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National Health System Strengthening

Key role of Community Health Workers and International Non-Governmental Organizations Positioning

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ACRONYMS

ACF	Action Contre la Faim
BCC	Behavior Communication Change
BPHS	Basic Package of Health Services
CAP	Consolidated Appeal Process
CBHP	Community Based Health Program
CFA	Franc des Colonies Françaises d'Afrique
CHW	Community Health Worker
CNNTA	Centre National de Nutrition et Technologies Alimentaires
ECHO	European Commission Humanitarian Office
EHESP	Ecole des Hautes Etudes en Santé Publique
EPHS	Extended Package of Health Services
ICCM	Integrated Community Case Management
ICT	Information and Communications Technologies
INGO	International Non-Governmental Organization
IRC	International Rescue Committee
HIV	Human Immunodeficiency Virus
MDGs	Millennium Development Goals
MDM	Médecins Du Monde
MOH	Ministry of Health
MSF	Médecins Sans Frontière
NHS	National Health System
NGO	Non-Governmental Organization
OCHA	Office Coordination for Humanitarian Affairs
PHC	Primary Health Care
PPP	Public to Private Partnership
PU-AMI	Première Urgence – Aide Médical Internationale
SDG	Sustainable Development Goals
UHC	Universal Health Coverage
UN	United Nations
UNICEF	United Nations Children's Fund
WFP	World Food Program
WHO	World Health Organization

ABSTRACT

Background: Strengthening national health system (NHS) through the deepening of the Community Health Workers (CHW) is at the heart of health strategy in developing countries. International Non-Governmental Organization (INGOs) play a huge role in NHS strengthening and therefore in scaling up community based program. This study intends to define a clear positioning of the INGO PU-AMI towards the role of CHW to ensure that its community health intervention respects the minimum standards and is ethically acceptable.

Method: Data collection was performed using 5 methods (literature review, workshop, interviews, case study, transversal methods) and based on 6 variables (recruitment, training, monitoring/supervision, type/scope of activities, compensation/remuneration and recognition by the NHS/link with health structures). The influencing factors are: ethical issues, leadership of Ministry of Health (MoH) and INGO positioning. The qualitative data was analyzed to formulate recommendations and further research needs.

Result: The pre-conditions were analyzed in different contexts with large disparities in intervention schemes highlighted. The recognition of the CHW by the NHS appears essential in ensuring sustainability. Ethical issues arise at each project steps, including security and quality risks. The availability of community health policy and the MoH leadership are critical, thus conditioning the application of national recommendations. INGOs should support national initiatives or whenever appropriate adapt their strategy to respect minimum standards. Advocacy must be oriented towards influential stakeholders for appropriate intervention.

Conclusion: There are as many types of CHW as types of projects. The key messages mostly correspond to harmonization, coherence and sustainability. Evidence based community health and international recommendation should be considered, especially in community case management. PU-AMI teams should be made aware of the topic and guided in their decision making process. Further research is needed to determine the new role of CHW, notably in the innovative approaches and the task shifting.

Key words: Community health system strengthening, Community Health Workers, International Non-Governmental Organization, National Health System, ethical, harmonization, coherence, sustainability, evidence based community health

I. INTRODUCTION

Nowadays ensuring Universal Health Coverage (UHC) in developing countries is one of the most challenging issues. Ensuring that essential health services are available to all who need them, when they need them, and at a cost that is affordable is critical.

Multiple concerns and difficulties are arising in relation to new policies and strategies designed to speed up the process to UHC, especially taking into account the desired achievement of the Millennium Development Goals (MDGs) by 2015. Beyond this deadline, Sustainable Development Goals (SDG) will be set up with new pathways to reach UHC.

In this context, the demand of health services is growing considerably, phenomena which lead to huge challenges in providing quality health care in an efficient manner, particularly in remote and deprived areas. Expansion of public health services require significant investments in infrastructure, human resources and essential medicines and equipment, as well as social protection measures for both rural and urban poor[i]. The required resources are not always available, especially in terms of human resources[ii] in developing countries.

Based on the Global Health Workforce alliance statement, human resources are at the center of public health strategies. Health professionals are often insufficient in numbers to cover all needs; this is why international policies and strategies are currently set up to cover the need of available and competent health staff. Human resources are one of the six building blocks of a health system as defined by the World Health Organization (WHO) and therefore are crucial when considering health system functions.

To strengthen the national health system (NHS), and especially Primary Health Care (PHC) sector though the deepening of the Community Health Workers (CHW) component is seen as one of the most realistic, feasible and pertinent solution to cope with this situation in human resources for health crisis countries[iii]. CHW often represent the first entry point to health care and therefore are required to be part of various national and/or institutional health programs. They can be asked to handle multiple tasks according to context and health strategies, being especially prominent in delivering PHC services at community level.

Overall, scaling up the community based health program, within the public health system is widely accepted as an effective option to accelerate progress towards the MDG health targets and commitment to UHC. Thanks to existing studies, there is global evidence showing that CHW programs can significantly add to the efforts to improve health in the population, particularly in children[iv],[v]. In that view, worldwide initiatives have been launched. Among many, the most predominant ones are the '1 million CHW campaign[vi]' and the 'WHO/UNICEF Integrated Community Case Management (ICCM)' joint statement[vii].

In developing countries, stakeholders such as United Nations (UN) agencies, International Non-Governmental Organization (INGOs) and institutional organizations play a huge role in NHS strengthening and therefore in scaling up community based health program.

INGOs are closely concerned with issues related to CHW's integration in their activities and/or durability of actions undertaken for very practical issues, such as remuneration, supervision and training. Donors and supporting agencies often rely on INGOs to promote these strategies; nevertheless the INGOs should remain critical in order to ensure the wellbeing of the served population. Sometimes, standards and exigencies are different, thus requiring specific attention.

Guidance and recommendations on how to articulate this support to local government, and hence to the local population, are scarce. Existing documentation are mostly oriented towards international recommendations or national policies, but are not specifically aimed to determine how INGOs can best intervene. INGOs mostly do not have internal guidance focusing on community based health. Questions arise towards the role of humanitarian organizations where INGO's intend to support national health initiatives.

Looking at aspecific French INGO, Première Urgence – Aide Médicale Internationale (PU-AMI)[viii] operates in worldwide humanitarian contexts providing health services among wider humanitarian assistance. Beside interests and strategies coming from the Ministry of Health (MoH), PU-AMI has to ensure that its health intervention including a CHW approach is ethically acceptable for the served population and that it respects the international standards and protocols. The MoH policies and directives must be questioned, particularly in NHS strengthening intervention. In relation to funding mechanism and surrounding humanitarian setting, PU-AMI must determine what the essential conditions to be met are when involving CHW in providing health services. If PU-AMI is keen to be involved in community health system strengthening; guidance in improving the program setting for quality insurance is required. For instance, PU-AMI may implement intervention including community case management and would ensure that requirements, such as CHW skills, close monitoring and adequate supervision are fulfilled.

This study intention is to sort out lessons learnt from international initiatives and various strategies, through looking at the health system functions and existing health policy analysis. Experiences from INGOs are explored, with specific attention to those of PU-AMI. A clear positioning intended to the field teams of PU-AMI towards the role of CHW and their participation in strategies, policies and priorities of health systems in their operating areas is expected with recommendations for further intervention formulated.

II. OBJECTIVES

In the context of PU-AMI's humanitarian health intervention, this research project aims to contribute to the decision making process of field teams with a clear positioning of the INGO towards the role of CHW and their participation in strategies, policies and priorities of health systems in their intervention areas. This work answers a need formulated by PU-AMI's technical department regarding its health intervention framework.

Therefore, the research question is: **What are the pre-conditions, the influencing factors, the decision criteria and the possible corrective actions required for the INGO PU-AMI to decide the level of engagement and support in CHW programs with the main goal to provide quality health care to the beneficiary population?**

Principal objective:

- To contribute to the decision making process of field teams with a clear positioning of the INGO PU-AMI towards the role of CHW and their participation in strategies, policies and priorities of health systems in areas of intervention.

Specific objectives:

- To determine the decision criteria and possible corrective actions if engaged in health projects with CHW;
- To identify and analyze the pre-conditions and influencing factors related to CHW approach;
- To develop a supporting document for PU-AMI field teams to better understand and plan PU-AMI's level of investment in terms of time, human resources and financial allocation;
- To analyze multiple experiences and identify lessons learnt from current practices in health programs with respect to the engagement in CHW programs;
- To establish a database with relevant documents available for PU-AMI teams;

III. METHODS

1. Preparatory work

i. Timeframe

This study was initiated in October 2013, with the selection of the topic of interest and the formulation of the hypothesis. From January 2014, the study's methodology was designed and then validated by the academic and professional advisors in March 2014. Data collection was conducted through various mechanisms and the data analysis was launched one month later to end by June 2014. Overall, it took over five months to gather information and analyze data to formulate recommendations and further research needs.

ii. Initial hypothesis

The initial hypothesis was to consider whether INGOs can play a significant role in scaling up community health strategy in developing countries. PU-AMI's clear positioning towards the role of CHW and their participation in strategies, policies and priorities of health systems can be formulated with the main goal of providing quality health cares to the served population.

iii. Definition 'Community Health Worker'

While looking at literature related to CHW, one can see that concepts and frameworks are mixed and their utilization depends mostly on the context. A variety of terminology is used, such as volunteer health workers, community health agents or rural health auxiliaries. For example, the term 'Rural Health Motivators' is used in Swaziland while Kenya refers to 'Village Health Worker' and Uganda uses the term 'Community Resource Person'[ix].

