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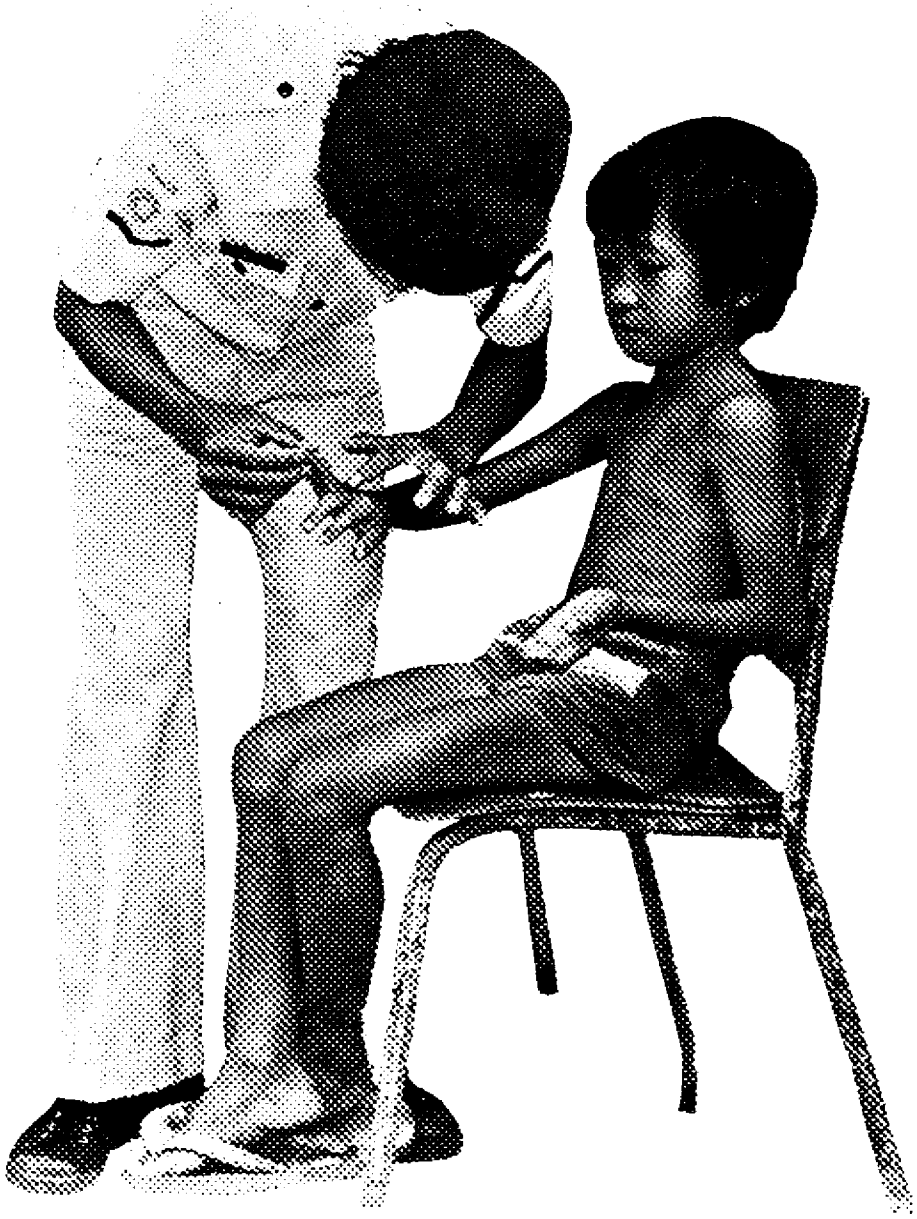
Health



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Health

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Health

Need

Refugees, particularly in an emergency, are affected by many factors which increase the risks of disease. Typically, these factors include over-crowding, inadequate water, poor sanitation and malnutrition. Urgent measures are therefore required to ensure an appropriate level of health care and reduce the number of new cases of disease.

Aim

To promote good health and to prevent, control and treat disease.

Principles of response

- ☐ Refugees must be given responsibility for their own health and therefore be directly involved in the development and provision of health services.
- ☐ Health services should reflect actual needs determined by qualified assessment and surveillance.
- ☐ Priority should be given to nutrition and public health measures, as the health of the majority of the refugees is more likely to be affected by these measures than by individual care.
- ☐ A health co-ordinator should be appointed with responsibility for these measures and for ensuring standard and appropriate treatment and services, in close co-ordination with the national health authorities and other organizations.

Action

- ☐ Assess the health and nutritional status in order to identify needs and establish priorities.
- ☐ In accordance with these priorities, set up a community-based health service with the necessary referral facilities.
- ☐ Monitor and evaluate the effectiveness and appropriateness of these actions and adjust them as necessary.

22.1 Introduction

1. The health services provided to the refugees should be based on the concept of primary health care. The general approach is summarized by WHO as follows: "Primary Health Care is essential health care made accessible to everyone in the country; care given in a way acceptable to individuals, families, and the community, since it requires their full participation; health care provided at a cost the community and the country can afford.

"Though no single model is applicable everywhere, Primary Health Care should include the following: promotion of proper nutrition; an adequate supply of safe water; basic sanitation; maternal and child care, including family planning; appropriate treatment for common diseases and injuries; immunization against major infectious diseases; prevention and control of locally endemic diseases; education about common health problems and what can be done to prevent and control them.

"Primary health care seeks to bring about the overall promotion of health: by giving the individual, the family and the community responsibility for Primary Health Care, with support from the national health care system; by the active participation of the community in defining its needs and finding ways to satisfy them; by using community as well as national resources; by using simpler and less costly technology; by mobilizing other sectors, such as education, agriculture, housing, public works, information and communications and industry.

"Primary Health Care recognizes that in order to achieve good health people must have the basic necessities of life: e.g. enough food to eat and plenty of safe water. It emphasizes the need for a safe environment and for people to understand the role they themselves can play in improving health and in promoting socio-economic development. This approach has evolved as a result of the hard experience of countries in the promotion of the health of their people." (Health: a time for justice - WHO Geneva 1978).

2. The circumstances faced by many refugees do not favour good health. In an emergency, the dangers to the health of the refugees will often be increased because of poor shelter and over-crowding, lack of sufficient clean water, poor sanitation, inadequate or inappropriate food supplies and a possible lack of immunity to the diseases of the new environment. These factors heighten the risk of communicable diseases. Furthermore, on arrival the refugees may already be in a debilitated state from disease or malnutrition.

3. The first priority is information on the number of the refugees with an indication of age/sex distribution, and on their state of health and immediate needs. Their condition will determine priorities for immediate action. The provision of water, food - particularly when the refugees are suffering the effects of a food shortage - and shelter are likely to be immediate priorities before the provision of medical assistance. Health follows as a continuing concern.

4. The health services must aim, from the start, to prevent as well as cure illness: to make and keep the refugees healthy. The health of a community, and therefore of the majority of the refugees, is generally more influenced by public health measures than by individual care.

5. Only through preventive measures, combined with the control of communicable diseases, can good health be maintained and the number of new cases of disease be reduced. The provision of safe water, environmental health measures, appropriate nutrition, communicable disease control, mother and child care and health education of the refugees must be seen as an integral part of primary health care. The location of the site and the amount of individual living space will directly affect health.

6. The level of health care provided will be determined by the condition of the refugees and resources available. Extraordinary efforts may be necessary initially, but once the immediate health

problems are controlled the level should broadly reflect that available to the local population and must be one that can be maintained. Services and levels of care available to the refugees should be standardized.

