

A Participatory Approach to Assessing Refugee Perceptions of Health Services

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ABSTRACT

Objective: The necessity and value of beneficiary input is widely recognized by the humanitarian community. Nevertheless, limited beneficiary involvement occurs due to various barriers. This study explores the effectiveness of an innovative, participatory approach to assessing beneficiary perceptions in resource-limited settings.

Methods: A unique hybrid of qualitative and quantitative methodologies assessed perceptions of health programs within five refugee camps in Kenya and Tanzania. A database of perceptions and

opinions was established through key-informant interviews, focus group discussions and free-response questionnaires among refugees, community leaders and healthcare providers. Each participant subsequently force-ranked the collected views into quasi-normal distribution according to level of agreement. Responses were analyzed using by-person factor analysis software.

Findings: Eighty-one individuals (96%) successfully completed the participatory exercise. The methodologies identified detailed levels of consensus, rank-ordered priorities and unique sub-population opinions.

Conclusion: The authors illustrate benefits and feasibility of qualitative quantitative participatory methodology in assessing beneficiary perceptions of refugee services.

Introduction

The great importance and value of beneficiary input is widely accepted among the donor community and implementing agencies involved in humanitarian assistance. Taking into account beneficiary perceptions can allow programs to address the specific needs of aid recipients, improve community acceptance and foster sustainability (Bamberger 1988). However, limited beneficiary involvement often occurs due to a range of barriers, including cost, insufficient resources and the lack of established participatory methodology (Kaiser 2002). This paper explores the use of by-person factor analysis, or Q-methodology, as an innovative approach to collecting beneficiary perceptions of healthcare in resource-limited settings such as refugee camps. By-person factor analysis applied in refugee camps in Kenya and Tanzania, where health systems were well established, is used to illustrate the wealth of information that can be collected through this participatory method of assessment.

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The Kakuma Refugee Camp located in northwestern Kenya was initially established in 1992 to accommodate refugees fleeing civil war in southern Sudan. In 2004, the total population of the camp was 90,441 and was comprised mainly of Sudanese (71%) and Somali (25%) refugees (International Rescue Committee 2004). A multinational camp, Kakuma is also home to refugees from several other countries such as Ethiopia, Burundi, Democratic Republic of Congo, Eritrea and Uganda.

The Kibondo District in western Tanzania contains four refugee camps: Kanembwa, Mkugwa, Mtendeli and Nduta. In 2005, these camps housed a total of 73,414 refugees. The shared border between Tanzania and Burundi results in a large concentration of Burundian refugees within the Kibondo District. Kanembwa was established in 1993, with Mtendeli and Nduta established the following year to accommodate the growing number of Burundian refugees fleeing political turmoil. The smallest camp, Mkugwa, was established in 1993 for Congolese and mixed ethnic groups such as intermarried Hutus and Tutsis.

An international humanitarian non-governmental organization (NGO) is responsible for preventive and curative health services within the Kakuma and Kibondo District refugee camps. Healthcare services provided in these refugee camps are quite comprehensive, ranging from immunization programs and family planning services to dental care and mental health. Quarterly program evaluations conducted by the implementing NGO through clinic reports and surveys provide quantitative data on mortality, morbidity, nutrition status, vaccination coverage and reproductive health. However, as in long-standing refugee settings worldwide, beneficiary input and refugee perceptions of healthcare are less easily, and less frequently, assessed.

Quite often in humanitarian efforts, program management is chiefly directed by an organization's mission or tasked according to the interests of funding agencies (Rutta et al. 2005). Meanwhile, the opinions of stakeholders and the desires of program beneficiaries can be neglected, despite their

central role as healthcare recipients. The Sphere Project standards, followed by the humanitarian community as best-practice guidelines, list “Evaluation” as the sixth common standard, whose key indicator requires that “evaluations take account of the views and opinions of the affected population, as well as the host community if different” (The Sphere Project 2004: 39).

