - support for mass media health information/education programmes - enlistment of the food industry to make better known the caloric content of food and to observe hygiene requirements - support for existence of public recreational facilities

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. Health Promotion (cont'd)	1.2 Communal (cont'd)	f) introduction of health promotion in school curricula and in non-formal education	school authorities	- as above in 1.1 and 1.2 overleaf	- teaching materials, radio receivers, etc.	- communal meeting facilities	- volunteer help in school health programmes
	1.3 First level health facilities	a) counselling of patients on how to maintain or regain health b) education/information of individuals, families CHWs and communities in health promotion	medical assistant nurse midwife	- ability to communicate effectively knowledge of threats to health in the community - knowledge of how individual families may be motivated to adopt/maintain health by behaviour patterns	- basic health promotion literature and audio-visual materials	- training in communication techniques and in community development work	- recognition of the potentials offered by the first level health facility and its timely and proper use e.g. for child immunization
	1.4 First referral level	a) as above in 1.3 b) group counselling for health	physicians nurses midwives health inspectors pharmacy assistants, etc.	- ability to communicate effectively with individuals and groups - ability to impart knowledge - knowledge about resources - human and material - in the communities they serve, including patterns of leadership and skills of members	- audio-visual materials and equipment on prevalent health problems	- special facility for educational and information purposes	- community involvement in the dissemination of information on health promotional activities

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Prevention of disease and maintenance of health</u>	2,1 Home	<p>a) acquisition of correct and sufficient know-how of:</p> <ul style="list-style-type: none"> - prevention of locally endemic diseases - prevention of accidents including burns and fractures - maintenance of health by positive action such as sport, rest, etc. - correct nutrition - water and waste sanitation <p>b) correct maternal and child health practices, including family planning and immunization</p> <p>c) correct use of essential drugs</p> <p>d) acquisition of correct information on available health services within the community and at the first level health facility and timely utilization such as proper immunization of children, accepting guidance in family planning, etc.</p>	family members	<ul style="list-style-type: none"> - knowledge and ability to act properly in case of emergencies - knowledge of possibilities and limitation of self-care - skill in elementary first aid - knowledge of methods of prevention of endemic disease 	<ul style="list-style-type: none"> - first aid kit - simple illustrated guides and material on disease prevention 	<ul style="list-style-type: none"> - provision and maintenance of educational facilities - provision and maintenance of sport and recreation facilities 	
		e) support to family members	CHWs volunteers	as above	as above	<ul style="list-style-type: none"> - home visits by first level health facility workers 	<ul style="list-style-type: none"> - organization of classes or sessions to teach family members (esp. mothers) elements of disease and accident prevention

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Prevention and maintenance of health</u> (cont'd)	2.2 Communal	a) sustained involvement in: <ul style="list-style-type: none"> - creation of healthy environment in the community: i.e. water, waste disposal and environmental safety, food hygiene, etc. - building of sports and creative leisure facilities (such as cottage industries etc.) - working towards self-reliance in agricultural production, etc. 	community health workers (CHWs) teachers volunteers self-help groups	<ul style="list-style-type: none"> - ability to communicate effectively with individuals and groups - knowledge of resources available within the community and the first level health facility - knowledge of skills of different members or groups in the community - knowledge and skill of preventive and health promoting measures that can be undertaken by the community itself 	- relevant education and information materials on current health issues of the community	- support by first level health facility and first referral level in organizing classes or sessions for development of skills and know-how in disease prevention and health promotion	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Prevention of disease and maintenance of health (cont'd)</u>	2.3 First level health facility	<p>a) education of family members, community leaders, CHWs, teachers and volunteer workers in prevention of common and endemic diseases</p> <p>b) education on health maintenance by correct nutrition, environmental safety, immunization, maternal and child health, occupational health (esp. agriculture)</p>	medical assistant nurse midwife	<ul style="list-style-type: none"> - ability to communicate effectively with individuals and groups - adequate knowledge of contents of health messages to be delivered - knowledge about the community they serve, both physically and socially 	<ul style="list-style-type: none"> - reference material on current health problems of the area - guidelines on educational methods and materials - audio-visual equipment, i.e. slide projection, diapositives, etc. 	<ul style="list-style-type: none"> - selection or election of some community members or volunteers to establish contact with first referral level when needed - availability of tools and building materials 	<ul style="list-style-type: none"> - organization of sessions and classes to teach about the prevailing health patterns and methods of preventing them as well as means of health maintenance - organization of community involvement in health development projects such as construction of water and waste disposal facilities
	2.4 First referral level	<p>a) education of individual patients and community at large on prevention of endemic diseases</p> <p>b) support and reinforcement of educational activities of the first level health facility</p>	physicians nurses midwives health inspectors pharmacy assistants, etc.	<ul style="list-style-type: none"> - ability to communicate effectively - some knowledge of counselling - knowledge of information and education resources within the community and surrounding area that might be utilized, such as newspapers, radio stations, etc. - adequate knowledge of communities the first referral level serves, both physically and socially 	<ul style="list-style-type: none"> - audio-visual material and equipment on prevalent health problems for group education 	<ul style="list-style-type: none"> - special facility for education and information purposes - transportation - availability of tools and building materials 	<ul style="list-style-type: none"> - community involvement in educational activities - organization of community involvement in health development projects such as construction of water and waste disposal facilities

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Education to deal with disease</u>	3.1 Home	a) acquisition of knowledge of symptoms of easily diagnosable prevalent diseases and how to deal with them	family members	- ability to recognize possibilities and limitations of self-care in each specific situation - knowledge of appropriate action to be taken in each specific situation	- suitable reference material - appropriate medicaments and supplies	- arrangements for individual and group education	- provision of assistance to sick people such as preparation of meals, taking care of children, etc.
		b) ability to take proper decisions for self-care or for seeking help					
	c) support to family members	community health workers volunteers	- as above	- as above	- mobilization of family members for participation in health education programmes conducted by first level health facility and first referral level on how to deal with disease		
	3.2 Communal	a) organization of self-help groups assisting family members in their health and social problems b) assignment of one or more persons in each community to assume special responsibility for health within the community c) decision-making in case of prevailing diseases on the proper action to be taken	community health workers teachers volunteers self-help groups	- ability to communicate effectively - adequate knowledge of resources in the community: human, institutional, agricultural, etc. - knowledge of the concept of community organization	- access to easy and illustrated reading material	- community meeting facilities	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Education to deal with disease (cont'd)</u>	3.3 First level health facility	a) education/information of individual patients and community on symptoms of easily recognizable diseases especially among children, and ways of dealing with each case b) information of community at large of the services available at first level health facility and at the first referral level	medical assistant nurse midwife	- ability to communicate effectively with groups and individuals - knowledge of resources in the community, both human and material - literacy and numeracy	- simple audio-visual equipment such as slide and film strip projections, demonstration facilities such as pictures, posters, etc.	- provision of material not available locally - provision of medications appropriate for use by each family	- volunteers to collaborate with first level health facility - communal room or place for meetings, gatherings, etc.
	3.4 First referral level	a) reinforcement of education and informational activities of the first level health facility b) counselling of individual patients on how to deal with disease and avoid recurrence c) provision of on-the-job training in education and information for the CHWs	physicians nurses midwives health inspectors pharmacy assistants, etc.	- ability to communicate effectively with individuals and groups - ability to impart knowledge - knowledge about resources (human and material) in the communities they serve, including patterns of leadership and skills of members	- audio-visual materials for education of community members and also for teaching of first health level workers	- as above in 1.3	- involvement in organization of volunteer groups both for permanent health work and in case of emergencies

PHC ELEMENT NO 2: PROMOTION OF FOOD SUPPLY AND PROPER NUTRITION

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Promotion of food supply</u>	1.1 <u>Home</u>	<p>a) application of simple improvements in the technology of food preservation and storage</p> <p>b) proper management of food budget in terms of nutrient content vs. cost</p> <p>c) utilization of facility or programme to improve use of food budget, i.e. food stamps, subsidies, special shops, food for work, feeding programmes</p> <p>d) improvement of the yield, quality, nutritional or monetary value of crops</p> <p>e) improvement of animals husbandry agriculture and the use of land and water technologies</p> <p>f) utilization of agricultural extension and rural credit facilities for above</p>	<p>father</p> <p>mother</p> <p>grown up sons and daughters</p>	<p>- understanding of proposed methods for improving food preservation and storage</p> <p>- understanding of food value vs. cost of more important food items</p> <p>- awareness of any facility or programme that can decrease food budget or generate income using improved technology</p> <p>- knowledge of the programmes carried out through social workers, agricultural extensionists, agricultural credit cooperatives, i.e. non-health sectors that can help improve food production and availability</p>	<p>- simple information booklets on home economics as related to food</p> <p>- simple brochures on improving food conservation, storage and production technologies</p> <p>- simple brochures on use of rural credit, formation of cooperatives, marketing facilities etc.</p>	<p>- supervision</p> <p>- information through mass media</p>	<p>- local farmers cooperatives and rural banks</p> <p>- Community Development Committee</p> <p>- Inter-sectoral programmes related to agriculture, animal husbandry, fishing etc.</p>
		<p>a) home visiting to become acquainted with family food problems and reasons for inadequate supply, as applicable</p> <p>b) information and demonstration concerning programmes being implemented and that can increase food budget, and increase yield of crops.</p> <p>c) education and demonstration concerning food value vs. cost, methods to improve food preservation, storage, etc</p> <p>d) education and demonstration concerning better use of land and water resources.</p>	<p>CHW</p> <p>social welfare worker*</p> <p>agricultural extension workers*</p>	<p>as above in 1.1 plus:</p> <p>- capacity to communicate relevant information in local languages</p> <p>- skill to demonstrate appropriate technologies</p>	<p>as above in 1.1 plus:</p> <p>- appropriate teaching/learning aids</p> <p>- manuals, guidelines</p>	<p>- supervision and on-the-job training</p> <p>- transport</p>	<p>as above in 1.1</p>

* Through intersectoral information and cooperation these workers would visit homes and participate in community meetings to carry out their specific sectoral activities.

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
	1.2 <u>Communal</u>	<p>a) assurance that the community is well informed about programmes that can increase/generate income</p> <p>b) information/education/demonstration concerning methods of increasing yield, nutritional, monetary value of produce</p> <p>c) promotion of the creation of cooperatives for better production and marketing of food</p> <p>d) support schemes to improve water supply</p> <p>e) support programmes to increase quantity and quality of food produced</p> <p>f) acquisition of food aid and creation of feeding programmes as necessary</p> <p>g) organization of meetings to inform/educate/organize community on methods/programmes to increase food production, food budget, income generation</p>	<p>CHW</p> <p>Community Development Committee</p> <p>agricultural extension workers*</p> <p>social welfare worker*</p> <p>mass and women's associations</p> <p>political party(ies)</p> <p>religious groups</p>	<p>as above in 1.1, plus:</p> <p>- knowledge of organizational, administrative and political capacity of programme</p> <p>- ability to get active support from the community</p> <p>- information about and knowledge of how to use potential outside assistance to develop programmes that can increase food supply</p>	<p>as above in 1.1, plus:</p> <p>- tools, seeds, fertilizers</p>	<p>as above in 1.1, plus:</p> <p>- meeting facilities</p> <p>- government support to schemes to increase food production and availability and better use of land water resources, animal husbandry, etc</p> <p>- food production/availability surveys</p>	<p>- selection of persons for CHW training</p> <p>- pressure on government and other agencies to obtain support to improve food production and availability</p> <p>- provision in cash or kind for help in communal projects to increase food supply</p>
	1.3 and 1.4 <u>First level health facility and first referral level</u>	<p>a) training and supervision of CHW</p> <p>b) participation in group educational activities</p>	<p>medical assistant</p> <p>nurse</p> <p>midwife</p> <p>nutritionist/dietician</p> <p>public health nurse as available</p>	<p>- previous participation in a course for teachers of CHWs</p> <p>- ability to teach and supervise tasks</p>	<p>- manuals, guidelines</p> <p>- teaching/learning aids</p>	<p>- records and information keeping</p>	

* Through intersectoral information and cooperation these workers would visit homes and participate in community meetings to carry out their specific sectoral activities.

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
<p>2. <u>Promotion of nutrition and prevention of PEM* in children under three years of age</u></p>	<p>2.1 <u>Home</u></p>	<p>a) breast-feeding for as long as possible and introduction of supplements progressively as from the 5th month</p> <p>b) preparation of foods for children with special attention to supplementary foods</p> <p>c) application of adequate food and culinary technologies in the preparation of food for young children</p> <p>d) preparation of foods in a hygienic way and boiling of left-over foods before giving them to the child</p> <p>e) feeding the child at least 4 times a day and addition of fats or oils plus sugar to the child's food on a regular basis</p> <p>f) feeding child with patience when ill and taking particular care to feed him well during convalescence</p> <p>g) utilization of feeding programmes, day care centres for her children, when existent and if appropriate</p>	<p>mother grandmother other family members and neighbours</p>	<ul style="list-style-type: none"> - understanding the relationship between the health of the child, its growth and development, and the type and amount of food it receives - knowledge and ability to prepare food that is suitable for children of different ages from common available food-stuffs, particularly the preparation of supplementary foods - knowledge of the food value vs. cost of the more important items - knowledge that food is a common vehicle for diarrhoea and how to prevent it - knowledge of the advantages of breast-feeding and awareness of the dangers of bottle-feeding. If forced to bottle-feed, knowledge of how to prepare suitable formulae, administer in a hygienic way and in sufficient quantity. - understanding the weight chart and knowledge that the baby is well if it gains weight - knowledge that an ill child needs food and that sufficient food is essential during convalescence - understanding the relation between child spacing and nutrition 	<ul style="list-style-type: none"> - very simple booklets on child care and nutrition - growth chart 	<ul style="list-style-type: none"> - supervision - information and education through mass media 	<ul style="list-style-type: none"> - health volunteers to help CHWs in their tasks during home visits

* PEM - Protein energy malnutrition

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
	2.1 Home cont'd	<p>a) home visiting to become acquainted with the feeding patterns of children, beliefs about foods, food availability, social and other factors that constitute risk for proper nutrition of the child</p> <p>b) home visiting for education and information and demonstrations to mothers and surrogates on tasks and competences as defined for family members</p> <p>c) assessment of nutritional status of under threes (weighing arm circumference), inspection of weight chart and reinforcement of knowledge of growth chart</p>	CHW health volunteers	<p>as above in 2.1, plus:</p> <ul style="list-style-type: none"> - capacity to communicate relevant nutrition educational messages in local languages - capacity to evaluate nutritionally significant changes in behaviour - understanding the reasons why the noted tasks competences and knowledge of the recipient persons, are important in promoting better nutrition and preventing PEM - ability to develop good human contact with individuals and groups and to impart knowledge through relevant messages delivered in local languages - thorough understanding of the weight chart and the interpretation of progress and nutritional status - correct utilization of a portable balance and noting weights in growth chart - utilization of an arm circumference and or tape and knowledge to interpret findings - knowledge of the foods used in the community, technologies and preparations used, patterns of feeding, prices of foods, breast-feeding practices, food taboos, etc - knowledge of the inter-relationship between infectious diseases and nutritional condition especially diarrhoea and measles 	<ul style="list-style-type: none"> - manuals and guidelines - portable teaching/learning material - portable scales - growth charts - paper, pencil eraser - measuring tapes 	<ul style="list-style-type: none"> - supervision and training - transport 	as above in 2.1

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
	2.2 <u>Communal</u>	a) designation of trainees for CHW and health volunteer courses b) acquisition of food aid, as necessary c) assistance to set up feeding schemes, day care centres, as necessary, and checking nutritional status of recipients d) organization of meetings for nutrition and child care education and demonstrations e) information/education of community leaders on food and nutrition and their importance on health/survival of the young f) nutrition group educational activities g) assessment of nutritional status, as applicable	Community Development Committee agricultural extension workers mass and women's organizations political party(ies) religious groups CHW	as above in 2.1 plus: - organizational and administrative capacity - ability to coerce the active support of the community - information and knowledge on how to use potential outside help for communal programmes - understanding the food needs of the community and the importance of nutrition on the health and survival of children	as above in 2.1 plus: - simple educational booklets, guidelines and manuals, simple group educational elements, growth charts - food, as necessary - fuel and cooking utensils as necessary - meeting facilities - group feeding and day care centre facilities	as above in 2.1 - intersectoral support for feeding centres, day care centres, as required - survey of nutritional status, food habits, food production and availability	- Community Development Committee - religious and political groups - other community organizations - group feeding and day care centre volunteers
	2.3 <u>First level health service facility</u>	a) training and supervision of CHW as applicable b) provision/distribution of guidelines and manuals, as applicable c) provision/distribution of growth charts, scales, measuring tapes, educational material, etc, as applicable d) provision/distribution of supporting material for feeding/day care centres, as applicable e) promotion of adequate breast-feeding practices f) participation/organization of group activities on nutritional education	medical assistant or physician nurse/ midwife	- previous participation at a course for teachers of CHW - ability to teach and supervise, following the indications of the teachers manual and guidelines, the knowledge and skills required by the CHW as described under 1.1, 1.2, 2.1 and 2.2	- materials needed for CHW training - appropriate kits for CHW - teaching/learning materials for group educational activities	- meeting facilities - material for data recording - transport - supervision and training	as above
	2.4 <u>First referral level</u>	a) as above in 2.2 if first level health service facility non-existent b) training and supervision of 2.3	as above in 2.2-2.3 plus: public health nurse nutritionist/ dietician	as above in 2.2 if first level not applicable	as above in 2.2 and 2.3	as above in 2.2 and 2.3	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. Treatment and rehabilitation of PEM	3.1 Home	<p>a) feeding of child according to recommendations of CHW and Health Volunteer</p> <p>b) feeding supplements as indicated by CHW and Health Volunteer</p> <p>c) weighing child at least every 2 weeks and its progress recorded on the growth chart</p> <p>d) referral of malnourished child to proper level as indicated by CHW</p> <p>e) notification of CHW when child has returned from higher level of health care</p> <p>f) adherence to special indications from higher level on treatment of concomitant diseases</p>	<p>mother grandmother</p> <p>other members of the family</p>	<p>- knowledge of the relation between malnutrition and proper feeding rather than reliance on "tonics" etc</p> <p>- knowledge of how to prepare and administer the malnourished child's food</p> <p>- knowledge of how to use, prepare and administer food supplements</p> <p>- knowledge of the meaning of the growth chart</p> <p>- understanding of, and ability to follow, treatment schedule for concomitant diseases prescribed by higher levels of health care</p>	<p>- simple booklets on child care, nutrition and care of PEM</p> <p>- food supplements</p> <p>- vitamin/mineral supplements</p> <p>- growth charts</p>	<p>- supervision</p> <p>- transport</p> <p>- appropriate information on continuation of treatment after referral</p>	<p>- food supplements</p> <p>- Health Volunteers</p> <p>- women's organizations to provide care while mother is absent</p>

