Chapter 9

Training Community Health Workers for Large-Scale Community-Based Health Care Programs

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Key Points

- CHW training needs to be carefully adapted to the needs of the trainees, the job, and the tasks they are expected to perform and the context in which they will be working.
- Current training approaches and techniques that are effective for training CHWs should be employed.
- Examples of training programs and their structures from a variety of CHW programs are provided.

INTRODUCTION

There is growing evidence that well-designed community-based programs using well-trained community health workers (CHWs) can be effective in the context of a wide variety of health programs. However, it needs to be acknowledged that CHWs currently face more competition for their services from other formal and informal providers than was the case when CHWs were first deployed in health programs in the 1970s and 1980s.[1] Communities in low-income settings throughout the world now have ready access not only to traditional healers, but also to a variety of 'village doctors', drug sellers, private doctors, and other health workers. There are also now many more voices in the community providing health information. In addition to these healers, there are other opinion leaders and a much greater reach and impact by the media such as radio, television, mobile phones, and Internet. To survive and improve community health in this evolving environment, a CHW has to be both competent in technical and communication skills and confident in using those skills. This expectation is the challenge for those who will design and implement training programs for CHWs.

In the implementation of a community-based health care (CBHC) program, some new health workers, such as CHWs and their supervisors, will need the full complement of skills, knowledge, and attitude training to enable them to fulfill the tasks and responsibilities defined in the program. The chapters on roles and tasks of CHWs (7) and supervision (10) address the roles and tasks that need to be carefully defined for these cadres. Some of the health professionals that are already employed in the health system, such as health facility-based staff, may need training for new skills to perform their expanded role in part-time support and supervision of the CHWs. Others, such as facility and district health managers, will not need new skills, but will need an orientation to the new CBHC program and need to know why it has been developed to effectively apply existing skills in the implementation and management of the new program. All of these people will also need be motivated to support the new program, part of which requires providing appropriate time allocations to fulfill their managerial and supervisory responsibilities for the CBHC program. Identifying the training or orientation needs of all such staff involved in the management of the community-based program is addressed in the chapters on planning (3) and scaling up (14).

Effective training will emphasize the development of specific competencies and skills required for high-quality job performance. Effective learning and performance of these competencies will require the trainee to acquire a critical body of knowledge and develop appropriate attitudes. This chapter discusses how these competencies can best be achieved and the ways training can be organized.

Key Questions for Planners and Trainers

The key questions to be addressed in this chapter are:

- What sort of CHW and training program is being planned?
- How should the training program be organized?
- Who should be responsible for the governance and management of the training program?
- How can optimal performance be achieved through training?

WHAT SORT OF CHW TRAINING PROGRAM IS BEING PLANNED?

As explained in the introductory chapter, there are two levels of CHWs that are being considered, and within each level, there are two types of CHWs. In Level 1, there are community health volunteers-ongoing and community health volunteers-intermittent (although their names actually vary from country to country and program to program). In Level 2, there

are auxiliary health workers and health extension workers (again, their names may vary). As their roles and responsibilities differ, their training needs also differ. The general differences between these two levels of workers are summarized in Table 1.

Table 1. Typical Training Programs for Different Levels of CHWs

Level 1 CHWs (Intermittent and Ongoing Community Health Volunteers)	Level 2 CHWs (Auxiliary Health Workers and Health Extension Workers)
• Job description usually not extensive • A large total number to be trained • Small numbers trained at one time • Non-residential training • Training sessions only a few days at a time, but may be several sessions • Training close to the community • Literacy may not be necessary • Needs little or no special equipment • Uses community setting for practice and a local health facility for clinical practice • No certification usually provided • Trained by those who are less highly skilled	• Job description more extensive • Variable numbers to be trained • Variable numbers in one course • Residential training • Training lasts 6-18 months • Training may be far from community • Usually requires a minimum of 6 years of school • Needs special equipment, practice labs with models, and a clinical training facility • Certification required for employment • Trained by those who are more highly skilled

CHWs in Level 2 generally have a job description with a broad scope, but many CHWs work for a specific disease control program or in the area of either child health or reproductive health programs. Typically, these individuals are required to have some secondary education and are prepared for their careers with a longer, full-time, residential training program. This type of training program is akin to a conventional professional training as it contains a lot more knowledge content than a Level 1 CHW training program would have. The next section reviews the differences between the training programs for these main groups of community workers.

HOW SHOULD THE TRAINING PROGRAM BE ORGANIZED?

Table 2 summarizes the nature of several different types of national CHW programs and the training programs that have been developed for them. There are a variety of issues that determine the nature of the training program that we will consider in this section, illustrated by these programs.

What Is the Scope of the Roles and Tasks of the CHW?

Multipurpose CHWs have become a familiar feature of many country health systems. The desire to bring essential health services closer to families in their communities means that the range of services provided by CHWs complements those provided by health professionals in primary health care facilities. These services generally include maternal, newborn and child health, family planning, nutrition, and disease control. In Ethiopia, health extension workers (HEWs) have the most extensive job description of all the examples, including skilled pregnancy and childbirth care, which are generally not included among the tasks of other CHWs. The HEW's one-year training is significantly longer than most other multipurpose CHWs, whose training generally lasts for three to six months. In Brazil, community health agents (CHAs) are tasked with less provision of clinical care, but have an extensive health promotion and supportive care role that also includes elder care, mental health care, and the prevention and management of non-communicable diseases.

In contrast, there are many CHWs with much narrower scopes of work, and the duration of their training may be only one to two weeks. For example, at the Community Health Care Site in the Democratic Republic of Congo, the CHWs who provide integrated community case

management (iCCM) for childhood illnesses have a typical training of six days. Other CHWs working on malaria control or in single or combined programs for TB and HIV have similar lengths of training.

Will This Be a Completely New Program or an Adaptation or Expansion of an Existing One?

Among the examples in Table 2, the Ethiopian HEWs, the lady health workers of Pakistan, and the CHWs of Afghanistan have been established as new programs during the last two decades. The current female community health volunteers (FCHVs) of Nepal and the health surveillance assistants (HSAs) of Malawi are much older cadres, but their roles have expanded more recently. The distinction between these types of cadres is not absolute, and even "new" programs begin to add additional tasks quite quickly after the program begins to function (also called "diversification" in Chapter 14, on scaling up). Evidence from recent years on the competence and effectiveness of CHWs in delivering newborn care and providing injectable contraceptives, for example, means that such tasks are frequently added to CHW roles and tasks even for more recently established cadres.

The important point is that if there is already a CHW cadre established in communities, there may be a considerable advantage to expanding the scope of work of that CHW rather than creating a new cadre. This expansion will likely also involve adjusting the incentives for the CHW as well. (This process is discussed in greater detail in Chapter 3, on planning.) In a number of African and Asian countries, iCCM is now being delivered by CHWs that previously were only involved in malaria or diarrhea control programs.[2, 3] Similarly, successful integration of TB and HIV programs has been achieved by retraining community workers previously working for only one program.[4] For the Nepali FCHV, there was a direct link between the MCH and family planning promotion work in the original scope and the gradual addition of iCCM, newborn care, and the provision of contraceptives. For the Malawi HSA, the addition of iCCM and family planning was a change in focus from the earlier disease control role, but it appears to have worked. Nevertheless, the enthusiasm to add more tasks to the job description of the HSAs is creating work pressure for many HSAs and problems for the health system in keeping up with the training needs of new HSAs.[5, 6]

What Educational Level Should Be Required for Entry to the Program?