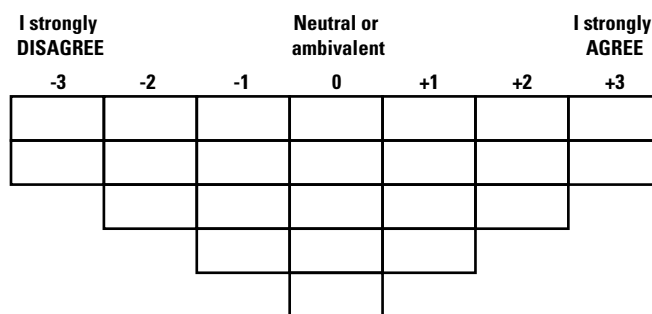
The relative absence of beneficiary input within refugee camps is often a reported result of scarce resources and the lack of technical capacity and manpower available for qualitative data collection and analysis (Greenough et al. 2007). Knowledge, attitude and practices (KAP) surveys and rapid assessment procedures (RAP) are methods commonly used to evaluate beneficiary programming in refugee camps (Manderson and Aaby 1992). These methods are appropriate for collecting data on easily measurable and quantifiable indicators such as mortality and malnutrition rates. They also provide a cost-effective method for continuous, periodic data collection that does not require high levels of expertise or extensive human resources. However, KAP and RAP surveys are ultimately methods of rapid assessment and, therefore, necessarily sacrifice some validity and precision on specific beneficiary perspectives for ease and speed of administration.

In this article we propose an alternative tool for beneficiary participatory program assessment within the refugee setting. By-person factor analysis is a hybrid of qualitative and quantitative methods applied in the scientific study of subjectivity. While long used in a number of other scientific disciplines, this methodology has to our knowledge never previously been used in the refugee setting. Using case studies of its first application within refugee camps, the authors present their experience applying by-person factor analysis in the collection and assessment of beneficiary perceptions of refugee health services in Kenya and Tanzania.

Methods

By-person factor analysis provides a scientific approach to the study of subjectivity while attempting to eliminate the influence of investigator preconceptions. First introduced by British physicist and psychologist William Stephenson in a letter to Nature in 1935, by-person factor analysis has been applied to numerous fields of research, including the fields of political science, social science, psychology and healthcare (Brown 1996). The strength of the methodology lies in its ability to (1) subdivide a study population based upon participants’ subjective responses to an issue, (2) evaluate the degree of consensus among participants, and (3) identify any discordant or minority opinions within a study population.

Figure 1. Quasi-normal (Gaussian) grid provided to participants for the force-ranking of statements in by-person factor analysis



The process of by-person factor analysis utilizes a unique combination of qualitative and quantitative methods. First, investigators establish a concourse or collection of perceptions and opinions about the topic under study (Nelson et al. 2005). From this concourse of ideas, 23 written state-

ments are developed that represent the spectrum of opinion within the study population. Members of the community are subsequently invited to individually sort each statement into a specially designed, quasi-normal grid of 23 boxes (Figure 1). In so doing, participants must rank-order the statements as to whether they completely disagree with, feel indifferent or ambivalent toward, or completely agree with each statement.

For the purpose of our health program assessments in the five selected refugee camps of north-western Kenya and western Tanzania, a large concourse of perceptions and opinions was established through dozens of key-informant interviews, focus group discussions and free-response questionnaires. From the developed concourse, the investigators selected key statements that represented the wide variety of opinion about health-related issues in the refugee camps – issues such as healthcare services, food and nutrition, water and sanitation, community health, mental health, gender-based violence and safety. (The first columns in each of Tables 2 and 3 list the 23 statements used in the Kakuma refugee camp and the Kibondo District refugee camps, respectively.) Utilizing established community health networks, participants at each of the five sites were obtained through open and targeted invitation of program beneficiaries and healthcare staff.

Each participant was given a copy of the quasi-normal grid of 23 boxes and a set of 23 small squares of paper; upon each piece of paper was imprinted one of the 23 statements. Participants were then provided written and verbal instructions on sorting the statements into the grid. Statements with which a participant most strongly disagreed were placed toward the left side of the grid (-3 agreement score), while statements with which a participant most strongly agreed were placed toward the right side of the grid (+3 agreement score). Between these extremes were placed statements about which the participant felt more neutral or ambivalent (0 agreement score). Participants could not augment the grid distribution or place more than one statement into each box in the grid. In this way, participants were compelled to prioritize and rank their perceptions and opinions. Responses remained anonymous throughout in order to facilitate a safe environment for minority or negative viewpoints.

The respondents' completed grid sorts were documented and then entered into and analyzed using PQMethod 2.11, a publicly available by-person factor analysis software package (Schmolck 2002). Given the populations' differing settings and conditions, analysis was completed independently for participants in Kakuma from the participants in the four refugee camps in western Tanzania. Subsequent subgroup analysis further explored differences within the populations.

