REPORT ON THE
HEALTH FACILITY SURVEY AND
IMCI TRAINING IN LUSAKA, ZAMBIA

March 7- May 10, 1996

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<thead>
<tr>
<th>ACRONYMS</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARI</td>
<td>acute respiratory infection</td>
</tr>
<tr>
<td>BASICS</td>
<td>Basic Support for Institutionalizing Child Survival</td>
</tr>
<tr>
<td>CHW</td>
<td>community health worker</td>
</tr>
<tr>
<td>CO</td>
<td>clinical officer</td>
</tr>
<tr>
<td>DMO</td>
<td>district medical officer</td>
</tr>
<tr>
<td>DHMT</td>
<td>District Health Management Team</td>
</tr>
<tr>
<td>DTU</td>
<td>Diarrhoeal Training Unit</td>
</tr>
<tr>
<td>EHT</td>
<td>environmental health technician</td>
</tr>
<tr>
<td>FP</td>
<td>family planning</td>
</tr>
<tr>
<td>GRZ</td>
<td>Government of the Republic of Zambia</td>
</tr>
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<td>HFS</td>
<td>health facility survey</td>
</tr>
<tr>
<td>HRIT</td>
<td>Health Reform Implementation Team</td>
</tr>
<tr>
<td>IMCI</td>
<td>integrated management of childhood illnesses</td>
</tr>
<tr>
<td>MCH</td>
<td>maternal and child health</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health</td>
</tr>
<tr>
<td>NGO</td>
<td>non-governmental organization</td>
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<td>NIDs</td>
<td>national immunization days</td>
</tr>
<tr>
<td>ODA</td>
<td>Overseas Development Agencies</td>
</tr>
<tr>
<td>ORS/ORT</td>
<td>oral rehydration salts, oral rehydration therapy</td>
</tr>
<tr>
<td>PHC</td>
<td>primary health care</td>
</tr>
<tr>
<td>PMO</td>
<td>provincial medical officer</td>
</tr>
<tr>
<td>PHMO</td>
<td>Provincial Health Management Office</td>
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<tr>
<td>PHMT</td>
<td>Provincial Health Management Team</td>
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<tr>
<td>RN</td>
<td>registered nurse</td>
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<tr>
<td>TDY</td>
<td>temporary duty</td>
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<tr>
<td>UNZA</td>
<td>University of Zambia</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>UTH</td>
<td>University Teaching Hospital</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>ZEN</td>
<td>Zambia Enrolled Nurse</td>
</tr>
<tr>
<td>ZEM</td>
<td>Zambia enrolled midwife</td>
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<td>ZCHP</td>
<td>Zambia Child Health Project</td>
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EXECUTIVE SUMMARY

Purpose

The purpose of the visit was to

- Conduct the health facility survey (HFS) for urban Lusaka.
- Organize and arrange the first integrated management of childhood illnesses (IMCI) training in Zambia.
- Actively participate in the preparations for the national immunization days (NIDs) in Zambia.

Activities

- I actively participated in the training of surveyors for the Lusaka Health Facility Survey (HFS) which was conducted between March 18-21, 1996. With the collaboration of Lusaka District Health Council, I conducted the HFS in eight preselected urban health centers.
- I participated in several important meetings for the preparations of the national immunization days (NIDs).
- I attended almost all the biweekly meetings for the IMCI Advisory Committee meetings, which were held in the University Teaching Hospital (UTH).
- I assisted the MOH for on-the-ground preparations of the IMCI facilitators’ and health workers’ trainings.
- I represented BASICS in other technical meetings during Dr. Remi Sogunro’s (ZCHP chief of party) TDY in Washington.

Conclusions

With the collaboration of Dr. G. Burnham, the Lusaka District Health Council selected six senior nurses to be trained as surveyors and/or supervisors for the HFS in selected health centers. These health centers are to be upgraded with the assistance of ODA. The survey staff had actively reviewed and edited the data collection instruments prior to the training sessions. After training, the survey was pre-tested in other health centers for two days and further editing and modifications of the data collection instruments were made.

The HFS was conducted between March 18-21 and was followed by data entry and analysis. The survey results are important for the assessment of the quality of services provided at the health centers in the Lusaka area. In addition, these results will be instrumental in measuring the impact (short and long term) of the planned IMCI trainings for both urban and rural health center staff in Zambia. See the attached draft report of the HFS in Lusaka.

In collaboration with WHO, UNICEF, USAID/BASICS and Rotary International, the MOH has established the dates for the polio NIDs. All children under age 5 in Zambia will be given a first
dose of oral polio vaccine during July 23-24 and a second dose during August 19-20 this year.