The usual response is "the highest educational level possible." Indeed, educational level is often assumed to be a way of identifying the most capable people for the job. This requirement may be relevant where educational opportunities are equitable and widespread, but less so if opportunities are restricted. Education should be considered along with other important factors, such as gender. Nepal, Afghanistan, and Pakistan all want women recruited from their communities for the CHWs because in their cultures it is only appropriate for women to be cared for by women. (This topic is discussed further in Chapter 8, on recruitment.) In Nepal and Afghanistan, 65% to 70% of the women selected are illiterate. In Pakistan, they required eight years of schooling. In Ethiopia, the entry level for HEW training is 10 years of school. However, among the pastoralist population, there are very few women with that educational level, so women and some men with a grade six to eight educational level were accepted into a shorter training program.

How important is educational level as an entry requirement into a CHW training program? Broadly speaking, a primary school education provides many skills and experiences unavailable to an illiterate person.[7] However, surveys conducted in Nepal have found little difference in job performance between literate and illiterate FCHVs.[8] Likewise, a secondary school education usually provides an introduction to scientific concepts that make understanding of the biological and medical concepts much easier. However, the correlation with problem-solving skills is less

clear. Many countries have found that a higher educational level for CHWs also brings disadvantages, including the social barrier it may create between the CHW and less-educated people in the community and a preference for living and working in urban areas.

How Long Should the Training Be, Where Should It Be, and How Should It Be Scheduled?

The only programs in Table 2 that include residential training are the Brazil CHAs and the Ethiopian HEWs. The Ethiopian program makes use of existing Ministry of Education training facilities. The other training programs all occur in a health facility or other suitable space close to where the CHWs live to not only avoid the expense of residential training, but also keep the trainees in a familiar situation and allow them to stay at home, in keeping with family or cultural requirements. Familial, agricultural, and cultural issues may also mean that certain times of the year are best avoided for training programs for volunteer CHWs.

The overall length of the training will reflect the size of the curriculum. The Brazil, Pakistan, and Ethiopian programs all have a longer classroom phase than the others, reflecting the greater amount of theory included and the requirement of a secondary level of education. All these programs also have considerable amounts of practical training: 50% for the LHWs, and 70% for the HEWs. Training programs for iCCM generally include clinic sessions on four of the five training days. Both the Nepali FCHVs and Afghan CHWs have programs with two to three integrated classroom and practical sessions lasting two to three weeks separated by two to three months. This schedule intends to focus on learning and practicing one set of skills before moving on to other and perhaps more complex skills.

How Should Trainers Be Prepared?

The establishment and maintenance of a high-quality training program for CHWs is a challenge, especially when so many regular health staff members are tasked to conduct the training. As explained previously, a competency-based training is essential for CHWs to learn the skills they require. Yet, obtaining and making the most of practical experiences is difficult for the trainers. The competency-based approach is often very different from the more traditional training experienced by trainers. There is a need for a core group of master trainers who can train and mentor provincial- or district-level trainers in competency-based approaches and be responsible for maintaining a high quality of training. Trainers in almost all of the programs listed in Table 2 are taught training facilitation/teaching skills and the CHW curriculum. In some instances, training of trainers is done in a cascade fashion, meaning trainers at the local training health facility are supported in the training and monitored by master trainers from the region or district.

When training is being provided in specific training institutions in several locations in different regions of the country by different organizations (as in Afghanistan), the quality of training can be maintained through a process of accreditation of the training schools. Accreditation can be organized directly by the government or by an independent body, but usually the process functions best when all the key stakeholders are represented and have distinct and significant roles in school assessments and accreditation program oversight. A standards-based approach, using a survey instrument with measurable indicators to assess training facilities, clinical practical facilities, the staff and the school's organization is a rigorous approach. Afghanistan developed such an accreditation program for its community midwifery schools with success.[9]

Table 2: Training programs for different types of community health workers[a]

PROGRAM	ROLES AND TASKS	TRAINING
FULL-TIME, SALARIED, MULTIPURPOSE CHWS		
Brazil		
Family Health Program (1989). ▪ Family health team in the basic health unit serving 3,000 to 4,500 people includes 1 doctor, 1 nurse, 1 assistant nurse and about 6 CHAs. Each CHA cares for about 150 households. ▪ CHAs are recruited from their communities and need 8 years of schooling. ▪ State employees, on salary. ▪ Now about 236,000 CHAs.	▪ Annual household registration and assessment of risk status. ▪ Promotion and monitoring of skilled care at the clinic for: – Maternal, newborn, and child health; – Family planning and female cancers; and – Environmental health, adolescent health, elder care, mental illness. ▪ Infectious disease surveillance and support for management of TB, HIV, and chronic non-communicable diseases.	▪ Curriculum developed by Ministry of Health (MOH) with Ministry of Education approval. Municipalities may adapt it to local priorities. ▪ An 8-week residential course is followed by 4 weeks of supervised fieldwork. ▪ Refresher training is monthly. ▪ Training done by nurses, supported by staff from state health secretariat. ▪ Nurses do an 80-hour teacher training module. State specialists do 540 hours at technical school to become a specialist in professional health education.
Pakistan.		
LHW Program (1994). ▪ LHWs are community-based, caring for 100-200 households and are supervised by the health facility. ▪ Recruited from the community, preferably a married woman with 8 or more years of schooling. ▪ Now about 100,000 LHWs. ▪ Full-time salaried workers.	▪ Register families and do 5-7 home visits each day to promote facility care for pregnancies and childbirth and immunizations. ▪ Growth monitoring, nutrition education, and distribution of micronutrients. ▪ Provide condoms, contraceptive pills, and injections. ▪ Community case management of childhood illnesses and essential newborn care. ▪ Supervise directly observed treatment short-course (DOTS) for TB. ▪ Education on hygiene, sanitation, and prevention of HIV infection.	▪ Federal Project Implementation Unit of the MOH approves the curriculum and trains master trainers. ▪ LHWs have 3 months classroom training, followed by 1 week of practical training each month in the health facility for a year. ▪ Refresher training is for at least 1 day each month (15 days each year). ▪ Health facility staff members do the training after 9 days of teacher training and 3 days assessment in a health facility. They receive an additional 20% salary for the 15 months of the training. ▪ District trainers support them.

[a] Most of the data in Table 2 are taken from World Health Organization and Global Health Workforce Alliance. 2010. *Global Experience of Community Health Workers for Delivery of Health Related Millennium Development Goals: A Systematic Review, Country Case Studies, and Recommendations for Integration in National Health Systems.* WHO and Global Health Workforce Alliance: Geneva, Switzerland.