In the context of this study, the terminology of CHW is considered and used. Broader scopes such as the traditional birth attendants or the traditional healers, which correspond to specific health provider categories, are not tackled. Despite multiple definitions of CHW, the following one is referred to: *members of the community they work in; selected by the communities; answerable to the community for their activities; supported by the health system but not necessarily part of its organization; and have shorter training than professional workers*[x].

iv. Identification of stakeholders

The stakeholders considered in this study are: 1) National MoH; 2) National NGOs and INGOs; 3) Institutional organizations; 4) UN agencies; 5) Human health resources, especially the CHW; 6) Community members. This classification refers to the model of stakeholder's analysis as defined by the WHO[xi].

v. Identification of variables

Pre-conditions and influencing factors of interest were highlighted by performing a literature review and consulting key INGO health professionals. Information related to the community health strategy design up to its field implementation was analyzed to identify areas of interest. Concerns were notified at each step with the provision of quality health services being influenced by various pre-conditions. Theses pre-conditions refer to each phase of the project cycle and are categorized by six variables: the recruitment process, the training, the monitoring/supervision, the type/scope of activities, the compensation/remuneration and the recognition by the NHS. These variables are influenced by numerous factors depending on the contexts. In this study, the main influencing factors of interest are: ethical issues, leadership of national MoH and INGO positioning. These factors were highlighted while looking specifically to developing context and its humanitarian surrounding.

2. Data collection

i. Literature review

Research on websites was conducted to gather relevant documentation related to community health strengthening in developing countries. Documents were mostly collected on the PubMed, Lancet and WHO websites. Reliable reports are available as well on platforms, such as the Global Health Workforce Alliance[xii], the Millennium Development Goals (MDGs)[xiii] and 'the 1 million CHW campaign'[xiv]. As well as the review of published literature, documents such as national policies, internal guidelines and procedures from current projects implemented by INGOs were consulted.

To focus on the topic of interest, the main following key words were used: 'CHW', 'Community health workers', 'Evidence based community health', Community health policies', 'Community health strategy', 'Health system strengthening', Community health system strengthening', 'Community case management', 'CHW effectiveness'.

To organize the literature review, two types of documents were referred to: 1) documents related to policies, guidance and strategies, 2) scientific studies, systematic review and meta-analysis. The aim was to analyze multiple experiences and set out lessons learnt. Evidence based practices were highlighted and taken into consideration in this study.

ii. Participatory workshop

A workshop was organized in Paris on the 27th of February 2014 with the participation of 17 key staff members from three main health INGOs: Médecins du Monde (MDM), Action Contre la Faim (ACF) and PU-AMI, including respectively 7, 6 and 4 participants.

The workshop, which lasts one full day, constituted sharing information through various presentations, open discussion and group work. Each INGO was responsible for preparing its own presentations prior to the workshop according to the agenda and expected results. Presentations were made about the general context of CHW intervention and the historical, political and anthropological perspectives of community health strategies. This was completed by two presentations: CHW as part of a health care system and overview of the Mobile Health. In addition, each organization presented experiences related to the six variables in six different contexts. Group works were then organized to identify successes, challenges and opportunities when working with CHW.

The main goal of this workshop was to identify key conditions required for adequate CHW intervention. For instance, the variables of interest defined prior to the workshop were confirmed as relevant. The case studies from various contexts have pointed out huge disparities in intervention schemes. Special attention was paid to CHW status, with debates about the consideration and the link with the NHS. During the workshop, notes were taken and then compiled to produce one single document highlighting key messages. Few recommendations were formulated and integrated into this summary. The workshop was a great opportunity to highlight some issues but was not sufficient to articulate formal recommendations. As further action, this study was expected to provide deeper analysis and hence provide guidance to INGOs. All presentations, the summary and other related documentation were shared among the participants and can be consulted upon request. These documents were referred to for this study and have helped to reflect INGO concerns.

iii. Interviews with key informants

Individual semi structured interviews were conducted with six key informants selected among three INGOs: ACF (3), MDM (1) and PU-AMI (2) (Annex 4). The selection of key informants ensured that national coordinators, regional advisors and senior staff were represented.

A standardized questionnaire (Annex 1) validated by the academic and professional advisors was used for this study. Questions were oriented toward strengths, weaknesses, challenges and opportunities in working with CHW. The interview was limited to 60 minutes and was conducted by the referent of this project either by phone or face to face.

An individual semi structured interview (Annex 2) was also conducted with a representative of the European Commission Humanitarian Office (ECHO) based in New Delhi, India. ECHO is one of the main donors financing PU-AMI's interventions, as well as many other worldwide INGO and UN's projects.

The goal of interviewing key informants was to collect information from experienced staff working in different organizations and different areas. It has helped to determine the main points of vigilance, requirements, limits and recommendations in working with CHW.

iv. Case study – Chad

A visit to the PU-AMI mission in Chad was organized by the referent of this project from the 13th to the 27th of April 2014. The visit was organized after internal validation of the term of references. PU-AMI has been working in Chad since 2004, providing humanitarian assistance through various projects. Since 2012, PU-AMI has extended its intervention to the fight against malnutrition through nutrition and food security projects.

During the visit, information was gathered by meeting key stakeholders from two supporting agencies, three INGOs and the national health authorities. In total, seven meetings were organized with nine key informants (Annex 5). Visits to four health structures were organized, focusing on the nutrition program implemented by PU-AMI. During these visits, individual interviews, using a standardized questionnaire (Annex 3), were conducted with three CHW affiliated to PU-AMI projects. Translation from Chadian Arab to French was required for two interviews out of three and was managed by a member of the PU-AMI team. In complement, one gathering was held with the three technical assistants for the community mobilization in charge of supervising the CHW. Furthermore, meetings were organized with the PU-AMI team in order to exchange information about the ongoing projects.

This visit has helped to get inside PU-AMI's experience, taking into account local constraints, humanitarian setting and internal/external factors.

v. Complementary methods

Information from PU-AMI's projects was collected and helped proceed to more in-depth case studies and comparison in order to illustrate how the CHW approach can vary considerably in different contexts, and thus even within the INGO itself. The referent of this project has participated in various forums to gather wider information on humanitarian intervention.

The scientific committee of PU-AMI has also contributed to this study by performing literature review on selected topics and sharing relevant experiences.

3. Data analysis

The analysis of the qualitative data was performed following 5 steps: 1) Consideration of the main statements found in existing literature, including national health policies; 2) Analysis of the data gathered by the interviews; 3) Incorporation of data collected in Chad; 4) Incorporation of data collected from other PU-AMI and INGO's projects (including information collected from the participatory workshop) ; 5) Comparison between information collected from stakeholders and information found in published literature.

Finally, data was categorized according to variables corresponding to the pre-conditions. The influencing factors were pointed out during the key informants' interviews. A deeper analysis was also oriented towards national policies and INGO positioning.

IV. RESULTS

1. Decision criteria and possible corrective actions related to pre-conditions

i. Recruitment process

Community concept

While looking at the recruitment process, the first difficulty is defining 'Community' and therefore 'Community Health Worker'. Numerous terms are used nowadays and it has become challenging to understand the meaning behind the word. Do we consider a community a group of people living in the same area? Being part of the same ethnic group? Having similar religions? The community is not homogeneous in its needs, expectations and solidarity mechanisms. The social support can be highly valued in some countries while individualism can be predominant in others. For example, social support is said to be weak and poorly structured in Haiti compared to Latin American countries[xv]. Social solidarity, supported by strong network of local NGOs, is reported to be common in Colombia or in Peru.

Despite the lack of consensus around a common definition, three characteristics of a community are widely accepted: 1) A geographical territory which gives health problems and their solution local significance, 2) Individuals or groups with similar living conditions, 3) Individuals who share common values and/or interests[xvi].

Overall, it is essential to keep in mind that any project can generate economic, social and political issues, with possible conflicts and fights in sharing the resources and power. A project calls into question the hierarchical distribution of responsibilities and roles among a community. It is crucial to ponder the motivations and sense of a project for the CHW to understand their behavior and actions. The concept of community has to be understood uniformly in a given context when implementing community projects.

Selection criteria

Depending on the contexts, CHW can simply be selected by community members whereas they may have to go through a formal selection process.

The community program ownership is strengthened when community members are actively participating to CHW selection. Most often the village leaders are the ones who lead this process. In Chad, the CHW, were selected among the community by the chiefs of each village. The only criterion applied was selecting persons well recognized among the community. For instance, no written or reading skills were required. In that situation, conflict of interest and unfair selection can then happen with people selected according to implied considerations. Questions about the neutrality, transparency and equity arise.

When CHW have to go through a more structured selection process, respected and competent persons may be excluded as not fulfilling the selection criteria. Previous CHW may not be considered. Moreover, the persons selected by formal process may fit to the defined criteria but may not be respected by community members. For example, six selection criteria are set up by the MoH in Myanmar: 1) To be over 18 and less than 50 years; 2) To know how to read and write; 3) To have at least 10 years of education; 4) To be interested in health issues; 5) To commit to at least 3 years; 6) To be willing to work for the MoH. Fulfilling these conditions can be challenging, particularly for people living in remote area without access to educational system.

Therefore, a compromise is needed between the requirement of technical skills related to expected tasks and the need of credibility and acceptance among the community, a condition more subjective to evaluate. Organizing recruitment process by involving community members as well as representatives of NHS or implementing partners may help to recruit adequate candidates. The selection process can include two phases: a first one initiated by the community members (open election through polling); a second one finalized by local authorities or implementing partners. This double process may help to select CHW approved by community members and fitting into formal criteria. It may take a longer amount of time but it seems to be an efficient way of tackling the limits of both processes[xvii]. Clear criteria are required for both categories of requirements, with literacy not seen as an excluding criterion. A cross sectional study conducted in Kenya in 2012[xviii], has pointed out that CHW with lower literacy levels can satisfy and enable their clients effectively. Another study stipulates that lay health workers may represent a different and sometimes preferred type of health worker[xix]. Special training materials and methods are then required to adapt to the CHW knowledge and skills. Extra efforts for capacity building, monitoring and supervision are needed too.

Looking at gender balance, the study conducted in Kenya has shown that male CHWs were more likely to keep better records than females, while females were more likely to counsel and enable their clients respectively compared to men. In any case, gender balance should be preserved as both men and women are needed to provide services adapted to the target population and specific to the topics of interest. No clear statement was found in published literature regarding limitations of age, although being over 18 years is often a condition. Other factors are often judged more influent than age to CHW motivation.