BASICS has been requested to assist the MOH in the area of the service delivery (development of technical guidelines, training, and logistics) for the NIDS. In addition, BASICS has actively supported and participated in organizing and planning the social mobilization aspect of NID preparations.

**Recommendations**

- Since the MOH has decided to implement IMCI in Zambia, a nationwide (with the exception of urban Lusaka) HFS should be designed and conducted prior to health worker training in other provinces and districts. Results of such nationwide surveys will assist in designing a priority-based master plan for future IMCI training. **Immediate** health center supervisors should be involved in all stages of the HFS, including data management.

- Based on the experience gained from the initial Lusaka HFS, the four data collection instruments should be further simplified to focus on key indicators for acceptable quality care. Scoring systems (indices) based on such key indicators should facilitate the selection process of priority districts with regard to training, supervision, staff deployment, and other managerial issues.

- Complete field guidelines (including data management and report writing) for the HFS should be written in close collaboration with all concerned bodies, particularly the MOH (MCH/FH, HRIT, EDP, etc.), WHO, UNICEF, and other donors. Involving other interested parties will reduce duplication and encourage coordination, thus increasing support and participation from other agencies on the IMCI approach and quality assurance activities.

- The training of supervisors for each health worker trained on IMCI should be ensured. The supervisors for the health center staff should also be trained in IMCI prior to or during health worker training. In addition, developing a complementary training module for supervisors should be considered a top priority activity in order to establish a continuous monitoring system for the IMCI process at the health center level. Such a module will help these supervisors develop skills which will enable them to oversee the provision of good quality care in their respective health centers. This module and/or the HFS field guidelines should contain a simple checklist for these supervisors.

- Since the MOH has nominated Mrs. Mary Kaomo as the coordinator for the NID activities, it is crucial to relieve her from other MCH/FH duties. The three subcommittees for the NIDs should meet more often and should shift their individual roles from advisory to working groups. Kaomo should not be overloaded with individual subcommittee duties, but rather should ensure that the subcommittee activities are in harmony with the overall country guidelines and action-plans. Therefore, she may not participate in the IMCI training courses until September 1996.
- The NID service delivery subcommittee will need a full-time, short-term consultant (June-August) to assist in cold chain logistics. Mark Weeks could be the right person since he is familiar with the current cold chain logistics situation.

- Another subcommittee that needs more technical support is the one on surveillance and monitoring. WHO should provide a full-time consultant (epidemiologist) to assist the subcommittee in establishing an effective surveillance and monitoring system for the NIDs since they have been requested to provide lead technical support for this subcommittee.

HEALTH FACILITY SURVEY REPORT

Executive Summary

A health facility survey was conducted by MOH staff in collaboration with BASICS between March 18-21, 1996 in eight urban health centers in Lusaka District. The survey was designed to collect information on the quality of care for children with the most common illnesses (e.g., diarrhea, ARI, malaria) and on the level of counseling offered to caretakers. The survey was also designed to gather information on the availability of basic drugs and equipment for the management of sick children in health centers.

The survey team used eight pre-selected health centers in well-spread areas of Lusaka. These health centers are to be renovated and upgraded by ODA. Each of these health centers is expected to have about 10 inpatient beds.

Survey results show the need for further improvement in the quality of health services provided in these activities. The primary deficiencies were found to be irregularity of drug supply; poor case management, especially in examination of children; and lack of counseling or communication with mothers/caretakers.

Some survey data will be used as baseline indicators for case management of childhood illnesses in Zambia. MOH plans to conduct surveys in other districts or provinces where IMCI training is scheduled to take place in following years.

Introduction

In Zambia, more than 70 percent of childhood mortality is caused by malaria, diarrhea, and acute respiratory infections (mainly pneumonia). Health workers have received separate training on how to manage each of these diseases. Efforts to combat these life-threatening diseases can be supported by assessing the quality of care in these health facilities.

The development of this survey has been a collaborative effort between Lusaka City Council health personnel, Ministry of Health personnel (MCH/FP, HRIT, and Quality Assurance units)
and USAID/BASICS. All questions in this survey were developed and repeatedly revised using the combined expertise of health professionals from the above institutions.

**Purpose of the Health Facility Survey**

The MOH decided to conduct a health facility survey to help health workers improve the quality of case management for life-threatening childhood diseases. The overall objectives for the survey were the following:

- Obtain information about technical aspects of child health care activities in preselected health centers in Lusaka City.
- Provide baseline information for the forthcoming training on “integrated case management of the sick child.”
- Gather information that will help health workers improve the quality of services for the sick child.

Survey results will inform plans for additional training of health personnel, the design of effective supervisory tools, improve communication between health workers and caretakers, and improve systems for drug supply.