PROGRAM	ROLES AND TASKS	TRAINING
Ethiopia.		
Health Extension Program (2004) ▪ Primary Health Care Unit includes 1 health center (for ~25,000 people) with 5 satellite health posts (~5,000 people) ▪ Each health post has 2 HEWs and 20 community health promoters ▪ HEWs are recruited from their communities and should be women with 10 years of schooling ▪ More than 34,000 HEWs ▪ Salaried civil servants	▪ Hygiene and environmental sanitation ▪ Pregnancy, childbirth, and postnatal/newborn care ▪ Case management of childhood illnesses; provision of immunizations ▪ Counseling and provision of contraceptive pills, injections, and condoms ▪ Nutrition; adolescent health ▪ Disease control for TB, HIV, and malaria ▪ Health education and training and support of CHPs	▪ Curriculum designed by the MOH, but training is provided at 40 technical and vocational training schools belonging to the Ministry of Education. ▪ 1-year training program ▪ 30% in classroom, 70% practical, including attachments to health centers and 3 months in a community ▪ Trainers are nurses and environmental workers. They receive 3 months training by MOH instructors.
Malawi		
Health Surveillance Assistants (1980) ▪ Originally community environmental health and disease control workers serving about 1,000 people ▪ Requires 10 years of schooling (recently increased to 12 years) ▪ Now about 11,000 HSAs. 60% are male. ▪ Since 2008, some HSAs have been selected to provide 3,500 village health clinics to villages more than 5-8 kilometers from a health facility ▪ Salaried civil servants	**All HSAs** ▪ Immunizations ▪ Growth monitoring ▪ Disease outbreak investigation ▪ Water and sanitation and health education **Some HSAs** ▪ iCCM of childhood illnesses (since 2008) ▪ Essential newborn care ▪ Family planning ▪ Disease control for HIV and TB	▪ Basic curriculum for 12-week training is from the Environmental Health Unit of MOH ▪ Training is supposed to be provided by district environmental health staff ▪ The iCCM curriculum for the 6-day training is from the Integrated Management of Childhood Illnesses Unit of the MOH ▪ Training for iCCM has been supported by bilaterally-funded projects and implemented by special training teams
VOLUNTEER, PART-TIME MULTIPURPOSE CHWS		
Nepal		
Female Community Health Volunteer Program (1988) ▪ At least 9 FCHVs attached to a health facility, each caring for about 1,000 people ▪ Work about 5 hours each week. Some material incentives ▪ Recruited from community ▪ About 60% are literate ▪ About 50,000 FCHVs	▪ Basic job is to promote use of MCH and family planning services; home and personal hygiene and management of diarrhea; and HIV prevention through home visits and working with mothers' groups ▪ All now do iCCM of childhood diseases and distribute condoms and contraceptive pills ▪ Some are now distributing misoprostol for home births and doing newborn care and resuscitation	▪ The Family Health Division of the Department of Health Services sets the training curriculum ▪ Basic training consists of 2 9-day training sessions 2 months apart ▪ Most FCHVs receive about 3 refresher sessions each year (1-2 days long) ▪ Training of trainers is a snowball process managed by the National Health Training Institute ▪ Training is done by government and NGO staff

PROGRAM	ROLES AND TASKS	TRAINING
Afghanistan		
Community Health Worker Program (2004) ▪ 1 male and 1 female CHW for 100-150 households (about 1,000 people) ▪ Selected from community. Literacy not required. 70% of females and 20% of males are illiterate. ▪ Part-time volunteers ▪ About 25,500 CHWs	▪ Promotion of home and personal hygiene and sanitation ▪ Promotion of skilled MCH care at the facility ▪ Promotion and provision of birth spacing methods, including injectables ▪ Provision of iCCM of childhood diseases ▪ Growth monitoring and essential newborn care. ▪ DOTS care for TB ▪ Lead and train women's care groups (Family Health Action Groups) for health promotion.	▪ Curriculum is managed by the community-based health care section of the MOH ▪ Basic training is 3 training courses (3 weeks long) at 3 monthly intervals ▪ Refresher training courses have included: – 8-day course on postpartum family planning and injectables – 2 courses on iCCM (each 5-days long) – 5-day training and implementation of community growth monitoring ▪ Training done by full-time provincial CHW trainers after 5 days of training on teaching methods and separate training on modules
VOLUNTEER, PART-TIME CHWS FOR COMMUNITY CASE MANAGEMENT OF CHILDHOOD ILLNESSES		
Democratic Republic of Congo		
▪ Up to 3 community health care sites selected in catchment area of health clinic for villages with poor access ▪ 2 part-time male volunteers at each site ▪ Recruited from the community ▪ Should be literate in French ▪ Preference given to previous health promoters	▪ Management of fever, diarrhea and ARI ▪ Growth monitoring ▪ Distribution of iron and deworming tablets ▪ Distribution of condoms ▪ Promotion of immunizations ▪ Health education on above topics	▪ The iCCM curriculum set by the MOH ▪ 5 days of training on health topics and 1 day on site management ▪ 3 monthly 1-day follow-up sessions at the health clinic. ▪ Trainers are from health clinics and the district health office and receive 3 days of training. A ratio of 1 trainer to 2 CHWs is required.

WHO SHOULD BE RESPONSIBLE FOR THE GOVERNANCE AND MANAGEMENT OF THE TRAINING PROGRAM?

When a CHW program is part of a vertical program in a MOH, the oversight of the training program is usually implemented by the same group. For the HEWs and the general purpose CHWs, options and practice vary. Oversight of the training for the overall CHW program is usually the responsibility of a unit within the MOH. The CHW program and the CBHC unit are frequently part of a health services or primary health care division. Management of the training implementation may come from that unit or may be delegated to a national training institute that is responsible for training programs for the MOH. The Nepal National Health Training Institute is a good example of this arrangement. Involvement of the Ministry of Education is unusual for this type of program, but the Brazil CHAs' curriculum had to be approved by that Ministry of Education, and the HEW training program in Ethiopia made use of Ministry of Education vocational training facilities.

When a new program is being planned and designed, it is helpful to have both a steering committee and an *ad hoc* or formal technical advisory committee(s). The steering committee should have a broad membership of all the stakeholders of the program to guide and approve the design of the training. The technical groups will usually represent the key stakeholders and will ensure that the CHW program and its training program involve the best practices that are appropriately adapted and applied to the country situation or its different regions. The Malawi HSA program has long been organized by the environmental health section of the MOH. With additional roles and tasks being added to the job description, other sections of the MOH are becoming engaged, such as the section concerned with the Integrated Management of Childhood Illness. (See Chapter 3, on planning, for more detail.)

HOW CAN OPTIMAL PERFORMANCE BE ACHIEVED THROUGH TRAINING?

The first thing to recognize is that the performance of CHWs depends upon the impact of many factors other than training. Evidence suggests that knowledge of correct actions is not sufficient to ensure that the right thing will be done. Box 1 lists some of the common individual factors and environments that frequently affect CHW practices. The quality of training and the regularity of refresher training are important determinants of performance, but the recognition of other significant factors can lead to the development of appropriate strategies to address them.

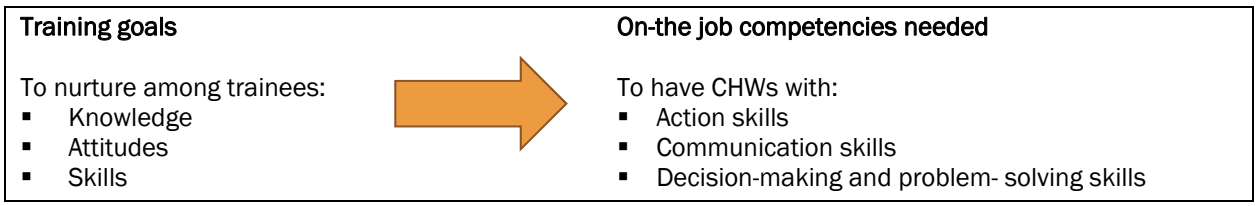
Foremost, proper performance of the required activities and tasks of a CHW requires competence in the skills to perform those tasks. This is why more emphasis is now being placed on competency-based training rather than the traditional knowledge-based training. Figure 1 shows the main types of competencies required of a CHW, and it also emphasizes the supportive role of both knowledge and appropriate attitudes in addition to skills. A detailed description of activities and tasks—discussed in Chapter 7, on CHW roles and tasks—is required to then do a detailed task analysis for preparing performance protocols and the training curriculum. This analysis involves examining each task to be performed by the CHW, identifying any sub-tasks, and then describing the skills that are required for satisfactory performance. Any particular task may involve any combination of psychomotor, communication, and decision skills.

Each of these three types of competencies or skills is different and requires different types of learning experiences. The factor common among all of them is the requirement of active participation in the learning experience by the trainee CHW to achieve competency.

Box 1: Factors influencing CHWs' performance[10]

- CHW factors: Knowledge, skills, motivation, and job-satisfaction; confidence in work guidelines and own skills; fear of bad outcomes; perceptions of patients' demands; and fear of losing clients to other healers.
- Patient factors: Severity of illness; patient's demands; patient's age; sex; and social status.
- Work: Complexity of the work, presence, and clarity of the work guidelines and frequency with which guidelines are changed.
- Sociocultural environment: Traditions and values of communities.
- Work conditions: Amount of work, access to and quality of support and supervision, availability of supplies and equipment.
- Educational support: Opportunities for refresher or in-service training.
- Incentives: Existence and regularity of financial and non-financial incentives.
- Economic environment: Cost of living, alternate job opportunities, economic conditions of country and health system.