22.2 Organization of the health services

- ☐ The health services must be developed with not just for the refugees.
- ☐ The national health authorities and services must be as closely involved as possible.
- ☐ The World Health Organization must also be closely involved.
- ☐ Early appointment of a suitably experienced health co-ordinator on UNHCR's field staff is important, to be responsible for appropriate standards and co-ordination.
- ☐ Outside assistance can be mobilized quickly, but the use and development of local expertise is preferable.

The refugees

1. The refugees must be given responsibility for their own good health and be very closely involved in the organization and provision of their health and welfare services. From the beginning, these should be developed and operated with rather than than for the refugees. Services not set up on a community participation approach are likely to be less appropriate to the needs, and will collapse when key outside personnel leave.

Personnel needs

2. Strong emphasis should be placed on the training and upgrading of medical skills of selected refugees, particularly in their former roles within the community. Full account should be taken of the experience of the traditional doctors and midwives. Provided there is proper supervision and referral where necessary, experience has demonstrated the advantages of encouraging traditional methods of health care in parallel with the other organized health services. Refugees may seek traditional treatments for a variety of problems which are beyond the capacity of outside services.

3. Even refugees with no prior experience can be very valuable after basic on-the-spot instruction in a few relevant tasks. Many of the personnel most important to the provision of good health do not require technical medical training at all: those, for example, who organize and operate the water, sanitation and vector control services. Ongoing training and an understanding of the purpose of these services is however required.

The national health authorities

4. Whatever the implementing arrangements, early involvement of the government's central, provincial and district health services is essential. To the extent possible, the services to the refugees should be integrated with national services. Direct co-ordination of certain treatment, immunization, communicable disease control and surveillance practices will be particularly important. Promoting the good health of the refugees is clearly in the interest of the local population.

Role of The World Health Organization (WHO) and the health co-ordinator

5. There are WHO representatives[1/] in almost every country where UNDP is represented, working directly in or with the ministry of health. For normal operational matters in their country, they depend on the WHO Regional Director, while for emergencies they deal directly with both their Regional Offices and WHO Headquarters. WHO has only limited financial resources available in an emergency, but is able to provide advice and guidance, mobilize

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1/ Called either WPC (WHO Programme Coordinators) or NPC (WHO National Programme Coordinators).

specialist personnel and, through its Supply Services in Geneva and certain regional stocks, can provide urgently needed medicaments and supplies from UNHCR funds. The response to the health needs of the refugees must be closely co-ordinated with WHO.

6. In major emergencies, UNHCR will immediately seek the assistance of WHO in identifying a health co-ordinator, who would be a key member of the UNHCR's Representative's staff. The co-ordinator would be responsible for developing appropriate health care, establishing standards, monitoring the quality of the services and for ensuring proper liaison and co-ordination with the ministry of health and with WHO at the field level. Careful attention should be paid to the co-ordination of the activities of NGO and other non-national medical teams, and the creation of a medical sub-committee within the overall NGO co-ordinating mechanism should be encouraged.

7. As a general principle, the order of preference for meeting health personnel needs, in co-operation with the national services, is: persons from within the refugee community; nationals or residents of the country familiar with local conditions and problems; personnel from outside the country. Most emergencies will require some combination of these sources. Concurrent with the decisions on the sources of the necessary health personnel will be decisions on the required skills and numbers. An important consideration may be the government's attitude to foreign medical personnel, including such matters as the recognition of qualifications and authority to practice medicine.

8. If outside medical assistance is required, Headquarters must be informed. Besides WHO, sources include the International Red Cross, (the ICRC can field medical teams at short notice and the local Red Cross, which should anyway be involved from the start, can be strengthened through the LRCS, and, in case of war, through ICRC), governmental disaster organizations, and large NGOs. Indications of suitable sources should be given by the Representative, for example an NGO already working in the country might be able to expand its health programme.

9. Any requests should be for specific types of health workers: not simply for so many doctors and nurses, but, for example, for doctors and nurses with relevant experience as general practitioners, epidemiologists, specialists in public health, nutrition, tropical medicine, paediatrics, midwifery and health visiting, depending on priority problem areas. Experienced personnel with the right personality are more important than highly trained specialists, whose skills are often inappropriate. Familiarity with the local culture, patterns of disease, and the public health services is as important as an advanced knowledge of medicine and medical techniques.

10. For international health workers three months is considered the absolute minimum period of stay, and six months a preferred minimum.

Organization of response

11. Each refugee emergency will have its particular health needs and problems, and the methods used to identify them, assess priorities, implement remedial action and evaluate its effectiveness will vary, and be further influenced by national health services and policies and the availability of resources. The following broad headings cover considerations that are likely to be common: surveillance, reporting, control of communicable diseases and immunization, curative health care, mother and child health, health education, the referral system, medical supplies, and the personnel and organizational resources required to establish and operate the service.

12. Measures for the provision of community services such as curative health care, mother and child services, supplementary feeding programmes, social services and health and nutrition education are clearly interrelated and must be co-ordinated. Circumstances will dictate how they should be

arranged, for example whether around the health centre or supplementary feeding centre. There are obvious advantages in grouping these services for the convenience of the refugees, thus encouraging maximum use.

22.3 Health assessment and surveillance

- ☐ An assessment of the health and nutritional status is an essential start to the provision of health services.
- ☐ This must be done by experts, with experience of emergencies, and if possible local knowledge.
- ☐ The factors affecting the health of the refugees must be identified and a surveillance and reporting system established as an important part of the health services.

Initial assessment

1. The aim of the initial assessment is to gather sufficient information on the health and nutritional status of the refugees in order to establish priorities and plan how best to meet the needs and allocate resources. The factors that are contributing to health or disease in the refugee community must be determined by establishing the pattern of disease, the cultural and social influences on the refugees and how effective the health services are, so that the level of health care can be planned to restore and maintain good health as well as treat the diseases found. This is called epidemiology.

2. Much information can be collected by observation, for example of the adequacy of the water supply and sanitation. Discussion with and examination of individuals through sample surveys will reveal symptoms and disease patterns and indicate distribution in the community. Mass screening on arrival is an effective method of initial assessment where possible.

3. Speed of response is vital, but to be effective the initial assessment should be made by one or more experienced persons with epidemiological training. Relevant practical experience is important. There are obvious advantages in using national or locally-based personnel but appropriate outside expertise can be made available quickly, and should be requested through Headquarters if necessary.

4. A surveillance system must be established quickly. Careful and controlled monitoring of the health and nutritional status is essential if outbreaks are to be detected and checked before they reach epidemic proportions and the early symptoms of problems identified in time for preventive action. As an example, the incidence of diarrhoeal diseases may be an important pointer both to general health and environmental problems and to specific communicable diseases. Continued monitoring of the health status and disease patterns will allow the health services to be adjusted and resources reallocated as necessary. The form of this surveillance, the data required, who will interpret it and how to ensure action on the results will be matters for early decision. Only simple arrangements are effective in emergencies. Where the refugees are in different locations, the system should be centrally co-ordinated.

Specific disease surveillance

5. If the initial assessment or subsequent reports suggest specific deficiencies or communicable diseases, special measures must be taken to organize specific surveillance by persons with appropriate experience. As an important example, malnourished children are vulnerable to eye diseases, and vitamin A deficiency can lead to irreversible blindness in children as a result of deterioration of the cornea (xerophthalmia). This is often the subject of a specific ophthalmic surveillance. Prevention requires measures to ensure an adequate intake of vitamin A through breast feeding, green leafy or yellow vegetables or vitamin A fortification of food. If this is not possible, or if the refugees are already

deficient in vitamin A, vitamin A capsules, such as available from UNICEF, must be provided. Suitable capsules are also included in the emergency health kit described in annex 1. A single dose of between 100,000 and 200,000 IU will give six months protection. Those treated must be identified in order to avoid duplicating the dose, which can be toxic.