Selected surveyors were trained between March 13-15, 1996. The training session covered the following areas:

- Introduction, to include purpose and parts of the survey
- Planning and conducting the survey
- Completion of forms and detailed instructions for each of the four parts of the survey

**Methodology**

Two teams of surveyors (three per team) were involved in the survey. Each team covered one health center per day. A supervisor was nominated for each team. The role of the supervisor was to select children for tracking, interview the health worker, and take inventory of available supplies and cold chain equipment.

During the survey, one surveyor was stationed in the screening room to observe what the health worker did during each case and fill in the respective portions of the health worker observation questionnaire. Another surveyor was stationed in a room or area close to the exit of the clinic to interview the caretaker of selected children after they left the pharmacy.

The survey was conducted from March 18-21, 1996. Children up to 60 months (5 years) who were brought between 8:00-12:30 and had symptoms of fever, cough/difficult breathing, diarrhea, and/or malnutrition were selected for the survey.
A USAID/BASICS consultant oversaw the activities of the two teams throughout the entire survey period. The consultant entered all data and performed a preliminary data analysis.

**Survey Results**

A total of 8 health centers were surveyed, with a total of 195 caretakers being interviewed. The total number of children observed during the survey period was 195. The distribution of cases by facility is summarized in Table 2. The age range of children observed was 1-60 months, with a mean age of 17 months and a median age of 14 months.

**Observation of the Health Workers**

Health workers asked caretakers to cite the reason for bringing the child to the clinic in approximately 96 percent (187/195) of all cases. The primary reasons given were cough/difficult breathing (47 percent), fever (30 percent), and diarrhea (22 percent).

Clinical officers (73 percent) were the most frequent health workers to screen sick children, followed by registered nurses (16 percent). Table 3 describes the distribution of health worker types by facility.

In 98.5 percent of all cases, health workers asked the caretaker about the length of the illness. The length of the illness ranged from 1-14 days, with a mean of 3.7 days and a median of 3 days. Table 4 describes the frequency with which particular medical history questions were asked by health workers, arranged by presenting complaint.

The length of screening sessions per child ranged from 2-60 minutes, with a mean of 6 minutes and a median length of 5 minutes.

Table 5 describes proportion of children assessed for general danger signs. Of the 196 children who were screened by health workers during the survey, 30 percent of their caretakers were asked if child was able to eat/breastfeed, 54 percent were questioned about vomiting, 43 percent about lethargy or drowsiness, and only 1 percent of mothers were asked if the child had a history of convulsions.

Of those children brought to the clinic with diarrhea (64), about 89 percent (57) of caretakers were asked for duration of the current episode, 64 percent for blood in the stool, and 45 percent for history of vomiting. Only one third (21) of the children were given a skin turgor examination, while 69 percent (42) were given or advised to administer ORS. Of the 42 children for whom ORT was recommended, only one-third (13) of the mothers received an explanation on how to prepare ORS, 26 percent (11) received a demonstration on ORS preparation, and 16 percent (7) were asked to show how to prepare ORS.

Of the 136 children who were brought to the health centers for cough or difficulty breathing, only 2 percent had their respiratory rates counted, 43 percent were assessed for chest indrawing, and
60 percent were examined with stethoscope. In addition, 66 children (50 percent) with cough or difficult breathing complaints received antibiotic treatments. Table 7 shows health workers' assessment and interventions for children with cough or difficult breathing.

Overall, only 37 percent of caretakers were told what was wrong with their child (69/186). Table 9 describes the frequency of health messages given by health workers.

Caretakers' Interview (Exit)

The length of initial waiting time before screening was reported to range between 2 minutes to 7 hours, with an average of 1 hour and 25 minutes (median waiting time of 1 hour). More than a third of the mothers (65/191) thought the waiting time for services was too long. The number of days that had elapsed between onset of complaint and the clinic visit ranged from 1 to 14 days, with a median period of 3 days.

Of the 194 mothers who were interviewed upon leaving the clinics, 54 percent (106) claimed to have given home treatments to the child for current illness prior to their arrival at the clinic. Over half (52 percent) of these home treatments were administered for fever, 27 percent for cough/difficult breathing, and 21 percent for diarrhea.

Only one-third of mothers (32 percent) reported that the screening officer told them what was wrong with their child. In addition, only 16 percent of mothers/caretakers reported that the screening officer told them to come back on a specific date for follow up. The proportion of mothers who were told to come back immediately if the child got worse was 17 percent.

About 92 percent of caretakers (176/191) reported receiving medications or prescriptions for their child's illness. However, of those prescribed medications, only 42 percent (74/177) reported that someone explained to them how to administer these medications at home.