Globally, giving power and responsibilities to selected community members has to be carefully assessed to avoid the potential numerous negative outcomes. A consensus between social recognition and technical skills requirement is fundamental to best serve the target population. Valuable community members should be recognized with possible corrective actions for enhancing their technical skills.

ii. Training

When national policy exists, the training process can be specified, with indications about the required curriculum, length of training, topics to tackle or even the compensation to be given to each participant. This is the case in Sierra Leone e.g. where the training process is standardized with training sessions of ten days articulated around six modules and involving not more than thirty CHW per session[xx]. However, implementing partners may adapt the protocol to their own needs. This has been reported in some contexts where national policies are said to be insufficient or not adequately designed[xxi]. For instance, parallel training can be organized on topics related to expected tasks if they are not included in the national policy.

In the absence of national policy, each actor can adapt its training to specific requirements. For instance, if CHW are expected to be in charge of hygiene promotion, then a session on this topic will be organized, thus leading to vertical intervention. In Yemen, PU-AMI only manages a nutrition program. CHW are trained on nutrition (e.g.: detection of malnutrition case) but are not considered for training on other topics (e.g.: tuberculosis, HIV).

In any case, training tools and methodology may not always be adapted to the CHW level which can considerably vary, even within the same project. Standardizing the training process may be difficult if there are no minimum requirements and no harmonization within CHW network. Training sessions are often said to be too classroom based, too theoretical, too complicated and too vertical. The lack of general and skill based training is seen as a barrier to effective CHW performance. An additional concern is the time spent on training which is not spent at community level. Organizing numerous and time consuming sessions can jeopardize conducting activities at community level.

Overall, the priority is to ensure that training is adapted to each participant's level. Training requirements should be directly related to the type and scope of expected activities. Mix methodologies can be used, including classroom and remote teaching methods. Preferably, sessions should be organized at the workplace rather than remote locations. Multiple short training sessions are recommended rather than long lasting ones, with initial sessions complemented by regular refresh and on job trainings. Finally, any training should be rewarded by the provision of certificates, evaluation or social recognition.

iii. Monitoring/supervision

Monitoring and supervision are essential to ensure the adequate provision of services by CHW, particularly as inadequate supervision can lead to high attrition rate[xxii]. Supervision is often said to be weak, mainly due to limited logistic means (e.g.: transportation means), lack of available and competent human resources and lack of time[xxiii]. Supervision can be time consuming, particularly in remote and hard to reach areas.

Technically, guidelines are not always available or when existing they may not be properly designed, understood and applied. In the case of equipment or drugs management by CHW, close monitoring of the use of these means is required. In term of reporting, CHW are expected to produce activities reports, and hence are accountable for their activities. Some CHW may be capable of producing their reports, while it can be more difficult for others. During supervision, interaction between the supervisor and supervisee may be more punitive than supportive, leading to possible demotivation of the CHW. High attrition rate can disrupt the relationship between the CHW and the community, causing lost opportunities to build on experience and increasing the costs in recruiting and training new CHW.

Overall, the CHW should get information about the supervision and its purpose prior to the visit. Guidelines and protocols should be systematically referred to. Supervision should not only be seen as a way to verify what CHW are doing, but as a motivation and teaching method. It represents one of the main opportunities to interact with the CHW. When alone, CHW may feel lonely and deserve greater attention. Communication among the CHW should be stimulated as much as possible for enhancing exchange and team spirit. Peer review and CHW network can be organized as a way to improve the coordination and harmonization. The participation of partners, local authorities and even outsiders (e.g.: donors) should be promoted wherever feasible. Means to perform the supervision should be adequately allocated (e.g.: motorbikes, supervisors, supervision tools).

iv. Type/scope of activities

Task shifting

Task shifting corresponds to the transfer of tasks and responsibilities from highly qualified health workers to health workers with less training and qualifications. This process is done to respond to the health workforce shortage in multiple countries, and promotes the rational distribution of tasks among health workforce teams. For the past decade, CHW have been seen as the means of extending access to health care, particularly for isolated populations. With this perspective, task shifting is an ongoing debate, with concerns about how far responsibilities can be transferred to CHW. Which tasks? What decision making powers? Who shall be accountable to whom? This has to be put in parallel with responsibilities given to formal health workers. It may be the case that CHW have more duties, responsibilities or remuneration than health professionals in health centers; this may disturb the pyramid and hierarchy of a NHS. CHW can decrease the workload of formal health staff, but distinction between the positions is required. For example in Haiti, the national policy stipulates that CHW should receive a fixed salary per month while salaries for national employees working in health structures are not regularly paid. CHW supported by INGOs may receive regular salary compared to nurses that may not be financially compensated for their job. The whole

NHS seems to be partially dysfunctional[xxiv]. Before the latest crisis (earthquake in 2010 followed by a cholera outbreak), this NHS was already weak with limited resources. This precarious situation has considerably intensified with additional burdens to cope with.

Based on global recommendations and guidelines issued by the WHO[xxv], task shifting should be implemented alongside other strategies dedicated to increasing the health force in all sectors. Task shifting corresponds to a national strategy to organize the health workforce and aims to provide sufficient and adequate health services to the served population.

Range of services

CHW can be in charge of preventive as well as promotional or curative services. Beside health related tasks, CHW deal with administrative duties, such as drug management, action plan or fund management (especially in cost recovery system). They also have to participate in meetings and ensure community representation in various forums.

Based on existing studies, CHW actions have been proven effective in the preventive sector[xxvi], especially in education, health promotion and epidemiologic surveillance. They often represent the first entry point in care seeking. They are close to their population; understand their needs and so can clearly play a huge role in improving access to health care. CHW are also primordial for early detection of cases and alert in case of disease outbreak. In an emergency, they can be mobilized quickly, being numerous and covering wide areas.

While looking at the curative component, CHW can be requested to handle case management, medication or patient follow up. In Burkina Faso e.g., CHW treat uncomplicated malaria and filariasis among the entire population, acute respiratory infections, moderate malnutrition and diarrhea in children[xxvii]. Curative services provided in the community apply to several diseases where case management can be effective at community level and drugs are available. The main constraints highlighted in the literature review as well as the interviews with key persons are: recurrent breakdown of drugs supply, quality concerns with supervision schemes, unavailability of volunteers CHW (e.g.: busy with parallel activities) with an irregularity in the provision of services, and lack of sustainability.

In addition, CHW may face high demands from the community to provide curative cares. They may feel limited in their actions if their interventions are restricted to preventive interventions. They may struggle to remain respected and acknowledged by community members. One CHW met in Chad reported frustration in not being able to manage medical cases. He had to refer patients to health structure without being sure of the quality of care provided there. The question of efficiency of the whole health care system is then asked. Indeed, to refer patients to care that is judged inadequately provided in health structures may jeopardize the perception of the CHW by the community.

Overall, local needs and possible gaps should drive the decision making process in terms of task allocation[xxviii]. Although deciding if CHW can be involved in curative or only in preventive and promotional services cannot be generalized, adapted protocols are always required. Each CHW should be given adapted protocols and encouraged to consult them. Alongside the CHW capacities and the health needs, provision of curative cares should be subject to other indicators, such as the training and supervision process, the sustainability of the system or the integration within the NHS. It is acknowledged that the more sustainable the system is and able to provide a long term intervention, more tasks can be shifted to CHW[xxix].

Integrated Community Case Management

While defining which curative tasks to transfer to CHW, Integrated Community Case Management (ICCM)[xxx] should be referred to. This WHO/UNICEF joint statement calls for the scaling up of community approaches. It presents the latest evidence for ICCM of childhood illness, describes the program elements and support tools needed to do this, and lays out actions that countries and partners can take to support the scale up of ICCM. Moreover, the 'count down to 2015'[xxxi] report stipulates that a minimum package of services contributes to the achievement of MDG 4, 5 and 6. Twenty six key interventions for neonatal, infant and maternal health in 68 countries are listed to tackle 90% of mother and child deaths. For example, treatment of acute respiratory infections, malaria, tuberculosis or Vitamin A supplementation are effective in reducing infant and maternal mortality. Although the whole population is the beneficiary of these approaches, the specific mother-child group is often the prime target for interventions.

Vertical versus Horizontal approach

Community projects articulated around one specific topic are considered vertical. They are disease oriented and correspond to common ways stakeholders work in many developing countries. Horizontal approach includes support for various sectors and benefits the whole health system. For instance, it is recommended that health system strengthening intervention remains horizontal to prevent certain sectors from being under developed compared to others. Duplication of services and costs, uncovered needs, and diversification of scarce resources (e.g.: human, financial, logistic) are among the problems most often noted in the vertical approach. It undermines priorities and diverts funds from the general health services. In that context, CHW may be requested to participate in vertical programs, such as nutrition, malaria or HIV, and concentrate all their efforts on specific objectives. When different programs with different CHW are implemented in the same location, misunderstanding among the community, frustration among the CHW (particularly if status differs) or unsatisfactory coverage can result.

Overall, horizontal approaches seem preferable to vertical ones. Harmonization and coordination are highly recommended with specific attention to coverage and efficiency. A Package of services should be defined to promote integrated provision of health services.

Coverage

The intervention area per CHW can be determined by the number of villages or the number of households to cover. This repartition is often led by geographical constraints, available resources and other variables (e.g.: security context, coverage of the NHS). Inequalities in terms of geographical access to CHW services are noted in some context, as in Burkina Faso[xxxii]. In some districts, less than half of the population may benefit from CHW services compared to other districts where the coverage may be higher. The distance from the villages and the health centers was highlighted as a factor of unequal distribution. This results from the accessibility of other services and the need for higher concentration in specific deprived areas.