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
	3.1 Home cont'd	<p>g) home visiting of children recovering from PEM at least twice a month</p> <p>h) identification of risk factors and introduction of appropriate actions against them</p> <p>i) adhesion to guidelines on home treatment and rehabilitation of children suffering from PEM</p> <p>j) education on treatment and demonstration of use of ordinary foods for above purpose</p> <p>k) distribution of food supplements and demonstration of their use</p> <p>l) referral of cases of complication or unresponsive cases of severe PEM to higher levels</p> <p>m) explanation of the therapeutic measures indicated at higher level</p> <p>n) close monitoring of the treatment indicated from referral</p> <p>o) provision of iron tablets and Vit. A to all children suffering from PEM and explaining their use</p> <p>p) recording cases of severe PEM</p>	<p>CHW</p> <p>Health Volunteer</p>	<p>as above, plus:</p> <ul style="list-style-type: none"> - ability to explain in local language the threat to life posed by PEM and that recovery depends on how the child is fed - knowledge to classify PEM using weight, arm circumference and clinical observations - knowledge to identify oedema, skin changes wasting as signs of severe PEM - understanding the dietary treatment of PEM - knowledge of local foods and special supplements used in the treatment of PEM and how to prepare them - knowledge of why, when and where to refer children for treatment and rehabilitation - understanding the role of certain infections in producing and aggravating PEM - ability to identify anaemia in PEM and treat it - understanding danger of Vit. A deficiency in PEM and how to treat it 	<p>as above, plus:</p> <ul style="list-style-type: none"> - scales - measuring tapes - manuals and guidelines - portable teaching/learning material 	<p>as above, plus</p> <ul style="list-style-type: none"> - record keeping - data gathering and interpretation on prevalence of PEM 	<p>as above</p>

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
	3.2 Communal	<ul style="list-style-type: none"> a) collection of data on prevalence of PEM b) utilization of data to reinforce activities c) assistance to families of children with PEM who present social risk factors susceptible to correction through prompt community action d) setting up feeding schemes, day care centres, as necessary e) action to ensure proper access to higher health referral levels f) coverage of the needs of family if mother absent 	<p>CHW</p> <p>government officials</p> <p>women's and other organizations</p> <p>political party(ies)</p> <p>religious groups</p> <p>Community Development Committee</p>	<ul style="list-style-type: none"> - knowledge of the implications of an increase in prevalence of PEM - knowledge of what can be done to assist families with social risk factors - organizational and administrative abilities - knowledge of where and how to get assistance for feeding and day care schemes 	<ul style="list-style-type: none"> - food and other materials needed for feeding schemes and day care centre - kitchen and feeding rooms - storage facilities 	<p>as above in 3.1 plus:</p> <ul style="list-style-type: none"> - transport 	<ul style="list-style-type: none"> - support from women's and mass organizations in helping to manage group feeding - assistance to families with social risk factors
	3.3 First level health service facility	<ul style="list-style-type: none"> a) training and supervision of CHW b) provision/distribution of guidelines and manuals to CHW c) treatment of uncomplicated severe PEM d) referral of uncomplicated severe PEM to nutrition rehabilitation centre if available e) diagnosis and treatment of concurrent diseases in children with PEM f) referral to higher level if facilities not adequate g) back-referral of discharged patient to CHW with clear indications on how to follow-up h) breast-feeding by mother and participation in feeding demonstrations i) collection of information on prevalence degree/types of PEM and on forwarding to higher level, as applicable j) provision/distribution of food and vitamin/mineral supplements to CHW or mother, as applicable. k) provision/distribution of growth charts, scales, measuring tapes, educational materials, etc. to CHW, as applicable 	<p>medical assistant (or physician)</p> <p>nurse/midwife</p> <p>trained auxiliary</p> <p>mother</p>	<p>as in 2.3 & 3.2 plus:</p> <ul style="list-style-type: none"> - knowledge and ability of how to diagnose and treat severe PEM - knowledge and ability of how to diagnose and treat the complications and emergencies in children with PEM - knowledge and skill of how to prepare and administer diets needed in the treatment of severe PEM - ability to teach and demonstrate to mothers and preparation and administration of food necessary for the rehabilitation of severe PEM 	<ul style="list-style-type: none"> - material needed for training of CHW - material to be distributed to CHW for the performance of their tasks - supplies and equipment for the diagnosis and treatment of the complications and emergencies in children with PEM - teaching and demonstration aids for mothers 	<ul style="list-style-type: none"> - transport - record keeping - collection of data and interpretation - supervision and training 	<ul style="list-style-type: none"> - support from Community Development Committee - support from women's and mass organizations - support from other community organizations

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
	<u>3.4 First referral level</u>	<p>a and b as under 3.3</p> <p>c) treatment of complicated or unresponsive cases of severe PEM</p> <p>d) diagnosis and treatment of concurrent diseases in children with PEM</p> <p>e) referral of treated cases to rehabilitation centre for more complete nutritional recovery</p> <p>f) back-referral of discharged patient to first level and/or CHW with clear indications on how to follow up</p> <p>g, h, i, j, k as in 3.3 if first level not existent</p>	<p>physician/ paediatrician</p> <p>public health nurse</p> <p>nurse/midwife</p> <p>dietician/ nutritionist</p> <p>hospital support personnel</p> <p>mother</p>	as above in 3.3, but corresponding to this level of referral	as above in 3.3 but corresponding to this level of referral	as above in 3.3	as above in 3.3
<u>4. Treatment and prevention of nutritional anaemias in pregnant women</u>	<u>4.1 Home</u>	<p>a) self administration of iron/folate tablets regularly</p> <p>b) communication to CHW or TBA any problems associated with iron supplementation</p>	pregnant women	- knowledge of the dangers of anaemia and how to prevent them	- iron/folate tablets		
		<p>a) home visiting and examination for signs of anaemia*</p> <p>b) explanation of the dangers of anaemia and how to prevent them*</p> <p>c) provision of iron/folate tablets and explanation of their use and possible distress in taking them and how these can be overcome*</p> <p>d) refers unresponsive severe cases*</p>	<p>CHW</p> <p>TBA</p>	<p>- knowledge and has the ability to explain the dangers of anaemia and the use of iron/folate tablets in preventing them, using local language and portable visual aids</p> <p>- knowledge and skill on how to recognize the more severe cases of anaemia</p>	<p>as above in 3.3</p> <p>- simple, portable visual educational material</p>	- supervision and training	

* These tasks can be performed in the home or at a communal health facility

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
	4.2 and 4.3 <u>First level health service facility and first referral level</u>	a) reinforces b (under 4.1) in referred women and increases the dose as necessary, in unresponsive or severe cases b) identifies non-nutritional factors or causes (parasitic, genetic, etc) and treats whenever possible c) back-refers severe/complicated cases to CHW with clear instructions for follow-up d) training and supervision of CHW and TBA e) special treatment in very severe cases	nurse/midwife physician laboratory technicians	as above in 4.1 plus: - clinical skills and laboratory facilities to recognize different degrees and/or causes of anaemia	as above in 4.1 plus: - those necessary for a clinical laboratory (minimal for first level health service facility)	- supervision and training - record keeping data collection and interpretation	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
5. Treatment and prevention of xerophthalmia in children under 5 years of age	5.1 Home	<p>a) administration of one capsule of Vit. A to women after delivery (not to be given after 1 month of delivery)*</p> <p>b) administration of one capsule of Vit. A to all children under 5 years of age, once every six months*</p> <p>c) administration of one capsule of Vit. A to children under 5 years of age, suffering PEM</p> <p>d) administration of one capsule of Vit. A to children with acute infectious diseases, at their onset (not to be repeated before three months)</p> <p>e) administration of one capsule of Vit. A for two consecutive days if xerophthalmia suspected, in a child under five</p> <p>f) education of mothers about the use of local foods in prevention of xerophthalmia*</p> <p>g) recording of the administration of Vit. A capsules in growth chart</p>	CHW TBA	<ul style="list-style-type: none"> - knowledge of the role that the administration of Vit. A can have in preventing nutritional blindness* - skill to recognize clinical and functional alterations in Vit. A deficiency in children under 5 years of age* - knowledge of the fact that nutritional blindness is commonly associated with PEM and infectious diseases, especially measles - knowledge that Vit. A capsules can be toxic and care exercised with repeated administration and in children below 1 year of age - knowledge that xerophthalmia is a health emergency and that treatment should begin at once if suspected, certainly before sending child to referral - knowledge that xerophthalmia can be prevented by incorporating certain local foods into child's diet 	capsules containing 200,000 units Vit. A (100,000 units to children before one year of age)	<ul style="list-style-type: none"> - supervision and training - record keeping, growth charts 	
	5.2 and 5.3 First level health service facility and first referral level	<p>a) treatment of referred cases as emergencies, preferably starting with injectable preparation</p> <p>b) back-referral to CHW for follow-up and administration of one further capsule, as necessary</p> <p>c) supportive antibiotherapy, local or general, as needed</p> <p>d) one preventive dose of Vit. A to all hospitalized children under five, suffering from PEM or an infectious disease</p> <p>e) training and supervision of CHW and TBA</p>	physician medical assistant nurse/midwife paediatrician ophthalmologist	<ul style="list-style-type: none"> - skill and knowledge of the diagnosis and treatment of xerophthalmia, as a medical emergency in the under five - knowledge of the common association between PEM and infectious diseases with xerophthalmia/keratomalacia 	<ul style="list-style-type: none"> - Vit. A capsules of 200,000 units - water-miscible injection of 100,000 units of Vit. A - ophthalmic anti-biomatic ointment/drops - ampic spectrum antibiotics 	<ul style="list-style-type: none"> - supervision and training - record keeping - transport 	

* only in regions of high prevalence

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
6. <u>Promotion and protection of nutrition in pregnant and lactating women</u>	6.1 <u>Home</u>	a) increased food intake especially of protective foods during pregnancy and lactation	pregnant women nursing women	- knowledge of the importance of increasing food intake, especially of protective foods, during pregnancy and lactation	- food supplements as applicable*		- supplementary feeding programmes with support of the community organizations
		b) participation in supplementary feeding programmes	father	- knowledge of the fact that spacing of births and/or control of births is needed to protect her health and nutrition	- simple booklets on health and nutrition care during pregnancy and lactation		
	c) assurance that the pregnant or nursing wife gets enough food, and that the supplements obtained from special programmes are consumed by her						
		a) education concerning the need for increasing food intake during pregnancy and lactation*	CHW TBA	- knowledge of the relation between food intake during pregnancy and lactation and nutrition/health condition of mother and child	- simple portable educational material	- supervision and training	
		b) education and demonstration concerning use and preparation of food supplements*		- knowledge of the nutritional value of common foods			
		c) Correction of negative taboos and misconceptions regarding the use of certain foods during pregnancy and lactation*		- knowledge of how to use special food supplements and to demonstrate their preparation			
	6.2 <u>Communal level</u>	a) setting up and management of supplementary feeding programmes with the assistance of community organizations and the possible participation of other sectors**	CHW TBA community organizations	- knowledge of the need for food supplementation during pregnancy and lactation, especially in conditions of general food shortage	- food supplements - food preparation facilities, as necessary	- training and supervision of volunteers - transport	- support of the Community Development Committee
		b) training volunteers for food storage, preparation	workers from other sectors, especially Social Welfare	- management and administrative skills - honesty - knowledge of programmes that may provide food supplements and how to get their assistance	- rooms for collective feeding, as necessary - kitchen and storage facilities, as necessary		- support from community organizations through voluntary work

* Can be carried out at the home or communal level

** Other sectors, notably Social Welfare, are involved in supplementary feeding programmes

Activities Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
6.3 and 6.4 <u>First health service facility and first referral level</u>	a) provision of food supplements, if programme supported by health sector	medical assistant public health nurse/midwife	as above in 6.2 when programme effected through health sector	as above in 6.2 when programme supported by health sector	as above in 6.2 when programme supported through health sector	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Promotion of personal and community hygiene</u>	1.1 Home	<ul style="list-style-type: none"> a) awareness of relationship between unhygienic practices and ill-health b) communicate a) to other family members c) practice of personal hygiene d) instruction of other family members and introduction of personal hygiene habits into family practice e) discourage indiscriminate defaecation (bush, fields) f) discussions in the family of the children's school instruction in health 	family members neighbours	<ul style="list-style-type: none"> - some knowledge of relevant communicable diseases and modes of transmission - some knowledge of relevant techniques of personal hygiene, food handling and water storage - some knowledge of availability of community and referral resource persons and health service facilities 	<ul style="list-style-type: none"> - an appropriate reference source i.e. simple diagrams appended to: child care clinic cards and other appropriate printed materials 	<ul style="list-style-type: none"> - through community worker and 1st referral level - mass communication such as radio programme 	<ul style="list-style-type: none"> - literacy education programme - health education in school, health centre and public place by means of group and mass meeting, including audio visual aids display - teaching and demonstration at school - organization of "Hygienic" week/ annual "Clean Premises" competition, other campaigns
		<ul style="list-style-type: none"> g) periodic home visits to inspect, instruct and demonstrate as appropriate on personal hygiene practice h) encourage the family to use sanitary facility i) promote family contribution to community action in the improvement, construction and maintenance of sanitary facility 	Community worker (CHW)	<p>Broader knowledge of above plus:</p> <ul style="list-style-type: none"> - preferably literacy - basic knowledge of community hygiene hazards and preventive measures - basic knowledge in community development and communication techniques - understanding of basic appropriate techniques of water supply and sanitation 	<ul style="list-style-type: none"> - demonstration material - guidelines and manuals - simple audio-visual aids - hand tools - family folders 	<ul style="list-style-type: none"> - relating mass communication promotion of activity to this level - provision and updating of equipment aids, and tools - relating referral level activities to community worker - transportation, training and supervision 	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Promotion of personal and community hygiene</u> (cont.)		j) promote the up-grading of sanitary facilities according to water availability and family income.					
	1.2 Communal	<p>a) demonstration of community sanitary facility and usage at school or community centre</p> <p>b) promote and motivate community actions for (i) construction, operation, maintenance and financing of community/sanitary facility; (ii) cleaning of premises</p> <p>c) raising funds for community facility construction</p> <p>d) organizing annual competition "Clean" premises</p>	<p>CHW</p> <p>Health Volunteer</p> <p>Community Development Committee</p> <p>Teachers</p>	<p>as above in 1.1 plus:</p> <ul style="list-style-type: none"> - basic organizational skill 	as above in 1.1	<p>as above plus:</p> <ul style="list-style-type: none"> - provision of meeting facilities and space for demonstration 	
	1.3 First health facility	<p>a) provide advisory services to the community, including training in motivation as required</p> <p>b) provide audio-visual aid materials to responsible person</p> <p>c) assist in organizing a "Community Development Committee" for "community action"</p>	<p>Health workers (mid-wife, nurse, sanitary inspector)</p> <p>Voluntary workers</p>	<p>Broader knowledge at sub-professional level above in 1.2, plus:</p> <ul style="list-style-type: none"> - specific knowledge and skills on utilization of audio visual material - supervision and report preparation 	<ul style="list-style-type: none"> - promotional and visual aid materials for communities - stores of family folders - standard report forms 	<ul style="list-style-type: none"> - support and supervision from 2nd referral level - access to resource persons with operational skills for demonstration and promotion purposes - meeting and demonstration space and equipment 	<ul style="list-style-type: none"> - Information on health status and felt needs of the community which would assist in the activity planning process can be provided by the community worker, community leader(s) and/or community meetings