About 93 percent (177/191) of mothers brought their child's immunization card with them to the clinic, of which 68 percent (120/177) reported that someone at the clinic looked at the card. Over half of the mothers (55 percent) reported they would have brought their children to get required immunizations if they were sick with fever, cough/difficult breathing, or diarrhea.

About 73 (38 percent) of the mothers who were interviewed were not satisfied with the services received during the survey period. Of these unsatisfied mothers, 36 (49 percent) reported a lack of necessary drugs to be the main reason for their dissatisfaction. Table 10 describes the primary reasons why mothers were not satisfied with the health center services.

Interview with Health Workers on Case Management

A total of 13 health workers who screen sick children were interviewed during the survey period. The average number of years in service of these workers is 52 months, with a range from 1 month to 120 months (median 5 years).
The average number of health workers involved in screening sick children in any one center ranges from 5 to 13, with a median number of 8. Half of these have had training in case management of diarrhea, ARI, malaria, or malnutrition.

The number of supervisory visits received by health workers in the past 12 months ranged from 0-4, with a median of 2.

In checking the knowledge of health workers on assessment of children with cough or difficult breathing, 8/13 (62 percent) would count respiratory rate and 12/13 (92 percent) would look for chest indrawing. One-third of health workers did not associate fast breathing with pneumonia.

Health workers' knowledge of diarrhea was significantly greater than of ARI. A good proportion knew the main signs of dehydration and all would give ORS to manage mild diarrhea. Table 8 describes the advice health workers would give for a child with mild diarrhea of two days duration.

All health workers recognized stiff neck, severe malnutrition, severe pallor, and lethargy or unconsciousness to be conditions that need referral to hospitals. Table 11 lists health workers' knowledge of cases that need referral.

Equipment and Supplies

A summary of the availability of basic equipment and supplies is presented in Table 12. Over 80 percent (7/8) of the facilities surveyed had adequate seating for patients and health workers, privacy in screening rooms, cooker/stove and steam sterilizers, and a refrigerator thermometer with a temperature chart. In only one health center (12 percent), a timing device (watch) for counting respiratory rates was available.

All facilities had working refrigerators, scales for weighing, and lockable cabinets or rooms for drug storage. Half of the facilities had running water, and more than half (5/8) had usable latrines.

All facilities had an ORT corner. Only one of the eight did not have enough supplies and equipment such as cups, measuring jugs, etc., for use in the corner. Over 80 percent of facilities had updated tally sheets for immunization and an adequate supply of under-5 cards.

The total number of first visits per month per clinic as indicated by OPD registers ranged from 325 to 800, with a median number of 477. However, in all clinics surveyed, there was a discrepancy between OPD registers and the MF47 forms. Recorded number of referrals made per month ranged from 0 - 31, with a median of 20 cases per month.

The general cleanliness of all health centers surveyed was rated as "good."
Recommendations

- Improve the drug supply system both through training of health workers on rational drug use and by reviewing the existing allocation and distribution system. More than 90 percent of health centers ran out of stock for major drugs.

- Train clinical officers on integrated case management of childhood diseases. Areas to be concentrated on during training might be the following: assessment and treatment of danger signs, cough and difficult breathing, and advising caretakers on feeding and treatment schedules.

- Conduct such facility surveys in at least some rural health centers and in health centers where IMCI training is planned to take place.

- Strengthen the supervisory schemes for health centers in order to assure a good quality of services. The MOH should plan to include health center supervisors in the IMCI trainings. The frequency of supervisory visits should be increased to at least once every quarter.
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Table 1: Schedule of Activities for the Survey

<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTIVITIES</th>
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<tbody>
<tr>
<td>11/03/96</td>
<td>Selection and introduction of surveyors to the data collection instruments</td>
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<tr>
<td>13/03/96</td>
<td>Training of surveyors on purpose &amp; methodology of the survey</td>
</tr>
<tr>
<td>14/03/96</td>
<td>Field testing of survey procedures in Kabwata &amp; Civic Center health centers. Final revision of the data collection instruments</td>
</tr>
<tr>
<td>15/03/96</td>
<td>Further testing in Matero Main &amp; Bauleni health centers. Visits to all eight selected facilities for final preparations</td>
</tr>
<tr>
<td>18/03/96</td>
<td>Survey in Chelstone &amp; Chilenji health centers</td>
</tr>
<tr>
<td>19/03/96</td>
<td>Survey in Mutendere &amp; Kamwala health centers</td>
</tr>
<tr>
<td>20/03/96</td>
<td>Survey in Chipata &amp; Chawama health centers</td>
</tr>
<tr>
<td>21/03/96</td>
<td>Survey in Matero Reference &amp; Kanyama health centers</td>
</tr>
<tr>
<td>22-30/03/96</td>
<td>Data Entry</td>
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Table 2: Number of Children Observed by Health Center, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>Facility</th>
<th># HWs observed</th>
<th># mothers interviewed</th>
<th># HWs interviewed</th>
</tr>
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<tbody>
<tr>
<td>Chelstone</td>
<td>9</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Chilenji</td>
<td>28</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>Mutendere</td>
<td>27</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>Kamwala</td>
<td>27</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>Chipata</td>
<td>22</td>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>Chawama</td>
<td>29</td>
<td>29</td>
<td>1</td>
</tr>
<tr>
<td>Matero Ref.</td>
<td>24</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Kanyama</td>
<td>30</td>
<td>30</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>196</td>
<td>194</td>
<td>13</td>
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</tbody>
</table>