In view of satisfactory coverage, the distribution of CHW depending on the number of households to cover seems more appropriate. The 1 Million CHW campaign recommends a ratio of one CHW to 150 households, which can correspond to around 650 inhabitants.

v. Compensation/remuneration

In-kind payment and monetary/non-monetary incentives

No clear international statement is available regarding compensation/remuneration for the CHW. The need to scale up CHW approach is well stipulated in the ICCM policy, but does not provide a clear positioning regarding remuneration. Supporting agencies such as ECHO or USAID do not apply a common strategy for the interventions they finance. They mainly follow national recommendations where available or propositions made by supported agencies. To start from the preexisting conditions, as there is almost always some active CHW in a country, and to build on the project from this starting point was recommended by one ECHO representative in Chad[xxxiii].

At national level, when community health policy exists, compensation/remuneration can be specified. In Myanmar e.g., despite huge workload and high selection criteria, CHW are volunteers and perceive only perdiem when attending training. Compensation/remuneration schemes may not be specified, thus leading each agency to apply its own strategy.

Despite the lack of clear positioning stipulated by international or national stakeholders, there are authors recommending fully paid CHW. For instance, the 1 million CHW campaign promotes the scaling up of paid CHW[xxxiv]. Remuneration is seen as a way to ensure the provision of services of quality and to enhance sustainability.

As recommendation, the compensation/remuneration should be adapted to the workload of the CHW and its performances. The CHW deserve some compensation which can correspond to in-kind payment and monetary/non-monetary incentives. For instance, food rations, cooking utensils or agricultural tools can be considered for donation. Identification cards, certificates and diplomas can be provided too. When salaries are given, they should be adjusted to those received by the national health staff. Pay for performances system is preferable, as it values the work done and stimulates motivation. Furthermore, monetary incentives can take various forms beside regular monthly salaries: stipend, meals allowance, or even perdiem for training. In some situations, preferential treatment (e.g.: access to credit programs, literacy class) were introduced but have shown limitations. Most often, this special treatment is not well perceived by the community members. Sustainability of compensation mechanisms should be considered from the outset of any project. A cost recovery system or financial sources diversity could be ways to sustainability. Dependency on national authorities or supporting agencies should be carefully assessed and limited by intermediary actions, such as CHW association or local management committee. Funds can come from national government, INGOs, UN agencies, institutional organizations, income generative activities or even from the population.

Minimum standards

Ethical issues arise while considering the compensation/remuneration schemes. Looking at Afghanistan context, married couples work together. They are volunteers, not remunerated but have a wide scope of activities to handle. Yet, time for household duties and parallel income generative activities may lack, with potential negative consequences for the family (e.g.: no time to take care of their children). In Chad, one of the three CHW interviewed is a farmer and works in his fields according to agricultural calendar beside his CHW tasks whenever possible to increase his income.

Moreover, resources are required for the CHW to perform their duties. In community case management, CHW need regular drugs or medical supplies. To cover the assigned area, transportation means are often needed, such as a bike or transportation allowance.

As the amount of duties may not allow CHW to have any parallel income generative activities, compensation/remuneration should be provided to ensure that CHW meet the minimum living standards. Means should always be sufficiently and regularly provided to avoid disruption in providing services or demotivation from the CHW. This includes transportation means and basic equipment such as backpacks, stationeries or weather protection (e.g.: rain coat). A particular attention is required for medical items for community case management.

vi. Recognition by the NHS

Link with health care facilities

Depending on the intervention scheme, a link between the CHW and health care facilities may not always be in place. This may happen in vertical interventions where CHW are assigned to tasks unrelated to the services provided in the health structure. It may also be the case when health actors intervene without link with the NHS or when CHW are not recognized by national health authorities. Although most often, CHW are attached to a health structure providing PHC, such as a health post, health center or community center. They may also have a link with secondary or tertiary health structures for the referral of complicated cases. As well as community activities, CHW can contribute to activities at health structure level. In Chad e.g., CHW attend a session for managing malnourished cases at the health center/health post with PU-AMI staff once a week. The CHW are not employed but are affiliated with PU-AMI through monthly financial compensation, and do not have a direct link with the NHS. CHW in direct connection with the local health authorities are present in the same area. Their activities relate to the PHC delivered at the health center/health post. They do not receive financial compensation, but get a monthly food ration provided by the World Food Program (WFP).

Another example from Sierra Leone: each CHW is engaged with the nearest health facility, with the District Health Monitoring Team managing the database of the CHW in the district. CHW are monitored by those in charge of the nearest health facility once per month. Trained peer supervisors selected from existing trained CHW supervise CHW and report to local supervisors. Zonal supervisors also provide additional supportive supervision to CHW and their local supervisors. Supervisors visit CHW in the community at least quarterly.

This type of organization is frequent. Thanks to evidence from systematic reviews that point out the importance of the link between formal health systems and CHW in promoting and sustaining positive potential from community based health programs[xxxv],[xxxvi]. Worldwide recommendations go to the recognition of the CHW as part of the whole NHS. Link between the health facilities and the CHW should be strengthened wherever possible.

Workers versus Volunteers

To differentiate workers and volunteers as well as the line between a real job and voluntary position is challenging. The time spent on the field, the scope of activities, the type of remuneration or even the selection process among many other criteria could play a role in determining the status. While visiting Chad, a representative of the MoH recognized that voluntary work has limits which must be carefully assessed, particularly when CHW tasks are numerous. Ethical concerns appear too when asking deprived population to serve their communities without meeting their own minimum living standards and without receiving any

compensation for their contribution. The CHW may not have any other choice but to be engaged, taking this opportunity as the only chance to get a place within the society. Based on individual interviews, the CHW affiliated with PU-AMI in Chad are engaged for the benefit of their population despite the low financial compensation and the commitment which can be time consuming. One out of the three CHW met used to work for the Chadian Red Cross for many years. Another used to work for a number of INGOs, such as MSF, IRC or Save the Children. Both have lost their job, and so decided to remain active for their population. Some reported that they noticed the benefit of the project among community members and so are proud to be part of it ('less sick children in the villages'). Having no official job, the CHW seem to find some self-confidence and social recognition in their position.

Alongside these considerations, the notion of accountability is essential too as CHW have to report their activities to the MoH or other stakeholders. According to their status, how far can CHW be judged and responsible for their actions? They are also accountable to the community itself. Sometimes, their relationship with the community can be jeopardized if volunteers become workers. CHW are expected to be close to the population, and a distance may appear if they are fully integrated to the NHS[xxxvii]. This distance often results when CHW do not act appropriately. The social position and the powers that come with may induce inadequate behavior. Unclear selection may also result in a lack of respect from the community.

Overall, it is recommended to integrate CHW within the NHS independent of their legal status. CHW can be volunteers or workers, but always deserve recognition as key players in the NHS. Their commitment and motivation should be adequately valued in order to enhance CHW retention and community health program sustainability.

2. Decision criteria and possible corrective actions related to influencing factors

i. Ethical issues

Safety of CHW

Even if CHW are often considered as members of the population and vulnerable at first, their safety can be jeopardized by their actions. People who may have been influent well before being CHW may then face additional burdens related to their front line position.

Among many risks, gender based violence and social stigmatization may occur. For example, CHW women promoting family planning may be targeted by opposition groups in some countries. Looking at HIV projects, CHW can be isolated and stigmatized by community members. Beneficiaries can also be stigmatized, particularly when home visits are performed. In Colombia, being CHW may put your life at risk, particularly where armed

groups are present[xxxviii]. In Afghanistan and Pakistan, it has been reported that some CHWs have resigned due to fear of possible retaliations[xxxix]. The poliomyelitis vaccination campaign recently conducted in Pakistan has shown how CHW can be at risk in conducting health activities. This is a very sensitive issue, with a mix of governmental and military purposes.

Safety concerns are worldwide; the responsibilities of implementing stakeholders in a given context are then engaged. Security assessment and mitigation should be ensured for any type of project in any country. The agencies 'Human Rights Watch' and the 'Safeguarding Health in Conflict Coalition' published a report in 2013 showing up how healthcare professionals can be at risk[xl]. Attacks, interferences or threats based on ethnic, religious, national, political or military affiliation or other non-medical considerations are addressed.

Quality of services

Studies on the effectiveness of community approach are regularly conducted but often do not include a component on patient satisfaction. They focus mainly on cost-effectiveness, including financial considerations and activity outputs, but little information is collected on the relationship between the served population and the CHWs.

Based on information from key informants interviewed in this study, quality of services is debatable. Some argue that training, monitoring and supervision are keys to quality while others remain sceptic about CHW capacities to deliver appropriate services independent from provided support. Despite the numerous evidences available on community health, the question remains controversial among stakeholders.

One can ask if it is appropriate to judge the quality of the CHW as most often they are illiterate, not remunerated and not recognized by the NHS. Based on findings from a study conducted in Burkina Faso, slow progress in changing behaviors was observed as linking to a lack of service quality. With often erroneous messages transmitted to people and the lack of visual media during lectures, awareness remains weak and affects the use of health services especially by women.[xli] Also, the diversity of activities carried out raises a question about the quality of their execution. In relation to the low education level or literacy of CHW, the mastery of knowledge necessary for the implementation of such services is not obvious. Beyond the skills of CHW is also the burden of having to complete a large amount of activities. The availability and presence that may be required sometimes creates a risk of neglect or defaulting.

Hence, the quality of services provided by the CHW should be regularly assessed, notably by performing patient satisfaction study. The quality, coverage and availability of services should always be ensured by sufficient provision in the means to carry out the duties, rational allocation of tasks and close monitoring and support at community level.

ii. National policies and MoH leadership

Community health policies are often framed in developing countries thanks to supporting agencies and to the growing MoH leadership. Community approach is often incorporated into national health policy, such as the Basic Package of Health Services (BPHS) or the Extended Package of Health Services (EPHS).

However, national policies are not always available (e.g. Chad). In that situation, actions should be harmonized among actors and should reflect and respond to population needs. International recommendations and evidence based community health should be taken into consideration. In order to strengthen NHS, local health authorities should always be involved. INGOs can initiate debates when esteemed necessary, but should keep in mind the need to support national authorities. Local NGOs should be considered too, such as in Latin America where their influence is said to be important.