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Promotion of personal and community hygiene</u> (cont.)		d) assist in the demonstration under Community (1.2) above e) supervision of community health workers f) guidance for "Community Development Committee" members g) public information to promote good achievement of community h) organize workshop for village committee representatives i) progress reports to community and 1st referral level.				- suitable transport - provision of supplies and equipment as required	
	1.4 First referral level (public health team or sanitation headquarters at district level)	a) provide health facility level with the following: - advisory services, - assistance in financial, material support, - health education technique, - supervision, - publication information, - reporting system - evaluation b) obtain technical/professional advice from other referral sources as required	Public Health/Medical officer, senior health workers (P.H. nurse, sanitarian and other health workers) Water Agency technician	The team should have at its disposal certain professional knowledge of public health, planning and management At sub-professional level, competence required as above in 1.3 with emphasis on health education and supervisory capability	- as above, in 1.3	- guidance on policy and priorities and financial backing from high referral level - access to specialist advice on health education and community development - have knowledge of future mass media programming - suitable transportation	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Promotion of personal and community hygiene</u> (cont.)		c) programme planning and budgeting					
2. <u>Supply of drinking water</u>	2.1 Home	<u>Construction</u> a) attendance at community meeting where improved community water supply systems is discussed b) assistance in construction or improvement of community system c) construction or improvement of private system <u>Organization and Maintenance (O&M)</u> a) procurement of adequate quantity of safe water, b) assistance in O&M of improved water supply including household and consumer payments, c) avoiding unnecessary wastage of water.	Family members Neighbours	- appreciation of need for performing tasks ability to do certain tasks, e.g. unskilled or semi-skilled labour and minor construction and mechanical tasks	- simple "how to do" leaflet - simple tools for domestic shallow well construction and maintenance	- advice and support by community worker - appropriate use of mass media to provide technical messages	- neighbourhood support in family well construction or in-house plumbing, as appropriate - procure and make available to family durable vessels for water transportation and storage
	2.2 Communal	<u>Construction</u> a) participation in planning, design, site location of simple technology water systems b) organize community labour and material contribution c) construction and upgrading of simple communal water supply systems	Community Worker Community Development Committee Volunteer	- preferably literacy; - ability to understand manuals/guidelines - construction and mechanical skills; - ability to do "design" of simple water supply systems and understanding of viable options; - basic organizational and teaching skills;	- for household piped connexions some special tools for use by community workers or local operators; - manual of standard designs suitable for community use;	- provision of and updating manuals; - supervision and training from next higher level; - assistance in obtaining material support.	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Supply of drinking water</u> (cont.)		<p><u>Organization and Maintenance (O&M)</u></p> <p>a) assisting in O&M of improved water supply</p> <p>b) avoiding unnecessary wastage</p> <p>c) organization of systems for collection of tariffs</p> <p>d) paying caretaker/operator</p> <p>e) paying electricity or fuel if appropriate</p> <p>f) submit request to government for assistance improvements/major maintenance</p> <p>g) training of community workers in O&M for simple systems</p>	Health Worker from first health facility	<ul style="list-style-type: none"> - simple accounting skills; - ability to detect maintenance needs; - appreciation of value of preventive maintenance - ability to establish community needs and convey request for necessary assistance 	<ul style="list-style-type: none"> - procedures or forms for requesting assistance from 1st ref. level - tools and materials for construction operation and maintenance 		
	2.3 First Health Facility	<p>a) providing advisory service to individuals and groups</p> <p>b) supply of simple spare parts</p> <p>c) providing intermediate level maintenance</p> <p>d) providing intermediate level training</p> <p>e) surveillance of technical features and sanitary inspection</p>	<p>Health workers (midwife, nurse sanitary inspector)</p> <p>Water Agency technicians</p> <p>Voluntary workers</p>	<p>as above in 2.2 plus:</p> <ul style="list-style-type: none"> - ability to appreciate technical and organizational needs of communities - ability to supervise and teach skills required in the community - ability to provide more sophisticated repairs, maintenance, residual chlorine testing on request and routinely; - basic accounting and record keeping skills 	<ul style="list-style-type: none"> - standard design and repair manuals; - special tools; - repair shop for special repairs of simple and routine repairs of more sophisticated systems; - residual chlorine test kit 	<ul style="list-style-type: none"> - provision and updating manuals, supervision and training from 2nd referral level - store house space and stores to supply communities - access to advice on water supply technology, system groundwater information 	<ul style="list-style-type: none"> - information on the needs and resources supplied by community worker, community leader and community meetings for construction, operation and maintenance of their water supply system.

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Supply of drinking water</u> (cont.)		f) assist in organization of O&M system and disinfection (as needed) g) progress reports to community and 2nd ref. level				- water quality testing facilities	
	2.4 First Referral Level (public health team or sanitation headquarters at district level)	a) advisory service b) major maintenance c) supply of major spare parts d) supervision e) water quality surveillance f) training g) liaison with central government for funding	Public Health/Medical Officer and Senior Health Workers (P.N. nurse, sanitarian and other health workers) Water Agency technician District officer	as above in 2.2 & 2.3 plus: - specialized maintenance, repair and construction or drilling knowledge and skills - quality surveillance - specialized water and control knowledge and skills	- specialized tools and equipment; - storage of pipes, pumps, etc. - manuals/guidelines; - standard report forms; - water quality testing kit	- access to professional advice on water supply, groundwater information, choice of appropriate technology, and of supply; - procurement; - transportation; - training; - supervision	
3. <u>Excreta Disposal</u>	3.1 Home	a) seek advice on most appropriate local method b) construct suitable privy - possibly with help from neighbours c) use of privy d) keeping it clean e) discourage insects and rodents from feeding and breeding in area of privy f) empty (or re-locate) privy when it is full g) continued upgrading of sanitary facility according to available water supply and family income	Family members Neighbours	- appreciation of need for performing tasks - general health and hygiene knowledge - ability to construct a privy, with minimum guidance - basic knowledge of appropriate method of insect and rodent control	- simple "how to do" leaflet when applicable; - hand tools; - slabs, bowls, water seals, and other appliances as appropriate	- support and guidance of community worker in design and maintenance; - funding assistance for expensive materials - assistance in transport of heavy materials - appropriate use of mass media to provide technical messages	- organize cooperative action to design, obtain local materials to construct and upgrade privies with neighbourhood, youth and other local groups - demonstrate privy construction and maintenance in public place and by the committee members - provide sanction and incentives to encourage cleanliness

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Excreta Disposal</u> (cont.)	3.2 Commu- nal	a) building school - market latrines/ privies and public comfort station (where family privy not possible) b) obtain and transport from next level (3.3) the essential but non-indigenous materials (concrete slabs, reinforcement bars, etc.)	Community Worker Community Development Committee	- preferably literacy; - ability to follow a standard design manual and adapt a design to local conditions and resources - ability to organize communities and obtain support from 1st ref. level	- hand tools; - materials not locally available	- designs; - supervision; - training; - access to vehicle for obtaining heavy material; - support by mass media and audio-visual aids	
	3.3 First Health Facility	a) technical advisory services to the "Community Development Committee" and/or community health worker b) introduce/demonstrate/train, techniques c) obtain and store for community collection the materials not available locally d) construction and maintenance of demonstration latrine for use in health posts) centres e) obtain financial support for family and community, as appropriate f) arranging inter-village visits g) progress reports to community and to higher levels	Health Workers (mid-wife, nurse, sanitary inspector) Voluntary workers	- knowledge of general sanitation, health education and simple sanitary engineering - ability to supervise, train and organize - ability to do accounting and book/record keeping	- tools for demonstration; - report forms and procedural manuals; - audio visual materials	- design updating guidance, monitoring, supervision and training transportation, i.e. motorized or bicycles - some funding assistance to support task e) - storage facilities	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Excreta Disposal</u>	3.4 First Referral Level (public health team or sanitation head-quarters at district level)	<ul style="list-style-type: none"> a) training, provision of training aids and demonstrations for health workers b) devise and adapt technical advice and guidance materials for use by health facility staff c) ensuring that contracts are placed with local producers for materials not available at village or health facility level d) funding some proportion of materials supply costs on a temporary basis (where communities require subsidy and funds are available) e) organizing competitions f) supervisory visits to health facilities and communities g) reporting, monitoring and evaluation 	Public Health/Medical officer and senior health workers (P.H. nurse, sanitarian and other health workers) Water Agency technicians	<ul style="list-style-type: none"> - More knowledge of above in 3.3 plus: - ability to develop simple guidance materials - ability to monitor and evaluate the programme 	<ul style="list-style-type: none"> - manuals/guidelines; - stores of construction material and tools to be used by 1st ref. level - report forms - training and audio visual materials 	<ul style="list-style-type: none"> - procurement - transportation - financial assistance - training - information - guidance and supervision 	
4. <u>Protection of Water Sources and Surveillance of Drinking Water Quality</u>	4.1 Home	<ul style="list-style-type: none"> a) keeping waste disposal away from water sources b) use of sanitary excreta and waste disposal facilities c) keep people and animals from contaminating water sources 	Family members Neighbours	<ul style="list-style-type: none"> - appreciation of need for performing tasks - basic knowledge of health, sanitation and communicable diseases transmitted by water 	<ul style="list-style-type: none"> - health education material - simple "how to do" leaflet 	<ul style="list-style-type: none"> - advise on remedial action required - appropriate use of mass media to provide technical messages 	<ul style="list-style-type: none"> - prevent community waste disposal upstream of surface water source - promote proper latrine construction at a safe distance (surface water) or height above water table (ground water), from water source.

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
4. <u>Protection of Water Sources and Surveillance of Drinking Water Quality</u> (cont.)		<p>d) protection of family well by providing cover (with handpump, if affordable)</p> <p>e) for rain water sources, clean roof, container and filter if possible,</p> <p>f) seek advice of health/community workers on above tasks as needed.</p>					
	4.2 Communal	<p>a) locating ground-water supplies away from areas where water is or can become unsafe for drinking</p> <p>b) install surface water intake in location safe from contamination</p> <p>c) install fencing or other means of isolation of water from contamination by people, animals and wastes</p> <p>d) install communal handpumps, well covers, or clean buckets for wells</p> <p>e) periodic sanitary survey to ensure installations are protected</p> <p>f) locate and maintain waste disposal facilities (e.g. privies dumps) where they are not liable to contaminate water source</p>	Community Worker Health Volunteer Community Development Committee	<p>as above in 4.1 plus:</p> <ul style="list-style-type: none"> - preferably literacy; - knowledge of community hygiene hazards and preventive measures - basic knowledge of community development and communication techniques - understanding of basic appropriate techniques of water supply and sanitation - organizational skill - basic skills for construction using indigenous materials and for installation and maintenance of simple devices, i.e. handpumps 	<p>as above in 4.1 plus:</p> <ul style="list-style-type: none"> - simple tools/materials for construction and maintenance of water supply and excreta disposal - guidelines/manual 	<ul style="list-style-type: none"> - training - supervision - health education by means of posters, media, films and group meeting 	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
4. <u>Protection of Water Sources and Surveillance of Drinking Water Quality</u> (cont.)	4.3 First Health Facility	<p>a) advisory service for drinking water source selection and protection for communities</p> <p>b) simple inspection and testing of water quality of community water supplies</p> <p>c) training of responsible person in the community for his water source protection and quality surveillance duties</p> <p>d) review of results of community sanitary surveys and advise on corrective measures to be taken</p> <p>e) obtain water samples for analysis and dispatch them to laboratory; advise on any corrective measures if required as indicated by analytical results</p> <p>f) progress reports to community and first referral level</p>	Health Workers (mid-wife, nurse, sanitary inspector) Voluntary workers	<p>Broader knowledge of above in 4.2 plus:</p> <ul style="list-style-type: none"> - ability to communicate, train, and support the tasks required at home and communal levels - basic understanding of the significance of water analysis results - basic understanding of corrective measures 	<p>as above in 4.2 plus:</p> <ul style="list-style-type: none"> - map showing location of houses, water sources, road, privies, etc. - chlorinated lime - simple chlorine residual test kit - water sample bottling 	<p>as above plus:</p> <ul style="list-style-type: none"> - supplies from first referral level - transportation 	
	4.4 First Referral Level (public health team or sanitation headquarters at district level)	<p>a) adaptation of guidelines and procedures for the selection of drinking water sources for local use,</p> <p>b) training of health facility and community level personnel in protection, surveillance and control procedures</p>	Public Health/Medical officer and senior health workers (P.H. nurse, sanitarian and other health workers) Lab. technician Water Agency technician	<p>More knowledge of above in 4.1-4.3 plus:</p> <ul style="list-style-type: none"> - ability to plan, organize, train and supervise lower level health workers, volunteers; - ability to develop simple guidance materials; - ability to monitor and evaluate the programme 	<p>as above in 4.3 plus:</p> <ul style="list-style-type: none"> - simple water examination; - laboratory equipment and reagents; - forms for sanitary survey; - forms for reporting result of laboratory test; 	<ul style="list-style-type: none"> - necessary guidelines/manual and procedures; - procurement and distribution of chlorinated lime; - design and distribution of health education material; 	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
4. <u>Protection of Water Sources and Surveillance of Drinking Water Quality</u> (cont.)		<ul style="list-style-type: none"> c) participation in land use planning to avoid water source contamination d) provision of basic laboratory services for water quality testing e) report, monitor and evaluate water quality surveillance and source protection programme, f) supervision. 			<ul style="list-style-type: none"> - training materials 	<ul style="list-style-type: none"> - health education via mass media (radio TV and newspaper); - training facility; - transportation 	
5. <u>Linkage with other related sectors</u> (This section refers to activities and tasks that positively affect programmes of other sectors, e.g. in agriculture, housing, while being part of an environmental health programme)	5.1 Home	<ul style="list-style-type: none"> a) regularly cleaning household area of breeding and harbourage of flies and disease vectors, b) deposition of solid waste in allocated areas and cleaning of drains around house, c) self-help dwelling improvements in association with vector control and water/sanitation upgrading, d) planting family garden and irrigation with excess/waste water from domestic water supply system, e) use of resource recovery from waste disposal (e.g. composting, biogas, fish farms). 	Family members	<ul style="list-style-type: none"> - general knowledge of hygiene education; - knowledge of appropriate methods of dwelling upgrading and parallel construction skills; - knowledge of locally appropriate methods of improving family gardens and fish ponds. 	<ul style="list-style-type: none"> - simple "how to do" leaflet; - where affordable, sprays or netting; - building tools and materials for house improvements; - hand tools and planting material; - appropriate materials for linked sanitary biogas and fish pond construction. 	<ul style="list-style-type: none"> - training and demonstration; - design assistance; - a referral advice service; - provision of non-local building materials, seeds, plants and fish fry. 	<ul style="list-style-type: none"> - demonstrate in local schools or other community buildings, construction and use of family gardens, fish farms, biogas and composting latrines; - set aside area for solid waste disposal; - adult/literacy programme.

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
5. <u>Linkage with other related sectors</u> (cont.)	5.2 Commu- nal	<p>a) community action to construct and clean drains and dispose of solid waste (especially where there is a piped water system),</p> <p>b) organization of community vector, fly and rodent control,</p> <p>c) repair of parts for water and sanitation systems in small workshops or garages,</p> <p>d) organization of community, cooperative or other self-help dwelling improvement projects.</p>	<p>Community worker</p> <p>Local skilled worker</p> <p>Water Agency technician</p> <p>Volunteer.</p>	<p>as above plus:</p> <ul style="list-style-type: none"> - knowledge of drainage construction; - knowledge of metal and fitting; - for solid waste disposal some knowledge of community or cooperative organization and management. 	<ul style="list-style-type: none"> - hand tools for drain construction; - appropriate community solid waste vehicles; - hand tools and blacksmith equipment or welding equipment as appropriate and available 	<ul style="list-style-type: none"> - support structure for linked family; - nutrition; - farming; - dwelling; - sanit. improvements; - community artisan support structure. 	
	5.3 First Health Facility	<p>a) motivate community organizations to activities linking with other related sectors matching expressed needs,</p> <p>b) train and supervise community level workers for inter-sectoral action,</p> <p>c) assist communities in designing and building community inter-sectoral facilities,</p> <p>d) manufacture parts for water and sanitation systems in small workshops (simple technology or high transport cost).</p>	<p>Health workers (mid-wife, nurse, sanitary inspector)</p> <p>Voluntary workers.</p>	<p>Broader knowledge of above plus:</p> <ul style="list-style-type: none"> - competence in community organization and other activities of related sector and problems. 	<ul style="list-style-type: none"> - manuals/guidelines; - tools and materials for inter-sectoral activities. 	<p>as above at first referral level, coming either through health services or other departments coordinated locally.</p>	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
5. <u>Linkage with other related sectors</u> (contd.)	5.4 First Referral Level (public health team or sanitation headquarters at district level)	<p>a) supervise and train existing local officers to inter-sectoral activity promotion,</p> <p>b) monitor and evaluate activity progress in area of responsibility</p> <p>c) manufacture parts for water and sanitation systems in small workshops or plant (less simple technology and lower transport cost).</p>	Public Health/Medical officer and senior health workers (P.H. nurse, sanitarian and other health workers). Water Agency technician Local businessman.	as above in 5.1-5.3, at professional level - especially courses in rural development, artisan and small industries and urban policy.	<p>as above plus:</p> <ul style="list-style-type: none"> - heavy equipment and special tools and machinery in rural areas, frequently made available for low rental in multipurpose repair workshops. 	<p>as above, from higher referral levels:</p> <ul style="list-style-type: none"> - initial promotion, guidance and funding for produced components manufacture; - training. 	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1.1 <u>Early diagnosis of pregnancy and screening for risk cases</u>	1.1.1 Home	<p>a) recognition of signs and symptoms of pregnancy</p> <p>b) information about services available and referral of woman to nearest health services or health worker</p> <p>c) detection of risk factors, using defined criteria, including nutritional and socioeconomic family history</p> <p>d) influencing women at risk to seek adequate care (including delivery at health centre or hospital).</p>	<p>woman herself</p> <p>husband</p> <p>relatives</p> <p>neighbours & self help groups in the community</p> <p>trained community workers</p>	<p>- knowledge about pregnancy symptoms, risk factors, nutritional needs during pregnancy, availability and accessibility of health services</p>	<p>- relevant information material on pregnancy symptoms, risk factors in pregnancy, etc.</p>	<p>- facilities for health education classes</p>	<p>- educational programmes for adults and health education in schools, churches, mosques etc.</p> <p>- training of community volunteers for health education activities</p> <p>- public transport services</p> <p>- development of outreach programmes for special risk groups, e.g. factory workers</p> <p>- inclusion of information about risk pregnancy in training of workers from sectors</p> <p>- health insurance schemes or equivalent support scheme for families</p>