Data analysis included assessing levels of group agreement and identifying unique respondent types within the study populations. Each respondent type represents a group of individuals who have common perspectives that are unique relative to participants outside of the group. By identifying these unique respondent types within a population, majority and minority opinions can be elucidated. This information allows targeted interventions to directly address each subgroup's distinct concerns. To define and characterize the respondent types, participants who had significant and specific concordance with a single respondent type (i.e., >60% concordance with the respondent type of interest and <30% concordance with remaining types) were closely reviewed to assist in characterizing each respondent type.

These methods – including both regional and site-specific key-informant interviews, focus group discussions, questionnaires and by-person factor analysis exercises – were accomplished by two investigators in Kenya (one week) and two investigators at the four sites in Tanzania (three weeks).

Results

Preparation for by-person factor analysis included approximately 10 to 12 key informant interviews in each country and two focus group discussions at each of the five refugee camps. For by-person factor analysis, a total of 84 individuals – representing various cultural groups and social positions within the refugee camps – were invited to participate: 22 individuals in the Kakuma Refugee Camp in Kenya and a total of 62 individuals within the four Kibondo District refugee camps in western Tanzania (Table 1). Each of the five camps had roughly comparable levels of participation. The

response rate of participants successfully completing the exercise was 96.4%. Participant age ranged from 19 to 60 years, with a mean age of 34.5 years. Forty-two percent of participants were female. Refugees represented 50.6% of participants, refugee community leaders were an additional 17.3% of participants and healthcare workers constituted the remaining 32.1% of participants.

Table 1. Participant demographics for by-person factor analysis

Response rate	96.4% (81/84)
Participation by camps	27.2% from Kakuma Camp, Kenya
	19.8% from Kanembwa Camp, Tanzania
	19.8% from Nduta Camp, Tanzania
	17.3% from Mtendeli Camp, Tanzania
	16.0% from Mkugwa Camp, Tanzania
Age	Range 19-60 years
	Mean 34.5 years
Gender	42.0% female
	58.0% male
Position in the community	50.6% refugee
	17.3% refugee community leader
	32.1% healthcare worker
Ethnic group	60.5% Burundi
	13.6% Congo
	12.3% Sudan
	6.2% Ethiopia
	4.9% Somalia
	1.2% Rwanda
	1.2% Tanzania

Assessing Levels of Agreement

By-person factor analysis allowed for the assessment of consensus within the study populations. Using the data from the Kakuma refugee camp as an example of this assessment capacity, by-person factor analysis revealed significant consensus on several health-related issues. Kakuma participants, on average, felt discrimination from community health workers and did not fully trust them. Healthcare access appeared to be another concern of these participants. Most believed vulnerable groups did not have access to healthcare, there was a long wait for specialty care, the hospital was overcrowded and it was difficult to quickly obtain emergency healthcare at night. There was also significant agreement that assault and lack of food were continuing obstacles to quality refugee health. However, most participants felt that tuberculosis care and mental health programs provided in the camp were adequate.

Comparing Participant Responses by Demographic Types

By-person factor analysis can also be utilized to examine responses across demographic types. Data from the Kibondo District refugee camps illustrate this. In the Kibondo District camps, investigators compared the responses of community members (i.e., refugees), to the responses of health workers, to the pooled responses of all participants (Table 2).

Table 2. Comparison of participant responses by demographic types, -Kibondo District refugee camps, Tanzania