Table 3: Proportion of Sick Children Screened by Facility and by Type of Health Worker, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>Facilities/HW</th>
<th>COs</th>
<th>MDs</th>
<th>ZRNs</th>
<th>ZENs</th>
<th>Others</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelstone</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Chilenji</td>
<td>21</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Mutendere</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Kamwala</td>
<td>21</td>
<td>0</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Chipata</td>
<td>22</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>22</td>
</tr>
<tr>
<td>Chawama</td>
<td>27</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>29</td>
</tr>
<tr>
<td>Matero Ref</td>
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<td>0</td>
<td>21</td>
<td>0</td>
<td>0</td>
<td>24</td>
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<tr>
<td>Kanyama</td>
<td>20</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>30</td>
</tr>
<tr>
<td>TOTAL</td>
<td>144</td>
<td>2</td>
<td>31</td>
<td>11</td>
<td>8</td>
<td>196</td>
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Table 4:  Main History Questions Asked by Health Workers by Presenting Complaints, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>HISTORY QUESTIONS/COMPLAINTS</th>
<th>FEVER N=134 (%)</th>
<th>DIARRHEA N=64 (%)</th>
<th>COUGH N=136 (%)</th>
<th>TOTAL N=196 (%)</th>
</tr>
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<tbody>
<tr>
<td>Length of illness</td>
<td>133 (99)</td>
<td>64 (100)</td>
<td>134 (98)</td>
<td>193 (98)</td>
</tr>
<tr>
<td>Previous treatments for the illness</td>
<td>44 (33)</td>
<td>23 (36)</td>
<td>37 (27)</td>
<td>63 (32)</td>
</tr>
<tr>
<td>Fever in past 24 hours</td>
<td>128 (95)</td>
<td>61 (95)</td>
<td>122 (90)</td>
<td>179 (91)</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>45 (34)</td>
<td>62 (97)</td>
<td>39 (29)</td>
<td>70 (36)</td>
</tr>
<tr>
<td>Cough or difficult breathing</td>
<td>99 (74)</td>
<td>43 (67)</td>
<td>118 (87)</td>
<td>145 (74)</td>
</tr>
</tbody>
</table>

Table 5:  Frequency of Sick Children Assessed for Danger Signs by Main Complaints, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>DANGER SIGNS ASKED OR LOOKED FOR BY HW</th>
<th>DIARRHEA N=64 (%)</th>
<th>FEVER N=134 (%)</th>
<th>COUGH N=136 (%)</th>
<th>ALL N=196 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Able to eat</td>
<td>27 (42)</td>
<td>43 (32)</td>
<td>35 (26)</td>
<td>58 (30)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>29 (45)</td>
<td>36 (27)</td>
<td>30 (22)</td>
<td>54 (28)</td>
</tr>
<tr>
<td>Lethargy or drowsiness</td>
<td>24 (38)</td>
<td>56 (47)</td>
<td>49 (41)</td>
<td>75 (43)</td>
</tr>
<tr>
<td>History of convulsions</td>
<td>1 (1)</td>
<td>2 (2)</td>
<td>1 (1)</td>
<td>2 (1)</td>
</tr>
</tbody>
</table>
Table 6: Assessment and Interventions Conducted in Children with Diarrhea, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>History questions asked, examinations done and prescriptions for diarrhea</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=64</td>
<td></td>
</tr>
<tr>
<td>Asked for duration of episode</td>
<td>57 (89)</td>
</tr>
<tr>
<td>Asked if blood in stool</td>
<td>41 (64)</td>
</tr>
<tr>
<td>Asked if child is vomiting</td>
<td>29 (45)</td>
</tr>
<tr>
<td>Looked for skin turgor</td>
<td>21 (33)</td>
</tr>
<tr>
<td>Prescribed ORS</td>
<td>42 (69)</td>
</tr>
</tbody>
</table>