When available, the main recommendation is to take into consideration the national community health policy. Sustainability may be enhanced when national framework surrounds the community approach. Nevertheless, the relevance, coherence and feasibility of these strategies may be questionable in some contexts. By the diverse examples in this study, limits of national policies have been highlighted. The national policies may be hard to implement in the field, with huge differences identified between design and implementation. The example of Haiti proves that NHS has to be strong enough to be coherent in its approaches. At the time of the interview, MDM was analyzing the relevance of being involved in CHW projects in Haiti. Considerations focus on the feasibilities of implementing such an approach, while the NHS is partially dysfunctional. Even if community health policies are available, adjustment may be required to cover the difference between the policy design and its implementation. INGOs may gain flexibility particularly in terms of project implementation on the ground. In Afghanistan e.g., there is no space to adapt the community health policy, which is part of the BPHS and EPHS strategies. PU-AMI has reported having little room for flexibility (e.g.: recruitment). Each partner has to implement the national policy as defined or cannot be an implementing partner. Budgets are allocated to INGOs through the MoH based on the compliance. Nevertheless, PU-AMI may adapt the policy for supervision or remuneration (which is not stipulated in the national guideline). For instance, community health supervisors are not numerous enough to cover all CHW. On job training and formal training must then be increased to strengthen the CHW capacities and autonomy.

In any case, INGOs should dedicate some effort to the advocacy of MoH and relevant stakeholders. This is particularly feasible for well recognized INGOs with good reputation and influence. INGOs should share experiences and valuable knowledge notably at the policy design stage. While implementing the policies, feedback should be provided for national authorities for further readjustment. This has been the case in Myanmar where the

Community Based Health Program (CBHP) network has submitted some recommendations to the World Bank, development partners and national authorities[xlii] in April 2014. The main objective was to call for a scale up of community based health programs, within the wider public health system, as an effective policy option to accelerate progress towards the Myanmar's MDG health targets and the commitment to UHC.

This demonstrates how stakeholders are willing to improve their strategy mechanisms by coordinating their actions. Cluster system[xliii], as part of the humanitarian reform, represents a platform that cannot be neglected in order to coordinate and harmonize actions. Other platforms, such as task force, sub-working group or technical forum, are places where advocacy role can be played. It must be noted that INGOs are less influent in policy making than UN agencies or institutional donors. Therefore their commitment is strongly required to improve community health intervention.

iii. INGO positioning

INGO have to define their positioning with the CHW intervention according to their mandate and internal policy. However, INGO often face external and internal constraints limiting their decision making power. The most frequent limits reported by the key staff interviewed are presented below. Strengths and opportunities are pointed out, with possible actions to improve the impact of humanitarian intervention.

Financial relationship with supporting agencies

In financing humanitarian action, budgets submitted to donors are often cut, with possible negative impact on the means that can be allocated to the community approach. Agencies with sufficient private funding may cope with this financial restriction by allocating additional funds when required. Unfortunately, few INGOs can deploy private funds when needed, and are dependent on supporting agencies.

To cope with this financial dependency, advocacy is essential. INGOs are key implementing partners for local authorities and supporting agencies. Hence, advocacy toward stakeholders is well perceived and can lead to positive changes. INGOs can raise their voice to ensure that sufficient funds are provided in regards to the minimum standards. INGOs benefit from technical recognition that can be used to argue on their recommendations.

Funds can also be solicited from various sources outside 'traditional' donors. If funds are restricted, intervention pattern should focus on the priority issues. Expected outcomes should be considered according to needs and feasibility. If no consensus is reached for an acceptable ratio inputs/outputs, then INGOs should limit their commitment. Activities should be transferred to partners with the capacities whenever possible. Advocacy for tackling the uncovered needs should be continued until an acceptable solution is reached.

Effectiveness and relevance of humanitarian intervention

Schemes of intervention can vary considerably if INGOs focus on emergency, post crisis or development contexts. It is often considered that building a community network is not the priority in an emergency context, where substitution is often preferred. In post crisis or development contexts, efforts to strengthen community networks are enhanced. This ascertainment is similar to that looked at in the health system strengthening program. It must be noted that debates surrounding the distinction between emergency, post crisis and development interventions are recurrent in humanitarian setting.

In any case and in any context, national policies should always be considered. To align its intervention with national directives seem to be the most effective and coherent way. When inconsistencies are noted in national strategy, and only in this case, protocols can be adapted to respond to actual needs. Alongside, advocacy towards official readjustment of the strategy is essential. As lesson learnt, actions should be fully based on local needs. Time is required to assess the situation and define the best way to intervene. Rigorous assessment methodologies exist and should be used as much as possible. Being on the field providing direct assistance, INGOs are often seen as the players closest to the community and hence are well positioned to highlight local needs and define a well-adapted response.

Coordination between humanitarian actors

In most contexts, coordination mechanisms exist but are not specifically aimed at tackling issues related to CHW. Coordination is influenced by several factors such as the multiplicity of partners, the diversity of strategies and the different motivational systems of CHW. Competition between humanitarian actors is said to have risen over the past few years. This can be seen partially as a consequence of new funding mechanism related to the humanitarian reform and the scarce provision of funds dedicated to humanitarian assistance. These factors lead to different intervention schemes, varying from one region to another or from one district to another. Hence, disparities among intervention mechanisms of various INGOs have been noted. Disparities were even highlighted within the INGOs and NHS. An example of two CHW systems implemented in Madagascar[xliv]: One CHW network is fully dedicated to the health program and another is dedicated to the nutrition program. The CHW related to the health program are paid while the ones related to the nutrition program are volunteers. To solve this issue, discussion between implementing partners and leading stakeholders are ongoing[xlv]. This type of dissociation can lead to numerous negative outcomes, such as frustration, demotivation and high attrition rate among CHW, unmet needs, confusion among the community and competition between humanitarian actors

Hence, without clear coordination schemes, the coherence and effectiveness of community health intervention may be jeopardized. Each INGO may defend its own interest, losing its

first goal: to benefit the targeted population. Remaining cautious on acting in a joint and coordinated manner is essential. Harmonizing intervention strategies and mechanisms, with special attention to pre-conditions and influencing factors, is crucial to provide adapted assistance to the target population. Seven principles determined by the INGO World Vision and the Core Group[xlvi] provide guidance for NGOs and their partners for a coordinated national scale-up of CHW programs. This network has submitted seven recommendations which should be followed while intervening through CHW at community level (Annex 6). Yet, existing coordination body should be enhanced. Cluster coordination mechanisms as well as regional coordination platforms constitute great opportunities to share experiences and harmonize intervention pathways. The Consolidated Appeal Process (CAP) lead by the UN agency 'Office Coordination for Humanitarian Affairs (OCHA)' enhances mapping of humanitarian action to avoid gaps or duplications. Multiple mechanisms and platforms are in place in the humanitarian field and aim for harmonization, coordination and collaboration. Remaining active in these settings is a way of ensuring that community health strengthening strategy is well-adapted.

Sustainability

INGOs most often implement projects on a short or middle term basis and so often have a restricted budget and limited vision of health intervention and their outcomes. INGOs are also sometimes criticized for their vertical approach, focusing on a specific problematic.

Nowadays, the health system strengthening strategy is the most recommended to enhance global considerations of NHS priorities. Advocacy for long term intervention and financing should be directed at donors. Long term perspectives and a horizontal approach should be considered, with at the very least an exit strategy and handover of responsibilities in place. Partnership with local actors or public to private partnership (PPP) can be considered in some contexts. Other options, such as CHW association, local management committees or cost recovery system could be explored.

3. Key messages

The growing tendency to intervene in the health sector through CHW, and thus especially in developing countries, has posed many concerns as described by this study. The key messages discerned by this study correspond mostly to harmonization, coherence and sustainability. Any action can lead to a negative outcome that may be prevented. In this view, a list of key messages is presented in the annex 7. This list will be completed by a check list intended to guide PU-AMI field teams.

V. DISCUSSION

This study has permitted to complement and synthetize existing literature regarding CHW intervention and their link to community health strengthening strategy. Numerous published studies and reviews are available on line. However, few indications are provided towards the INGO positioning and its role in NHS strengthening. Most studies analyze implemented national community health policies but do not tackle specifically to the humanitarian setting and its stakeholders. The review of current INGOs practices, with special attention to external and internal factors, gave additional insight to this study.

Strong in worldwide intervention, INGOs are recognized as key implementing actors in improving access to health. They benefit from influence and recognition which can be oriented towards advocacy for better effectiveness. Lessons learnt could be pointed out in this study. Most of the information collected from interviewed stakeholders was coherent with available documentation. Pre-conditions and influencing factors highlighted by this study refer to variables which are often comprised in CHW studies. The main information gap is in patient satisfaction, with little information on the relationship between CHW and the served population. Higher attention should be paid to monitor and evaluate this relationship through regular supervision and patient's satisfaction assessment. At first, only preconditions and factors related to project cycle management were considered. While going through this analysis, the ethical concerns appeared to be of high interest. Ethical issues are correlated to any step of community health program, starting from the recruitment process up to CHW integration in the NHS. With regards to preconditions and even when generalization is not feasible; a bottom line can be highlighted, with minimum standards set out. Moreover, evidence based community health should be considered, especially in community case management. To identify the best practices, the specificities of each context should always be acknowledged.

Despite existing evidence based community health, the most controversial issue related to the resources dedicated to the community approach compared to overall NHS strengthening. Critics noted the rationalization of community project funding. Funds to support the whole NHS are not sufficient to cover all needs. For instance, funds dedicated to CHW could be used to support the PHC provision in health structures as well as to purchase equipment, drugs or pay salaries. As shown in this study, the community health approach can be efficient only if the whole NHS is structured. The NHS strength is essential to support an adequate and effective community health strategy, with functional referral system and a link between the community and health structure. Regular and adequate resources must be available at both levels for coherency. Therefore a well-balanced allocation of resources according to available means and the needs to cover is essential.

Overall, after taking into consideration all elements pointed out in this study, recommendations from three main guidelines should be considered: 1) The 7 guiding principles determined by the Core Group and World Vision; 2) The ICCM guideline and latest recommendations about case management; 3) The 1 million CHW campaign report providing a clear direction for policy makers on the design and management of CHW programs.