Statements (listed from greatest participant consensus to least consensus)	Averaged level of agreement for each statement		
	All Kibondo participants	Kibondo community members	Kibondo health workers
Patients are prescribed the medicines they need	-0.9	-0.8	-1.1
It is easy for patients to get treatment for sexually transmitted infections	0.5	0.3	0.8
The lines are too long at the outpatient department	0.5	0.6	0.4
The vulnerable groups in the camp do not have good access to healthcare	-0.3	0.1	-0.8
There is good care for women who have problems in childbirth	0.4	0.5	0.3
The health staff are well trained	-0.1	-0.1	-0.2
Chronic diseases are poorly cared for in the camp	-0.1	0	-0.3
Patients receive good quality healthcare in the camps	-0.3	-0.4	-0.2
Refugees trust the community health worker if they have health concerns	0.6	0.1	1.3
Criminals can get away with rapes and other assaults in the camp	-0.2	-0.3	-0.2
Help is available for people who have HIV infection	-0.1	-0.2	0
Domestic violence cases are not taken seriously by the community	-0.3	0.2	-0.9
Waiting for a referral to a specialist doctor takes too long	0.5	0.6	0.5
More families should use family planning services	0	0.2	-0.2
Refugees seek dental care when they have problems with their teeth	-0.1	-0.2	0.1
The pharmacy often lacks the medicines the doctors prescribe	0.6	0.5	0.8
Refugee health workers are treated fairly in terms of salaries and authority	-1.3	-0.7	-2
The inpatient wards are overcrowded	0.9	0.7	1.2
Community health workers place enough importance on disease prevention	0.4	0.3	0.7
Refugees in the supplementary feeding program still go hungry	0.2	0.5	-0.1
Patients cannot get eye care when they need it	-0.3	-0.3	-0.2
Mental health programs are adequate for all of the people who need help	-0.3	-0.7	0.3
Community health workers are poorly trained to answer the health questions of refugees	-0.5	-0.9	0

Note. With each statement, an averaged level of agreement is calculated for all Kibondo participants and for the subgroups of community members and health workers. Agreement levels for each statement correspond to "I strongly disagree" (-3), "I feel ambivalent/neutral" (0), or "I strongly agree" (+3).

Significant consensus on several health-related issues was found. On average, participants felt that patients were not prescribed the medications they needed and that, when medications were prescribed by a doctor, the pharmacy often lacked the medications. (Interestingly, health workers felt this way even more strongly than community members.) There was large consensus that the inpatient wards were overcrowded. Similarly, all tended to agree that patients waited too long for outpatient services (an important exception being services for sexually transmitted infections) and for referral to specialist doctors. Eye care was felt particularly difficult to obtain. On the other hand, participants consistently agreed that there was good care available for women who had obstetric complications. Both community members and health workers felt that refugee health workers were not treated fairly in terms of salaries and authority. There was consensus that community health workers placed adequate importance on disease prevention.

Identifying Distinct Respondent Types

In addition to determining levels of agreement among study participants, by-person factor analysis facilitates the identification of distinct respondent types, or clusters of participants grouped by their common opinions and perceptions. From our Kakuma study, four respondent types were discovered in the population (Table 3). Kakuma Respondent Type 1 individuals (32% of Kakuma participants) were concerned that insecurity and discrimination limited healthcare. They believed that assault and rape were constant problems that were not taken seriously and were not punished. Furthermore, Kakuma Respondent Type 1 individuals stated there was discrimination by community health workers and poor healthcare access for vulnerable groups. Kakuma Respondent Type 2 individuals (involving 14% of Kakuma participants) believed healthcare was getting worse in the refugee camp. They cited poor medication supply, limited food and water, and poor employee training and remuneration. Kakuma Respondent Type 3 individuals (14% of Kakuma participants) were hopeful that conditions were going to improve. Even as they agreed with others that insecurity was a constant threat, especially at night, they believed that rape was taken seriously. This respondent type also stated that mental health and vulnerable group services were good, but drug supply and training programs needed improvement. The last identified group of Kakuma participants, Kakuma Respondent Type 4 (14% of Kakuma participants), advocated improved healthcare access for vulnerable populations and improved tolerance by community health workers. While they did not feel that the clinic lines were too long, they stated that the hospital was overcrowded and that there were long delays to see specialists.

Respondent Type 1 individuals (18.6% of Kibondo participants) were more likely to be refugees and ... believed that referral to specialty doctors took too long, chronic diseases were poorly cared for, inpatient wards were overcrowded, individuals in the supplementary feeding program still went hungry.

Similar by-person factor analysis yielded three unique respondent types within the Kibondo District camps of western Tanzania. Kibondo Respondent Type 1 individuals (18.6% of Kibondo participants) were more likely to be refugees and had several recommendations for health program improvement. They believed that referral to specialty doctors took too long, chronic diseases were poorly cared for, inpatient wards were overcrowded, individuals in the supplementary feeding program still went hungry, medications were not adequately prescribed or stocked, mental health programs were not adequate for all who needed them and refugee health staff were treated unfairly in terms of salaries and authority. However, this group did feel that good care was available for women who had difficulties during childbirth. Kibondo Respondent Type 2 individuals (10.2% of Kibondo participants) were predominantly community leaders (67%) and appeared more satisfied with health services. Like Kibondo Respondent Type 1, they believed good care was available for women with

Table 3. Comparison of participant responses by identified respondent types, Kakuma refugee camp.