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1.1 (continued) <u>Early diagnosis of pregnancy and screening for risk cases</u>	1.1.1 Home (continued)	a)-d) as above, also physical examination of woman e) planning for care of risk pregnancies, including booking for delivery f) adequate supportive therapy (e.g. iron, nutrition supply)	home visiting midwife traditional birth attendant, trained TBA other trained traditional workers or volunteers	- knowledge about early signs of pregnancy and risk factors in pregnancy - practical skill in screening for high risk - knowledge about appropriate referral levels skills in techniques for home visiting	- audio visual information - check list simple manual for risk screening - essential supportive drugs	- antenatal records - referral system - transport for home visits	- facilities for front-line workers - encouragement of training for TBAs etc. - support from community development committees, women's clubs similar bodies
	1.1.2 First Health Facility	a)-f) as above for women presenting directly for care g) screening of referred cases and referral of those needing special care h) supervision and training of health workers and community workers	nurse/midwife medical assistant	- adequate theoretical and practical skill as above	- manual for risk screening - equipment for examinations - essential drugs	- antenatal records - referral system - transport facilities for supervision, etc. - stores	- assistance with transport facilities - health insurance schemes as above
	1.1.3 First Referral Level	a) management of pregnancy and delivery of referred cases b) supervision of work at health centres c) short refresher training activities for field staff	physician nurse-midwives	- adequate obstetrical skills and recognition relevant risk factors	- adequate obstetrical equipment including facilities for obstetric intervention - essential drugs	- record systems - management of supplies etc. - stores - transport	- public transport - provision of facilities near hospital to accommodate "at risk" mothers and their infants referred before start of labour - health insurance schemes, as above

- 1: Antenatal care -

Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1.2.1 Home	a) information of pregnant women and relatives about normal pregnancy rationale for ante-natal care and for birth spacing b) information about hygiene during pregnancy, nutrition requirements, c) information about availability of services	home visiting health worker trained community worker national or provincial health educators, via mass media neighbours/friends	- adequate knowledge of pregnancy, child birth, child care etc. (see also matrix for PHC Element No 1)	- relevant educational material, locally adapted	- as indicated in matrix for PHC element No 1	- support by community development committees etc. to health education activities

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Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1.2 (continued) <u>Health education during pregnancy</u>	1.2.2 Communal	<p>a) planning health education activities for pregnant women in community</p> <p>b) development of intersectoral programme activities for pregnant women in special risk groups like migrants, factory workers etc.</p> <p>c) implementing such programmes (see matrix No 1)</p>	<p>CHW</p> <p>nurse/midwife or other health workers working in the community</p> <p>chairman of Community Development Committee</p> <p>other community leaders</p> <p>workers from other sectors such as education, social welfare</p>	<p>- As in 1.2.1 above</p> <p>- skills in planning and conducting health education classes</p> <p>- skills in teaching communication skills</p> <p>- skills in producing and/or using audio visual material and equipment</p>	- appropriate audio visual material locally adapted	- see matrix No. 1	<p>- support by community development committee</p> <p>- library support and availability of films, TV, etc</p> <p>- participation from other sectors (school, church, mosque, etc.) including:</p> <p>a) health education activities within their own programmes, and</p> <p>b) dialogue with health sector planners and mass media health education programmers</p> <p>- involvement of local Women's Groups, Youth Associations, Cooperatives etc.</p>

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1.2 (continued) <u>Health education during pregnancy</u>	1.2.3 First Health Facility	a) - d) as in 1.2.1 above e) training of community volunteers and workers from other sectors in health education for pregnant women f) participation in 1.2.2 above	nurse/midwife or other categories as requested	- as in 1.2.2	as in 1.2.2	as in 1.2.2 - supervision and support from District Health Office, health education unit	
	1.2.4 First Referral Level	a) information on post partum period, hygiene, nutrition, breastfeeding, family planning availability of services b) information about newborn care and infant nutrition, availability of services c) participation in activities in 1.2.3 (e) and (f) above	ward sisters physicians	- as above in 1.2.2	- AV equipment and material including posters and pamphlets	- as in 1.2.3 above	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1.3 <u>Basic antenatal care</u> (see also matrices for PHC elements nos. 2 and 5)	1.3.1 Home	a) motivation of woman to seek care b) monitoring of self-care (nutrition, hygiene) c) monitoring of antenatal visits and drugs as prescribed	woman herself husband relatives neighbours and local self help groups trained community worker	- knowledge as in 1.1.1 and 1.2.1 above	- nutritional supplies, essential drugs as prescribed	- public transport facilities - if applicable home-based antenatal records	- education and motivation through community health education activities as in 1.2.1 - support to working pregnant women to reduce workload - housing schemes - laws or regulations on maternal benefits
		d) history taking and examination at each visit e) planning and managing normal pregnancy until delivery f) detection and management of risk cases and complicated pregnancy, including referral (see 1.1.1 & 1.1.4) g) giving individual health education and supportive nutritional therapy and advice h) carrying out tetanus immunization of pregnant women i) record keeping	trained TBA home visiting midwife or nurse aid if applicable other CHW	- adequate knowledge about normal pregnancy and about complications and risk factors - practical skill in history taking, physical examinations and vaccination - practical skills in record keeping and use of records, including simple systems for non-literate workers - preferably basic literacy	- manual or checklist-for ante natal care - minimum equipment for examination, depend-on resources - essential drugs, vaccines, nutrition, supplies - vaccination kit if applicable	- record system and files, if applicable home-based records - transport for home visits - referral system	- selection of TBAs or other community workers for training - support by Community Development Committee

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1.3 continued <u>Basic Antenatal Care</u>	1.3.2 First Health Facility	a) - f) as above g) supervision and training of community workers and health workers	nurse or midwife	- as above - practical skill in supportive techniques for supervision of health workers	- as above in 1.3.1 dependent on resources and level of training of responsible health worker - laboratory equipment for testing of at least Hb and albumin in urine	- as above in 1.3.1	- availability of public transport or other transport for referral cases
	1.3.3 First Referral Level	as in 1.3.2 above	as in 1.3.2 above	- as in 1.3.2 above	- as in 1.3.2 above - laboratory and basic X-ray equipment	- as in 1.3.2 above	- as in 1.3.2 above
1.4 <u>Detection and management of pregnancy complications</u> (see also matrix for PHC Element No. 2)	1.4.1 Home	a) detection of signs of abnormal pregnancy or of malnutrition or disease complicating pregnancy b) contact with front-line health worker or health service unit c) following treatment prescriptions	woman herself family members trained community volunteers or self help groups workers from other sectors (social workers, teachers, police, etc)	- knowledge about signs of abnormal pregnancy or other problems - knowledge of availability of services - instructions from health worker regarding treatment	- educational material as in 1.2.1 - essential drugs, diets	- availability of transport - assistance with care for other children	- as above under 1.1.1, and assistance with transport - health insurance schemes as above in 1.1.1 - when needed direct assistance to family during sickness period, economic or manpower or both

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1.4 continued <u>Detection and management of pregnancy complications</u>	1.4.1 Home	d) diagnosis of abnormality by history and examination e) assessment of underlying nutritional status, supportive therapy if required f) initial treatment and observation, if complication is manageable at front-line, otherwise appropriate referral	trained TBA community health worker midwife or other house-visiting health worker	- as in 1.3.1 above - knowledge of which cases should be referred - knowledge of appropriate emergency treatment - knowledge of referral possibilities and appropriate management of referral	- essential equipment and drugs for emergency treatment - manual for emergency treatment	- transport facilities for emergencies - 24 hours availability of health worker - record system	- assistance with transport for emergencies - selection of community workers for training
	1.4.2 First Health Facility	a) As above in 1.4.1 b) initial treatment and observation or emergency treatment and referral if need for hospitalization. c) when complication cured or controlled, adequate follow-up	nurse-midwife, medical assistant or physician, as available	- as above in 1.4.1 appropriate for category of worker - skill in supervision as above in 1.3.3	- as above, dependent on resources for health services - laboratory equipment as in 1.3.2	- as above in 1.4.1 - store space - laboratory space - beds for observation	- as above in 1.4.1 - health insurance scheme as above in 1.1
	1.4.3 First Referral Level	a) diagnosis of complication b) emergency treatment and curative treatment after hospitalization c) referral to 2) after cure and feedback information d) supervision and continuous training of workers in the field	physician and other members of hospital team	- as above in 1.4.1, appropriate for category of worker - skills in supervision as above in 1.3.2	- full equipment for emergency treatment, including obstetric surgery - clinical and laboratory facilities including X-ray and blood grouping - blood bank if appropriate	as above in 1.4.2	- facilities for transport - health insurance schemes as above in 1.1

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support	
2.1 Management of normal delivery and detection of complications (see also matrix for PHC Element No. 5)	2.1.1 Home	a) identification of start of labour (including time of onset)	woman herself family members neighbours or trained community worker	- psychological preparation of woman for delivery and for newborn baby	- clean room	- 24 hours availability of birth attendant	- provision of community based trained birth attendant or midwife	
		b) contacting birth attendant (professional or trained)		- knowledge about delivery process and how to recognize onset of labour	- clean water			- assistance with care of other children
		c) preparing home for birth		- knowledge of requirements for home delivery	- water boiler			- health education classes for pregnant women
		d) attending to woman during labour and assisting birth attendant		- knowledge of availability of midwife or TBA	- bowls			- support schemes for maternity leave
		e) attending to newborn			- clean clothes for baby			- other support schemes or cooperative insurance schemes for family welfare
	f) recognition of onset of labour	trained TBA nurse/ midwife performing home delivery	- adequate knowledge of normal labour and delivery and signs of complications	- midwifery kit (UNICEF, simplified TBA kit or equivalent)	- transport for home delivery	- provision of transport for midwife and emergency transport		
	g) evaluation of progress of labour		- knowledge of emergency treatment appropriate for front-line worker and of when to refer	- essential drugs, including active and safe traditional drugs or herbs	- record system, including birth and death register reports	- remuneration for births recorded, if applicable		
	h) recognition of early signs of complications like prolonged labour, fetal distress etc.		- practical skills for normal delivery care and for management of complications	- birch register reports	- referral system, including emergency transport	- support from community development committees		
	i) monitoring complications, including referral if required and and feasible		- appropriate skills in record keeping and reporting	- simple manuals on management of most common obstetric problems				
	j) monitoring 2nd and 3rd stages of delivery		- preferably basic literacy					

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2.1 continued <u>Management of normal delivery and detection of complications</u>	2.1.2 First Health Facility	a) emergency assistance to frontline worker by home visit or by admitting complicated cases b) appropriate management of complication, including post-natal care c) supervision and continuous training of frontline health workers giving delivery care	nurse/ midwife or other competent staff on duty	- adequate theoretical and practical obstetrical knowledge and skills - skills in supervision as above in 1.3.2	- obstetrical equipment as appropriate manual and management records for management of obstetric problems - essential drugs - laboratory equipment as appropriate	- delivery room - laboratory facilities - emergency transport and referral system record systems	- health insurance schemes as above in 1.4.2 - provision of lodging for mother and family members before start of labour, (mother's hours or equivalent)
	2.1.3 First Referral Level	As in 2.1.2 above, a-c	physician, nurse/midwife	- as in 2.1.2 above	- as in 2.1.2 above - surgical equipment	- as in 2.1.2 above - surgery facilities	- as in 2.1.2 above

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2.2 <u>Management of risk cases in labour and complicated cases</u>	2.2.1 Home	a) motivation of risk case woman pregnancy to plan delivery in health centre or hospital	woman herself family members neighbours trained community workers	- appropriate knowledge about risk factors and signs of complications - knowledge of availability of appropriate health services and of health workers	- as in 2.1.1	- as in 2.1.1	- assistance with transport for woman in labour - assistance to family while woman is away from home
		b) arrangement of transport as soon as labour starts, in booked cases c) if this is not possible, notification of front-line health worker d) in case of referral for complications, sending relatives with woman as potential blood donors					
		e) examination of woman and decision on need and feasibility to refer her f) if appropriate, arranging referral g) as in 2.2.1 (d) above h) if referral is not possible prevention of aggravation of condition and treatment of complication according to resources e.g. manual removal of placenta if trained	trained TBA midwife	- adequate theoretical and practical obstetrical skills - knowledge about referral possibilities and when to refer cases - appropriate skills in record keeping and recording	- as in 2.1.1	- as in 2.1.1	- assistance with emergency transport

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2.2 (continued) <u>Management of risk cases in labour</u>	2.2.2 First Health Facility	a) admission of referred cases, diagnose complications and decide on management b) treatment of complication and deliver patient c) if required referral of patient to hospital, arrange safe referral	midwife, medical assistant or other competent staff on duty	- adequate theoretical and practical skills deliver patient	- as in 2.1.2	- as in 2.1.1	- assistance with emergency transport
	2.2.3 First Referral Level	a) - b) As above c) referral of patient back to health centre after delivery d) supervision of health worker's performance and arrangement of training as appropriate	physician in charge	- as above in 2.2.2	- as above in 2.2.3	- as above in 2.2.3	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2.3 <u>Management of newborn after delivery</u> (see also matrix for PHC element No. 2)	2.3.1 Home	a) providing clothes and other needs for baby	woman herself grandmother or other family member	- knowledge about needs in newborn period - practical skills in care of newborn	- baby equipment as appropriate - water and soap	- health education classes, mass media programmes for women	- assistance with care of other children - if needed, socio-economic support to family - training programmes for community workers
		b) teaching mothers of first babies to breastfeed and care for infant	neighbours or local self help groups trained community workers				
		c) cutting and dressing cord	trained TBA midwife	- adequate knowledge of newborn period, including detection and management of complications - knowledge about the importance of breast-	- instrument and dressing for cord - portable scale if appropriate - BCG vaccine and syringe if appropriate - appropriate equipment for clearing of airways, etc. - essential drugs - manual for care of newborn	- as in 2.1.1	- assistance with transport
		d) examination of mother and child for signs of complications	if appropriate community health worker	- knowledge of hygienic procedures for cutting cord			
		e) if feasible, weighing of baby					
		f) if referral necessary preparation of mother and baby for transport, arrangement for transport					
		g) if health status normal, giving child normal care and preparing home giving mother advice					
		h) follow-up visits to check on health status and give mother health education and information on breastfeeding, BCG immunization					
		i) reporting of birth and of maternal or perinatal death					

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2.3 continued <u>Management of newborn after delivery</u>	2.3.2 First Health Facility or First Referral Level	<ul style="list-style-type: none"> a) admission of referred cases, diagnose and treatment of complication b) screening for other conditions and mal-development, appropriate management of these c) giving appropriate vaccinations d) information to mother at discharge about condition and plan for followup e) feedback information to front line worker f) supervision of performance and continuous training of health workers 	nurse/midwife, physician, medical assistant, or other competent staff	<ul style="list-style-type: none"> - adequate knowledge about newborn period, diagnosis and management of complications and conditions - skills in supervision as above in 1.3.2 	<ul style="list-style-type: none"> - appropriate equipment for diagnosis and treatment of neonatal problems - essential drugs - manual for management of problems in the neonate 	<ul style="list-style-type: none"> - facilities for care of newborn - record systems - transport for referrals 	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2.4 Basic care of newborn and mother during post partum period (see also matrices for PHC Elements No. 2 and 5)	2.4.1 Home	a) breastfeeding, daily hygiene	mother	- adequate knowledge about postpartum period and child care	- additional nutritional supplies (to mother and/or infant)	- home visit by front line health worker	- as above in 1.2 health education during pregnancy
		b) protection from contagious infections	other family members				
		c) screening for signs of problems	neighbours		- information material	- if applicable home based child record	- support to working women and families, maternity leave, housing etc.
		d) home visit for examination and history taking (if applicable, weighing of child)	trained community workers				
		e) detection and management of complications and problems including referral if necessary	midwife or trained TBA	- adequate theoretical and practical skills in history taking, examination of newborns and mother, diagnosis and treatment of complications immunization, etc.	- nutritional supplements	- referral system	- health education support (see matrix for PHC Element No. 1)
		f) education about breastfeeding, nutrition, family planning, etc.	CHW	- adequate knowledge about normal growth and development and how to detect deviations from normal pattern	- essential drugs	- record system (possibly home-based records)	- assistance with transport for home visits and for referral
		g) if applicable, immunization (BCG)		- practical skills in verbal and appropriate audio-visual communication techniques (see PHC Element No. 1)	- vaccination kit if applicable	- locally applicable growth charts	
		h) record keeping			- portable baby scale (if applicable)	- transport for home visits	
	2.4.2 First Health Facility	d)-h) as above in 2.4.1	nurse, nurse/midwife	- as above in 2.4.1	- as above in 2.4.1	- as above in 2.4.1	- assistance with transport and referrals
		i) weighing and measuring of infant, recording weight and height			- baby scale	- referral system	
					- basic equipment for routine examination of infant	- record system	
					- basic laboratory equipment		