6. Another common deficiency among refugees is anaemia. Anaemia can be caused by a variety of factors, but is most often associated with an insufficient intake of dietary iron or other nutrients, especially folate, or by an excess loss of iron through disease or parasitic infections, especially malaria and hookworm. The effects of anaemia range from tiredness and lethargy to cardiac failure and death in the most severe cases. Surveillance should identify those who are already anaemic and those with increased requirements for iron and folate, especially pregnant and lactating women, which are not being met in the diet. Treatment is by concentrated preparations of iron and folate, such as the ferrous sulphate and folate tablets available from UNICEF. Suitable tablets are also included in the emergency health kit. Treatment must continue daily for 10 days.

Records and reporting

7. A crucial decision will be that on the information to be collected. Simple standard reporting forms should be prepared centrally in close consultation with all concerned. An example is given in annex 2. The aim should be to collect essential information for a minimum of effort. Beyond this, no records should be kept that are not swiftly used for planning purposes, whether this be for individual or community benefit. The system should give field staff regular feedback on their reports. National health authorities require specified "notifiable" communicable diseases to be reported.

Laboratory services

8. To be fully effective, surveillance requires access to rapid laboratory services, but the refugees are often remote from such facilities. This is a problem that should be raised with the national health authorities at an early stage: if access to local laboratories is not possible, basic laboratory services should be provided at each location. Reference laboratory assistance may be required.

22.4 Communicable disease control

- ☐ The conditions likely to be encountered, and particularly overcrowding, will encourage the spread of communicable diseases.
- ☐ The aim is to prevent, detect, control and treat.
- ☐ Improvement in environmental conditions will have a major role in prevention.
- ☐ Avoid mass immunization in the emergency phase, except against measles.
- ☐ After the emergency phase, children should be routinely immunized within the framework of the national immunization programme.
- ☐ Specifically medical emergencies such as epidemics require an immediate on-the-spot expert assessment and close co-ordination of the response with the national authorities and WHO.

1. The risks of communicable (infectious) diseases are increased in a refugee emergency by over-crowding and environmental conditions on the one hand and the stress on the refugees and their debilitated state on the other. There is, for example, a close association between malnutrition and the incidence of communicable disease, particularly

childhood diarrhoea. It is, however, important to realize that the organism has to be present to multiply: for example, although carriers of cholera and typhoid may have no signs of infection, if no one is carrying cholera, it will not suddenly appear.

2. Measures to improve the environmental health conditions are therefore very important: enough clean water, soap, the control of excreta and garbage, rodent and vector control and general public health education and awareness.

3. Expert advice is essential to communicable disease control and the management of epidemics. Some communicable diseases have a seasonal incidence and timely preventive measures must be taken.

Immunization

4. There is often considerable pressure for an immediate mass immunization programme. There are strong reasons, both medical and practical why this should be resisted. The most common causes of disease and death in the emergency phase are generally malnutrition and non-specific gastroenteritis, neither of which can be effectively prevented by immunization. Mass immunization programmes require large numbers of workers, the handling of vaccine in controlled refrigerated conditions and careful supervision, all of which is difficult, and not necessarily the best use of resources even if immediately available.

5. In the emergency phase, only the immunization of children against measles is likely to be indicated. All other necessary immunizations (for example, DPT, Polio and BCG) should be given later, once facilities allow, and within the framework of the government's own expanded programme of immunization (EPI) to the extent possible. Details of immunization schedules and vaccines are given in annex 3.

Common diseases

6. The most commonly occurring diseases and symptoms among refugees are generally not far removed from those normally to be expected in a community: diarrhoea, nutritional deficiencies, respiratory infections, malaria, worms, anaemia and genito-urinary problems. A brief description of some of these problems and indications as to action is given below.

Diarrhoeal diseases

7. Prevention and treatment of dehydration are the most important measures. Malnourished children get diarrhoea easily and diarrhoea makes malnutrition worse. Children with diarrhoea must eat and especially drink a lot: the child usually dies from dehydration, not from the infectious process. Rehydration requires a solution containing salt and sugar. The ingredients may be available as a pack (for example, UNICEF "oral rehydration salts") or prepared locally. Cooled, boiled water will be required. Oral rehydration should be given whenever possible, and intravenous fluids only by experienced health personnel. Local advice must be sought on appropriate measures against the specific organism causing diarrhoea. Provision of adequate quantitites of safe water, control of environmental sanitation and refuse and relevant health education are the most important preventive measures.

Measles

8. In nearly all refugee programmes, measles epidemics are at some time a major cause of death and malnutrition among young children. Once the resources are available, the vaccination of children of nine months to five years should be undertaken. If resources are limited, malnourished children and children under three years should have priority. Measles vaccine is expensive, and highly sensitive to any failure to maintain it at a temperature of between -20C to +8C. One injection provides immunity.

Malaria

9. Malaria will be a problem when refugees move from a malaria-free into an endemic area or encounter a strain to which they are not immune. Treatment is necessary to save lives, while public health measures are required to reduce the incidence of new cases and reinfection. National health authorities will advise on appropriate treatment and preventive measures in the light of local conditions. Malaria forms may differ by area, as may resistance to insecticides and medication. In the emergency phase it is unlikely that the general provision of drugs which give personal protection will be indicated, even if practical, except perhaps for refugees from non-malaria areas or pregnant and lactating women and young children.

10. In general the most appropriate preventive action is to decrease the risk by reducing the number of mosquitoes: destroying breeding places and larva and killing adult mosquitoes by residual spraying inside dwellings (vector control). Rapid treatment is necessary to save lives and is also a preventive measure, through reduced transmission as a result of fewer people with the disease infecting the mosquitoes. Curing refugees of malarial parasites is also a preventive measure, since the disease is spread by mosquitos transmitting these parasites from one person to another. Exposure may be reduced by insect repellants and sleeping under netting: mosquitoes are most active from dusk to dawn.

Meningococcal meningitis

11. Meningococcal meningitis is a very serious and contagious neurological infection. In the regions where it is endemic, outbreaks as a result of overcrowding are not uncommon among refugees, particularly affecting infants and children. Specific treatment should be given as quickly as possible to individual cases. Initial isolation is required with strict measures to prevent the spread of infection, which occurs through contact with the patients' respiratory discharges. Where an epidemic is suspected, for example when surveillance detects clustered rather than isolated cases, immunization with polysaccharide vaccine may be indicated. Expert advice is essential as the vaccines are group specific and may be counter-indicated for children under two years of age. Immunity is only achieved after one week. Meningitis should be notified to the health authorities.

12. Neonatal tetanus, resulting from umbilical infection, and whooping cough (pertussis) outbreaks, which may be common among refugees, can contribute to very high mortality rates in the first year of life. Tetanus is preventable through clean obstetrical practice and immunization (DPT vaccination), which would be given as part of the routine programme, once established. If populations are not protected, vaccination can be given antenatally.

13. Tuberculosis may be common and can contribute to malnutrition and weakness, particularly in children. TB is often a major public health problem even after environmental conditions have been improved to control other diseases. Active case finding is important and treatment must continue for at least six months, as an out-patient. Discontinuing treatment earlier can spread infection and may make the original condition worse and more resistant, even leading to death. Close co-ordination with government programmes and policies is particularly important.

14. Mass vaccination campaigns against typhoid and cholera are often requested. These should be avoided for several reasons. WHO does not recommend typhoid and cholera vaccines for routine use in endemic areas and these vaccines, cholera in particular, offer only low and short-term individual protection (and that only after a week), and little or no protection against the spread of disease. Personal and public hygiene and health education are the best preventive measures, while good medical control must rest on effective case identification, isolation of confirmed cases, and treatment. These diseases may have a seasonal incidence. While movement between locations must be kept

to a minimum during an epidemic, strict quarantine of suspected cases of cholera is likely to be unmanageable in practice.

