MANAGEMENT OF SICK CHILDREN BY COMMUNITY HEALTH WORKERS

INTERVENTION MODELS AND PROGRAMME EXAMPLES

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GLOSSARY

AIDS	acquired immunodeficiency syndrome
APROMSA	Asociación de Promotores de Salud/Community health promoter association (Peru)
ARI	acute respiratory infections
ARI/CDD	acute respiratory infections/control of diarrhoeal disease
ALRI	acute lower respiratory infections
BASICS	Basic Support for Institutionalizing Child Survival
BRAC	formerly the Bangladesh Rural Advancement Committee, now known as 'BRAC'
CDC	Centers for Disease Control and Prevention (United States)
CHW	community health worker
CICSS	Community Initiatives for Child Survival in Siaya (Kenya)
CORE Group	Child Survival Collaboration and Resources Group
COMPROMSA	Comité de Promotores de Salud/community health promoter committee (Peru)
CNLP	Centre National de Lutte contre le Paludisme/National Centre for Malaria Control (Burkina Faso)
CQ	chloroquine
CRS	Catholic Relief Services
HIV	human immunodeficiency virus
IMCI	Integrated Management of Childhood Illness
IPT	intermittent presumptive treatment
IRC	International Rescue Committee
NGO	non-governmental organization
ORS	oral rehydration salts or oral rehydration solution
ORT	oral rehydration therapy
SEARCH	Society for Education, Action, and Research in Community Health
SP	sulfadoxine-pyrimethamine (Fansidar®)
TBA	traditional birth attendant
TDR	WHO/UNICEF/World Bank Special Programme for Research and Training on Tropical Diseases
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

1. INTRODUCTION

An estimated 10.6 million children under five years of age still die each year from preventable or treatable diseases. Many of these deaths are attributable to the conditions targeted by Integrated Management of Childhood Illness (IMCI): acute respiratory infections, malaria, diarrhoea, measles and malnutrition. A large proportion of these deaths could be prevented through early, appropriate and low-cost treatment of sick children in the home or community, with antibiotics, antimalarials or oral rehydration therapy.

This report examines approaches for the community management of sick children, specifically antimicrobial treatment, through the use of community health workers (CHWs) or their equivalent. It is based on an extensive review of literature, including peer-reviewed studies, reports, programme descriptions and programme evaluations. Individuals and programme managers from various institutions were interviewed, and pertinent documents were solicited.

Chapter 2 presents a brief background of the issues surrounding community treatment. Chapter 3 describes the methods used for the review. In Chapter 4, CHW programmes are classified according to the CHW's role in the management of sick children in the community, based on use of antimicrobials, method of disease classification and referral mechanisms. Chapter 5 then presents operational considerations in CHW programming, such as CHW performance and retention, drug supply systems and the appropriate use of antimicrobials. Chapter 6 examines the support of programmes, and factors affecting sustainability and scaling up of programme operations. Chapter 7 presents findings of the report and recommendations for strengthening current programmes and policies, as well as needs for future technical and operations research. Annex A contains the WHO/UNICEF Joint Statement on Management of Pneumonia in Community Settings. Annex B outlines further details about selected CHW programmes that were reviewed in the process of preparing this document. Annex C contains checklists related to programmatic recommendations.

Intervention models

CHW programmes that manage childhood illness in the community can be classified according to the following factors: use of antimicrobials, type of referral system, type of antimicrobial and use of systematic processes to classify sick children. The seven types of programmes considered are shown in Table 1 and discussed in further detail below. Programme case studies are presented extensively in Chapter 4 of the document and are examined with respect to the type of programmatic approach.

Table 1. Overview of intervention models for case management of children with malaria or pneumonia outside of health facilities

Intervention model		Treatment with antimicrobials			
Number	Title	CHW dispenses antimalarials	Family dispenses antimalarials	CHW dispenses antibiotics for ALRI	Referral to nearest health facility: Verbal or facilitated
Model 1	CHW basic management and verbal referral	No	No	No	Verbal
Model 2	CHW basic management and facilitated referral	No, may give initial treatment prior to referral	No	No, may give initial treatment prior to referral	Facilitated for all sick children needing an antimicrobial
Model 3	CHW-directed fever management	Yes	No	No	Verbal or facilitated
Model 4	Family-directed fever management	Family only or shared responsibility		No	Verbal
Model 5	CHW malaria management and surveillance	Yes	No	No	Verbal or facilitated
Model 6	CHW pneumonia case management	No	No	Yes	Verbal or facilitated
Model 7	CHW integrated multiple disease case management	Yes	No	Yes	Verbal or facilitated

Operational aspects

This report also reviews operational components that can contribute to the effectiveness of treating sick children in the community: community health worker performance, retention of CHWs, use of CHW services, drug supply systems and appropriate drug use. The operational considerations are not reviewed exhaustively; rather, other documents that have analysed or reviewed these relevant operational aspects are referenced throughout the text.

Support, sustainability and scale

Most CHW programmes rely on coordination and cooperation between many partners and stakeholders, and strong links between partners can improve the capacity of the programme. Yet the balance between the roles of each partner varies. Solid links with the community and the ministry of health can help foster more sustainable CHW programmes. The community (and community groups), non-governmental organizations and the ministry of health may all have unique roles in a CHW programme.

Box 1. Local names for community-based health workers

Name	Country or area
Agente comunitario de salud	Peru
Agente comunitário de saúde	Brazil
Basic health worker	India
Community health volunteer	Various
Community health worker	Various
Colaborador voluntario	Latin America
Community drug distributor	Uganda
Female community health volunteer	Nepal
Kader	Indonesia
Lady health worker	Pakistan

Findings and recommendations

The findings and recommendations are summarized in Chapter 7 of this report. A few key findings are highlighted here.

Despite stronger evidence supporting its effectiveness in lowering mortality, community-based treatment of pneumonia is less common than treatment of malaria or diarrhoea. This discrepancy is especially striking in Africa. A policy statement on pneumonia in the community emerged from this finding and is found in Annex A. The guidelines for treatment of malaria and pneumonia concurrently, especially outside of facilities, are outdated because of the emergence of co-morbidities (HIV) and the development of antimicrobial resistance. Many programmes promote 'home treatment' and 'community-based treatment' of malaria in Africa. There is no standardization of these terms; both phrases are usually ill-defined and the differences are blurred in much of the documentation.

2. BACKGROUND

The past few decades have witnessed large and sustained decreases in child mortality in most low- and middle-income countries. However, an estimated 10.6 million children under the age of five still die each year from preventable or treatable conditions, including malnutrition *(1–2)*. Many of these deaths are attributable to the conditions targeted by Integrated Management of Childhood Illness (IMCI): acute respiratory infections, diarrhoea, malaria, malnutrition and measles *(1–4)*. A large proportion of these deaths could be prevented through early, appropriate and low-cost treatment of sick children in the home or community, with antibiotics, antimalarials or oral rehydration therapy. Improvements in care at health facilities through IMCI and other initiatives are necessary but not sufficient. Children from the poorest families are significantly less likely