Table 7: Assessment and Interventions in Children with Cough or Difficult Breathing, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>Assessment by health worker</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=136</td>
<td></td>
</tr>
<tr>
<td>Asked history questions for cough</td>
<td>118 (87)</td>
</tr>
<tr>
<td>Counted respiratory rates</td>
<td>3  (2)</td>
</tr>
<tr>
<td>Looked for chest indrawing</td>
<td>59 (43)</td>
</tr>
<tr>
<td>Used stethoscope</td>
<td>81 (60)</td>
</tr>
<tr>
<td>Prescribed antibiotics</td>
<td>66 (50)</td>
</tr>
</tbody>
</table>
Table 8: Health Workers' Knowledge on Management of Mild Diarrhea, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>Treatments and advice by health workers</th>
<th>Frequency (%) N=13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral rehydration therapy</td>
<td>13 (100)</td>
</tr>
<tr>
<td>Extra fluids at home</td>
<td>8 (62)</td>
</tr>
<tr>
<td>Continue feeding</td>
<td>10 (77)</td>
</tr>
<tr>
<td>Return if blood in the stool</td>
<td>5 (38)</td>
</tr>
<tr>
<td>Return if drinking poorly</td>
<td>5 (38)</td>
</tr>
<tr>
<td>Antibiotics</td>
<td>2 (15)</td>
</tr>
<tr>
<td>Antidiarrheal/antimotility</td>
<td>2 (15)</td>
</tr>
</tbody>
</table>

Table 9: Frequency of Health Messages Given by Health Workers during the Survey, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>Messages and other open-ended questions asked by HWs</th>
<th>Frequency (%) N=186</th>
</tr>
</thead>
<tbody>
<tr>
<td>About the sickness</td>
<td>69 (37)</td>
</tr>
<tr>
<td>More fluids</td>
<td>26 (14)</td>
</tr>
<tr>
<td>Increase feeding</td>
<td>26 (14)</td>
</tr>
<tr>
<td>Continue home nursing care</td>
<td>53 (28)</td>
</tr>
<tr>
<td>Explained to mothers when to return</td>
<td>41 (22)</td>
</tr>
<tr>
<td>Asked mothers to tell schedule of treatment</td>
<td>19 (10)</td>
</tr>
<tr>
<td>Asked mothers to tell when to return follow-up</td>
<td>21 (11)</td>
</tr>
</tbody>
</table>
Table 10: Reasons Why Mothers/caretakers Were Dissatisfied with Health Center Services, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>Reasons given by mothers/caretakers</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=191</td>
<td></td>
</tr>
<tr>
<td>No drugs were given at the pharmacy</td>
<td>36 (49)</td>
</tr>
<tr>
<td>Long waiting time</td>
<td>30 (41)</td>
</tr>
<tr>
<td>Staff are not receptive</td>
<td>3 (4)</td>
</tr>
<tr>
<td>No doctors in the clinic</td>
<td>2 (3)</td>
</tr>
<tr>
<td>Clinic is congested or shortage of staff</td>
<td>2 (3)</td>
</tr>
</tbody>
</table>

Table 11: Health Workers' Knowledge of Signs to Refer a Sick Child to the Hospital, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>Signs or conditions for referral</th>
<th>Percent of health workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drowsiness/unconsciousness</td>
<td>100</td>
</tr>
<tr>
<td>Convulsions</td>
<td>92</td>
</tr>
<tr>
<td>Not eating or drinking</td>
<td>77</td>
</tr>
<tr>
<td>Vomiting everything</td>
<td>46</td>
</tr>
<tr>
<td>Persistent fever</td>
<td>92</td>
</tr>
<tr>
<td>Chest indrawing/wheezing</td>
<td>77</td>
</tr>
<tr>
<td>Severe dehydration</td>
<td>85</td>
</tr>
<tr>
<td>Stiff neck</td>
<td>100</td>
</tr>
<tr>
<td>Severe malnutrition</td>
<td>100</td>
</tr>
<tr>
<td>Severe pallor</td>
<td>100</td>
</tr>
<tr>
<td>Fever or fast breathing in young infants</td>
<td>85</td>
</tr>
</tbody>
</table>
Table 12: Availability of Supplies and Equipment in Health Centers, Lusaka Health Facility Survey, 1996