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3.1 <u>Basic child care:</u> <u>Monitoring of growth and development, screening for Risk cases, management of disease or maldevelopment</u> (see also matrices for PHC elements no. 1,2,5,7)	3.1.1 Home	a) provision of appropriate nutrition including growing or purchasing of appropriate diet components	mother and father other family members and neighbours, mother's clubs etc.	- knowledge about nutrition requirements during growth about normal development and about availability of services - practical skills of family members in home agriculture, home economics, preparation of infant foods, etc. as appropriate	- information material - nutrition supplies, essential drugs	- transport for home visits of health workers - if applicable home-based child care records	- as above in 1.1.1 - support to working mothers to enable them to continue breastfeeding, including maternity leave - nutrition and home economic classes - agricultural and housing schemes
		b) development of positive dietary habits, personal hygiene, etc.	trained community workers				
		c) provision of adequate stimulation					
		d) history-taking for risk factors and examination (trained volunteers)					
		e) informing about availability of child care services and what can be offered there					
	f) planning for care of risk cases, referral when necessary		CHW TBA nurse/midwife	- adequate practical skill in examination of children (including assessment of growth and development) immunization detection and management of health problems	- nutrition supplies, essential drugs, vaccines	- record system - referral system	
	g) health education to mothers, including nutrition and child spacing			- practical skills in communication techniques, use of AV aids	- minimum equipment for examinations - vaccination kit, first aid kit		
	h) recruitment of cases for immunization programme and if feasible, performing vaccinations			- knowledge about appropriate referral levels			
	i) provision of supportive nutrition therapy						
	j) diagnosis and management of disease and other conditions including emergency-therapy and referral when necessary						

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
<p>3.1 (continued)</p> <p><u>Basic child care</u> <u>Monitoring of growth and development,</u> <u>screening for risk cases, management of disease or mal-development</u></p>	<p>3.1.2 Communal</p>	<p>a) provision of day care and food programmes for children of working mothers</p> <p>b) provision of school health services and school food programmes</p> <p>c) provision of home services by trained community volunteers, or other mechanisms, providing advice on child care, nutrition, home arrangements, agricultural programmes etc.</p>	<p>community leaders</p> <p>local school authorities</p> <p>local social welfare authorities</p> <p>woman's associations etc.</p> <p>nutritionists</p> <p>agricultural extension workers</p> <p>workers from other sectors</p>	<p>- knowledge about the need to support families in particular working women with small children</p> <p>knowledge about growth and development and its relation to future health, etc.</p> <p>knowledge of existing legislation and of government policies</p>	<p>- information material</p> <p>- guidelines for school health services, day care services etc.</p>	<p>- facilities and staff for day care, school health, school food programmes, agricultural programmes, etc.</p> <p>- studies of local child health priorities and dietary habits and other socio-cultural factors affecting child health</p>	<p>- support by policy makers and appropriate government bodies (e.g. community development committees at the village or district level)</p> <p>- participation in other development programmes</p> <p>- programmes for basic education and child education</p> <p>- provision of day care and food programmes for children of working mothers</p> <p>- provision of home services by trained community volunteers, or other mechanisms, providing advice on child care, nutrition, home arrangements, agricultural programmes etc.</p>

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3.1 (continued) Basic child care: <u>Monitoring of growth and development, screening for risk cases, management of disease or maldevelopment</u>	3.1.3 First Health Facility	a) As above in 3.1.1 (f-i) b) laboratory examinations for HB, malaria smear, etc. c) initial diagnosis, treatment and observation of diseases and other conditions, emergency treatment and referral if needed d) adequate follow-up of treated or controlled cases e) supervision and continuous training of front-line health workers	Nurse, Medical Assistant, or other qualified staff	- as above in 3.1.1 - skills in supervision as above in 1.3.3	- as above in 3.1.1 dependent on resources - appropriate laboratory equipment	- as above in 3.1.1 - laboratory space - store space - beds for observation	- as above in 1.4.2
	First referral level	a) diagnosis of disease or condition b) emergency treatment and curative treatment including hospitalization c) feedback to front line workers after cure	physician and other members of hospital team	- as above in 3.1.4 adequate practical skills in and theoretical knowledge of pediatrics	- as in 1.4.3 above	- as above in 1.4.3	- as above in 1.4.3

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3.2 Prevention of main causes of child mortality (communicable disease, gastro-enteritis, malaria respiratory tract disease, malnutrition, accidents, etc.) (see also matrices for PHC elements No. 1, 2, 3, 5, 6, 7, 8)	3.2.1 home	a) water hygiene measures b) acceptance of immunization services offered c) supervision and education of children to avoid accidents, safe storage of poisons, etc. d) cooperation in community efforts (malaria spraying, etc.) e) provision of adequate nutrition to children, prolonged breast-feeding f) child spacing and limitation of family size	parents other relatives older siblings neighbours, friends local self-help groups	- knowledge about health problems and preventive measures - practical skills in water hygiene measures, waste disposal, preparation of child food, etc - knowledge about availability of services for immunization, family planning, etc.	- information material - appropriate technology for accident prevention	- facilities for information meetings - mass media programmes	- as above in 1.1.1 - safe water projects - waste disposal projects - malaria and immunization campaigns, etc. - traffic accident campaigns - housing schemes - intervention programmes for special risk populations, e.g. migrant workers, refugees - policies and legislation facilitating breastfeeding, family planning, etc.
	3.2.2 Communal	a) as is 3.2.1 under "Community support" b) creation of responsible committees or groups c) development of systems for lay reporting of deaths and of epidemic disease d) local analysis of death and morbidity reports, collaboration with health authorities in detection and eradication of epidemic disease	community development committees village leaders school teachers or other relevant community members agricultural workers and other trained community workers	- awareness of health problems and preventive measures - skill in techniques to improve water supplies, waste disposal - basic skills in collecting, reporting and analyzing data on morbidity and mortality	- construction material - chemicals for vector eradication, etc. - epidemiological guidelines and records for lay reporting of death and disease	- public health and environmental expertise consultants	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistics support	Community support
3.2 (continued), <u>Prevention of main causes of child mortality</u>	5.2.3 First health facility and first referral Level (District Health Office)	a) participation in health education of community leaders and family members b) train family and community members in techniques to improve water supply and sanitation c) provide immunization, family planning services d) collect, report and help interpret data on child deaths and morbidity	all community health personnel including sanitarians	- practical skills in communications techniques - adequate and relevant knowledge about public health problems, epidemiology, nutrition problems and about preventive measures - practical skills in sanitation work and other preventive technology particularly immunization	- information material, including material for demonstration of sanitation work - vaccines, essential drugs - manuals for field work including simple guidelines for epidemiological field work - checklist for diagnosing cause of death	- immunization programme with vaccination teams, "cold chain" delivery system for vaccines, management support - record and reporting system, including for immunization	- support from community development committees or similar bodies - facilities for clinics, health education classes, vaccination sessions, etc. - cooperation in continuous surveillance of mortality/morbidity in community

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3.3 <u>Detection and management of social and family problems affecting child health</u> (including disease in family, alcohol abuse, food habits, child abuse, etc.)	3.3.1 Home	<p>a) detection of problem behaviour and taking contact with health or social services</p> <p>b) reorganization of management of home to solve problem or diminish effects</p> <p>c) cooperation with social workers, health workers and others</p> <p>d) detection of family problems affecting children</p> <p>e) information about available services</p> <p>f) support treatment and referral to health services when appropriate</p> <p>g) notification of other services if necessary (police, social worker)</p>	<p>parents</p> <p>other family members</p> <p>neighbours</p> <p>trained community workers</p> <p>trained traditional healers</p> <p>CHW</p>	<p>- knowledge of availability of advisory services</p> <p>- knowledge of signs of disturbance and of aberrant behaviour</p> <p>- appropriate knowledge of family problems and of legal rights and restrictions</p> <p>- knowledge about referral possibilities</p>	<p>- information material</p>	<p>- home visits by health workers and other trained workers</p> <p>- transport for house visits</p> <p>referral system</p> <p>record system</p>	<p>- day care centres</p> <p>- counselling and advisory services</p> <p>- intervention by police or social</p> <p>- training of community</p> <p>- outreach programmes for special groups</p> <p>- support from community development committees women's organizations, youth organizations, etc.</p>

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3.3 (continued) <u>Detection and management of social and family problems affecting child health</u>	3.3.2 Communal	a) detection of cases or families with problem behaviour b) counselling services for family problems, referral for cases needing special care c) economic support to working mothers d) intervention designs in schools, mass media, factories, etc.	social workers CHW school teachers religious leaders Police etc. other community members community development committees, women's groups etc.	- as in 3.3.1 above	- information material	- facilities for day-care, counselling etc. - referral system - facilities for information meetings - access to mass media programmes	- focal point for social work - channel of communication between families and community, see 1.2.1 - supportive family legislation and legislation for the protection of children - drug traffic control programmes etc.
	3.3.3 First Health Facility or first referral level	a) as in 3.3.1 d)-g) above b) treatment of medical problems and follow-up	physician/ medical assistant, nurses and other competent staff	- as in 3.3.1 above	- as in 3.3.1 above	- as in 3.3.1 above	as in 3.3.1 above

ELEMENT No 4 (continued)

		- 4: Family Planning -					
Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
4.1 <u>Information on benefits of family planning methods and services available</u> (see also matrix for PHC element No. 1)	4.1.1 Home	a) provision of information about relation between family size and family economy, health of mother, other children, other family members etc.	home visiting health workers including family planning workers school teachers etc. trained community workers	- adequate knowledge of content of message - practical skills in communication techniques including use of AV techniques - knowledge about local and traditional beliefs and attitudes - knowledge of availability of services for family planning	- relevant educational material locally adapted	- facilities for and administration of classes - mass media programmes - transport for home visits	- support by community development committees, political organizations etc. - participation from other sectors than health (school), church, etc.) See above 1.2.1 and 1.2.2 - special approaches to reach migrants, youth, workers, etc. - government policies for provision of information about family planning
		b) information about available methods for child-spacing or sterilization	neighbours, self help groups				
		c) information about available services in community					
	4.1.2 First level health facility and first referral level	a) as in 4.1.1 above, in individual counselling and organizing classes b) training of health workers and other workers in motivational and promotional activities	all health workers in contact with women and families	- as in 4.1.1 above	- as in 4.1.1 above	- as in 4.1.1 above	- as in 4.1.1 above

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support	
4.2 <u>Identification and management of clients for family planning (birth spacing or limiting, infertility management)</u>	4.2.1 Home	a) identification of need for child spacing and timing and decision to obtain information and method	couple or individual family member relatives and friends, neighbours trained community volunteers	- knowledge as in 4.1.1 - knowledge about and skills in use of chosen method	- essential contraceptive drugs or devices - information material - screening lists for contra-indications, complications of pills	- home visits by health workers - mass media programmes health education classes	- information support as in 4.1.1 above - community-based distribution of certain family planning methods - training programmes for community workers - family life education in schools and out-of-school supportive government policies on availability of family planning	
		b) appropriate actions to obtain information and adopt method						
		c) continued use until planning next pregnancy						
		d) if pregnancy does not occur within a year when wanted, contact for infertility investigation						
	e) identification of women and men in need of means for birth spacing or infertility management. Emphasis on risk groups		TBA and other types of traditional healers CHW	- adequate knowledge about FP methods, mode of use, side effects, etc. - adequate practical skill in screening for risks and counselling for choice of method	- as in 1.1.2 above - simple manual for family planning services	- record system - transport for home-visits - referral system	- as in 1.1.2 above - legislation and/or regulations on paramedicals on family planning methods	
	f) history taking and counselling for choice of method		home visiting midwife/nurse family planning worker if applicable	- knowledge of available family planning services				
	g) provision of method or referral to service unit			- preferably basic literacy				
	h) record keeping and recording							
	i) follow-up for provision of supplies and counselling about side effects or complications							

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
4.2 (continued) <u>Identification and management of clients for family planning</u>	4.2.2 Communal	a) distribution of information (4.2.1 a)-e) b) community-based distribution of supplies if applicable (condoms, chemicals, possibly pills) c) assistance with child adoption to infertile couples d) record keeping and reporting	community-based FP workers e.g. pharmacists, trained workers school health nurse or school teachers health educators social workers	- adequate knowledge about FP methods, mode of use, side effects, etc. - knowledge about available family planning services	- as in 4.2.1 above - screening list for contra-indications to pills, if applicable	- distribution outlets for condoms, information - counseling and other services for adoption of children - record files - referral system	- family life education programmes in schools, and other community - support from women's organizations, religious groups, community development committees, etc. - supportive legislation on information about family planning
	4.2.2 First Level Health Facility	a) As in 4.2.1 e)-i) above for health workers b) if applicable, provision of "menstrual regulation" or early induced abortion services for failure of contraceptive method c) history-taking and basic physical examination for infertile couple d) referral of cases for investigation and/or treatment (infertility, tubal ligation, etc.) e) supervision and continuous training of frontline health workers and FP workers	medical assistant, nurse-midwife, physician or other trained health worker	- as in 4.2.1 above - practical skill in IUD insertion, vasectomy, menstrual regulation, etc. as appropriate - skill in supervision as in 1.3.3 above	- essential drugs - other family planning supplies - kits for IUD insertion, vasectomy, menstrual regulation, etc. as appropriate - AV information material - manual for management of clients for family planning - laboratory equipment for Hb examinations	- facilities for family planning clinic - referral system - record system	- as in 1.1.3 above - supportive government policies on family planning, health and population

- Immunization of women and young children*

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Motivation/education of pregnant women, mothers, and other family members</u>	1.1 Home	a) participation in educational activities or information gathering at community level or in health facilities	woman herself other family members	Knowledge of: <ul style="list-style-type: none"> - which childhood diseases are preventable by immunizing the children - possibility of protecting women and newborn children against tetanus by injection during pregnancy - recommended immunization schedules and where immunization can be obtained 	- information material as appropriate		<ul style="list-style-type: none"> - educational programmes for adults - health education in schools, churches, mosques etc. - public transport system
		b) recognition of the need for immunization of children and pregnant women					
		c) recognition of the need for cleanliness during home delivery to prevent neo-natal tetanus					
		d) motivation/education of mothers and other members of the community (see also matrix for PHC element no. 4, MCH)	home visiting CHW or nurse volunteers	<ul style="list-style-type: none"> - as above, and knowledge of which vaccines prevent such diseases - skills in listening, and leading discussions; - skills in communication, counselling and group education 	- appropriate information and AV material	- transport facilities for home visit	- support from Community Development Committee

* Priority given to children 0-1, order of priority for other age groups will vary between countries

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. (Continued) <u>Motivation/education of pregnant women, mothers, and other family members</u>	1.2 First health facility	a) motivation/education of individual women attending antenatal or child care sessions to seek immunization b) planning and conducting health education sessions on vaccine preventable diseases, immunization and delivery hygiene	nurse nurse/ midwife	- as above in 1.1 - knowledge and understanding of the disease tetanus and how it can be prevented through delivery hygiene - ability to speak and understand the local language	- as above in 1.1	- as above in 1.1	
	1.3 First Referral Level (District Health Office)	a) production and acquisition of training aids b) dissemination of information on the immunisation programme to the public and to the health personnel, e.g. by arranging information campaigns c) supervision of health education activities in 1.2 and training of staff	health educators, medical officer and/or public health Nurse	- ability to explain the aims of the programme in a simplified manner; - ability to communicate with influential people of the community (religious, political, etc.) - knowledge of relevant existing training aids in the country and how to use them - ability to prepare simple health education material together with health service staff	- AV material - simple equipment for producing graphic material	- mass media support - transport facilities	- involvement of local voluntary bodies particularly in health and welfare fields such as: - womens associations, - Red Cross, - Save the Children etc. - pre-campaign meetings to inform community leaders, politicians, journalists, etc. - mass-media programmes and campaigns organized by community

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Immunization of pregnant women and children*</u>	2.1 Home	<ul style="list-style-type: none"> a) deciding to utilize immunization services b) obtaining information about place, date and time c) attending immunization sessions, also for follow-up d) appropriate action if side effects occur 	woman herself other family members	<ul style="list-style-type: none"> - knowledge of: where and when to go for immunization services - what to do if side effects occur 	- information material	- information in mass media on schedule for immunization activities	Same as 1.1 above
	2.2 Communal	<p>2.2.1</p> <ul style="list-style-type: none"> a) planning of immunization sessions b) information of the public about time table for immunization sessions c) participation in immunization sessions in out-reach community d) reminder to mothers about re-visits as they leave the session 	community leaders, social workers school teachers CHW's health workers from 2.3	<ul style="list-style-type: none"> - knowledge of the Govt. programme for immunization - ability to cooperate and communicate with Health Service staff in planning - knowledge about the target population in the community - knowledge about the community in general - knowledge of the immunization schedule used in the country - ability to assist in record keeping 	<ul style="list-style-type: none"> - map of the area with population of each village - samples of AV material - growth charts - immunization cards 	<ul style="list-style-type: none"> - transport facilities for out-reach immunization team - planning assistance from District Health Office - record system 	<ul style="list-style-type: none"> - support from Community Development Committee and Government immunization programme - arrangement of site for immunization sessions - announcements in mosques, local shops, markets, radio, etc. - if necessary arrangement of accommodation for team members - public transport

* Priority as indicated under 1.