In this process, INGOs need to formalize their actions and measure their impact. The target population's interest should be at the heart of any intervention. The most supportive circumstances seem to be: 1) Willingness from government (means and resources); 2) CHW framework (e.g.: training; remuneration). INGOs are accountable to the population they are working for and the one they are working with. INGOs, by their mandates and status, hold a position which can allow them to lead advocacy and to help make the voices of the beneficiaries heard. By consequence, the initial hypothesis is considered valid. INGOs can play a significant role in scaling up community approach in developing countries. Looking more specifically at PU-AMI, the INGO has shown willingness and motivation to enhance its community health intervention. Respecting minimum standards as determined in this study could help in adjusting to the main goal to provide the most appropriate assistance to the served population. The pre-conditions, the influencing factors, the decision criteria and the possible corrective actions required are formulated for PU-AMI to support and engage in CHW program. A clear positioning of PU-AMI towards the role of CHW and their participation in strategies, policies and priorities of health systems is formulated with the main goal to provide quality care in its intervention area. This positioning will be included in the PU-AMI health intervention framework. Briefings on the community approach will be conducted for newly recruited health professionals in charge of health programs. Community sensitive projects will be enhanced with attention paid to CHW approach. A database with relevant documents is available for PU-AMI teams who are encouraged to consult them. This study will be shared among field teams to provide guidance and support in decision making. This study will also be shared with INGO partners, including those which have participated in the process. Finally, a check list will be produced to reflect the main key points related to CHW intervention. This tool will be intended to provide support to PU-AMI field teams involved in community health programs.

VI. LIMITATIONS

Inclusion of key informants

Including additional stakeholders could have broadened the perspective, but was not feasible in the permitted time. National health policies were consulted and used to reflect the NHS position. Guidelines and policies from donors and UN agencies were also consulted. The existing literature has helped to provide information on community perspectives.

Scope of the analysis

Additional time was required to perform deeper analysis. Aspects related to CHW are wide and are not exhaustively included in this study. For instance, drug resistance related to ICCM, the impact of the health reforms or the innovative approaches could not be tackled.

VII. CONCLUSION

The effectiveness of CHW intervention has been well acknowledged by various studies[xlvii], especially for increasing health care access, for reinforcing the continuum of cares and for strengthening the link between the community and NHS. Yet, numerous governments make CHWs a cornerstone of their community health strategy. Looking at the worldwide community health initiatives, there are as many types of CHW as types of projects. Despite that generalization is unrealistic, systematic and standardized questioning towards all pre-conditions and influencing factors can be performed in community health strengthening intervention. Concerns related to CHW approach are often similar, although the way to respond may differ according to each context.

As main recommendation, the key messages mostly correspond to harmonization, coherence and sustainability. Evidence based community health should be considered, especially in community case management. International recommendations and guidelines should be referred to. The tendency shows an evolution towards professionalism and recognition of the CHW within the NHS. Debates around task shifting are good examples, with frameworks required for appropriate implementation. As often recommended in existing studies, CHW should be part of the NHS. INGOs are present in most developing countries providing valuable assistance to deprived population. Their actions in supporting NHS aim to sustain the existing system. This goes along with the growing MoH leadership, with national agencies becoming more and more predominant in the humanitarian setting. INGOs should fully engage in this process by supporting local efforts in scaling up community health strategy. The growing leadership of MoH should be seen as an opportunity to work hand in hand for better effectiveness. In this context, PU-AMI teams should be made aware of the topic and guided in their decision making process. They are responsible in ensuring the correct application of recommendations and therefore in promoting satisfactory provision of quality services in collaboration with local health authorities at ground level.

Finally further research to build on evidence is crucial to drive a decision making process on the interventions proven effective. Research is needed to better determine the new role of CHW, notably in the new innovative approaches and the task shifting process.

VIII. ANNEXES

1. Annex 1: Key informants interview – INGO representatives

RESEARCH STUDY – KEY INFORMANTS INTERVIEW

INGO Representatives

Health community strengthening:
The role of Community Health Workers in relation with International Non-Governmental Organizations and national health systems

Location: **Paris** **Date:**

Interviewer:

- **Name, Surname:** TONON Brigitte
- **Agency:** Première Urgence - Aide Médicale Internationale (PU-AMI), 2, rue Auguste Thomas, 92600 Asnières-sur-Seine, France
- **Position:** Medical referent
- **Contacts:** + 33 (0)1 55 66 99 66 - btonon@pu-ami.org

Interviewee:

- **Name, Surname:**
- **Agency:**
- **Position:**
- **Contacts:**

Notes:

- *The interviewee agrees that the information provided will serve and be published for research purposes (EHESP).*
- *All data will be treated confidentially and none of the content will be linked to the identity of the interviewee.*
- *The participation of the interviewee will be mentioned in the annex with reference to the position of the interviewee only (e.g. Interviewee A – project officer of XYZ organisation).*
- *This face to face interview should not last more than 60 minutes.*
- *The term Community Health Worker (CHW) is used as a generic term including all persons working at community level and designated by various terms such as volunteers, motivators or helpers.*
- *As many examples and illustrations as possible will be gathered a better understanding and analysis of the information transmitted.*

Part 1: Key informant's information

1. Please briefly explain what your position and your responsibilities are within your organization

2. Please indicate if you are in charge of projects involving CHW in your work. If yes, please briefly describe the context and types of projects

Part 2: National Ministries of Health (MoH) – Role and leadership in the CHW approach

3. In your intervention areas, are there any coordination mechanism/task force/work groups lead by the MoH or any influent stakeholders (such as WHO or UNICEF) focusing on the CHW approach in community based program? please describe your answer

4. In health system strengthening interventions where INGOs intend to support national health initiatives, CHW policy may not always be adequately designed. Please explain how you can cope with this situation focusing on the most important influencing factors/criteria.

5. In your current interventions, do you think that your organization has enough space and flexibility to improve the CHW approach in terms of national policy definition and program implementation? If yes, please describe the means and scope; if no, please provide a few explanations

Part 3: Donor/Supporting agencies - Role and influence in the CHW approach

6. Looking at the funding mechanisms in humanitarian context, did you ever feel pressure from international donors or other actors to implement a community based program involving CHW despite an unsuitable setting? If yes, please describe the situation; if no, please provide a few explanations

7. Considering community based programs involving CHW, did you ever face difficulties in adjusting a donor strategy of intervention in respect to national policy? If yes, please describe how you coped with this situation.

Part 4: NGO – Role and positionin theCHW approach

8. Based on your own experience, did you ever get involved in projects involving CHW without being convinced of its relevance and adequacy? Please describe your answer

9. Do you have any experiences to share about a situation where your organization decided against engaging in an intervention involving CHW? If yes, please describe why this decision was taken and provide information on the general context.

10. Based on your own experience, do you think CHW were at times put at risk by your organization's actions? Risks can be related to safety (CHW as well as beneficiary), psychosocial and/or gender issues etc.

11. In your current activities connected to health and nutrition projects with CHW, please list 3 of the main constraints
    - ✓ Linked to your organization
    - ✓ Linked to the national policy in place
    - ✓ Linked to coordination with partners

12. In your current activities connected to health and nutrition projects with CHW, please list 3 main positive points
    - ✓ Linked to your organization
    - ✓ Linked to the national policy in place
    - ✓ Linked to coordination with partners

13. Have you discovered any differences between different regions of the world and the type of projects involving CHW that were perhaps more successful in one region than another?

14. Within your organization, is there any positioning paper, guidelines or recommendations which intend to provide some guidance on CHW approach?

    a. If no, do you think that these types of document could be helpful?
    b. If yes: please describe the main content of these documents

15. Do you have any additional information that you would like to share?

2. Annex 2: Key informants interview – Institutional donor (ECHO)

RESEARCH STUDY – KEY INFORMANTS INTERVIEW

Institutional donor - ECHO

Health community strengthening:
The role of Community Health Workers in relation with International Non-Governmental Organizations and national health systems

Location: **Paris** **Date:**

Interviewer:

- **Name, Surname:** TONON Brigitte
- **Agency:** Première Urgence - Aide Médicale Internationale (PU-AMI), 2, rue Auguste Thomas, 92600 Asnières-sur-Seine, France
- **Position:** Medical referent
- **Contacts:** + 33 (0)1 55 66 99 66 - btonon@pu-ami.org

Interviewee:

- **Name, Surname:**
- **Agency:**
- **Position:**
- **Contacts:**

Notes:

- *The interviewee agrees that the information provided will serve and be published for research purposes (EHESP).*
- *All data will be treated confidentially and none of the content will be linked to the identity of the interviewee.*
- *The participation of the interviewee will be mentioned in the annex with reference to the position of the interviewee only (e.g. Interviewee A – project officer of XYZ organisation).*
- *This face to face interview should not last more than 60 minutes.*
- *The term Community Health Worker (CHW) is used as a generic term including all persons working at community level and designated by various terms such as volunteers, motivators or helpers.*
- *As many examples and illustrations as possible will be gathered for a better understanding and analysis of the information transmitted.*

Part 1: Key informant's information

1. Please briefly explain what your position and your responsibilities are within your organization

2. Please indicate if you are in charge of projects involving CHW in your work. If yes, please briefly describe the context and types of projects

Part 2: Donor/supporting agency strategy & policy: ECHO

3. Within the organization ECHO, is there a intervention policy which focuses on the CHW approach in the community based program? please describe your answer

4. Within the organization ECHO, is there a department specially dedicated to community approach? And particularly regarding CHW? If yes, please describe

5. In various contexts of ECHO intervention, what is your position to national community health policies?

6. Looking at funding mechanisms in a humanitarian context, did you ever find it difficult to finance a strategy set up according to national policies?

7. Based on your own experience, do you think that CHW are sometimes put at risk by the intervention? Risks (for CHW as well as beneficiary) can be related to safety, psychosocial and/or gender issues etc.