Figure 1. A conceptual framework for training of Community Health Workers



Actions: Psychomotor skills

Psychomotor skills are a wide range of skills that include making observations and doing things. Table 3 illustrates the range of action skills that might be required of a CHW, depending upon the roles that he or she is required to play.

Table 3: Action/psychomotor skills

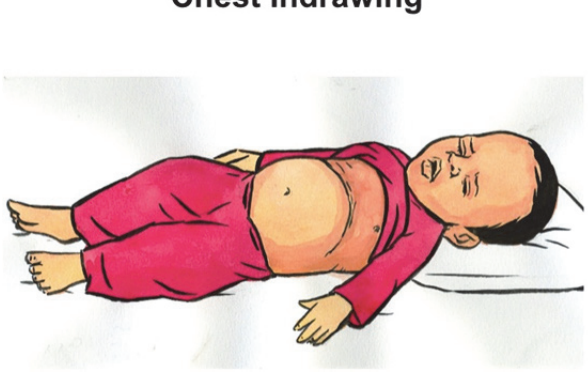
TYPE OF ACTION	EXAMPLES
Observation	Count breathing rate using a timer or watch, detect rib in-drawing, skin- pinch test for dehydration, listen for stridor.
Performance of medical procedure	Give different types of injection, administer eye ointment, apply chlorhexidine or gentian violet to a baby's umbilical cord. Deliver a baby, tie, and cut a baby's umbilical cord.
Use of supplies and equipment	Take blood, and use a malaria rapid diagnostic tool. Weigh a baby or measure the mid-upper arm circumference. Package medicines for a sick child; prepare and give oral rehydration solution.
Recording and reporting	Complete a patient record or a monthly report.
Construction	Construct a stand for a domestic hand washing basin. Construct a safe pit latrine.

There are three stages in the learning process for action skills: demonstration, simulation, and supervised practice in the work place. Verbal or written descriptions alone have little value for learning. Demonstrations can be done in the work setting, but often suffer from poor visibility when there is a large group of students. Videos of procedures have the advantage of being designed to maximize visualization of the key points with a clear commentary and repetitions of

key points. They can also be viewed anywhere, at any time, and as often as desired. Videos on laptops are used to demonstrate clinical signs to CHWs in the Democratic Republic of Congo.[2]

Pictures or photographs can be useful for many clinical signs that can be demonstrated without video. Some more complex tasks may require the development of a job aid that provides a checklist for all the steps. Packaged instructions for equipment, such as malaria rapid diagnostic tests, may need to be supplemented with a more clearly understood version.[10] In Afghanistan, a pictorial version of the algorithms for community case management of sick children was developed for literate and illiterate CHWs. Full-page versions of the pictures of selected key clinical signs were prepared as flip charts for demonstrations. (See example in Figure 2.) However, all the pictures and symbols were first submitted to a thorough process of pretesting and modification with both literate and illiterate CHWs.

Figure 2. Demonstration Picture



Simulations provide an opportunity for the students to practice actions in a supervised "classroom" setting. Students can count each other's breathing rates.[3] Simply made models can be used for many procedures and for practicing use of equipment, such as weighing and recording the weight of a model child, resuscitation of a newborn using a doll, or giving an injection. The more that students have practiced by simulation, the more confident they will be when faced with the real-life action in the work place. Therefore, whenever possible, time should be made available during periods when the students are in a clinic or field site for practice to ensure that these basic action skills are learned before attempting any more complex communication or decision skills that involve those actions.

Communication Skills

Interpersonal communication and counseling skills have received more attention and programmatic emphasis in recent years. Contraceptive failures and discontinuation of contraceptive use often highlight communication failures in family planning services. For counseling in child case management, observation studies have been more helpful than exit interviews at identifying problems.[11, 12] Observations of CHWs in their community work setting are much more difficult to arrange than in a clinic, but awareness of difficulties and/or deficiencies in counseling should prompt attention to strengthen the communication skills of CHWs.

An important point of clarification with health program managers is to agree on the objectives of CHW communications, in particular, which specific behavioral changes will be sought in the community. This will have implications for selecting the range of skills for communicating with both individuals and with groups. Table 4 shows both an illustrative list of communication tasks of CHWs and the types of communication they represent. The importance of considering the type of communication objective is to distinguish what can be accomplished through one-to-one

[2] Very good examples of professionally made videos on newborn care and other topics are available from the Global Health Media Project online at http://www.globalhealthmedia.org.

[3] One of the consistently weaker skills of CHWs is accurately counting breathing rates. Use of minute timers (separate or on a mobile phone) is clearly more effective than using a watch second hand. However, rather than trying to count breaths, less literate and numerate individuals may be more effective comparing the child's breathing rate with a string and weight pendulum swing. A 35 cm pendulum swings at 50 per minute, the cutoff point for the rate of breathing that indicates pneumonia in a child younger than one year of age.

peer counseling and what needs to be addressed through a group approach. With appropriate training in interpersonal communication and counseling skills, CHWs are successful in one-on-one exchange of information, such as teaching home management of sick children or the use of a contraceptive, as well as persuading women to use preventive care services.[13, 14] An approach that improves both the effectiveness and the efficiency of health promotion is the care group.[15] In this approach, the CHW (as in Afghanistan) or another facilitator recruits 10 to 15 respected women (the care group) who will be trained on a regular basis in a health message or skill and then share that information with the women in about 10 of her neighboring households.[16]

Table 4. CHW communication skills

SELECTED CHW COMMUNICATION TASKS	TYPES OF COMMUNICATION BY OBJECTIVE
▪ Asking a mother about her child's sickness ▪ Counseling a couple on choices of contraceptive ▪ Explaining how to treat the sick child at home and when to return ▪ Persuading a women to go to the clinic for antenatal care ▪ Advising a couple on the advantages of using a long-acting contraceptive ▪ Persuading an expectant mother to breastfeed early and to defer washing the newborn ▪ Changing childbirth management practices at home births	▪ Collect information ▪ Provide information ▪ Teach how to do **well** what the person already wants to do ▪ Encourage someone to do what is acceptable, but not most convenient or affordable ▪ Address local fears and myths ▪ Change social norms of behavior

There are those health-related behaviors that seem to have been particularly resistant to health education efforts over the years, particularly those concerning pregnancy, home delivery, and newborn care. The global movement to improve maternal health by training traditional birth attendants (TBAs) failed because trained TBAs were unable to change these practices. After being trained, TBAs were sent back to communities where any effort to change birthing practices was usually met with community resistance. Community beliefs and norms of practice are socially shared; these were the community's "authoritative knowledge."[17] Differences in the cultures of home and facility deliveries also explain the reluctance of many women to go to facilities for care.[18, 19] It has been found, therefore, that where social norms need changing, community-oriented rather than individual-oriented approaches are needed. In particular, women's groups that have practiced participatory learning and action have resulted in significant improvements in maternal and newborn health.[20] However, the "participatory learning and action" approach requires more sophisticated group facilitation skills than interpersonal communication and counseling.

Practical learning experiences are essential for the development of communication skills. Where audiovisual aids are available to assist in communicating messages, these must be available for practice use during the training. Using these aids is often the easiest way for the student to learn, understand, and be able to explain the messages. Especially useful is the application of role play in the training to ensure that the student learns to respond to the questions or objections of her/his audience. Discussions among the students may bring to light the common beliefs, practices, and any misunderstandings about scientific health practices. Sometimes, it is better to conduct formative research to identify the issues that the CHW needs to be prepared to address when talking with individuals or groups and develop model answers.