22.5 Community health care

- ☐ Most care does not need sophisticated arrangements or treatment and should be provided through health centres within the community by health workers from the community.
- ☐ Diagnostic techniques and the treatment of the major acute diseases should be simplified, standardized and appropriate to the needs and circumstances.
- ☐ Health workers must spend time out in the community, not simply wait for sick persons to come to them.

1. Community health care embraces both preventive and curative measures. The need for and scope of the latter will vary with each emergency and will be a function of the degree of prevention.

2. Particularly where several organizations are involved, close attention must be paid to ensuring a broadly common standard of appropriate health care and a fair distribution of available services both within and among camps. Opinion as to treatment can vary; thus centrally developed and clearly understood standardized treatment schedules are essential, and will also be of great importance to the training programme and to avoid confusion among local and refugee health workers. Where qualified personnel are scarce and confirmed diagnosis not possible, the standard treatment should be given for the presenting symptoms. (Annex 1 includes a possible incidence of symptoms with suggested treatment.) Unless treatment is administered on the spot, clear written instructions on the dosage must be provided in the language of the refugees.

3. All concerned should be aware that treatment inappropriate to the needs and circumstances may not only be useless and wasteful, but can have an important negative effect on the refugees' attitude to health care and preventive measures. Examples are the fostering of the belief that only injections, rather than tablets are effective, that intravenous fluids are better than oral rehydration, or that imported milk rather than breast-feeding can save the malnourished baby.

Triage

4. This is the selection and sorting of the sick and potential patients for medical attention in the face of overwhelming needs and insufficient resources. The aim is to provide maximum benefit to most of those in need. While it is a likely requirement in the first day after a severe natural disaster, triage is rarely relevant in refugee emergencies. If the need for triage is identified, the most common classification consists of three categories: those who cannot benefit from the treatment available under the emergency conditions and are therefore not treated, the seriously ill or injured, who should be attended to first; and those who, after initial first aid can wait for medical attention until after the second category.

Health centres

5. The refugees must have easy access to appropriate treatment. If the local national health centres or clinics cannot be strengthened to meet the needs, specific arrangements will be required. The initial organization of services other than basic curative care may be markedly affected by the nutritional status of the refugees. In many refugee emergencies the hospitals, whether national or established for the emergency, have been swamped by refugees demanding treatment for simple conditions because treatment was not available or the quality at the health centre level was deemed unacceptable by the refugees. Furthermore, in many emergencies some 75-90% of patients present with minor ailments, which in many cases will cure themselves. These

patients should not be treated at all during emergencies if, as is likely, resources are scarce. Public health measures will be likely to reduce the incidence of such minor ailments.

6. As a general guide, one health centre might be appropriate per 10,000 refugees in crowded conditions but otherwise in reasonably good health. This should be a simple building with facilities for consultation, clinical procedures such as dressings and injections, a pharmacy, a few beds for overnight observation, simple equipment and sterilization facilities (electricity may not be available), and basic laboratory services in at least one centre in each location. A possible list of equipment is given in annex 1. Water and sanitaton are essential services.

7. The approach must be outward looking: the diseases presented at a centre may not reflect the most common problems in the community. The health centre staff must therefore spend a fair proportion - say half - of their time out in the community case finding, following up and on preventive work, in close co-ordination with other community services. They will, for example, often identify the malnourished and disabled. The health centres must keep records of health status (see 22.3.7).

8. No firm indication of numbers of health personnel can be given in the abstract, but for such a health centre, two or three nurses might be required, with appropriate refugee and national support. Each community or site should have at least one doctor. Co-ordination between doctors in different locations is essential. Training programmes may double the number of outside staff needed.

Mother and child health

Pregnant and lactating women and young children are a vulnerable group and special attention must be given to their needs.

9. In a normal community, children, especially those under five, and pregnant and lactating women are recognized as being particularly vulnerable to malnutrition, infection and general medical problems. In a refugee emergency the risks are greatly increased and health centres should provide comprehensive care and supervision for women and children throughout the particulary vulnerable periods of pregnancy, birth, early infancy and lactation. This should be integrated with the Supplementary Feeding Programme. Details of this, and vital information on milk and infant feeding, are given in chapter 23.

10. A sick child must eat and drink, even if he or she has no appetite, is vomiting or has diarrhoea (taboos forbidding food for the sick child are not uncommon). Malnourished children may be discouraged from eating by dental infections. The need for and nature of dental programmes should be considered once priorities allow. The promotion of oral hygiene and preventive dental treatment is more important than individual surgical interventions.

11. A home visiting service will be very important, particularly for this type of health care. To the extent possible it should be an integrated part of a total welfare service. Neo-natal, post-natal and at-risk clinics are common special programmes. Some countries use a special take-home chart, often referred to as a 'Road to health chart', to help monitor the progress of children under five, which could be introduced for the refugees.

12. As soon as schools are established, special health programmes should be arranged for the pupils.

13. Family planning services should be available, giving information on the benefits of family planning in preventing infant and maternal mortality and for the health and well-being of existing children. Suitable temporary methods of contraception (child spacing) should be provided on a voluntary basis, and after proper education.

Health education

14. The importance of health education of the public is perhaps more widely recognized than are the difficulties in persuading those most at risk to change long established habits and traditions, however compelling the case for such a change may appear to outsiders. At least in the emergency phase, the priority topics should be those directly related to the immediate public health problems, for example the disposal of human excreta and refuse. Many governments and organizations produce simple health education posters that may be useful. Trained teachers and respected elders from the refugee community are likely to be more effective than outsiders in communicating the basic principles to their own people.

22.6 Referral services

- ☐ The health centre must be able to refer patients to hospitals for treatment.
- ☐ This should be made available in local hospitals if possible, with support if necessary from UNHCR.
- ☐ Alternatively, a simple hospital with appropriate facilities should be constructed in or close to the refugee community.
- ☐ Another solution is a field hospital but this may have disadvantages.
- ☐ Arrangements must be made to provide suitable transport to and from the hospital.

1. In order to ensure that patients who cannot be cared for or treated at the health centres receive the necessary attention, an effective referral system to a hospital or rehabilitation institute is required. Unless there are high numbers of injuries, once primary health services have been established the numbers of such patients may not be high. Regardless of the type of hospital, arrangements must be such that only those specifically referred from the health centres are seen, with no refugees presenting directly at the hospital.

2. At least in the emergency phase, such referrals should be for life-saving intervention and difficult obstetrics problems only. Medical cases are kept at the health centre level and elective surgery would not be a priority. The level of hospital treatment should reflect that available to nationals.

3. Referral to the nearest national hospital should be the aim; this has obvious advantages, not least that of immediate availability. Close and direct co-ordination with the district medical officer is essential. The possibility of expanding existing hospitals, for example with tents in the grounds and additional medical personnel, should be considered. Care must be taken not to swamp the hospital. Facilities at the hospital must also provide for the needs of relatives and allow parents to be with young children. Financial and material support should be provided as necessary. For example, the drugs on list B in annex 1 might be placed at the disposal of the hospital treating refugees.

4. If national hospital facilities are too remote or otherwise unavailable, and if a decision is taken to provide a special hospital in the emergency phase, priority consideration should be given to the local construction of a simple appropriate structure, to be staffed and equipped to a level of sophistication determined by the local pattern of disease and likely demand rather than a theoretically possible need for highly specialized treatment. From the start, planning of such a hospital must take account of environmental factors such as sanitation, the disposal of hospital waste, security of drugs and supplies, and the provision of latrines. Hospital floors should be solid and washable.

5. The number of hospital beds required will naturally depend on the state of health. As an indication only, one bed might be required per 5,000 refugees in reasonably good health. More beds are often needed initially. Again as an indication only, a site hospital with 50 beds might require one surgeon and three or four nurses plus auxiliary support.