8. Do you have any positive experiences to share on projects involving CHW?

9. Do you have any negative experiences to share on projects involving CHW?

10. Have you discovered any differences between different regions of the world and the type of projects involving CHW that were perhaps more successful in one region that another?

11. In your opinion, what are the 3 major elements to consider while working with CHW?

12. Do you have any additional information that you would like to share?

3. Annex 3: Key informants interview – Community Health Worker

RESEARCH STUDY – KEY INFORMANTS INTERVIEW

Community Health Worker

Health community strengthening:
The role of Community Health Workers in relation with International Non-Governmental Organizations and national health systems

Location: **Tchad** **Date:**

Interviewer:

- **Name, Surname:** TONON Brigitte
- **Agency:** Première Urgence - Aide Médicale Internationale (PU-AMI), 2, rue Auguste Thomas, 92600 Asnières-sur-Seine, France
- **Position:** Medical referent
- **Contacts:** + 33 (0)1 55 66 99 66 - btonon@pu-ami.org

Interviewee:

- **Name, Surname:**
- **Agency:**
- **Position:**
- **Contacts:**

Notes:

- *The interviewee agrees that the information provided will serve and be published for research purposes (EHESP).*
- *All data will be treated confidentially and none of the content will be linked to the identity of the interviewee.*
- *Participation in the interviewee will be mentioned in the annex with reference to the position of the interviewee only (e.g. Interviewee A – project officer of XYZ organization).*
- *This face to face interview should not last more than 60 minutes.*
- *The term Community Health Worker (CHW) is used as a generic term including all persons working at community level and designated by various terms such as volunteers, motivators or helpers.*
- *As many Examples and illustrations as possible will be gathered for a better understanding and analysis of the information transmitted.*

Part 1: CHW's information

1. Please briefly explain what your activities are regarding to current projects

2. Please indicate how you were selected to become a CHW. Describe your curriculum before becoming CHW

3. Please indicate any additional activities beside the function of CHW

Part 2: Working conditions of CHW

4. Looking at your role as a CHW, do you think that your remuneration and recognition of your work is satisfactory? If no, please explain possible suitable conditions

5. Looking at your role as a CHW, do you think that the training, support and supervision is satisfactory? If no, please explain possible suitable conditions

6. Looking at your current activities, what are the 3 main difficulties you face: 1) in connection to your organization ; 2) In connection to the local authorities

7. Looking at your current activities, what are 3 main positive aspects you can highlight: 1) in connection to your organization ; 2) In connection to the local authorities ; 3) In connection to the CHW

8. Do you have any additional information that you would like to share?

4. Annex 4: List of key informants interviewed

Interview	Position	Agency
A	Medical advisor (Asian Pool, Head quarter (HQ), Bangkok office)	PU-AMI
B	Medical coordinator (Afghanistan mission)	PU-AMI
C	Medical and nutrition advisor (HQ, Paris)	ACF
D	Senior medical and nutrition advisor (HQ, Paris)	ACF
E	Health and nutrition coordinator (Chad mission)	ACF
F	Medical advisor (Latin America/Caribbean/North Africa, HQ Paris)	MDM
G	Regional medical coordinator (Asian Pool, New Delhi office)	ECHO

5. Annex 5: Case study: list of interviewees, Chad

Interview	Position	Agency
A	Technical assistant	ECHO
B	General director (Chadian Ministry of Health)	CNNTA
C	Technical assistant	UNICEF
D – E – F	Technical assistants for community mobilization	PU-AMI
G – H - I	Community Health Workers	PU-AMI
J – K	Head of mission - Health coordinator	MSF
L - M	Medical doctors	IRC

6. Annex 6: CHW principles of practices, CORE Group and World Vision, April 2013

Non-governmental organizations working in CHW programming should endeavor to work with national and regional health authorities and all collaborating partners, understanding that each country will vary in its approach to CHWs, in order to:

1. Advocate for the legitimization and recognition of appropriate CHW cadres within the formal health system through country policies and initiatives that support registration, accreditation and minimum standards for the role and performance of different cadres.
2. Enable and support country leadership including national or regional coordination bodies developed under a multi-stakeholder approach, empowered to provide oversight in CHW programme implementation across partner organizations, health authorities and communities.
3. Work with and through existing local health services and mechanisms where possible to strengthen them, avoiding the creation of parallel services, methods and supply chains or competitive working practices, while reinforcing the supportive role played by communities
4. Establish standards and methods for the motivation and support of CHWs which are ethical, non-competitive, sustainable and locally relevant under a unified country policy.
5. Develop minimum standards of needs-and resource-based training and continuing education of specific cadres of CHWs, as well as necessary minimal tools, under an agreed unified system linked to accreditation
6. Support unified mechanisms for reporting and management of community health worker data that promote consistent quality monitoring and accountability to existing health structures and communities reinforcing local use of data for decision making
7. Maximize the NGOs roles in supporting CHW research, developing appropriate low-tech innovations, and judiciously taking to scale evidence-based cost-effective solutions made available in the public domain through partnership approaches.

7. Annex 7: Key messages for community health strengthening through CHW

Key messages for community health strengthening through CHW
Recruitment process
• Understanding the internal social dynamics within a given community is crucial; • A compromise between the technical requirements and community requisites with clear criteria should be reached. Double process of recruitment involving community members (through open voting by polling) and implementing actors should be conducted; • Extra efforts in capacity building are required for lay health workers. Illiteracy should not be seen as an excluding criterion;
Training/Curriculum
• Following recruitment, initial training should be performed and completed by regular refresh and on job training to strengthen the CHW capacities; • Training contents should be adapted to the level of participants and the expected duties; • Theory and practices should be mixed, considering adult teaching and participatory methods; • Communication skills and behaviors should be incorporated into the training course; • Multiple short training sessions are preferable to long lasting ones; • Sessions should be conducted at the workplace rather than at remote locations; • Involvement of community members, health staff, local authorities and outsiders should be encouraged as much as possible; • Any training session should be valued by certificates, ceremony or social recognition;
Monitoring and supervision
• Supervisory visits should be seen as a motivational and not a punitive tool; • Supervision should be organized on a regular basis involving community members, local authorities and health staff. Whenever possible visit from outsiders can be promoted for social recognition; • CHW should always be informed prior to the visit on its purpose and organization; • Tools, such as supervisory grid, protocols and procedures should be standardized, well understood and applied; • To strengthen a link between local actors, CHW network or peer review can be considered;
Type and scope of activities
• The type and scope of activities assigned to CHW should be based on local needs and gaps; • The task shifting is one of the best options of achieving an acceptable level of health care provision in developing countries and should be enhanced; • Evidence based community health are available and should be consulted to implement interventions proven effective; • Package of services should be determined and assigned to CHW with a horizontal approach;

- The Integrated Community Case Management (ICCM) guidelines and the 'Count Down 2015' report should be referred to;
- Adapted protocols should always be given to CHW. CHW should be encouraged to consult them;
- The coverage per CHW should be based on the number of households (e.g.: 150 households)

Compensation/remuneration

- Compensation/remuneration should be based on the workload and CHW performances;
- Multiple incentives can be provided, such as monetary, payment in kind and non-monetary;
- Minimum living standards have to be reached for any CHW;
- Regular provision of equipment required to perform duties should be ensured (e.g.: drugs, equipment, transportation means);
- Sustainability of the compensation/remuneration should be considered at the outset of any project. Various ways to enhance sustainability exist and should be referred to;

Recognition by the national health system

- CHW should be seen as integral part of the national health system;
- Recognition by the NHS should be promoted as a way to ensure sustainability and enhance CHW performances. Links between CHW and health facilities should be strengthened;
- Accountability frameworks are required for the national authorities as well as the community;

Ethical concerns

- The safety of CHW should be preserved in any project and in any countries through preventive measures and security assessment;
- The quality, coverage and availability of services should be monitored. Correctives actions should be initiated if required;

National community health policies and MoH leadership

- When existing and relevant, national community health policies should be applied and respected; In cases of needs, readjustments could be performed alongside advocacy towards influent stakeholders;
- In the absence of national community health policies, intervention schemes should be defined according to local needs and feasibility;
- The growing leadership of MoH should be seen as an opportunity to enhance health strategy;

INGO positioning

- Internal weaknesses should be considered to tackle issues related to financial dependency. Funds should be provided from multiple sources and requested on long term;
- Response to population needs should be at the heart of any intervention strategy;
- Efforts should be coordinated and harmonized. The 7 guiding principles from the Core Group and World Vision should be acknowledged and applied. Being active in coordination mechanisms is a way of ensuring that the community health strategy is well-adapted;
- INGOs should advocate positive changes in community health strategy;

IX. ABSTRACT IN FRENCH

Renforcement des systèmes de santé nationaux – Rôle clé des agents de santé communautaire et positionnement des organisations non gouvernementales internationales

Contexte: Le renforcement du système de santé national (SSN), via l'implication d'agents de santé communautaires (ASC) est au cœur de toute stratégie de santé dans les pays en développement. Les Organisations Non Gouvernementales Internationales (ONGI) ont un rôle important dans le renforcement des SSN. Cette étude vise à définir un positionnement pour les équipes de PU-AMI sur le rôle des ASC afin de s'assurer que son intervention en santé communautaire respecte les standards minimums et est éthiquement acceptable.

Méthode: Les données ont été collectées à travers 5 méthodes (revue littéraire, atelier, entretien, étude de cas, méthodes transversales) et font référence à 6 variables (recrutement, formation, suivi/supervision, type/portée des activités, compensation/ rémunération, reconnaissance par le SSN/ lien avec les structures de santé). Les facteurs d'influence sont: questions éthiques, leadership du SSN et positionnement des ONGI. Les données qualitatives ont été analysées afin de formuler des recommandations et de définir les besoins d'investigations futures.