- Immunization of women and young children -

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. (continued) <u>Immunization of women and young children</u>	2.2 Communal	2.2.2 a) conduct immunizations of children and women b) record immunizations and submit reports c) examine and treat cases with side effects or complications	nurse nurse/midwife CHW if applicable vaccinators in immunization teams	- as above in 2.2.1 knowledge of contra-indications and ability to screen children and record information obtained - skills to prepare vaccination equipment and vaccine, to administer vaccine and record immunizations - knowledge of side effects and complications and how to handle them	- vaccines - equipment such as syringes, needles, instruments, etc. - growth charts or immunization cards - cold chain equipment such as vaccine carriers, cold packs etc.	transport for immunization team system of supply (see below, Activity 3.1)	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. (continued) <u>Immunization of pregnant women and children</u>	2.3 First Health Facility	<p>a) conduction of immunization sessions in the fixed and the outreach facility</p> <p>b) participation in planning and evaluation:</p> <ul style="list-style-type: none"> - meetings with District Office staff and with community members for planning of immunization session schedule - assistance to health teams as required in coverage assessment - contribute to discussions of assessment results - conduct periodic staff meetings <p>c) maintain records and report immunization status</p> <p>d) maintain surveillance of vaccine preventable diseases</p> <p>e) supervise all categories of health workers</p> <p>f) provide in-service training to all categories of staff</p>	nurse nurse/ midwife if applicable medical assistant	<ul style="list-style-type: none"> - Same as in 2.2.1 and 2.2.2 - ability to cooperate and communicate with community preferably including ability to speak and understand local language - skills in establishing and conducting immunization sessions taking into consideration: <ul style="list-style-type: none"> - size of eligible population; - distances - vaccine wastage factors - appropriate knowledge of methodology used for coverage assessment - teaching skills - practical skills in immunization activities - knowledge of eligible population in the area - knowledge of how to collect, compile, analyse, and report data; - ability to monitor programme activities 	<p>Same as 2.2.2</p> <ul style="list-style-type: none"> - map of area with population of each village - evaluation forms for cluster surveys - disease surveillance reports - simple AV material including equipment for demonstrations 	<p>Same as 2.2.2</p> <ul style="list-style-type: none"> - supervision from next higher level 	<ul style="list-style-type: none"> - involvement and support of respected people in the community such as community leaders, development committees, school authorities, women's groups, youth associations, traditional practitioners and TBAs

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. (continued) <u>Immunization of pregnant women and children</u>	2.4 First referral level (District Health Officer)	a) development of immunization plan b) allocation of resources c) conduction of disease surveillance and report to central level d) conduction of coverage evaluation surveys e) contribution to discussions of assessment of results f) obtaining and maintaining interest and support of health services personnel by: - supervision of all categories of health workers - conduction of periodic staff meetings for all categories of staff	District Health Officer, Public Health Nurse, Statistician, etc.	- as above in 2.2 and 2.3 - ability and knowledge required to assume leadership role in the planning, implementation and evaluation of immunisation programmes - ability to acquire and efficiently utilize consultant services	- map of areas with population of each village and distances between village and health centre, - equipment and material for producing graphs and statistical reports. - AV material and other training equipment.	- transport facilities - consultant services by epidemiological and other expertise, as required - record and reporting systems	- understanding of the programme. - support of, and collaboration from, influential people such as chiefs, school authorities, women's groups, etc. Assistance by volunteers, TBAs etc., particularly in disease surveillance and coverage evaluations.

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Provision of vaccine</u>	3.1 First Health Facility	a) estimating the requirement for vaccine: - collection of vaccine from the District Health Office	nurse, nurse/mid-wife community volunteer	- ability to report accurately: - vaccinations done - vaccine used - vaccine needed	- vaccine carriers, - icepacks - supply records	- transport for collection of vaccine from the District Health Office, or expenses to use public transport	- community help to transport vaccine in an emergency
		b) storing vaccine: - organizing and rotating stocks in the refrigerator - reading the temperature and adjusting the thermostat	nurse or other trained health worker	- knowledge of vaccine handling procedures - ability to read and adjust temperature accurately and ability to act in an emergency	- effective and appropriate refrigerator - thermometer - refrigerator record forms	- regular supervision of vaccine handling to encourage and assess need for improvement	- community to help store vaccine in an emergency
		c) maintaining equipment: - checking and cleaning equipment each day, each week, each month. - repairing equipment and fitting spare parts	as in b above refrigerator technician for major parts	- knowledge of equipment maintenance procedures and proper use of equipment	- refrigerator spare parts - simple tool kit (UNICEF/ UNIPAC)	- training and supervision from D.H. office - supply of spare parts by office - visits by repair technician	
		d) obtaining fuel supplies for the refrigeration equipment (non electric)	community volunteer, or trained health worker in centre	- ability to follow thoroughly a routine of fuel stock checking and collecting fresh supply	- for kerosene or gas refrigerators; enough fuel with reserve of at least one week	- expenses for purchase of fuel	- arrangements for alternative fuel sources in an emergency

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. (continued) <u>Provision of vaccine</u>	3.1 First Health Facility	<ul style="list-style-type: none"> e) using and despatching vaccine: - packing vaccine in carrier for field use, when applicable - protecting vaccine from heat during use 	as in <u>b</u> above	<ul style="list-style-type: none"> - knowledge of and skills in vaccine handling procedure 	<ul style="list-style-type: none"> - vaccine carriers - container for vaccine vials with ice 	<ul style="list-style-type: none"> - provision of ice or ice packs - supervision of the immunization clinic to check on vaccine handling procedures 	<ul style="list-style-type: none"> - help to provide ice in an emergency - awareness of the community that vaccine and diluents needs to be with ice at time of use
	3.2 First referral level (district health office)	<ul style="list-style-type: none"> a) receiving vaccine - estimating requirement for vaccine - collection of vaccine from the regional store, or receive delivered vaccine b) storing vaccine - organising and rotating stocks in the refrigerator or freezer - reading the temperature and adjusting the thermostats - record keeping 	<ul style="list-style-type: none"> public health nurse assistant for the public health nurse laboratory technician or store-keeper (1 person responsible) 	<ul style="list-style-type: none"> - ability to report accurately: <ul style="list-style-type: none"> - vaccinations done - vaccine used - vaccine needed - reliability to meet vaccine or travel without delay from the regional store - knowledge of vaccine handling procedures - ability to read and adjust temperatures accurately and ability to act in an emergency - ability to maintain a stock record for each vaccine 	<ul style="list-style-type: none"> - 1 vaccine cold box for field use and emergency storage - 2 vaccine carriers - refrigeration or freezer - refrigerator record forms - vaccine stock record forms 	<ul style="list-style-type: none"> - reports on target population in coverage surveys, - transport for collection of vaccine from the regional store or expenses to use public transport - regular supervision of vaccine handling to encourage and assess the need for improvement - supervision of stock control accuracy 	<ul style="list-style-type: none"> - as above in 3.1.a - as above in 3.1.b

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. (continued) <u>Provision of vaccine</u>		c) maintaining equipment: - checking and cleaning equipment each day, each week - repairing equipment and fitting spare parts - obtaining fuel supplies (if electricity is not available)	laboratory technician or store-keeper	- knowledge of equipment maintenance procedures and proper use of equipment - knowledge of simple repair procedures - ability to follow strict routine of fuel stock checking and collecting fresh supplies	- refrigerator spare parts for district office refrigerator and refrigerators at 1st level health facility level - simple tool kit (UNICEF/ (UNIPAC) - enough fuel with a reserve of at least two weeks	- supply of spare parts - repair technicians expenses for purchase of fuel	- as above in 3.1.d)
		d) despatching vaccine: - packing vaccine for transport to the health centre	laboratory technician or store-keeper (1 person responsible)	- knowledge of vaccine handling procedures	- vaccine carriers brought by health centres when collecting vaccine - ice packs for carriers and cold box	- provision of spare vaccine carriers and ice packs - expenses for ice purchase if necessary	- community or local shops to provide ice in an emergency
		e) supervision/ training of field staff - vaccine handling supervision - vaccine stock checks - on-the-job training of responsible staff	public health nurse	- knowledge of vaccine handling procedures - knowledge of supervision and teaching methods - ability to calculate minimum/maximum stock levels and compare actual stocks found in health centre refrigerators	- checklists - posters - cold chain slide set - 1 thermometer for temperature checking	- training for supervisors	

PHC ELEMENT No 6: PREVENTION AND CONTROL OF LOCALLY ENDEMIC DISEASE
 - (a) Prevention and control of malaria

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Early recognition of suspected malaria cases, appropriate treatment and referral</u>	1.1 Home	a) recognition of usual symptoms of malaria, particularly fever	individual family members mother/father	- knowledge of main malaria symptoms, complications of severe malaria, and consequences - knowledge of availability and location of health facilities	- suitable information material, like pamphlets, etc.	- procurement of drugs, and supply to home and CHWs - facilities for health education - supervision by other levels of health services	- community generated support, e.g. health committees and volunteers - support and health education in schools, churches, mosques, etc.
		b) seeking care c) taking prescribed drugs					
		d) as above e) taking blood slides from fever cases and suspected cases where practicable f) administration of standardized treatment g) recording patients and treatment given h) directing patients to referral facilities whenever necessary i) maintenance of regular supply of drugs j) supervision of home tasks	CHW volunteer	- ability to identify malaria symptoms and social and health consequences - taking slides, packing and forwarding them - knowledge of treatment dosage for different age groups, and contra-indications - knowledge of referral facilities - basic training in health education practice - ability to communicate with supervisory level	- as above - check-list and/or manual of his tasks - essential drugs - kit with recording forms, stationery, blood slides, needles, cotton, alcohol, etc.	- as above - transport for home visits - inventory/mapping of villages and houses - access to refresher training and consultation - storage for drugs and other supplies	- facilities for CHWs - financial support for drug procurements - community cooperation and acceptance - support from community development committees or similar bodies - storage facilities - local herbalists and healers - identification, selection and training of CHWs in cooperation with health authorities - financial support for drug procurements

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Early recognition of suspected malaria cases, appropriate treatment and referral (cont'd)</u>	1.2 First health facility	<ul style="list-style-type: none"> a) - j) in 1.1 above k) taking blood slides and microscopic examination, or sending to hospital l) record-keeping and reporting on malaria morbidity and mortality m) supervision of CHWs n) training community members and CHW whenever possible 	nurses midwives medical assistants physicians	- adequate theoretical knowledge and practical skills about malaria with basic elements in epidemiology, parasitology, entomology and methods of control of malaria	<ul style="list-style-type: none"> - essential drugs - manuals - laboratory and equipment supplies - transport facilities for supervision 	<ul style="list-style-type: none"> - records - stores - referral system - supervision 	<ul style="list-style-type: none"> - assistance with transport facilities - assistance with land and building facilities - support to training of selected community members and CHWs - appropriate communication system, e.g. public transportation, telecommunication
	1.3 First referral level	<ul style="list-style-type: none"> a) adequate management of severe or referred cases b) supervision and continuing training of CHW and volunteers 	nurses physicians	<ul style="list-style-type: none"> - adequate knowledge and practical skills of the clinical and preventive aspects of malaria - ability of the management of severe malaria cases and radical treatment of malaria - knowledge of the national malaria control strategies 	<ul style="list-style-type: none"> - manuals - essential drugs and other anti-malaria drugs and facilities for severe cases - laboratory supplies 	<ul style="list-style-type: none"> - stationery - management of supplies - stores - transport 	<ul style="list-style-type: none"> - public transport - appropriate communication system, e.g. public transportation, telecommunication
	2.1 Home	<ul style="list-style-type: none"> a) undertaking protective measures, including taking regularly prescribed drugs 	pregnant women mother/father individuals at risk	- knowledge of health and social consequences, preventive services and available standardized drugs	<ul style="list-style-type: none"> - suitable information material, like pamphlets, etc. - drugs 	<ul style="list-style-type: none"> - facilities for health education - regular provision of drugs 	<ul style="list-style-type: none"> - community generated support, e.g. health committees and volunteers - support and health education in schools, churches mosques, etc.
2. <u>Preventive treatment to high risk groups of population (expectant mothers, children 0-4 yrs and adults in communities of high economic importance)</u>							

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. Preventive treatment to high risk groups of population (expectant mothers, children 0-4 yrs and adults in communities of high economic importance (cont'd)	2.1 Home (cont'd)	<ul style="list-style-type: none"> b) identification of individuals to be protected c) home visits d) drug distribution e) recording and reporting system f) maintaining adequate stock of drugs g) supervision of home tasks responsibilities 	CHW volunteers TBAs	<ul style="list-style-type: none"> - as above - identification of the selected groups to be protected - knowledge of preventive action of drugs and dosage by age groups - knowledge of drug storage and record-keeping 	<ul style="list-style-type: none"> - adequate drugs - kit with reporting forms and stationery - relevant information material (pamphlets, etc.) 	<ul style="list-style-type: none"> - facilities for health education - transport for home visits - manuals - supervision - inventory/mapping of villages and houses 	<ul style="list-style-type: none"> - financial support for drug procurements - facilities for CHWs (housing, etc.)
	2.2 First health facility	<ul style="list-style-type: none"> a) as above in 2.1 but here the receivers of drugs come to the health facility - supervision of CHWs - operational evaluation 	nurses nurses/midwives medical assistants physicians	<ul style="list-style-type: none"> - as above in 2.1 - knowledge of basic elements in epidemiology, parasitology, entomology and methods of control of malaria - capability of participating in the training of CHWs 	<ul style="list-style-type: none"> - adequate drugs - relevant information material, pamphlets, etc. - material and equipment for training 	<ul style="list-style-type: none"> - facilities for health education - manuals - supervision - preparation for training of CHWs - transport facilities - inventory/mapping of villages and houses 	<ul style="list-style-type: none"> - provision of local facilities for the trainee CHW - transport
	2.3 First referral level	<ul style="list-style-type: none"> a) supervision of CHWs and first health facilities b) training of CHWs, health workers and first health facility personnel - epidemiological evaluation 	nurses physicians	<ul style="list-style-type: none"> - as above in 2.2 - basic knowledge of malaria and of national malaria control strategies - planning, supervisory and evaluation capability - training capability 	<ul style="list-style-type: none"> - as above in 2.2 - laboratory equipment for malariometric evaluation 	<ul style="list-style-type: none"> - facilities for health education - participation in the training of CHWs and first health facilities' personnel - supervision - transport and communication facilities 	<ul style="list-style-type: none"> - appropriate communication system, e.g. public transportation, telecommunication

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Reduction of prevalence of malaria*</u>							
3.1 <u>Reduction of vector longevity</u>	3.1.1 Home	a) acceptance of and cooperation with the spraying operations, etc.	individual family members	- knowledge of the importance of spraying operations for the health - knowledge of the transmission of malaria by mosquitos, and of the need for spraying	- pamphlets on health education on the subject	- facilities for health education - development and production of health education material	- community cooperation - health education at community level
		b) information and motivation of people for the spraying operations	CHW and volunteer community leaders	- knowledge of the spraying operation methods and the importance for the health of the people	- as above	- supervision	- as above
		c) carrying out spraying if so programmed	squad-leaders	- socio-cultural setting with a view to applying appropriate health education principles	- relevant supplies, equipment and spare parts, insecticides, protective clothes and emergency kit for toxic accidents	- transport facilities	- facilities for the spraymen, accommodation; water to dilute the insecticide
		d) inventory, mapping of villages, houses, etc.		- knowledge of the spraying operation methods and evaluation			- storage facilities for insecticides and equipment
		e) insecticidal residual spraying of structures		- relevant training and re-training of spraymen			
		f) recording and reporting activities					
		g) training and supervision of spraymen					
		h) checking coverage, dosage, date of application of the residual insecticide					
	3.1.2 First health facility	a) operational evaluation	health inspector	- as above in 3.1.1		- as above in 3.1.1	- storage facilities
		b) supervision of CHWs					
		c) promotion of health education					

*The implementation of these activities may vary according to the local conditions and should therefore be adapted accordingly

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3.1 <u>Reduction of vector longevity</u> (cont'd)	3.1.3 First referral level	a) epidemiological and operational evaluation b) supervision of lower levels	public health medical officer	- knowledge of the spraying operations and malaria control	- relevant material for evaluation	- transport facilities - consultant service of an epidemiologist as appropriate	
3.2 <u>Reduction of man/vector contact</u>	3.2.1 Home	a) use of repellents, bed nets, window screening, selection of proper site of the house b) residual spraying as in 3.1.1 c) selection of building sites and promotion of the above tasks	responsible family member CHWs/community leaders, technical services	- knowledge of transmission of malaria, and ability to apply preventive measures - knowledge about criteria of the proper site of the house	- necessary screens, and repellents whenever feasible - as in 3.1.1, if programmed	- availability of material - documents about malaria and individual protection - advice from technical services	- motivation through community health education - training of CHWs - intersectoral coordination and cooperation (different ministries, etc.)
	3.2.2 First health facility	a) promotion of health education b) supervision of CHWs	nurse medical assistant	- knowledge of the disease and preventive measures - basic knowledge of parasitology and entomology	- facilities for health education	- transport facilities	
	3.2.3 First referral level	a) epidemiological and operational evaluation b) promotion of health education c) supervision of lower levels	public health medical officer entomological technician	- as above in 3.2.2 - methods of malaria control	- facilities for health education - facilities for evaluation	- transport facilities	- intersectoral coordination and cooperation