6. Field hospitals may be offered. While this is an alternative to be considered in certain circumstances, for example a major expansion of a local hospital through a field hospital in the grounds, field hospitals may have several limitations including delays in establishment and cost (especially transport), and can be technologically inappropriate. A field hospital may not be the best available way of meeting a continuing need. It should also be recognized that because of their great public relations value, donors press such hospitals even when unsuitable.

7. Refugee emergencies are not usually characterized by widespread injuries. However, a situation in which such was the case might initially require the rapid deployment of a surgical unit. Such a need will generally be self-evident, and such units are normally quickly available, for example though ICRC.

8. Whatever arrangements are made for hospital treatment and referral, suitable transport must be available.

22.7 Medical supplies

- ☐ Drugs should be limited to a few basic standardized items, based as far as possible on the WHO list of essential drugs.
- ☐ Special emergency kits have been developed on this principle for immediate needs and should be requested if local sources are inadequate.
- ☐ Vaccine requires special handling and is best obtained locally against subsequent replenishment.
- ☐ Unsolicited medical supplies are often unsuitable and should be subject to clearance prior to despatch.

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1. Emergency supply arrangements should draw on in-country resources and distribution channels to the extent possible. However, initially specific arrangements may be necessary. Unplanned response can lead to long and inappropriate requests, often for brand rather than generic names. Experience suggests that what is needed are a few varieties of basic drugs and a strict control on unsolicited donations. Response should be based on drugs in WHO Technical Report Series 641 (1979) "The selection of essential drugs", which was prepared by an international group of experts.

2. Medical supplies will require tight security control to prevent misuse and theft.

3. With UNHCR, WHO has developed an emergency kit of those basic drugs and supplies which have a high probability of being required in any refugee emergency. Each kit theoretically covers the needs of 10,000 refugees for three months. Details of the kits and a number of related practical considerations are given in annex 1. Arrangements have been made for the supply of up to 10 such kits at short notice. As soon as Representatives, in consultation with the local health authorities, WHO and the operational partner, consider that the kits may be required they should cable a request, giving details, including the number of kits needed and destination. The fact that one kit can effectively cover the needs of 30,000 persons for one month as well as 10,000 persons for three months should be borne in mind in determining numbers needed.

4. Once immediate material needs are assured, arrangements should be made by the operational partner responsible for medical services to the refugees for a continued source of supply. Supplies are generally available locally and this is the preferred source, but if not,

consideration should be given to bulk ordering through Headquarters, as substantial savings may be possible. In any event, supplies ordered should continue to be restricted to the basic needs and conform to the principles of the emergency kit. A standard re-order form has also been developed and is attached to annex 1. This should be modified as necessary to reflect local needs, and re-ordering procedures standardized and centralized for the country. Attention is drawn to the UNIPAC catalogue which also contains certain specialized kits (e.g. midwifery). Requests for overseas procurement or acceptance of donations should be made through or co-ordinated with Headquarters, who in turn will maintain close co-ordination with WHO, UNICEF, ICRC, LRCS and other potential suppliers to avoid duplication and help ensure effective response.

5. When necessary, vaccine should be borrowed from local stocks if available, against subsequent replenishment. The WHO Representative or medical co-ordinator will advise on this and also on any regional availability of WHO stocks (for example, in Africa there may be stocks in the WHO stores at Brazzaville, Dakar, Kinshasa, Nairobi and Niamey). If it is apparent that immediate overseas supply is necessary, UNHCR Headquarters should be informed by cable. Whatever the source, most vaccines - and particularly measles vaccine - require refrigeration and careful handling if they are to remain effective. The transportation links from manufacturer to individual immunization are known as the "cold-chain". The national health authorities will have a network of cold-chains which should be used to the extent possible, but these may not extend to the vicinity of the refugees; without it the immunization programme will fail. Further information on vaccines is given in annex 3.

6. Unsolicited drugs may be a problem in an emergency. Quantities and quality may vary greatly; for example, small quantities of mixed drugs, free samples, used or expired medicines, inappropriate vaccines, and drugs identified only by brand names or in a foreign language. UNHCR's policy is that overseas medical supplies should only be sent in response to a specific request or with prior clearance; locally, the WHO representative, diplomatic missions and all others concerned should be briefed accordingly.

FURTHER REFERENCES

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WHO (1976)	Treatment and Prevention of Dehydration in Diarrhoeal Diseases Practical description of well tried and accepted techniques for use at the primary level.	
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WORLD HEALTH ORGANIZATION

United Nations High Commissioner for Refugees

Annex 1

The Emergency Health Kit
Lists of Drugs and Clinic Equipment for 10,000 refugees for 3 months

Explanation

1. There are two drug lists (Lists A and B) and one equipment list (List C). Together, the items make up one complete emergency kit. The drugs are selected from WHO Technical Report Series 641 (1979): "The selection of essential drugs". Drugs are listed in the order in which they appear in Report 641, but consecutive numbers are allocated to facilitate reordering: the reference numbers shown on lists A and B are not, therefore, those used in Report 641, which are given in brackets after the heading. The equipment in list C is generally available, standard clinic equipment.

2. The purpose of the lists and emergency kit is twofold: to enable swift outside supply in a refugee emergency if local supply is not possible, and to encourage an appropriate standardization of drugs and equipment for refugees.

The two drug lists

3. Vaccines and drugs for the control of certain communicable diseases have not been included in the lists because

(1) many countries have national disease control programmes, e.g. for tuberculosis, leprosy, schistosomiasis;

(2) it is necessary, therefore, first to investigate the incidence of these diseases among the refugees and then discuss the problem with the national authorities so that any disease control programme implemented conforms to national policies;

(3) many countries have an expanded programme of immunization (EPI) and use can be made of this, including the cold chain system;

(4) it is necessary, therefore, first to discuss the programme with the authorities before deciding on the type of vaccine and equipment required;

(5) under adverse conditions a cold chain may not be immediately available.

List A: Basic drug requirements for 10,000 refugees for 3 months

4. This list is based on/assumes:

(1) A population structure of 0-14 years of age = 5,000
15+ years of age = 5,000;

(2) Four contacts (informal or formal) per person per year for all age groups:
= 10,000 in 12 weeks
= 5,000 in 6 weeks
= 800-900 per week;

(3) The possible incidence of symptoms and suggested treatment as detailed in Table 1;

(4) The possible standardized treatment schedule as detailed in Table 2;

(5) A rounding up of the total drug quantities to simplify packaging;

(6) The likelihood that the clinic will be staffed routinely by basically trained health workers who on the whole will be treating symptoms rather than clearly defined diseases, and referring patients who need more sophisticated treatment;

(7) The realization that the supply of drugs on the list may only suffice as a help during the initial early life of a camp until a thorough assessment has been made of:

- the actual demographic pattern and size of the refugee community;
- the overall physical condition of the refugees;
- the incidence of symptoms/diseases as determined, for example, from clinic and hospital records and nutritional surveillance;
- the prevalence of symptoms as determined, for example, from household and nutrition surveys;
- the causes of mortality and morbidity;
- seasonal variations of symptoms and diseases;
- the impact on commonly seen symptoms and diseases of environmental and other programmes such as water, food, sanitation and housing;
- the diseases/symptoms common in the host country as well as in the refugees' country of origin;
- national drug prescribing policies and the type and amount of drugs and equipment available for purchase locally;
- problems of resistance to drugs, e.g. for malaria;
- the diagnostic capabilities of the staff routinely working in the clinic and other health services.