Decision-Making Skills

Decision-making in a health care setting follows one of three strategies: pattern-recognition, the application of rules or algorithms, and hypothetico-deductive reasoning.[21] The latter, which is used for complex diagnostic problems and requires detailed understanding of clinical science to

propose and then test for alternative diagnoses does not apply to CHWs. Rather, CHW programs are designed so that almost all the common situations that a CHW may encounter can be readily recognized and managed.

For example, as with most of the cases of malaria, pneumonia, or diarrhea that a CHW will manage, each condition in its moderate and severe forms has a pattern of symptoms and signs that is usually not difficult to recognize. Because of this ease, many CHWs do not routinely continue to use the iCCM algorithm charts, and they do so without impact on the quality of their care.[22] The iCCM charts are useful in learning the patterns and should be used more closely in situations when there is little information provided in the caregiver's story of the illness. In Afghanistan, the pictorial version of the iCCM charts was produced with all necessary information on the classification, management, and follow-up conveyed by field-tested pictures and symbols. It proved as popular with the literate CHWs as with the illiterate. (See sample chart in Figure 3 at the end of this chapter.)

The work of all health workers is increasingly designed to incorporate evidence-based best practices. For this reason, guidelines and protocols for most aspects of a CHW's practice are being developed and applied. The protocols are incorporated into job aids or patient reporting forms. (See Figure 4 at the end of this chapter for an example of a CHW report form.) For example, home-based newborn care programs all involve a series of home visits provided by CHWs at critical times during the antenatal and postnatal periods, each with a particular set of tasks designed to prevent or identify early any neonatal health problems.[23]

The learning approach to decision skills again follows the sequence of demonstration, simulation, and supervised practice. Simulation involves the use of case-based learning, including case studies and case-based questions. Most importantly, at each step in the sequence, trainees must understand and then become more confident in the use of the charts or other job aids.

The Place of Knowledge and Attitudes

Although the emphasis of CHW training is on the development of skills, there is a need for a certain level of knowledge and explanation to support the skills. Moreover, attitudes and motivations are well recognized as key elements in the quality of care that is provided.

Assessing the appropriate amount of knowledge and the types of explanations to provide to CHWs is not easy. Distinctions from "must know" to "helpful to know" to "nice to know" are important. The temptation is almost always to provide too much information because it is interesting to both teacher and student. Increasing amounts of knowledge in proportion to the level of background education is usually appropriate in response both to their desire for explanations and to their ability to grasp different concepts. Model curricula tested in similar settings in other countries may provide useful guidance. The best approach may be to have some experienced trainers research the amount of information required to assure competence and motivation in one or two pilot training courses.

Attitudes conveyed by CHWs are important in their relationships with patients of all social status and ethnic groups, the community and its leaders, and other health workers. Attitudes are also very much involved with the CHW's motivation and job satisfaction. The development of appropriate attitudes, such as concern, respect, and responsibility, should be consciously and explicitly part of all aspects and stages of the training program. A general discussion of the role of attitudes and motivations is essential in an introduction to the principles of interpersonal communication. However, the most effective way for students to learn appropriate attitudes is to repeatedly ask about the feelings and needs of patients and community members in all the various learning situations. One of the chief values of a role play is that it gives an opportunity

for the group watching the role play to observe and discuss the attitudes being conveyed by each of the participants and discuss how the CHW might have improved his/her performance. Most importantly, the trainers will be constantly modeling good and bad attitudes in all that they do; therefore, the issue of good attitude development needs to be an essential part of the selection and preparation of the trainers.

Evaluation of Student Competencies

Assessment of the CHW student's ability to perform the activities and tasks required to conform to an acceptable standard is necessary for all training programs. It is certainly essential for programs that provide certification at the end of the training. However, because the whole focus of the program is the development of a range of specific skills or competencies, acquisition of each skill and competency needs to be explicitly evaluated. Written or oral examinations that test the student's knowledge about what needs to be done will not suffice. A valid and relevant assessment of competency requires **observation of the performance** of that task and checking its quality against a checklist of essential components.

Mastery of a skill requires repeated practice, first in simulations and then in the real-life setting. Supervised learning means that the teacher monitors the student's performance with a performance check list to identify those aspects that were done well and those that need improving. Such a process is referred to as "formative evaluation." "Summative evaluation" is the application of the same technique toward the end of the training program to ensure that the student has reached and maintained a satisfactory standard. One of the simplest and most widely applied approaches to the development and evaluation of skills is the use of a procedures logbook. For each student, the logbook specifies the critical skills to be learned and the number of simulation and real-life experiences to be had and provides space for the instructor to add a performance score and sign off when the learning exercise has been completed. This book provides structure and standards to the training program and can be applied to all training schools.

What Should Be the Role of Follow-Up Monitoring and In-Service Training in the Overall Training Program?

One of the findings that has emerged from experimentation with different approaches and lengths of training of health professionals in Integrated Management of Childhood Illness is that the length of initial training is less critical than assuring follow-up monitoring of performance and in-service training.[24] The same principle almost certainly applies to CHWs. Because CHWs generally receive less hands-on practice of skills in their initial training, regular supervision of practice and in-service training is most desirable. The training of CHWs in the Democratic Republic of Congo includes a schedule of three full days of in-service training every month at the health center after completion of initial training. The purpose of these monthly trainings is to observe and correct the practices of CHWs and build their levels of confidence with newly learned skills. Similarly, the monthly week-long practical training sessions at the health center for the Pakistan LHWs fulfill the same goal.

Many CHW programs recommend that supervisors arrange for a regular refresher training each month when the CHWs bring their reports and restock supplies. Frequently, this training does not happen, for many reasons, especially if CHW supervision has been an add-on to the clinic health workers' otherwise full-time job. A more effective approach may be more regular but less frequent in-service training days at the clinic, but separate from the administration days. A provincial or district training team could organize these sessions rather than relying on the existing clinic staff. Such an approach needs to be formally adopted and then budgeted if it is to work.

What Is the Place of mHealth Applications?

Evidence on the effectiveness of mHealth applications is still scarce.[25] The most common applications are one-way text messaging and phone reminders for appointments and healthy behaviors and for data gathering and reporting. Innovative applications with mobile phones for CHWs include job aids for procedures or health education, clinical algorithm tools, and tools for data gathering and reporting.[26] In a few cases, these may be combined. In Tanzania, an iCCM application on a hand-held device proved much easier and quicker to use than the paper iCCM charts, thereby encouraging more regular use.[27] One example of the value of mobile phones for learning and refresher learning is the use of multimedia applications on the mobile phone, providing easy access whenever and wherever the information is required. For example, the newborn care series produced by the Global Health Media Project, which was previously mentioned, is available for download on mobile phones.

FITTING THE TRAINING TO THE SITUATION

Too often, when there is a problem with a health program, it seems to be assumed that the solution is "more training." Training is a necessary, but not sufficient, basis for successful CHW programs. Initially, the design of the program is more important: how the roles and tasks of the CHWs will fit with and complement the roles and tasks of the health staff of the supervising health facility; how well they cooperatively meet the health needs of the community and its socio-cultural setting; and whether the CHWs understand exactly what they should do and have the time, job-aids, tools, and other resources to do it.

Getting the design right is one of the main tasks of those responsible for the governance and management of the CHW program and its training program. (These are discussed further in Chapter 3, on planning, and Chapter 4, on governance.) Membership both on the oversight/steering committee and on the technical committees should include representatives of all the relevant stakeholders to ensure that serious considerations do not get overlooked.