<table>
<thead>
<tr>
<th>Supplies/Equipment or commodities available</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seats for mothers while waiting</td>
<td>87</td>
</tr>
<tr>
<td>Chair &amp; table for health worker</td>
<td>87</td>
</tr>
<tr>
<td>Watch with second hand</td>
<td>12</td>
</tr>
<tr>
<td>Running water</td>
<td>50</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>100</td>
</tr>
<tr>
<td>Sterilization equipment</td>
<td>87</td>
</tr>
<tr>
<td>Lockable cabinets or rooms for drugs</td>
<td>100</td>
</tr>
<tr>
<td>Scales for weighing children</td>
<td>100</td>
</tr>
<tr>
<td>Usable latrines/toilets</td>
<td>62</td>
</tr>
<tr>
<td>Two weeks supply of disposable syringes and needles</td>
<td>12</td>
</tr>
<tr>
<td>Two weeks supply of IV fluids</td>
<td>1</td>
</tr>
</tbody>
</table>
APPENDIX 2
SURVEY INSTRUMENTS

Appendix 2a: Facility, Equipment, and Supplies
Appendix 2b: Health Worker Interview
Appendix 2c: Observing the Health Worker
Appendix 2d: Exit Interview with the Mother or Guardian
Appendix 2: Survey Instruments

Appendix 2a: Facility, Equipment and Supplies

Facility, Equipment, and Supply Questions

District __________________ Facility name __________________ Date <dd/mm>__________
Interviewer __________________

Space and equipment

Are the following present in the clinic?

1. Are all mothers or guardians able to be seated while waiting? Y N
2. Does each health worker caring for children have a chair and table or desk? Y N
3. Are the mother or guardian and child able to be attended in privacy? Y N
4. Is a watch with a second hand or a timer available for each health worker managing sick children? Y N
5. Is an adequate volume of water available? Y N
6. Is there a latrine in good working order for patients and staff? Y N
7. Is a weighing scale present and in working order? Y N
8. Is there a cooker/stove for sterilization in working order, with adequate fuel? Y N
9. Is there a steam sterilizer present and in use? Y N
10. Is a refrigerator for vaccines present and in working order? Y N
11. Is a thermometer present inside? Y N
12. Is a temperature chart for the MCH refrigerator being kept? Y N
13. How many days out of the previous 30 was the temperature above 8°C?
   ____ days N/A
14. For how many days out of the previous 30 was the temperature below 0°C?
   ____ days N/A
15. In your opinion are there adequate health education materials displayed about the health of children which are appropriate, and up to date? Y N

Management of drugs and other supplies

16. Are drugs and supplies stored in a locked cabinet or room with grill doors? Y N
17. Is there a two week supply of unused disposable needles in stock? Y N
18. Is there a two week supply of unused disposable syringes in stock? Y N
19. Is there a two week supply of IV fluids and giving sets in stock? Y N
20. Availability of drugs: Please fill in the following table:

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Is there a stock card?</th>
<th>Amount of stock recorded</th>
<th>Actual stock present</th>
<th>Days out of stock last month</th>
<th>Date drug last in stock</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotrimoxazole syrup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotrimoxazole tablets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chloroquine syrup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chloroquine tablets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ORS sachets</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV fluids</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pen V syrup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye ointment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panadol syrup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amoxicillin syrup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mebendazole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metronidazole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multivitamins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ORT corner**

21. Is there a place where a child and mother or guardian can stay for several hours and be observed while the child is treated for dehydration? Y N

22. Does the facility have all the necessary cups, containers, spoons and measuring and mixing utensils to prepare ORS? Y N

**Clinic records**

23. Are OPD registers kept up-to-date, including diagnosis and treatment given? Y N

24. Is the immunization tally sheet kept up-to-date? Y N

25. Was the MF-47 (monthly return) completed last month? Y N

26. Is there at least a two week supply of under-5 cards for new children coming? Y N

**Review the OPD register for the last month and fill in the following:**

27. According to the OPD register how many first visits under age five were made last month? _____ number

28. Does this total from the OPD register agree with the total on the MF-47? Y N

29. How many of the children under five seen last month have more than one diagnosis recorded in the register? _____ number Information not available
30. From the MF-47, how many of the following diagnoses were made last month in children under 5?
   ___ malaria
   ___ diarrhoea
   ___ dysentery
   ___ pneumonia
   ___ malnutrition
   ___ anaemia
   ___ measles
   ___ ear infection

31. Of the last 10 cases of simple childhood diarrhoea or "gastroenteritis" (but not dysentery) recorded in the register, for how many were antibiotics prescribed?
   ___ number Information not available

32. Of the last 10 cases of childhood diarrhoea or "gastroenteritis" recorded in the register, for how many was ORS prescribed?
   ___ number Information not available

33. Of the last 10 cases of upper respiratory tract infection recorded for how many were antibiotics prescribed?
   ___ number Information not available

34. Of the last 10 cases of malaria recorded, how many received chloroquine injections?
   ___ number Information not available

35. How many children were referred to hospital last month for any condition?
   ___ number referred Information not available