List B: Drugs for the use of doctors and senior nurses

5. These drugs are intended as an emergency supply of second line professional management/more sophisticated drugs until more work has been done/information is available on:

(1) the different factors outlined in 4(7) above;
(2) an assessment of the type and quality of the health workers, both national and international;
(3) the health services actually appropriate to the needs and resources;
(4) an agreed standardised treatment schedule, perhaps with the development of diagnostic flow charts;
(5) the referral system.

6. If a nearby national hospital is acting as the referral point, and the drugs on list B are not immediately required within the refugee community, consideration should be given to providing them to that hospital.

General considerations

7. When prescribing any of the drugs on the two lists, as for all drugs, careful attention must be paid to patient-specific considerations such as contra-indications, the possibility of adverse reactions; drug interactions, irritant factors, and prescribing constraints in pregnancy, for children, especially neonatals, the undernourished, elderly and those with renal or hepatic diseases. The patient must be given clear instructions in his or her language on how to take/use the drug.

8. Cost-effectiveness in prescribing is important, but it must take into account factors such as frequency of dose and duration of treatment. The use of more expensive drugs may be justified, especially if it results in better and quicker treatment of the patient.

9. With regard to the supply of drugs for refugees generally, it is important that:

(1) no drugs are sent from a donor country without prior clearance;
(2) no drug should arrive with an expiry date of less than six months;
(3) the labelling on each drug should also be in the main language of the country of asylum;
(4) details on the label include the full pharmacopoeial (non-proprietary) name plus the strength and quantity of the drug;
(5) bottles are packaged in leakproof containers and all the drugs packaged in waterproof, durable containers;
(6) the need for the regular supply of an adequate quantity of soap for personal hygiene, is not forgotten.

Re-ordering

10. An example of a re-order form is also attached. Much time and trouble may be saved by adapting this to the needs of the situation and then standardizing re-order procedures for all locations/health teams, regardless of whether supplies are available locally or must come from abroad.

List A

Basic Drug Requirements for 10,000 Refugees for 3 months

Ref. No. A/	Drug (WHO TRS 641 reference)	Pharmaceutical form and strength	Total required for 3 months
1.	Analgesics (2)		
	1 acetylsalicylic acid	tab 300mg	14,000 tab
	2 paracetamol	tab 500mg	7,000 tab
2.	Antihelminthic (7.2)		
	1 piperazine	tab 500mg	4,000 tab
	2 piperazine	syrup 500mg/5ml	10 litres
	3 tiabendazole	tab 500mg	4,000 tab
3.	Antibacterial (7.3)		
	1 ampicillin	syrup 125mg/5ml	200 bottles 60ml
	2 benzylpenicillin	inj 0.6g (1 million IU)	500 vials
	3 phenoxymethylpenicillin	tab 250mg	5,000 tab
	4 phenoxymethylpenicillin	syrup 250mg/5ml	600 bottles
	5 procaine benzylpenicillin	inj 3.0g (3 million IU)	300 vials
	6 sulfadimidine	tab 500mg	2,000 tab
	7 tetracycline	tab 250mg	9,000 tab
4.	Antimalarial (7.6)		
	1 chloroquine	tab 150mg/base	2,000 tab
	2 chloroquine	syrup 50mg/5ml base	10 litres
5.	Antianaemia (11.1)		
	ferrous salt and folic acid	tab 60mg iron with 0.25mg folic acid	9,000 tab
6.	Dermatological (14)		
	1 benzoic acid & salicylic acid	oint 25g tube	100 tubes
	2 benzyl benzoate	lotion 25%	30 litres
	3 gentian violet	crystals	200 g (8 bottles)
	4 neomycin & bacitracin	oint 25g	100 tubes
7.	Antacid (17.1)		
	aluminium hydroxide	tab 500mg	7,000 tab
8.	Cathartic (17.5)		
	senna	tab 7.5mg	500 tab
9.	Diarrhoea (17.6.2)		
	oral rehydration salts	sachet 27.5g/litre	5,000 sachets
10.	Antiinfective (21.1)		
	sulfacetamide(ophthalmological)	oint 10%, 5g tube	500 tubes
11.	Solutions (26)		
	1 water for injection	2ml	500 amp
	2 water for injection	10ml	500 amp
12.	Surgical Disinfectants (27)		
	1 chlorhexidine	solution 5%	10 litres
	2 iodine	solution 2.5%	5 litres
13.	Vitamin (28)		
	retinol	caps 200,000 IU	1,000 caps

Table 1

How list A was formulated

Possible demographic pattern and incidence of symptoms with suggested treatment.

Symptoms	Possible incidence of symptoms		Of 5,000 infants and children	Treatment
0-14 years of age				
Respiratory	30%	=	1,500	750 upper respiratory tract: - paracetamol 400/ acetylsalicylic tab 350 750 lower respiratory tract - 300 phenoxymethylpenicillin syrup - 350 phenoxymethylpenicillin tab - 100 benzylpenicillin injections
Diarrhoea	20%	=	1,000	oral rehydration sachets
Malaria	13%	=	650	chloroquine syrup
Helminths	10%	=	500	500 piperazine syrup 200 tiabendazole tab
Skin, trauma	10%	=	500	200 benzyl benzoate lotion 100 benzoic acid and salicylic acid cream 200 iodine or chlorhexidine solution
Anaemia/malnutrition	8%	=	400	400 ferrous salt and folic acid tab 400 vitamin A caps
Eyes	5%	=	250	sulfacetamide ointment
Ears	4%	=	200	ampicillin syrup
15 years of age +				
Respiratory	20%	=	1,000	700 upper respiratory tract acetylsalicylic acid tab 300 lower respiratory tract tetracycline tab
Musculo-skeletal	15%	=	750	500 acetysalicylic acid tab 250 paracetamol tab
Digestive	15%	=	750	300 piperazine 200 tiabendazole tab 250 aluminium hydroxide tab 200 senna tab
Diarrhoea	15%	=	750	oral rehydration sachets
Genito-urinary	12%	=	600	300 sulfadimidine tab 300 procaine benzylpenicillin injections
Malaria	10%	=	500	chloroquine tab

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Symptoms	Possible incidence of symptoms		Of 5,000 infants and children	Treatment
Skin, trauma	5%	=	300	150 benzyl benzoate lotion 50 gentian violet 25 chlorhexidine 25 iodine solution 50 neomycin & bacitracin ointment
Anaemia/malnutrition	5%	=	250	250 ferrous salt and folic acid tab 250 vitamin A caps
Eyes	3%	=	150	sulfacetamide oint

Table 2

Possible Standardized Treatment Schedule

acetylsalicylic acid	tab 300mg	adult	2 tds x 2/7	= 12	= 9,000 tab
acetylasalicylic acid	tab 300mg	paed	1/2-1 tds x 2/7	= 6	= 5,000 tab
aluminium hydroxide	tab 500mg	adult	1 qds x 5/7	= 20	= 5,000 tab
ampicillin	syrup 125mg/5ml	paed	125mg qds x 7/7	= 1 bottle	= 200 bottles
benzoic acid and salicylic acid	oint 25g				100 tubes
benzyl benzoate	solution 25%	all	100 ml	= 100 ml	= 30 litres
benzylpenicillin	inj 0.6g (1 million IU)	paed	1 daily 5/7	= 5 vials	= 500 vials
chloroquine	tab 150mg/base	adult	4 stat	= 4	= 2,000 tab
chloroquine	syrup 50mg/5ml/base	paed	10mg/kg	= avg15ml	= 10 litres
ferrous salt and folic acid	tab 60mg/base	adult	1 bd 10/7	= 20	= 5,000 tab
ferrous salt and folic acid	tab 60mg/base	paed	1 od 10/7	= 10	= 4,000 tab
gentian violet	25g bottles				= 2 bottles
iodine/ chlorhexidine	solution 2.5%/5%				= 5/10 litre
neomycin and bacitracin	oint 25g	all	bd 7/7	= 1 tube	= 100 tubes
oral rehydration	sachets 27.5g/litre	all	3 packets	= 3	= 5,000 sachets
paracetamol	tab 500mg	adult	2 tds x 2/7	= 12	= 3,000 tab
paracetamol	tab 500mg	paed	1/4-1/2 tds x 2/7	= 4	= 4,000 tab
piperazine	tab 500mg	adult	8 stat	= 8	= 4,000 tab
piperazine	syrup 500mg/5ml	paed	20 ml stat	= 20 ml	= 10 litres
phenoxymethyl-penicillin	syrup 250mg/5ml	paed	125mg qds x 7/7	= 1 bottle	= 600 bottles
phenoxymethyl-penicillin	tab 250mg	paed	125mg qds x 7/7	= 14	= 5,000 tab