Résultat: Les conditions préalables ont été analysées dans des contextes différents et ont permis de souligner de grandes disparités dans les mécanismes d'intervention. La reconnaissance de l'ASC par le SSN semble essentielle pour une durabilité des interventions. Des questions éthiques se posent à chaque étape du projet, incluant les risques sécuritaire et qualitatif. La disponibilité de politique de santé communautaire et le leadership du SSN sont cruciaux et conditionnent l'application des recommandations nationales. Les ONGI doivent soutenir les initiatives nationales ou le cas échéant adapter leur stratégie afin de respecter les standards minimums. Un plaidoyer doit être orienté vers les acteurs influents pour une intervention appropriée.

Conclusion : Il y a autant de types d'ASC que de types de projets. Les messages clés correspondent essentiellement à l'harmonisation, la cohérence et la durabilité. Les interventions prouvées comme efficaces ainsi que les recommandations internationales devraient être prises en compte, particulièrement pour l'offre de soins curatifs au niveau communautaire. Les équipes de PU-AMI doivent être sensibilisées sur le sujet et guidées dans leur processus de prise de décision. De plus amples recherches sont nécessaires pour déterminer le nouveau rôle de l'ASC, notamment dans les approches innovatrices et la délégation des tâches.

X. REFERENCES

[i] Grundy J, March 2013:' Road to Recovery: Charting a Course to Universal Health Coverage in Myanmar'. Issues Brief Number 7. Nossall Institute of Global Health, University of Melbourne. Available at: http://ni.unimelb.edu.au/__data/assets/pdf_file/0019/750232/IB_7.pdf

[ii] Global Health Workforce Alliance, Strategy 2013-2016. Available at: http://www.who.int/workforcealliance/knowledge/resources/ghwa_strategy_long_web.pdf?ua=1

[iii] John Hopkins Bloomberg, School of public health, September 2012: 'How effective are community health workers?', Henry Perry, Senior associate and Rose Zulliger, PhD Doctoral candidate. Available at: http://www.coregroup.org/storage/Program_Learning/Community_Health_Workers/review%20of%20chw%20effectiveness%20for%20mdgs-sept2012.pdf

[iv] Haines A et al, 2007: 'Achieving child survival goals: potential contribution of community health workers. Lancet, 369, 2121-31. Available at: http://www.ncbi.nlm.nih.gov/pubmed/17586307

[v] The Partnership for Maternal, Newborn & Child Health, 2011:' A global review of the key interventions related to Reproductive, Maternal, Newborn and Child Health (RMNCH)'. Available at: http://www.who.int/pmnch/topics/part_publications/essentialinterventions14_12_2011low.pdf

[vi] The Earth Institute, Columbia University, 2011: '1 million Community Health Workers Technical Task Force Report'. Available at: http://www.millenniumvillages.org/uploads/ReportPaper/1mCHW_TechnicalTaskForceReport.pdf

[vii] WHO/UNICEF Joint statement, 2012: An equity focused strategy to improve access to essential treatment services for children. Available at: http://www.unicef.org/health/files/iCCM_Joint_Statement_2012.pdf

[viii] INGO non-profit, apolitical and secular, born of the merger in April 2011 of two strong French NGO with the aim to provide a comprehensive response to all basic needs of populations affected by humanitarian crises in the emergency until allow to find independence and dignity. Available at: http://www.pu-ami.org/

[ix] 'WHO, January 2007: 'Community health workers: what do we know about them?' Evidence and Information for Policy, Department of Human Resources for Health Geneva. Available at: http://www.who.int/hrh/documents/community_health_workers_brief.pdf

[x] Study group, WHO, 1989

[xi] Schmeer, Kammi, November 1999: 'Guidelines for Conducting a Stakeholder Analysis. Bethesda, MD: Partnerships for Health Reform, Abt Associates Inc. Available at: http://www.who.int/management/partnerships/overall/GuidelinesConductingStakeholderAnalysis.pdf

[xii] http://www.who.int/workforcealliance/en/

[xiii] http://www.un.org/millenniumgoals/

[xiv] http://1millionhealthworkers.org/

[xv] Key informants ACF and MDM

[xvi] Médard, J.-F., 2012 : ' Communauté locale et organisation communautaire aux États-Unis. Paris: Armand Colin. Available at: http://www.vrm.ca/syllabus/EUR8230_H12.pdf

[xvii] Karabi Bhattacharyya, Peter Winch, Karen LeBan, and Marie Tien, October 2001: 'Community Health Worker Incentives and Disincentives: How They Affect Motivation, Retention, and Sustainability'. Published by the Basic Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development. Arlington, Virginia. Available at: http://pdf.usaid.gov/pdf_docs/PNACQ722.pdf

[xviii] Glob J Health Sci., July 2012: 'Effects of selected socio-demographic characteristics of community health workers on performance of home visits during pregnancy: a cross-sectional study in Busia District, Kenya'. Available at: http://www.ncbi.nlm.nih.gov/pubmed/22980380

[xix] Glenton c et al, 2013: 'Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis'. Cochrane Effective Practices and Organisation of Care. Available at: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010414.pub2/abstract

[xx] Ministry of Health and Sanitation, June 2012: Policy for Community Health Workers in Sierra Leone. Available at: http://www.kambia.org.uk/downloads/CHW-Policy.pdf

[xxi] Key informants, ACF and PU-AMI

[xxii] Karabi Bhattacharyya, Peter Winch, Karen LeBan, and Marie Tien, October 2001: Community Health Worker Incentives and Disincentives: How They Affect Motivation, Retention, and Sustainability. Published by the Basic Support for Institutionalizing Child Survival Project (BASICS II) for the United States Agency for International Development. Arlington, Virginia. Available at: http://pdf.usaid.gov/pdf_docs/PNACQ722.pdf

[xxiii] Key informants, ACF, MDM and PU-AMI

[xxiv] Key informants, ACF

[xxv] WHO, 2008: 'Task shifting: rational redistribution of tasks among health workforce teams : global recommendations and guidelines'. Available at: http://www.who.int/healthsystems/TTR-TaskShifting.pdf

[xxvi] Bhutta Z. A et al, 2010 :' Global experience of community health workers for delivery of health related MDGs: A systematic review, case studies and recommendations for integration into national health systems'. WHO Available at: http://www.who.int/workforcealliance/knowledge/publications/alliance/Global_CHW_web.pdf

[xxvii] MoH, Burkina Faso, February 2011 : Analyse de la santé communautaire au Burkina Faso, Dr Awa Seck, internationale consultante and Dr Dieudonné Valéa, national consultant. Available at : http://www.unicef.org/bfa/french/analyse_de_la_sante_communautaire_au_Burkina_Faso.pdf

[xxviii] Regional medical coordination, ECHO, New Dehli office

[xxix] Participatory workshop, members of ACF, MDM and PU-AMI

[xxx] WHO/UNICEF Joint statement, 2012: An equity focused strategy to improve access to essential treatment services for children. Available at: http://www.unicef.org/health/files/iCCM_Joint_Statement_2012.pdf

[xxxi] http://www.countdown2015mnch.org/

[xxxii] MoH, Burkina Faso, February 2011 : Analyse de la santé communautaire au Burkina Faso, Dr Awa Seck, internationale consultante and Dr Dieudonné Valéa, national consultant. Available at : http://www.unicef.org/bfa/french/analyse_de_la_sante_communautaire_au_Burkina_Faso.pdf

[xxxiii] Regional medical coordination, ECHO, New Dehli office

[xxxiv] The Earth Institute, Columbia University, 2011: '1 million Community Health Workers Technical Task Force Report'. Available at: http://www.millenniumvillages.org/uploads/ReportPaper/1mCHW_TechnicalTaskForceReport.pdf

[xxxv] Bhutta Z. A et al, 2010 :' Global experience of community health workers for delivery of health related MDGs: A systematic review, case studies and recommendations for integration into national health systems'. World Health Organisation.
Available at: http://www.who.int/workforcealliance/knowledge/publications/alliance/Global_CHW_web.pdf
Glenton c et al, 2013: 'Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis'. Cochrane Effective Practices and Organisation of Care. Available at: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD010414.pub2/abstract

[xxxvi] Participatory workshop, members of ACF, MDM and PU-AMI

[xxxvii] Bhutta Z. A et al, 2010: 'Global experience of community health workers for delivery of health related MDGs: A systematic review, case studies and recommendations for integration into national health systems'. WHO
Available at: http://www.who.int/workforcealliance/knowledge/publications/alliance/Global_CHW_web.pdf

[xxxviii] Key informant interview, MDM

[xxxix] Regional medical coordination, ECHO, New Dehli office

[xl] Human Rights Watch and the Safeguarding Health in Conflict Coalition, January 2013: under attack violence against health workers, patients and facilities.
Available at: https://www.hrw.org/sites/default/files/related_material/HHR0514_brochure_LOWRES_0.pdf

[xli] MoH, Burkina Faso, February 2011 : Analyse de la santé communautaire au Burkina Faso, Dr Awa Seck, internationale consultante and Dr Dieudonné Valéa, national consultant. Available at : http://www.unicef.org/bfa/french/analyse_de_la_sante_communautaire_au_Burkina_Faso.pdf

[xlii] Accelerating progress toward MDG and UHC, A community based health program (CBHP) network brief, Union of Myanmar, April 2014

[xliii] https://www.humanitarianresponse.info/clusters/space/page/what-cluster-approach

[xliv] Key informants, ACF

[xlv] Key informants, ACF

[xlvi] Walker, P.; Downey, S.; Crigler, L.; LeBan, K., April 2013: CHW "Principles of Practice" Guiding Principles for Non-Governmental Organisations and Their Partners for Coordinated National Scale-Up of Community Health Worker Programmes. Washington, D.C.: CORE Group, World Vision International. Available at:
http://www.coregroup.org/storage/Program_Learning/Community_Health_Workers/CHW_Principles_of_Practice_Final.pdf

[xlvii] The Partnership for Maternal, Newborn & Child Health, 2011: 'A global review of the key interventions related to Reproductive, Maternal, Newborn and Child Health (RMNCH)'. Partnership for Maternal, Newborn & Child Health, 2011.
Available at: http://www.who.int/pmnch/topics/part_publications/essentialinterventions14_12_2011low.pdf