The type of CHW training to be adopted will depend upon several factors:

- First, the scope of the roles and tasks to be performed by the CHW. Will it be a multipurpose worker to extend primary care to populations without access to facilities or will it be a narrower scope to support a vertical program such as HIV/AIDS or child health?
- Is this training for a new CHW program or will it build on and expand an existing type of CHW?
- Will the CHW be a full-time salaried worker or a part-time volunteer? This factor will depend very much on the numbers required and the resources to pay for their training and salaries.
- What level of education will be required for entry to the program? This requirement will depend on:
    - The current general levels of education among either the men or women in the communities from which they are to be selected,
    - Whether the CHW is a full-time salaried worker or part-time volunteer.

The characteristics of an effective training program for CHWs are summarized in Table 5.

Table 5: Different training approaches and their effectiveness

	TRAINING APPROACHES	DESCRIPTION	EVALUATION OF BENEFIT FOR LEARNING
Educational techniques	Interactive techniques	Active educational experience that allows dialogue and interaction that includes simulations, role plays and case-based learning in preparation for supervised real-life experiences.	Interactive techniques that encourage the learner to process and apply the information have been found to be much more effective than didactic techniques for knowledge and skills acquisition.
	Didactic techniques	Passive educational experience that includes lectures and reading.	
Timing	One time	All the material is presented only once, at one time.	Information or learning experiences that are spaced or repeated over time produce better learning outcomes than single training interventions.
	Spaced and repeated	Information or learning experiences are spaced apart and/or repeated several times.	
Location	At work site	Trainees receive training at the facility or in the community where they will work (or in a similar community).	Most effective skill acquisition and performance takes place in an environment as similar to the work situation as possible.
	Away from work site	Training is in a classroom or other site remote from the CHW's community.	
Teaching/learning media	Print	Manuals and handouts	Manuals may be good guides of content for the trainers, but are poor methods of learning for students. Appropriate for some job aids for fully literate CHWs.
	Pictures	Pictures, cartoons, or photos. Can be on paper or on electronic devices.	Much more effective than words. Can be compiled into charts of algorithms and protocols for job aids. Still useful as health education aids.
	Multimedia	Audio and/or video content on computers, mobile and smart phones, DVDs, and radio.	Can be used interactively, repeatedly, and almost anywhere. More effective than either print or still pictures for learning.

*Adapted from [28]

Because most CHWs lack much formal education, it is very important that the training program is very explicitly competency-based rather than the more traditional knowledge-based approach. Learning needs to be active and interactive; didactic methods do not work. For the same reason, print manuals are not useful to the CHWs, although they may be appropriate as trainers' guides. Pictorial and multimedia materials are more useful for demonstrating what needs to be known. Most important is constant practice in the use of pictorial job aids that describe activity protocols or provide audiovisual support to health promotion. Evaluation of the CHWs in training should emphasize a process of "formative evaluation" that checks on progress in performance all the way through the training rather than just at the end.

Furthermore, the learning setting needs to be as similar and close to the work setting as possible. Clinic settings for practicing clinical skills are not the same as a village home, but they do ensure that sufficient cases may be available and help the CHW to become comfortable with the clinic and how things are done there. The lack of formal education and the need to consolidate competencies also means that there is great advantage in dividing the training into a series of modules separated by a period of practice in the community. (See examples from Brazil, Ethiopia, and Pakistan in Table 2.) Dividing the training allows the CHW to implement

and become confident in some skills before going back to learn new ones. Ideally, this process then continues through the process of supervision and the process of in-service and refresher training after initial training is completed.

CONCLUSION

All sub-systems in CHW programs are important, and training is one of them. Careful planning and utilization of appropriate approaches to the training of CHWs is essential for effective program functioning. Adapting training to fit the needs and capabilities of trainees with limited education is one of the great challenges facing CHW programs, but experience and capabilities in this area are growing rapidly.

Figure 3. Example of pictorial iCCM Chart from Afghanistan

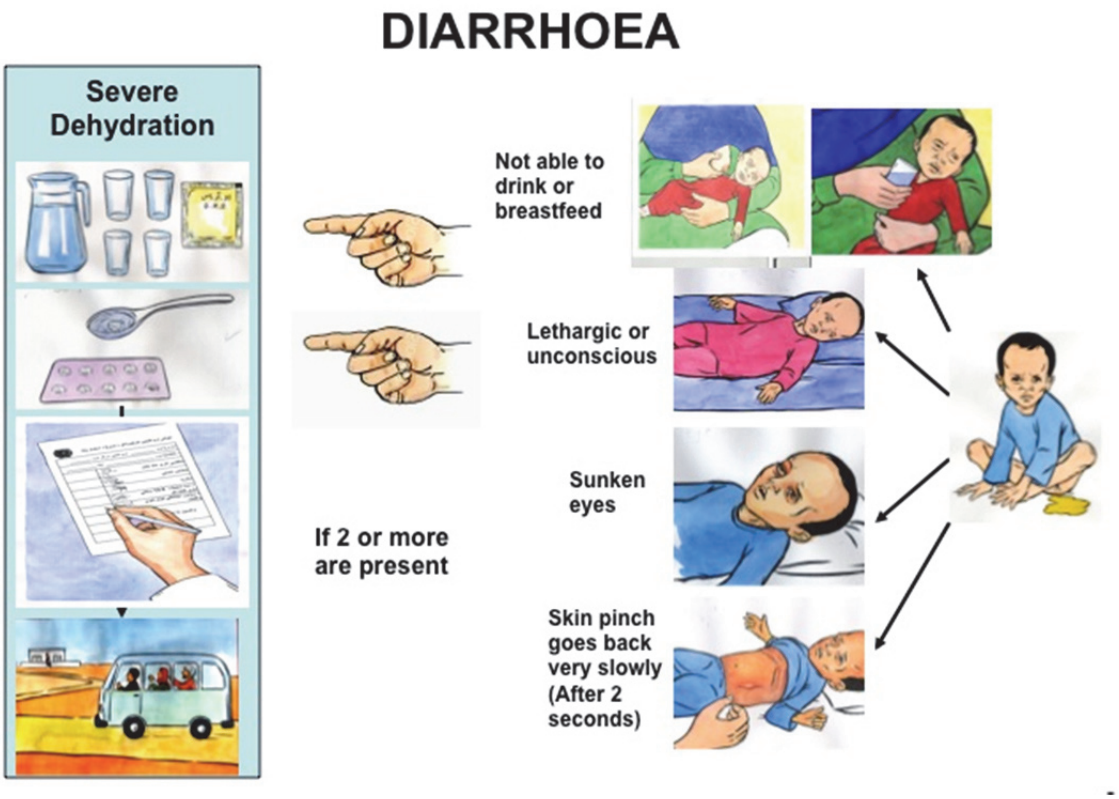
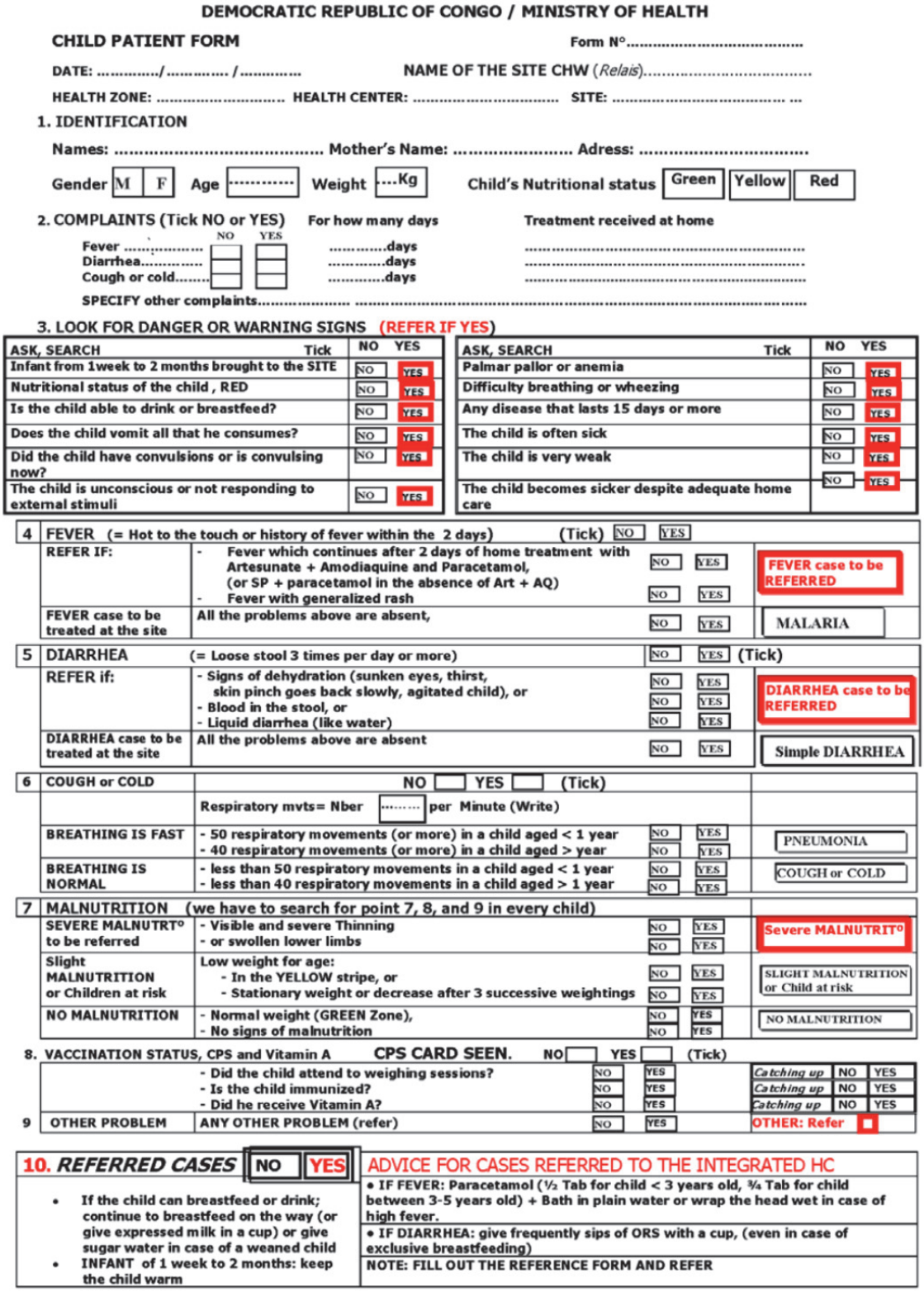