procaine benzyl-penicillin	inj 3g (3 million IU)	adult	1 stat	= 1 vial	= 300 vials
retinol	caps 200.000 IU	all	1 stat	= 1	= 1,000 caps
senna	tab 7.5mg	adult	2 stat	= 2	= 500 tab
sulfacetamide	oint 10%, 5g tube	all	qds 7/7	= 1 tube	= 500 tubes
sulfadimidine	tab 500mg	adult	2 bd 5/7	= 20	= 2,000 tab
tetracycline	tab 250mg	adult	1 qds x 7/7	= 28	= 9,000 tab
tiabendazole	tab 500mg	adult	3 bd x 2/7	= 12	= 3,000 tab
tiabendazole	tab 500mg	paed	1 bd x 2/7	= 4	= 1,000 tab

Key

od = take daily; bd = twice a day;
tds = 3 times a day; qds = 4 times a day; stat = at once

List B

Drugs for the use of doctors and senior nurses

Ref. No. B/	Drug (WHO TRS 641 reference)	Pharmaceutical form and strength		Total amount
1.	Anaesthetic (1.2)			
	lidocaine (local) 2%	inj vial/50ml		10 vials
2.	Analgesic (3)			
	pethidine 1/	inj vial 50mg		10 vials
3.	Anti-allergic (4)			
	chlorphenamine	tab 4mg		100 tab
4.	Anti-epileptic (6)			
	diazepam	inj 5mg/ml, 2ml amp		10 amp
5.	Anti-infective (7)			
	1 benzylpenicillin	inj 3.0g (5 million IU)		100 vials
	2 chloramphenicol	caps 250mg	2,000 caps (2 qds 5/7 for 50 patients)	
	3 cloxacillin	caps 500mg	1,500 caps (1 qds 7/7 for 50 patients)	
	4 mebendazole	caps 100mg	100 caps (2 stat)	
	5 metronidazole	tab 250mg	1,500 tab (2 tds 5/7 for 50 patients)	
	6 niclosamide	tab 500mg	200 tab (4 tab per patient)	
	7 quinine	inj 300mg/ml	20 amp (2ml) (avg of 4ml per patient)	
	8 sulfadoxine and pyrimethamine	tab 525mg (500 + 25 mg)		100 tab
	9 sulfamethoxazole and trimethoprim	tab 480mg (400 + 80 mg)	1,500 tab (2tds 5/7 for 50 patients)	
6.	Blood substitute (12)			
	dextran 70	inj sol 6%/500ml with 10 giving sets		5 litres
7.	Cardiovascular (13)			
	1 digoxin	inj 0.25mg/ml, 2ml amp		10 amp
	2 digoxin	tab 0.25mg		100 tab
	3 glyceryl trinitrate	tab 0.5mg		100 tab
	4 isoprenaline	inj 1mg/ml, 2ml amp		10 amp
	5 propranolol	tab 40mg		100 tab
8.	Dermatological (14)			
	1 hydrocortisone	1% cream, 30g tube		10 tubes
	2 nystatin	cream 100,000 IU, 30g tube		10 tubes
9.	Diuretics (16)			
	1 furosemide	tab 40mg		100 tab
	2 furosemide	inj 10mg/ml, 2ml amp		10 amp

1/ Subject to international control under the Single Convention on Narcotic Drugs (1961) and the Convention on Psychotropic Substances (1971). Not included in the kit: to be obtained locally in accordance with national procedures.

Ref. No. B/	Drug (WHO TRS 641 reference)	Pharmaceutical form and strength	Total amount
10.	Gastro-intestinal (17)		
	1 promethazine	tab 25mg	100 tab
	2 promethazine	syrup 5mg/5ml, bottle of 250ml	10 bottles
	3 codeine 1/	tab 30mg	100 tab
11.	Hormones (18)		
	hydrocortisone	inj 100mg	10 vials
12.	Oxytocics (22)		
	1 ergometrine	tab 0.2mg	100 tab
	2 ergometrine	inj. 0.2mg/ml	10 amp
13.	Psychotherapeutic (24)		
	diazepam	tab 5mg	100 tab
14.	Respiratory (25)		
	1 salbutamol	oral inhalation 0.1mg	5 aerosols
	2 beclomethasone	oral inhalation 0.05mg	5 aerosols
15.	Solutions (26)		
	1 water for injection	inj. 10ml amp	100 amp
	2 sodium chloride	0.9% inj sol/500ml, with 10 giving sets	5 litres

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1/ Subject to international control under the Single Convention on Narcotic Drugs (1961) and the Convention on Psychotropic Substances (1971). Not included in the kit: to be obtained locally in accordance with national procedures.

List C

Basic medical equipment for a refugee clinic

(equipment marked with an asterisk may need replacing every 3 months)

Ref No C/	Description	Quantity
1	Sterile disposable syringes, Luer 2ml	4,000*
2	Sterile disposable syrings, Luer 10ml	1,000*
3	Sterile disposable needles 0.8 x 40mm/G21 x 1 1/2"	2,500*
4	Sterile disposable needles 0.5 x 16mm/G25 x 5/8"	2,500*
5	Interchangeable glass syringes, Luer 2ml	5
6	Interchangeable glass syringes, Luer 10ml	5
7	Interchangeable needles, 144 assorted, Luer	2 pkts
8	Sterile swabs	5,000
9	Emergency suture sets with needles, pkt 12	15 pkts*
10	Needle-holder	1
11	Scalpel handle No. 3 size	2
12	Artery forceps	2
13	Dissecting forceps	2
14	Blades, disposable size 10	100*
15	Scissors, straight	2
16	Scissors, suture	1
17	Thermometers	5*
18	Stethoscope, standard and foetal	2 of each
19	Sphygomanometer, anaeroid	1
20	Diagnostic set (auroscope, ophthalmoscope)	1
21	Battery alkaline dry cell "D" type 1-5 v for item 20	4*
22	Vaginal speculum, Graves	1
23	Metal syringes for ear washing, 90ml	1
24	Tongue depressor, metal	1
25	Nasogastric tubes size Ch. 5 (premature), polyethylene	5*
26	Nasogastric tubes size Ch. 8 (infant), polyethylene	5*
27	Nasogastric tubes size 12, polyethylene	5*
28	Scalp vein needles	50
29	Gloves, reusable small	100
30	Gloves, reusable medium	100
31	Gloves, reusable large	100
32	Dressing tray with lid, stainless steel	4
33	Basin, kidney 350ml, stainless steel	2
34	Bowls, round with lid 240ml, stainless steel	4
35	Bowls, round 600ml, stainless steel	4
36	Gauze swabs 5 x 5cm in packets of 100	10 pkts
37	Gauze swabs 10 x 10cm in packets of 100	10 pkts*
38	Sterile gauze swabs 10 x 10cm in packets of 5	50 pkts*
39	Eye pads (sterile)	6 pkts*
40	Paraffin gauze dressings 10 x 10cm in tins of 36 pieces	3 tins*
41	Sanitary towels	200*
42	White cotton wool, rolls of 500gms	2 rolls*
43	Zinc oxide plaster 25mm x 0.9m roll	120 rolls*
44	Gauze bandage, 25mm x 9m	50*
45	Gauze bandage, 50mm x 9m	50*
46	Gauze bandage, 75mm x 9m	50*
47	Plaster of Paris bandages 3" x 3yds, packs of 1 dozen	1 pkt*
48	Pneumatic splint sets, multipurpose	1 of each*
49	Safety pins, 40mm	500*
50	Hand towels	2*
51	Soap, cleansing	20 bars*
52	Nail brush, surgeons	1*