Statements (listed from greatest participant consensus to least consensus)	Averaged level of agreement for each statement				
	All Kakuma participants	Kakuma Type 1 (32% of participants)	Kakuma Type 2 (14% of participants)	Kakuma Type 3 (14% of participants)	Kakuma Type 4 (9% of participants)
I trust the community health worker if I have health concerns	-1.0	-2	0	0	0
The treatment for tuberculosis in the camp is not adequate	-0.8	0	0	-1	0
The hospital is overcrowded	1.0	2	-1	0	2
Health would improve if refugees had more food	1.1	-1	2	1	1
There is not enough water	0.4	-1	2	1	0
I do not feel discrimination from the camp healthcare providers	-1.5	-3	-1	0	-2
Healthcare in the camp would improve if IRC had better qualified doctors	0.2	0	-1	-1	-1
Mental health programs are not adequate for all of the people who need help	-0.4	0	0	-3	2
The quality of healthcare in the camp is getting worse	0.5	1	3	-1	-1
If I have a health emergency at night I can see the doctor quickly	-2.2	-3	-3	-1	-1
The lack of an x-ray machine delays healthcare	0.9	1	1	1	1
Criminals can get away with rapes and other assaults in the camp	0.5	2	-1	0	0
We have no hope for a better future	0.2	1	0	-2	1
Incentive employees are not treated fairly in terms of salaries and authority	0.4	0	2	2	1
Assault is a constant threat	1.0	3	1	2	-1
Waiting for a referral to a specialist doctor takes too long	1.1	2	1	1	3
The refugee employee training programs in the camp are good	-0.8	-2	-2	-2	3
I do not get the drugs I want at the clinic	0.2	-1	3	2	0
The lines are too long at the IRC clinics	0.4	0	0	0	-3
The vulnerable groups in the camp have access to healthcare	-1.2	-2	-2	3	-2
Chronic diseases are not adequately taken care of in the camp	0.4	1	1	-2	-3
Rape cases are not taken seriously by the camp agencies	-0.1	3	-2	-3	-2
I worry about my safety if I have a health emergency at night	-0.1	-1	-3	3	2

Note. With each statement, an averaged level of agreement is calculated for all Kakuma participants and identified respondent type are compared. Agreement levels for each statement correspond to "I strongly disagree" (-3), "I feel ambivalent/neutral" (0), or "I strongly agree" (+3).

IRC = International Rescue Committee.

obstetric complications. They also stated that vulnerable groups had good access to healthcare, criminals could not get away with rape and other assaults, community health workers were well trained and eye care was available when needed. According to Kibondo Type 2 Respondents, three areas of service limitations were that the pharmacy often lacked medicines doctors prescribed, refugees in the supplementary feeding program still went hungry and mental health programs were inadequate for all who needed them. The last group, Kibondo Respondent Type 3 individuals (10.2% of Kibondo participants), had disproportionately high percentages of women (83%) and health workers (83%). These individuals were largely satisfied with the refugee health program. They felt that the community health workers were well trained and trusted by the refugee community. They believed that help was available for people living with HIV/AIDS, treatment for sexually transmitted infections was readily available and domestic violence was taken seriously by the community. This group uniquely felt that mental health programs were adequate for all those who needed them. The two identified concerns of Kibondo Respondent Type 3 were that inpatient wards were overcrowded and that the refugee health staff were treated unfairly in terms of salaries and authority.

*According to Kibondo Type 2 Respondents, ...
the pharmacy often lacked medicines doctors prescribed, refugees in the
supplementary feeding program still went hungry and mental health programs
were inadequate for all who needed them*

Discussion

Assessing and responding to beneficiary needs is a vital, ongoing responsibility of the international community. However, identifying effective and rapid assessment methods for this purpose has at times been a challenge. The participatory approach of by-person factor analysis may help fill this need. Using examples of its application in refugee camps in Tanzania and Kenya, we illustrate the depth and breadth of information on beneficiary perceptions that can be obtained through by-person factor analysis.

Firstly, not unlike other rapid assessment methods, by-person factor analysis assists in identifying specific needs within a population. For example, among those in the five surveyed camps in Kenya and Tanzania, access to healthcare was a primary concern. Refugee beneficiaries felt that health centres were overcrowded and outpatient care was difficult to access. Policies to improve referrals, decrease waiting times and increase interaction with community health workers may improve refugee perceptions related to these services.