Figure 4. Patient form incorporating the iCCM Algorithm used by CHWs in Democratic Republic of Congo



DEMOCRATIC REPUBLIC OF CONGO / MINISTRY OF HEALTH

CHILD PATIENT FORM — Form N°.....

DATE: ...../...../..... NAME OF THE SITE CHW (*Relais*).....

HEALTH ZONE: ..... HEALTH CENTER: ..... SITE: .....

1. IDENTIFICATION

Names: ..... Mother's Name: ..... Adress: .....

Gender M F Age ..... Weight ....Kg Child's Nutritional status Green Yellow Red

2. COMPLAINTS (Tick NO or YES) For how many days Treatment received at home

	NO	YES		
Fever			.....days	.....
Diarrhea.....			.....days	.....
Cough or cold.....			.....days	.....

SPECIFY other complaints.....

3. LOOK FOR DANGER OR WARNING SIGNS (REFER IF YES)

ASK, SEARCH	Tick	NO	YES
Infant from 1week to 2 months brought to the SITE		NO	YES
Nutritional status of the child , RED		NO	YES
Is the child able to drink or breastfeed?		NO	YES
Does the child vomit all that he consumes?		NO	YES
Did the child have convulsions or is convulsing now?		NO	YES
The child is unconscious or not responding to external stimuli		NO	YES

ASK, SEARCH	Tick	NO	YES
Palmar pallor or anemia		NO	YES
Difficulty breathing or wheezing		NO	YES
Any disease that lasts 15 days or more		NO	YES
The child is often sick		NO	YES
The child is very weak		NO	YES
The child becomes sicker despite adequate home care		NO	YES

4	FEVER (= Hot to the touch or history of fever within the 2 days)		(Tick) NO	YES	
	REFER IF:	- Fever which continues after 2 days of home treatment with Artesunate + Amodiaquine and Paracetamol, (or SP + paracetamol in the absence of Art + AQ)	NO	YES	FEVER case to be REFERRED
		- Fever with generalized rash	NO	YES	
	FEVER case to be treated at the site	All the problems above are absent,	NO	YES	MALARIA
5	DIARRHEA	(= Loose stool 3 times per day or more)	NO	YES	(Tick)
	REFER if:	- Signs of dehydration (sunken eyes, thirst, skin pinch goes back slowly, agitated child), or	NO	YES	DIARRHEA case to be REFERRED
		- Blood in the stool, or	NO	YES	
		- Liquid diarrhea (like water)	NO	YES	
	DIARRHEA case to be treated at the site	All the problems above are absent	NO	YES	Simple DIARRHEA
6	COUGH or COLD	NO YES (Tick)			
		Respiratory mvts= Nber ..... per Minute (Write)			
	BREATHING IS FAST	- 50 respiratory movements (or more) in a child aged < 1 year	NO	YES	PNEUMONIA
		- 40 respiratory movements (or more) in a child aged > year	NO	YES	
	BREATHING IS NORMAL	- less than 50 respiratory movements in a child aged < 1 year	NO	YES	COUGH or COLD
		- less than 40 respiratory movements in a child aged > 1 year	NO	YES	
7	MALNUTRITION	(we have to search for point 7, 8, and 9 in every child)			
	SEVERE MALNUTRT° to be referred	- Visible and severe Thinning	NO	YES	Severe MALNUTRIT°
		- or swollen lower limbs	NO	YES	
	Slight MALNUTRITION or Children at risk	Low weight for age: - In the YELLOW stripe, or	NO	YES	SLIGHT MALNUTRITION or Child at risk
		- Stationary weight or decrease after 3 successive weightings	NO	YES	
	NO MALNUTRITION	- Normal weight (GREEN Zone),	NO	YES	NO MALNUTRITION
		- No signs of malnutrition	NO	YES	

8. VACCINATION STATUS, CPS and Vitamin A CPS CARD SEEN. NO YES (Tick)

	- Did the child attend to weighing sessions?	NO	YES	*Catching up*	NO YES
	- Is the child immunized?	NO	YES	*Catching up*	NO YES
	- Did he receive Vitamin A?	NO	YES	*Catching up*	NO YES
9 OTHER PROBLEM	ANY OTHER PROBLEM (refer)	NO	YES	OTHER: Refer	

10. *REFERRED CASES* NO YES

- If the child can breastfeed or drink; continue to breastfeed on the way (or give expressed milk in a cup) or give sugar water in case of a weaned child
- INFANT of 1 week to 2 months: keep the child warm

ADVICE FOR CASES REFERRED TO THE INTEGRATED HC

- IF FEVER: Paracetamol (½ Tab for child < 3 years old, ¾ Tab for child between 3-5 years old) + Bath in plain water or wrap the head wet in case of high fever.
- IF DIARRHEA: give frequently sips of ORS with a cup, (even in case of exclusive breastfeeding)

NOTE: FILL OUT THE REFERENCE FORM AND REFER

11. TREATMENT

TREATMENT OF FEVER/MALARIA

1) Drugs
   A) ANTI MALARIA drugs:
   - Child 2-6 month: QUININE drops 20%(1 drop/kg of weight, 3 times per day, for 7 days)
   - Child 7-11 months: Art ½ Tab + AQ ½ Tab, for 3 days (TOTAL 1½ Tab Art + 1½ Tab AQ)
   - Child 12-59 months: Art 1 Tab + AQ 1 Tab, for 3 days