Ref No C/	Description	Quantity
53	Treatment cards with plastic envelopes	10,000*
54	Plastic envelopes for drugs	10,000*
55	Plastic sheeting 910mm wide	2m
56	Apron, plastic	2
57	Tape measure 2m/6'	2
58	Weighing scale, adult 140kg x 100g	1
59	Weighing scale, infant 10kg x 20g	1
60	Height measuring board	1
61	Sterilizer dressing pressure type, 350mm diameter x 380mm	1
62	Stove for 6l, kerosene single burner pressure	1
63	Basic laboratory kit and spares	1
64	Filter, water candle aluminium, 9 litres	1

Example of a standard re-order form

(page 1 of 3)

Serial No. of order .....
Date of order .....
Country ..... Refugee location .....
Total number of refugees at location .....
Requirement expected to last from .....(date needed by) for .....(months)
Last order: serial No.....date of order .....date received .....

List A

Reference No. (always prefix by A/ in any separate reference)	Quantity required (in form and strength as in list unless otherwise indicated)	Quantity supplied	Remarks
1.1			
1.2			
2.1			
2.2			
2.3			
3.1			
3.2			
3.3			
3.4			
3.5			
3.6			
3.7			
4.1			
4.2			
5			
6.1			
6.2			
6.3			
7			
8			
9			
10			
11.1			
11.2			
12.1			
12.2			
13			

Standard re-order form

(page 2 of 3)
List B

Reference No. (always prefix by B/ in any separate reference)	Quantity required (in form and strength as in list unless otherwise indicated)	Quantity supplied	Remarks
1			
2			
3			
4			
5.1			
5.2			
5.3			
5.4			
5.5			
5.6			
5.7			
5.8			
5.9			
6			
7.1			
7.2			
7.3			
7.4			
7.5			
8			
8.1			
8.2			
9.1			
9.2			
10.1			
10.2			
10.3			
11			
12.1			
12.2			
13			
14.1			
14.2			
15.1			
15.2			

(page 3 of 3)

Other drugs

Ref no in WHO TRS Report 641 (always prefix by WHO/)	Drug	Pharmaceutical form and strength	Quantity required	Supplied	Remark

Notes

1. Equipment on list C may be ordered in the same way.
2. In an emergency, orders can be placed in the same way by telex, but it is imperative that each separate item reference number be prefixed by A/ , B/ , C/ , or WHO/ as appropriate.

Ordered by: .....
(Name and title)

Signature: .....

Annex 2

Example of a Standard Monthly Refugee Health Surveillance Report [1/]

Serial no. of report .....

Location of refugees ..... Month ..... Year .....

Name of reporting officer .....

1. Refugee population

(1)	Total (end of last month)	.....	+
(2)	New arrivals (this month)	.....	+
(3)	Births "	.....	+
(4)	Deaths "	.....	-
(5)	Left "	.....	-
(6)	Total (end of this month)		=

2. Numbers of health personnel directly working with refugees [2/]

(1)	Doctors	.....
(2)	Nurses	.....
(3)	Midwives	.....
(4)	Sanitarians	.....
(5)	Nutritionists	.....
(6)	Medical technicians	.....
(7)		
(8)		
(9)		
(10)		

1/ A separate report should be made for each major location of refugees. A copy of any corresponding monthly report by the national health authorities should be attached.

2/ Add others as appropriate, e.g. dentists, ophthalmic personnel, traditional health workers, community health workers. Indicate those who are refugees.

3. Mortality

Possible cause/ category[3/]	Age					Total
	under 1 month	1-11 months	1-4 years	5-14 years	15+ years	
Diarrhoea						
Measles						
Malaria						
Trauma/ accident						
Neonatal						
Maternal						
Total						

3/ Add others as necessary. The object is to list deaths which may reflect on effectiveness of health care programmes.

4. Morbidity

Number of individual cases seen at all health centre(s) with one of the following headings as the major presenting condition. Record the first visit for this condition only, i.e. number of new cases.

Sympton/Disease[4/]	Number	
1. Fever, no cough		
2. Fever + cough		
3. Fever + chill		
4. Diarrhoea, no blood		
5. Diarrhoea, + blood		
6. Measles		
7. Whooping cough		
8. Eye infection		
9. Skin disease		
10. Veneral disease		
11. Malaria		
12. Dental		
13. Trauma/accident		
14.		
15.		
16.		
17.		
Total		100%

5. Data on communicable disease control programmes, for example:

Tuberculosis

Number of patients under treatment (end last month) ..... +
Number new patients (this month) ..... +
Number patients discharged after full treatment (this month) ..... -
Total number patients registered for treatment (end this month) ..... =
of whom percentage attending regularly ..... %

[4/] Add other specific diseases e.g. schistosomiasis (bilharzia) as necessary. The object is to monitor effectiveness of public health measures.

6. Supplementary feeding

Category[5/]	No. enrolled (end last month)	Admissions (this month)	Discharges (this month)	Total (end this month)	Attendance rate %
Malnourished (under 80% weight/height)					
Other young children (under 115cm tall)					
Pregnant					
Lactating					
Medical referrals					
Total					

5/ Add other categories, e.g. unaccompanied minors, as appropriate.

7. Therapeutic feeding

Category	No. enrolled (end last month)	This month			Total (end month)
		Admissions	Discharges to SFP/ hospital	Left although not discharged	
Marasmus (no oedema)					
Oedema					
Others (e.g.medical or siblings)					
Total					

8. Remarks: (summary assessment of overall situation, roles of agencies, surveys, particular problems, remedial action taken or envisaged, timescale, visiting health personnel during month, etc.).

Annex 3

Immunization and Vaccines

Suggested normal immunization timetable

Vaccine	Age
BCG	At birth
DPT 1st dose Polio 1st dose	3 months or older
DPT 2nd dose Polio 2nd dose	6 months. Two or three months after the first dose
DPT 3rd dose Polio 3rd dose Measles	9 months. DPT and polio can be given later, but measles should be given at 9 months
DT	When the child goes to school.

Vaccine storage times and temperatures

Type of Vaccine	Regional Store	Transport to Health Centre	Health Centre	Outreach Unit
Oral Polio Measles	Up to 3 months at -20^0C	-20^0C $+8^0$C	Up to 1 month at $+4^0$C to to $+8^0$C	Up to 1 week at $+4^0$C to $+8^0$C
BCG[1]	Up to 3 months at $+4^0$C to $+8^0$C	$+4^0$C to $+8^0$C	Up to 1 month at $+4^0$C to $+8^0$C	Up to 1 week at $+4^0$C to $+8^0$C
DPT[2] Tetanus[2]	Up to 3 months at $+4^0$C to $+8^0$C	$+4^0$C to $+8^0$C	Up to 1 month at 4^0C to $+8^0$C	Up to 1 week at 4^0C to $+8^0$C

1/ Also sensitive to sunlight: avoid direct exposure.

2/ Never freeze DPT or Tetanus vaccine. Keep diluent with vaccine in refrigerator if there is space. If not, refrigerate at least the diluent needed for the following day.