An additional strength of this methodology, however, is its ability to also identify critical issues, such as potential obstacles to improvements, significant divergence of opinions and previously unrecognized subgroup needs. Recognizing and addressing obstacles, discordant opinions and minority needs is important for program viability and for successfully providing services for the entire population. One example of an important identified divergence in opinion in the Kibondo camps related to healthcare access. Most healthcare workers believed that vulnerable groups had good access to healthcare, while community members typically disagreed. Similarly, Respondent Type 1 within Kakuma represented a subgroup of refugees who felt discrimination from community health workers and felt that their concerns were not taken seriously by camp authorities. Now discovered, these important opinion differences and subgroup concerns can be more effectively addressed.

This application of Q-methodology is but one illustration of the functional support academia can provide to the humanitarian community at the local field level. This relationship between NGO program personnel, beneficiaries and academia can be built collaboratively through their respective roles in data collection, systematic participation, and analysis and interpretation. NGOs need evaluative mechanisms that engage beneficiary participation; academia has validated methods but requires meaningful access to populations of interest. Through this exercise, NGOs build institutional and local capacity.

The participatory approach of by-person factor analysis, illustrated here by its application among refugees in Kenya and Tanzania, offers the humanitarian community an additional and effective means of assessing important beneficiary perceptions. The objective of such beneficiary participation is the improvement of healthcare services and health outcomes among refugee recipients. Soliciting beneficiary input is crucial for improving available services to meet the specific needs of the refugee community. Incorporating beneficiary input can also increase refugee satisfaction with services and potentially improve program utilization and health outcomes. Furthermore, facilitating participatory involvement in program design, implementation and evaluation can give refugees a realization of empowerment – essential in an environment in which they often feel powerless to enact change.

Conclusion

The results of these case studies support the benefits and feasibility of implementing by-person factor analysis within a refugee camp setting. Compared with conventional survey methods or other methods of rapid assessment, by-person factor analysis can uncover opinions and perceptions that may not otherwise be apparent to researchers or service providers. In addition, by-person factor analysis can be successfully administered in resource-limited settings among participants with restricted formal schooling.

References

- Bamberger, M. 1998. "The Role of Community Participation in Development Planning and Project Management, EDI Policy Seminar Report No. 13." Washington, DC: World Bank EDI.
- Brown, S.R. 1996. "Q-methodology and Qualitative Research." *Qualitative Health Research* 6: 561–7.
- Greenough, P.G., R. Nazerali, S. Fink and M.J. VanRooyen. 2007. "Non-governmental Organization Health Operations in Humanitarian Crises: The Case for Technical Support Units." *Prehospital & Disaster Medicine* 22: 369–76.
- International Rescue Committee. 2004. Kakuma Refugee Camp, Second Quarter Report: April-June 2004.
- Kaiser, T. 2002, February. "Participatory and Beneficiary-Based Approaches to the Evaluation of Humanitarian Programs." *UHNCR New Issues in Refugee Research*, Working Paper 51.
- Manderson, L. and P. Aaby. 1992. "An Epidemic in the Field? Rapid Assessment Procedures and Health Research." *Social Science & Medicine* 35(7): 839–50.
- Nelson, B.D., K. Dierberg, M. Mitrović, M. Vuksanović, L. Milić and M.J. VanRooyen. 2005. "Integrating Quantitative and Qualitative Methodologies for the Assessment of Health Care Systems: Emergency Medicine in Post-conflict Serbia." *BMC Health Services Research* 5: 14.
- Rutta, E., H. Williams, A. Mwansasu, F. Mung'ong'o, H. Burke, R. Gongo, R. Veneranda and M. Qassim. 2005. "Refugee Perceptions of the Quality of Healthcare: Findings from Participatory Assessment in Ngara, Tanzania." *Disasters* 29: 291–309.
- Schmolck, P. 2002. *PQMethod 2.11 Software and Manual*. Retrieved March 15, 2010. <<http://www.lrz-muenchen.de/~schmolck/qmethod/>>.
- The Sphere Project. 2004. *The Sphere Handbook 2004: Humanitarian Charter and Minimum Standards in Disaster Response*. Oxford, UK: Oxfam Publishing.