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3.3 <u>Reduction of vector population</u>	3.3.1 Home	a) peri-domestic sanitation b) intermittent emptying of water containers, filling up ponds, draining pools, planting trees, etc. c) prevention of man-made malaria (i.e. cisterns, disused wells, borrow-pits left by building projects, obstructed drains, etc.)	family members community leaders, CHWs, volunteers	- understanding of the transmission of malaria by certain mosquitoes - knowledge of the mosquito cycle - identification of breeding places of mosquitoes transmitting malaria	- documents on the subject - locally adapted supplies and equipment	- individual and community input - tools - facilities for health education - training and information - supervision	- health education at the community level - educational programmes for adults - training of CHWs - health education on the subject
	3.3.2 First health facility	a) application of larvicides (urban selected rural areas, development projects)	community or malaria workers operational leaders entomological technicians	- knowledge of mosquitoes, larvae cycle and breeding places - knowledge of the methods of application of larvicides	- adequate supplies, equipment and technology - larvicides	- training - transport facilities - supervision	- community cooperation - facilities for field workers and storage
		b) ultra low (ULV) insecticide applications (in case of epidemics only)	technical men	- technical knowledge of ULV equipment - knowledge of the bio-nomics of the vectors - ability to contact people	- adequate supplies and equipment - insecticides	- transport and petrol	- community cooperation
	3.3.3 First referral level	a) epidemiological and operational evaluation	epidemiologist	- methods of malaria control	- facilities for evaluation	- transport facilities	
4. <u>Interruption of transmission of malaria*</u>	As in 3, but adapted to malaria eradication structures and strategies						

*For more advanced programmes

PHC ELEMENT No 6: PREVENTION AND CONTROL OF LOCALLY ENDEMIC DISEASES
 - (b) Prevention and control of hypertension

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Early detection and diagnosis:</u> - identification of "at risk" subjects and - detection of patients	1.1 Home	a) history taking re: - hypertension - strokes - toxæmia of pregnancy - oral contraception	responsible family member	- knowledge of BP and of services available for its control; need for regular checks after middle age*	- suitable AV information material	- facilities for health education classes	- community generated involvement e.g. health development committees and volunteer health workers
		b) incidental screening, BP measurement c) referral as appropriate d) record-keeping	CHW	- as above - skill in measurement of BP and in record-keeping - knowledge of referral procedures	- as above - BP machines - record-keeping and referral forms	- transport services for home visiting and referrals	- support from defined groups e.g. religious bodies, factories, schools - appropriate communications system, e.g. public transportation, telecommunication, mailing
	1.2 First health facility	a) history taking b) physical examination including BP c) urinalysis d) record-keeping e) regular BP checks after middle age*	medical assistant nurse	- basic knowledge and skills required for CVD given as part of normal training or in continuing education courses	- as above in 1.1 - equipment for urinalysis	- as above in 1.1 - stores - referral system	
	1.3 First referral level	a) - e) as above in 1.2 f) special tests, e.g. X-ray, ECG and blood tests	physician nurse laboratory technician	- as above in 1.2 - skill to evaluate hypertension, e.g. ophthalmoscopy and interpretation of X-ray, ECG and blood tests	- as above in 1.2 - equipment and supplies for special tests	- as above in 1.2 - adequate supplies and spares - opportunity for referral to specialist centre	

* actual age will depend on BP frequency distribution in the community

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Initial management</u> 2.1 <u>General measures</u>	2.1.1 Home	a) persuading patients, with or without symptoms to seek treatment	family member	- as above in 1.1	- A-V health information materials	- facilities for health education of the community	- same community involvement and intersectoral support as required for Activity 1
		b) counselling: - firm but non-alarmist approach; - advice re weight; - oral contraceptives; salt intake; alcohol excess; smoking; c) encouraging adherence to treatment	CHW	- limited formal training, tailored to local needs and educational background, to cover tasks in a) to c) - (see also 2.2.1 below)	- suitable training materials, e.g. prepared educational manuals	- administrative arrangements and facilities for initial and in-service training of volunteers and health personnel	
	2.1.2 First health facility	as above in 2.1.1 - for reinforcement	medical assistant nurse	- as above in 1.2	- as above in 2.1.1		
	2.1.3 First referral level	- diagnosis and clinical assessment - initiating pt. education programme	physician nurse laboratory technician	- as in 1.3, complemented by continuing education courses	- as above in 2.1.1 - materials required for clinical assessment		
2.2 <u>Drug treatment and needs</u>	2.2.1 Home	- drug storage and administration - recognition of physical deterioration - recognition of side effects	patient or family member CHW	- basic knowledge of: dosage; potency; side-effects; storage/shelf life	- drugs as prescribed - facilities for safe keeping	as provided under PHC Element 8: "Provision of Essential Drugs", for the procurement, storage, quality control and distribution of drugs selected for BP control	- community action to ensure continuous availability of recommended range of drugs and supplies in adequate quantities at all levels
	2.2.2 First health facility	- as above in 2.2.1 - prescribing/supplying first level drugs e.g. diuretic, reserpine, beta blocker - monitoring efficacy and side effects	medical assistant nurse dispensing assistant	- as above in 2.2.1 - competence in drug supply, storage and dispensing procedures	- first level drugs - suitable dispensing and storage containers		
	2.2.3 First referral level	- prescribing and supplying - within the full range of recommended drugs - monitoring efficacy, quality and side effects	physician pharmacist nurse	- as provided in recognized training and refresher/continuing education courses	- full range of recommended drugs - suitable dispensing and storage containers		

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Follow-up and prevention of complications</u>	3.1 Home	- monitoring BP and treatment - encouraging compliance to - record-keeping - referral	family member or patient CHW	- as in 1.1 above	- as in 1.1 above	same support as for activities 1 and 2 above	
	3.2 First health facility	- as above in 3.1 on a periodic basis	medical assistant nurse	same requirements as under activities 1 and 2 above			
	3.3 First referral level		physician nurse				
4. <u>Treatment of emergencies</u>	4.1 Home	- first aid and prompt transfer to hospital	family friends workmates, etc. CHW	- knowledge of simple first aid measures and care of patients during transportation	- facilities for transportation	- facilities for health education classes	- reliable transportation system
	4.2 First health facility	- initial emergency treatment	medical assistant nurse	- recognition and initial treatment of certain emergencies, e.g. L.V. failure	- recommended range of drugs for parental administration	Supplies - acquisition - storage and - accounting procedures	- transportation and telecommunication links for referral
	4.3 First referral level	- emergency treatment and recovery care	physician	- recognition and treatment of all common emergencies			
5. <u>Management of complications (long-term)</u>	All levels	Follow-up as under activity 3 - supervision of rehabilitative measures and procedures	family and personnel at all levels	- training for rehabilitative care, e.g. physiotherapy	- drugs and appliances (see also activity 2.2)	- transport to rehabilitative clinics	- same support as for activities 1 and 2

PHC ELEMENT No 7: APPROPRIATE TREATMENT OF COMMON DISEASES AND ACCIDENTS

- (a) Diarrhoeal Diseases

page 1

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Diagnosis of diarrhoeal disease and provision of appropriate treatment</u>	1.1 Home	<p>a) recognize that the child has diarrhoea and that treatment must be started early</p> <p>b) feed child extra fluids (e.g. boiled rice water, weak tea, soups, juices, or suitable home-made solutions) to prevent dehydration</p> <p>c) recognize the signs and symptoms of dehydration and seek care when it occurs</p> <p>d) obtain ORS packets, mix packet ingredients with correct amount of safe water and administer OR fluids to child in appropriate amounts</p> <p>e) follow dietary practices, as advised for treatment of diarrhoea and continue breastfeeding</p>	family members neighbours	<ul style="list-style-type: none"> - skill in recognizing symptoms of diarrhoeal disease - knowledge of suitable additional fluids and skill in preparing them - skill in recognizing signs of dehydration and knowledge of availability and location of CHWs and health service facilities - knowledge of where ORS packets can be obtained and at what cost - knowledge and skills to correctly prepare and administer OR fluids - knowledge of appropriate dietary practices 	<ul style="list-style-type: none"> - information material which is appropriate to the beliefs traditions, attitudes, and education of family members - ORS packets - appropriate sized container to mix ingredients - safe water, or utensils to boil water 	<ul style="list-style-type: none"> - transportation in support of rererral system - distribution system for ORS packets 	<ul style="list-style-type: none"> - initiatives in support of relevant health information and education of various community groups e.g. schools, religious groups, etc. - community action for provision of safe water supply (see PHC Element no. 3)

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Diagnosis of diarrhoeal disease and provision of appropriate treatment</u> (continued)	1.1 Home (continued)	<ul style="list-style-type: none"> - as above in a) - d) plus: determine type of treatment needed based on recommended guidelines (e.g. increased breastmilk and/or other fluids and continued normal feeding, OR therapy treatment at health service facility) provide ORS packets to family train family members to perform tasks a) - e) above 	community health workers	<ul style="list-style-type: none"> - as above plus: - skill in identifying symptoms and signs of dehydration and degrees of it - knowledge of treatment appropriate for various degrees of dehydration and when to refer to higher level - knowledge of when ORS packets should be left with family and how many - practical skills in training appropriate to local beliefs, traditions, attitudes, and educational background of persons being trained - preferably literacy 	<ul style="list-style-type: none"> - as above - checklist, manual, guidelines, or other references and training documents 	<ul style="list-style-type: none"> - distribution and storage system for ORS packets - supervision by next higher level 	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Diagnosis of diarrhoeal disease and provision of appropriate treatment</u> (continued)	1.2 First Health Facility	- as above in 1.1 plus: a) give patient IV therapy b) train community health workers to perform tasks listed in 1.1 c) supervise CHWs d) administer other drugs (e.g. antibiotics)	nurses, medical assistants (physician)	- as in 1.1 above - knowledge of indicators that IV therapy or other drugs are needed - skill in administering IV therapy - skills in monitoring and supervising - knowledge of availability of other drugs and their dosage schedules and mode of administration	- as above in 1.1 - IV sets and fluids, essential clinical equipment and supplies - training materials suitable for CHWs - recommended drugs and relevant information literature	- distribution and storage system for ORS packets - procurement and maintenance of essential equipment and supplies - administrative arrangements, supplies, and facilities for initial and in-service training of community health workers - procurement of appropriate drugs - record systems	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Diagnosis of diarrhoeal disease and provision of appropriate treatment</u> (continued)	1.3 First Referral Level	<ul style="list-style-type: none"> - as above in 1.2 plus: a) give patient OR and/or IV therapy as appropriate b) collect specimens of stool and blood and perform laboratory tests c) package oral rehydration ingredients if applicable d) train health service facility personnel to: <ul style="list-style-type: none"> - determine when oral rehydration is appropriate; - administer oral rehydration - supervise work at other levels of PHC 	physicians, nurses, lab technicians, pharmacists	<ul style="list-style-type: none"> - as in 1.2 - skill in performing laboratory techniques (e.g. blood tests, slide preparation) - knowledge of procedures for packaging OR ingredients 	<ul style="list-style-type: none"> - as above in 1.2 and - clinical and laboratory equipment and supplies - guidelines for the production of ORS - essential pharmaceutical ingredients - pharmaceutical scale - packaging material - training materials suitable for health service facility personnel 	<ul style="list-style-type: none"> - as above 1.2 - procurement and maintenance of laboratory equipment and supplies - procurement of raw materials for ORS packets - adequate storage facilities 	<ul style="list-style-type: none"> - community support to develop local cottage industry for preparation of ORS packets if feasible and appropriate

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Prevention of diarrhoeal disease</u>	2.1 Home	<p>a) breastfeed infant for at least one year, preferably two</p> <p>b) begin supplementing child's diet when (s)he is about 6 months of age with safely prepared and nutritionally adequate weaning foods</p> <p>c) practice personal hygiene with regard to preparation, storage and serving of foods and the use of latrines and disposal of excreta cf. PHC Element 3</p> <p>d) isolate patients with diarrhoeal disease, if possible away from children and older persons</p> <p>e) train family members to perform tasks a) - d) above</p> <p>f) educate family members about the benefits of performing tasks a) - d) above</p> <p>g) participate in communal activities to provide safe water and safe disposal of excreta</p>	<p>mother and other family members</p> <p>CHW</p>	<ul style="list-style-type: none"> - knowledge of the importance of proper diet, personal hygiene, food hygiene practices, and sanitation practices - skill in performing the tasks specified - knowledge of locally available, nutritionally adequate weaning foods, and skill in safely preparing them cf. PHC Element 2 - knowledge of current practices, beliefs, attitudes, taboos, etc., relevant to those practices being promoted - skill in using motivating communication techniques appropriate to local conditions 	<ul style="list-style-type: none"> - informative material which is appropriate to the beliefs, traditions, attitudes and education of the family members - nutritionally adequate weaning foods - safe water supply, and appropriate sanitary facilities 	<ul style="list-style-type: none"> - as above in 1.1 - administrative arrangements, supplies, and facilities for training family members - transport for CHW home visits 	<ul style="list-style-type: none"> - support for communal arrangements for food production and provision of safe water supply (see also PHC Element 2, "Food Supply and Proper Nutrition, and PHC Element 3, "Adequate supply of Safe Water and Basic Sanitation"

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Prevention of diarrhoeal disease</u> (continued)	2.2 Communal Level	a) communal tasks related to the provision of safe water and basic sanitary facilities	As in PHC Element 3 "Adequate Supply of Safe Water and Basic Sanitation"				
	2.3 First Health Facility	a) educate family members and community health workers about the benefits of performing tasks above in 2.1 b) promote water and sanitation hygiene practices. cf. PHC Element 3 c) supervise and participate in training CHWs	nurses, medical assistants	- as above in 2.1	- suitable educational materials	- administrative arrangements, supplies, and facilities for educating family members and community health workers - supervision by next higher level	- as above in 2.1 plus endorsement and support from network of health service facilities cf. PHC Element 3
	2.4 First Referral Level	a) As above in 2.3	Physicians nurses	- As above in 2.1	- suitable educational materials	- as above in 2.3.	- as above in 2.3

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Management of outbreak of diarrhoeal disease</u>	3.1 Home	a) identify cases of diarrhoeal diseases and bring patients for treatment b) use only safe water	family members	- as above in 1.1 - knowledge of safe water sources		- transportation of patients to temporary centres	- community involvement in organization of temporary treatment centres
		c) inform next higher level of suspected outbreaks as soon as possible d) participate in control measures	CHWs	- skill in recognizing significant increases in cases - knowledge of whom to inform regarding suspected outbreaks		- system for prompt communication of the location of disease-causing source, temporary treatment centres and safe water	
	3.2 Communal Level	a) as above in 3.1 c) b) implement appropriate measures to control outbreaks (e.g. decontamination of water, proper waste disposal) c) report new cases	CHWs village leaders teachers agricultural workers	- as above in 3.1 - knowledge of the source and mode of transmission of the outbreak of the diarrhoeal disease (e.g. contaminated well, river etc.) - skill in practical techniques of controlling outbreaks (e.g. decontaminating water, disposing waste)	- reference documents - supplies and equipment needed to dispose waste, decontaminate water (e.g. bleaching powder)	- as above in 3.1 - system for prompt distribution of the supplies and equipment needed to control outbreaks	- mobilizing cooperation of residents for reporting of cases and implementing control measures

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Management of outbreak of diarrhoeal disease (continued)</u>	3.3 First Health Facility	<ul style="list-style-type: none"> a) as above in 3.1 c) b) collect specimens c) send specimens to laboratory d) determine appropriate measures to control outbreaks (e.g. decontamination of water, proper waste disposal) e) supervise/assist community members to implement appropriate control measures f) establish temporary treatment centres g) report new cases 	<ul style="list-style-type: none"> nurses medical assistants sanitary inspector 	<ul style="list-style-type: none"> - as above in 3.2 - skill in taking blood, water, and stool samples - knowledge of where to send specimens - knowledge of socially acceptable measures to control outbreaks - knowledge about the resources, personnel and equipment needed to operate temporary treatment centres - skill in establishing temporary treatment centres 	<ul style="list-style-type: none"> - laboratory supplies and equipment - reference documents - essential drugs - stockpiled supplies (e.g. ORS, IV, other clinical supplies, tents, etc. - essential equipment for temporary treatment centres 	<ul style="list-style-type: none"> - as above in 3.1 and 3.2 - system for collecting, preparing, and delivering specimens to laboratory - prompt transport of the supplies needed to set up temporary treatment centres - supervision by next higher level 	<ul style="list-style-type: none"> - as above in 3.1 and 3.2 plus organization of volunteer groups to assist in treatment centres
	3.4 First Referral Level	<ul style="list-style-type: none"> a) as above in 3.3, a) b), d) and e) b) test lab specimens 	<ul style="list-style-type: none"> public health officer nurses laboratory 	<ul style="list-style-type: none"> - as above in 3.1 - 3.3 - skill in performing laboratory techniques (e.g. preparing slides) 	<ul style="list-style-type: none"> - as above in 3.3 	<ul style="list-style-type: none"> - system for prompt communication of diagnosis of diarrhoeal disease and source to health service facility personnel and community residents - consultant assistance by epidemiologists as required 	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Management of outbreak of diarrhoeal disease</u> (continued)	3.4 (contd.) First Referral Level	<p>a) determine agent causing the outbreak</p> <p>b) confirm source of agent</p> <p>c) prepare for adequate management of diarrhoeal disease outbreaks by:</p> <ul style="list-style-type: none"> - stockpiling supplies - training medical personnel in procedures for: - establishing temporary treatment centres; - providing treatment to large numbers of patients <p>d) train non-medical personnel to assist in the treatment of patients when outbreak does occur</p> <p>e) supervise temporary treatment centres</p>	<p>public health officer</p> <p>nurse</p> <p>laboratory technicians</p>	<ul style="list-style-type: none"> - skill in performing laboratory tests and recognizing disease-causing agent - knowledge of diarrhoeal diseases etiology and epidemiology - skill in identifying source of outbreak - same as 1.3 q) and 3.3 i) - skill to treat patients with diarrhoeal disease as in 1.1, 1.2, and 1.3 - practical skills in training appropriate to local beliefs, traditions, attitudes, and educational background 	<ul style="list-style-type: none"> - as above in 3.3 - training materials suitable for medical and non-medical personnel 	<ul style="list-style-type: none"> - as above in 3.3 - storage facilities for ORS, IV clinical supplies, tents and essential equipment for temporary treatment centres - prompt transport of the supplies and facilities for training medical personnel 	<ul style="list-style-type: none"> - community assistance in communicating the findings of the laboratory and the epidemiologist (e.g. source of contamination, control measures needed) to the community