   Note: In case of lack of ART+AQ, give the SP according to the following dosage:
   - Child 2-11 months: SP ½ Tab single-dose, only for 1 day
   - Child of 1-2 years: SP ¾ Tab single-dose, only for 1 day.
   - Child of 3-5 years: SP 1 single-dose Tab, only for 1 day

   B) Paracetamol 500 Mg Tab: (4 times per day).
   - Child less than 3 years old: ½ Tab, for 2 days (TOTAL 4 Tab)
   - Child above 3 years old: ¾ Tab, for 2 days (TOTAL 6 tab)

2) Advice: See CHART 1
3) Appointment after 2 days

TREATMENT OF DIARHEA

1) Drugs:

   a) ORS (at least 2 bags) or other recommended liquids:
   - ½ glass of ORS after each stool: Child < 2 years
   - 1 glass of ORS after each stool: Child 2 years and above

   (If Vomiting: Wait 10 min. then give again)

   b) Mebendazole: 100 mg Tab 2 times per day for 3 days (TOTAL 6 Tabs) (or 1 Tab of 500 mg single-dose from one year of age)

   c) Zinc Tab for 10 days with the following dosage:
   - ½ 20 Mg tab, child of less than 6 months (TOTAL : 5 Tabs)
   - 20 mg tab, child 6 months and above (TOTAL: 10 Tabs)

2) Advice: See CHART 2
3) Appointment after 2 days

TREATMENT OF PNEUMONIA AND COUGH/COLD

1) PNEUMONIA :

   a) COTRIMOXAZOLE
   - Child 2 - 6 months: ¼ Tab 2 times per day for 5 days (TOTAL 2½)
   - Child 6 months - 3 years: ½ Tab 2 times per day for 5 days (TOTAL 5 Tab)
   - Child 3 years - 5 years: 1 Tab 2 times per day for 5 days (TOTAL 10 Tab)

   b) Remedy against cough: Lemon juice (diluted) or honey
   c) If fever: See Treatment for malaria.

2) SIMPLE COUGH OR COLD:
   a) Remedy against cough (Lemon juice or diluted honey)
   b) If fever: See treatment for malaria.

3) Advice: See CHART 3
4) Appointment after 2 Days

MANAGEMENT OF SLIGHT MALNUTRITION

1) Drugs

   a) Mebendazole : 100 mg Tab 2 times a day for 3 days (TOT 6 Tabs)
   (or 500 mg Tab single dose from one year of age)

   b) Ferrous sulfate 1 tablet per day for 1 month (TOT 30 Tabs)

2) Advice : See CHART 4

3) Appointment after 2 days to verify whether the advice given was followed,

   Then appointment after 7 days

12. CATCHING UP (See Vaccination status, CPS & Vit. A, and advice for catching up if necessary)

In all cases, encourage the mother to continue child weighing sessions, immunization and Vitamin A supplementation at the HC

13 FOLLOW UP VISIT CARRIED OUT? NO YES — INSTRUCTIONS FOR FOLLOW UP APPOINTMENT.

A. POSSIBILITY n°1: The child's mother returned ☐

Tick if:
- a. Returned according to the given appointment ☐
- b. Returned immediately due to child worsening health ☐

POSSIBILITY n°2: The child's mother did not return ☐

Tick why she did not return:
- a. Consultation by a traditional practitioner or traditional treatment ☐
- b. Lack of money ☐
- c. Child got better ☐
- d. Mother's activities: Seller, field, work, illness in the family... ☐
- e. Death ☐
- f. Other causes: ☐

B. IS THE CHILD's STATE AGGRAVATED? (Ask the mother) NO ☐ YES ☐ (Tick) IF YES, REFER

C. DOES THE CHILD HAVE A NEW COMPLAINT? NO ☐ YES ☐ IF YES, TAKE A NEW FORM

D. LOOK FOR WARNING AND DANGER SIGNS — REFER IN CASE A SINGLE SIGN IS PRESENT

	NO	YES
• The child is unable to drink or breastfeed	☐	☐
• The child vomits all that he consumes	☐	☐
• Had convulsions or convulsing now	☐	☐
• Unconscious or very weakened	☐	☐
• Difficult breathing (pulling or wheezing)	☐	☐
• Palmar paleness (anemia)	☐	☐
• The child becomes sicker	☐	☐

	NO	YES
• Fever that persists despite treatment	☐	☐
• Appearance of rash and/or pruritus	☐	☐
• Dehydration signs	☐	☐
• Blood in the stool,	☐	☐
• Very liquid diarrhea (like water)	☐	☐
• or another abnormal phenomenon	☐	☐

E. IF THE CHILD HAD COUGH OR COLD, Nber of respiratory mvts/minute ☐ Fast Respiration? NO ☐ YES ☐ REFER IF YES

F. VERIFY IF THE CHILD RECEIVED HIS DRUGS AS PRESCRIBED. Did he receive his dose? NO ☐ YES ☐
- Verify the remaining quantity of drugs in the mother's bag.

G. ADVISE TO CONTINUE CHILD TREATMENT
- Ask the mother to recall how she administered the drugs (review the «3 HOWS »)
- If the mother administered well the drugs, CONGRATULATE AND ENCOURAGE HER TO CONTINUE THIS WAY
- If the mother has administered the drugs inappropriately, make a demonstration on drug dispensation (review the « 3 HOWS ») then ask her to repeat and administer a dose in your presence. Verify her understanding.

Additional Resources

Many training materials and resources are available on the Internet. Many are very good, but it is important to check the intended audience. Materials that have been prepared especially for CHWs are not easily found. The following suggestions of Web sites are not complete, but may lead to some good quality materials.

GENERAL SOURCES

Teaching Aids at Low Cost/TALC: a unique charity dedicated to providing free and low cost books, DVDs, and other educational materials for health care workers in a variety of languages. Community health materials include child and newborn health, environmental health, communicable diseases, including HIV and TB, nutrition and food security, management of disabilities, and community mobilization (www.talcuk.org).

The World Health Organization Web site (www.who.int) is an essential site to check on agreed international standards on management protocols, including iCCM, HIV, TB, family planning, etc. In addition, there are training manuals and/or job aids for CHWs on some topics, such as iCCM, newborn care, and family planning.

TRAINING METHODS

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Werner D and Bower B. *Helping Health Workers Learn*. Hesperian Foundation. Available from TALC (www.talcuk.org).

ReproLine plus (reprolineplus.org), a resource of Jhpiego, has several publications on competency-based learning and teaching methods.

CHILD HEALTH AND NUTRITION

The USAID BASICS project (www.basics.org) has published a set of nine components of the Toolkit for Community Case Management of Childhood Illnesses. This toolkit was developed in the Democratic Republic of Congo and is available in French and English.

Training guide for Community-Based Management of Acute Malnutrition (CMAM). 2008. Guide for trainers and participant handouts. Available from Family Health International. CD–ROM can be obtained by emailing a request to fantamail@fhi360.org.

REPRODUCTIVE HEALTH

Home-Based Life Saving Skills. A four-book set manual and other teaching-learning materials can be bought from the American College of Nurse-Midwives. Life Saving Skills is a more advanced training course. See www.midwife.org.

The Global Health Media Project (www.globalhealthmedia.org) has prepared an excellent series of videos on newborn care in English, Swahili, and Spanish. These videos are available for free download. A second series on the management of labor and delivery is in preparation.

ReproLine plus (reprolineplus.org), a resource of Jhpiego, has several publications on community-based family planning and other aspects of reproductive health.

Family Health International (www.fhi360) has training materials on family planning and HIV.

The K4Health Project (USAID) has a Web site on toolkits (www.k4health.org/toolkits) that has several useful training resources on family planning and HIV.

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