- (b) Management of common injuries in the home

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Treatment of cuts</u>	1.1 Home	a) recognition of degrees of severity of cut	injured person or parents of injured children	- ability to recognize injuries, understand dangers and arrest haemorrhage	- first aid kit and manual	- facilities for health education classes	- health education and first aid in school and other public institutions
		b) arrest of haemorrhage	other family members	- knowledge of how germs gain access to the body			- community programmes or activities for rehabilitation
		c) protection of site of cut	neighbours	- knowledge of availability and location of nearest health facility			- economic and other support schemes for disabled
		d) seeking treatment if necessary					
		e) follow instructions for prescribed treatment/management					
		- as in 1.1 a), b) and c) above	CHW	- knowledge of how to: - arrest haemorrhage; - prevent infection; - immobilize severely cut limbs	- checklist and/manual of tasks	- transport for home visits	- facility for health worker
		d) teaching how to prevent accident/cuts	other trained community workers	- knowledge of referral facilities and which cases to refer - knowledge of local domestic circumstances and practices which may lead to cuts - teaching skills	- home nursing bag		- assistance with emergency transport

- (b) Management of common injuries in the home -

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. (continued) <u>Treatment of cuts</u>	1.2 First Health Facility	a) administration of anti-tetanus toxoid, if feasible b) diagnosis of shock and treatment if necessary c) cleaning wound d) removal of foreign bodies from wound e) examination of severity f) if no deeper tissues involved suturing and dressing wound g) follow-up treatment, as required h) if deeper tissues involved, arrangements for transport to hospital, immobilization of limbs, and if necessary completion of referral slip h) continuous training in first aid of front line health workers	nurses midwives medical assistants and physicians (if available)	- adequate theoretical knowledge and practical skills in management of casualties - ability to recognize and treat shock - skill in administering IV fluids - ability to diagnose severe cases requiring immediate hospital intervention - teaching skills	- essential drugs and medications - bandages - appropriate surgical equipment - sterilizing facilities - manuals, text-books audio-visual teaching aids	- treatment room - record systems	- help with emergency transport

- (b) Management of common injuries in the home -

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. (continued) <u>Treatment of cuts</u>	1.3 First Referral Level	as above in 1.2 a) - e) f) blood grouping g) adequate surgical treatment h) active measures to prevent future disability i) follow-up treatment if necessary including referral for specialized follow-up surgery or rehabilitative treatment k) continuous training of personnel	physicians nurses	- adequate knowledge and practical skills in treatment of injuries, including surgery - knowledge of up-to-date drugs, treatment and technologies - knowledge of availability of centres of rehabilitation - teaching skills	- as in 1.2 and more elaborate - teaching materials - textbooks, etc.	- surgical facilities - laboratory facilities - X-ray facilities - classroom facilities	- support from community groups to find blood donors, where appropriate

- (b) Management of common injuries in the home -

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Treatment of burns and scalds</u>	2.1 Home	a) assessment of degree of severity of burns	as in 1.1 above	<ul style="list-style-type: none"> - understanding of dangers and complications of burns and necessity for skilled intervention - knowledge of how to assess severity of burns - understanding of what <u>not to do</u> (e.g. application of oil etc. to burnt area) - knowledge of availability and location of health facilities 	<ul style="list-style-type: none"> - appropriate material on first-aid and home nursing 		- as in 1.2 above
		b) for mild burns: <ul style="list-style-type: none"> - give analgesics - protect site - reassure patient - call for skilled help c) if severe burns, as above plus arrange for immediate transfer to health facility or hospital	CHW other trained community worker	<ul style="list-style-type: none"> - ability to make rapid calculation of percentage of body burnt (based on rule of 9) - knowledge of principles and practices of shock treatment - ability to recognise difference between deep and superficial burns - knowledge that no treatment other than shock treatment should be undertaken - knowledge of local domestic circumstances and practices which may lead to burns and scalds; - teaching skills 	<ul style="list-style-type: none"> - home nursing bag - equipped - simple analgesics - antibiotics 	- transport for health worker	- as in 1.2 above
		d) rough estimation of percentage of body burnt and depth of burns e) if mild - as b) above arrange for later transfer to health facility f) if severe - treat for shock as in c) above, complete referral slip mentioning circumstances of burns where known g) information of family members about prevention of burns and scalds in the home					

- (b) Management of common injuries in the home -

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. (continued) <u>Treatment of burns and scalds</u>	2.2 First Health Facility	a) as above in 2.1 under CHW b) give injection of penicillin c) local treatment as appropriate d) arrangements for follow-up treatment e) if required, give IV fluids and arrange for referral to next level	nurses midwives medical assistant and physician if available	- complete first-aid knowledge of signs and symptoms of burns and how to assess their severity - knowledge of treatment of mild burns and of shock from large burns	- essential drugs - IV fluids	- treatment room - facilities for referral	
	2.3 First Referral Level	a) assessment of severity of case, taking other factors into consideration b) appropriate treatment c) arrangements for follow-up treatment d) referral of severe cases requiring specialized surgery	physicians nurses	- up-to-date knowledge of treatment of burns including surgical interventions within competency	- standard hospital equipment,	- surgical facilities	

- (b) Management of common injuries in the home -

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Treatment of poisoning</u>	3.1 Home	a) recognition of symptoms of poisoning by: i) - non-corrosives ii) - corrosives iii) - snake/insect bites	poisoned person parents of children neighbours	- knowledge of what constitutes a poison and differences in categories - knowledge of appropriate first aid measures - knowledge of home made emetics and antidotes - knowledge of availability and location of health workers/facilities	- first-aid and home nursing manuals - other information material	- facilities for health education classes	- arrangement for first aid and home nursing classes - mass media information programmes
		b) first aid treatment as appropriate, i.e. for: i) administering home-made emetics and/or giving bland fluids; send for help or transport person; for ii) sending for immediate qualified help and treating for chock for iii) incision and sucking out poison (if fang marks present), then send for help					
		a) as in 3.1 a) - b) above b) teaching family members about accident prevention	CHW other trained community workers	- as above in 3.1 - knowledge of antidotes to common poisons and how to administer them - knowledge of local domestic circumstances and practices which may lead to poisoning (e.g. keeping drugs out of reach of children, etc.	- home nursing bag equipped with analgesics and antitoxins to known local varieties of poisonous snakes and insects	- possible two-way radios for very remote areas	- as in 1.1 above

- (b) Management of common injuries in the home -

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. (continued) <u>Treatment of poisoning</u>	3.2 First Health Facility	a) recognition of signs and symptoms of poisons, especially those ingested b) referral of selected cases to hospital c) continuous training of front-line workers in first-aid treatment of poisoning and its prevention	nurses midwives medical assistants, if available physicians	- knowledge of different kinds of poisons - theoretical knowledge and practical skills in dealing with them - knowledge and skill to recognize serious cases requiring immediate transfer to hospital - teaching skills	- essential surgical equipment and supplies including resuscitation equipment - emetics - antidotes and/or antitoxins for commonly occurring poisonings and local known poisonous insects	- transport for referral - facilities for teaching	- as in 1.2 above
	3.3 First Referral Level	a) diagnosis and treatment/management of all types of poisoning b) continuous training of personnel in first level health facility	physicians nurses	- theoretical knowledge and practical skills in diagnosis, treatment and management of all types of poisoning	- standard hospital equipment and supplies - teaching materials and visual aids		

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Acquisition of drugs</u>	1.1 Home	<p>For the drugs in group A:*</p> <p>a) obtaining/receiving drugs from first health facilities or from CHW for each individual case (group A1)</p> <p>b) obtaining/receiving drugs in group A2 at regular intervals or as required</p> <p>For the drugs in group B:*</p> <p>c) obtaining prescription from health facility</p> <p>d) purchasing drugs from pharmacy or local herbalist</p>	responsible family member or neighbours	<p>- knowledge about which drugs are available and where</p> <p>- knowledge about the availability of drugs in group A2, their use and how and where to replenish them</p> <p>- knowledge about existing health facilities</p> <p>- knowledge about existing pharmacies or local herbalists</p>	<p>- drugs in proper packing material</p> <p>- information material on each individual drug</p> <p>information on material on each individual drug</p>	- provision of suitable containers	<p>- provision of facilities for education on availability and proper utilization of health facilities and drugs</p> <p>- development of community sponsored pharmacies and administrative supervision</p>

*Grouping of drugs in PHC

- A. Drugs provided by the system at different levels of PHC, for free distribution to the patients:
- A1 Drugs supplied to an individual patient
 - A2 Drugs distributed to homes for constant use (e.g. preventive drugs, disinfectants, supplements)
- B. Drugs bought with prescription from private pharmacies or herbalists
- C. Drugs bought without prescription including locally available herbal medicines (vegetable drugs) and home remedies

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Acquisition of drugs</u> (cont'd)	1.1 Home (cont'd)	For the drugs in group C:		<ul style="list-style-type: none"> - recognition of general symptoms of common disease - knowledge of what conditions can be safely self-treated and how - knowledge about the availability of drugs 	information material on self-medication, and manuals for growing, collecting, preserving and preparing simple vegetable drugs		<ul style="list-style-type: none"> - provision of programmes for health education related to self-diagnosis, self-care and preparation and utilization of home remedies
		e) self-diagnosis and decision as to whether to give self-care or to contact the health facility					
		f) purchasing drugs from pharmacies or local herbalists					
		g) obtaining/issuing of drugs in group A	CHW volunteers	<ul style="list-style-type: none"> - as above, in 1.1 - skills in record-keeping 	<ul style="list-style-type: none"> - as above, in 1.1 - drug cabinet for storage - record-keeping materials 	<ul style="list-style-type: none"> - supply and distribution system for drugs - transportation facilities - encouraging the cultivation, collection, and preparation of vegetable drugs 	<ul style="list-style-type: none"> - provision of necessary amenities
		h) record-keeping and home supervision					
		i) collection and preparation of locally available herbal medicines	local herozalists	<ul style="list-style-type: none"> - skills in preparation of local remedies 	<ul style="list-style-type: none"> - as above 		

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Acquisition of drugs</u> (cont'd)	1.2 First health facility	For the drugs in group A, the assessment of local priority health problems and projection of drug needs: a) estimation and projection of drug needs (including those of CHW) b) requisition of drugs according to system of supply* c) reception of drugs from first referral level or directly from distribution sub-centre, or from distribution centre (depending on the national system of distribution** d) record-keeping	nurse pharmacy assistant medical assistant physician	- knowledge about how to project drug needs based on local priority health problems - knowledge about the forms of requisition or how to formulate them - knowledge of system of supply including source of supply, timing and frequency of replenishment	- necessary manuals and forms - essential drugs relevant to local health problems - information leaflets on drugs	- maintenance of efficiency of supply systems - efficient distribution system - proper storage facilities	

*System of supply can be based on:

- requisition
- supply allocation, based on the assessment of the need; in the latter, there is no need for requisition, drugs are supplied at regular intervals

**Different systems of distribution can be operational:

- chain system, when each level is supplied and supervised by a higher level
- wheel system, when all the levels are supplied by a distribution centre or sub-centre
- any combination of the systems

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. <u>Acquisition of drugs</u>	1.2 First health facility (cont'd)	For drugs in groups B & C: e) giving prescriptions to the patients f) guiding patients in choosing available drugs in group C	nurse medical assistant or physician	- knowledge about availability of drugs including herbal medicine	- list of available drugs - appropriate professional education material		
	1.3 First referral level	For drugs in group A: a) assessment and projection of local priority health problems and projection of the drug needs (both for this level and below) b) requisition of drugs according to system of supply c) reception of drugs from next level of distribution according to the system of distribution	pharmacist medical assistant or physician	- as above in 1.2	- as above in 1.2	- as above in 1.2	

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
1. Acquisition of drugs (cont'd)	1.3 First referral level (cont'd)	<p>For drugs in groups B & C:</p> <p>d) inspection of pharmacies* and stores for:</p> <ul style="list-style-type: none"> - availability of drugs - adequacy of storage facilities - good dispensing practice - price control <p>e) supervision of local production of herbal medicines for:</p> <ul style="list-style-type: none"> - hygienic operation - adequate standard - taking samples for quality control 	pharmacist, medical assistant or physician	<ul style="list-style-type: none"> - knowledge about good dispensing practice - knowledge about prices of drugs - knowledge and skills of sampling procedures - knowledge of regulatory control - knowledge of good manufacturing practices for herbal medicines 	<ul style="list-style-type: none"> - as above in 1.2 - list of drugs registered in the country, complete with retail prices - containers for samples - manuals on good dispensing practice - manuals or information on herbal medicine 	<ul style="list-style-type: none"> - means of transportation for inspection - facilities for quality control - adequate storage facilities 	<ul style="list-style-type: none"> - cooperation in the implementation of drug regulations, e.g. local reporting system, availability and prices of drugs

*Most drug legislations give power of inspection to the drug administration of the country, this duty in some areas can be delegated to other levels

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
<p>2. <u>Drug storage</u></p>	<p>2.1 Home</p>	<p>For all three groups A, B, C:</p> <p>a) proper storage of drugs (e.g. protection from heat and humidity; inaccessible to children)</p>	<p>responsible family members</p>	<p>knowledge about:</p> <ul style="list-style-type: none"> - effects of adverse storage conditions on drugs - signs indicating deterioration of drugs, for instance disintegration of tablets, change in colour, precipitation of fluids, change of smell and taste 	<ul style="list-style-type: none"> - self-provision of drug cabinet, boxes with lock and key or dry high shelves 		<ul style="list-style-type: none"> - assistance in the provision of adequate drug facilities at home
		<p>b) provision of information and education about proper drug storage and supervision</p>	<p>CHW</p>		<ul style="list-style-type: none"> - information material about proper drug storage 		
	<p>2.2 First health facility</p>	<p>Only for drugs in group A:</p> <p>a) as above in 2.1</p> <p>b) implementing rules of stock rotation including consideration of expiry dates</p> <p>c) supervising and training the lower levels for good store-keeping</p>	<p>as above in 1.2 or store-keeper under supervision</p>	<p>- as above in 2.1</p> <p>knowledge about:</p> <ul style="list-style-type: none"> - basic good store-keeping practice - stock rotation - expiry date 	<ul style="list-style-type: none"> - adequate storage facilities - relevant forms, stock cards - teaching aids 		

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
2. <u>Drug storage</u> (cont'd)	2.2 First health facility	d) keeping appropriate inventory of supplies in the facility as well as below			manuals on good store-keeping practice including stock rotation and out-of-date stocks		
	2.3 First referral level	For drugs in group A: a) keeping level of drug reserves constant* For drugs in groups B and C b) inspection of storage facilities in private sector for good store-keeping practice	store-keeper as above in 1.3	- as above in 2.2	- as above in 2.2		

*Drug reserve (minimum stock) means the amount of drugs kept in the store in order to cover delays in delivery or sudden increases in demand

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Distribution of drugs</u>	3.1 Home	For drugs in all groups: a) administration of drugs to sick persons	responsible family member	- competence in proper administration of drugs including dosage scheme and side effects	information leaflets on drugs		- facilities for health education programmes - information on drugs as a part of general health education
		b) distribution of drugs and supplements to members c) recording and reporting	CHW volunteers	- as above and competence in record-keeping - as above, and competence in record keeping reporting	as above and recording forms		
	3.2 First health facility	A: For drugs in group A: a) planning for regular distribution of drugs to outlets b) distributing drugs as required: - patients - CHW and volunteers	nurse medical assistant physicians	- knowledge about the specific needs in areas to be covered - knowledge about system of distribution - knowledge about means of transport available - knowledge about drug reserve and emergency stock of outlets	as above in 3.1	- transportation facilities	- provision of volunteers for distribution of drugs - provision of community-owned means of transport

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
3. <u>Distribution of drugs</u> (cont'd)		c) supervision of CHW's distribution of drugs d) recording		- competence in recording - competence in recording and reporting			
	3.3 First referral level	a) planning for regular distribution of drugs to outlets b) distribution of drugs as required to: - patients attending first referral level - first health facilities c) supervision of drug distribution from first health facilities d) repackaging of drugs if required*	pharmacist physician	- as above in 3.2 - knowledge and competence about proper repackaging of drugs	- as above in 3.2 - packaging materials - manuals and instruction on repackaging of drugs	- as above in 3.2	- as above in 3.2

*Drugs should be distributed in their original containers as far as possible as repackaging if not done properly may affect the quality of the drugs

Activities	Level	Tasks involved	Person(s) responsible	Competence and knowledge required	Supplies and equipment	Logistic support	Community support
4. <u>Drugs utilization</u>	4.1 Home	a) ensuring the proper utilization of drugs by the patient	responsible family member	- knowledge about dosage and schedule of drug	- leaflets about drugs supplied or acquired		- information through health education programme
		b) as above c) instructing the patient and family members about: - indications - adverse effects - when to stop taking the drug d) observation of the effects of drugs e) reporting the effects	CHW volunteers	- knowledge of what to expect from a drug - knowledge of signs and symptoms of adverse effects and poisoning and when to refer	- as above in 4.1		- training of volunteers
	4.2 First health facility	a) giving or prescribing drugs to patients attending the facility b) monitoring and assessing the result of treatment	nurse medical assistant physician	- as above in 4.1 - supervisory skills	- information sheets on drugs	- monitoring and reporting system	