**General Health Center information**

36. Are the following present?
   ___ map of catchment area
   ___ population statistics, including population <5 yrs <1 yr
   ___ immunization coverage graphs
   ___ graph of the most common diagnoses
   ___ outreach and clinic activities schedule
   ___ clinical guidelines

37. Is there an equipment inventory present, and well kept? Y N

38. What is the state of cleanliness of the toilets (both staff and patient)?
   ___ clean
   ___ not very clean
   ___ unspeakable

39. What is the state of cleanliness of the kitchen?
   ___ good
   ___ fair
   ___ poor

**END OF EQUIPMENT AND SUPPLY QUESTIONS**

Be sure to thank the in-charge for his or her kind assistance in helping to supply this information.
Appendix 2b: Health Worker Interview

Health worker interview

District________________________Facility name________________________Date __/__/____
Interviewer_____________________

Introduce yourself to the health care worker. Tell him/her that you would like to ask him/her some general questions about the clinic followed by some questions about his/her job and some of the diseases likely to be seen. Please assure the worker that this is not an inspection, and their responses are confidential and will not be disclosed to their supervisors.

Activities at the Health Center

1. Type of health worker
   - Clinical officer (CO)
   - Registered Nurse (ZRN)
   - Enrolled Nurse (ZEN)
   - Other (OTH)
   - Environmental Health Technician (EHT)
   - Classified Daily Worker (CDW)
   - Doctor (MD)
   - Community Health Worker (CHW)

2. How many years have you been at this facility? ______ yrs

3. How many hours a day does the clinic see patients? ______ hrs
   How many days per wk? ______ days

4. In a usual day, how many staff are on duty treating children in the OPD? ______

5. How many of those treating children have received training in treating childhood illness. ______
   □ don't know

6. In the last 5 years, which of the following training courses (and lasting 2 days or more) have you participated in? (read out the list and tick responses)
   - immunisation
   - management of malaria
   - management of diarrhoea
   - management of malnutrition
   - management of respiratory infections
   - Quality Assurance
   - Other
   - attended no training courses

7. How many hours per day does this clinic offer immunisations to children? ______ hours
   How many days per week is it open for children at least some hours? ______ days

8. How many times during the past month has some health worker from this clinic done outreach work in the following locations? (please tick responses volunteered—do not prompt)
   - schools
   - markets
   - households
   - community groups

9. In the past 12 months, how many times has a supervisor visited your health center? ______ times

10. Which of the following did your supervisor do the last time he or she made a supervisory visit? (Read the following to the health worker and tick all that apply)
    - Discussed staff complaints about work conditions
    - Observed management of sick children
    - Interviewed patients/guardians
    - Discussed drug delivery problems
    - Reviewed records and reports
    - Inspected the facility
__Provided clinical training or continuing education__
__Discussed problems with supplies and equipment__
__Met with the entire team to provide feedback from the visit__
__This health worker was not present during last visit so cannot answer__
__Other ____________________________________

**Clinical Management**

*Now I would like to ask some questions on treatment of common childhood diseases.*

11. What things should you examine if a child has a history of cough or difficulty breathing?
*(Tick all answers given by the health worker—without prompting)*

- Count respiratory rate
- Listen with a stethoscope for crepitations
- Look for chest in-drawing
- Listen for wheezing/or stridor
- Look for flaring of the nostrils
- Other __________________
- Doesn't know

12. A 9 month old child has a cough. How can you tell if the child has pneumonia?
*(Tick all answers given by the health worker—without prompting)*

- Rapid or difficulty breathing
- Look for chest in-drawing
- Listen with a stethoscope
- Other __________________
- Doesn't know

13. Have you ever learned from any source that rapid respiration at rest in a two-year old child means that the child probably has pneumonia? Y N

14. If a 9 month old child should have a breathing rate of 30 per minute would you consider this child as having pneumonia? Y N

15. If a child should be brought to you with a cough, but no fever or rapid respiration, what would you do?
*(Tick all answers given by the health worker—without prompting)*

- Advise increasing fluids
- Refer to hospital
- Prescribe antibiotics
- Check for ascaris worms
- Prescribe paracetamol
- Prescribe cough mixture
- Other ________________

16. If a child with diarrhoea is brought to you, what questions would you ask of its mother?
*(Tick all answers given by the health worker—without prompting)*

- How many days ago did the diarrhoea begin?
- Is blood or mucus present in the stool?
- Other (details need not be recorded)

17. If a child has diarrhoea what things should you examine for?
*(Tick all answers given by the health worker—without prompting)*

- Skin pinch/skin turgor
- Sunken eyes
- Dryness of eyes or mouth
- Thirst
- Level of consciousness
- Other (details need not be recorded)

18. How do you know if the child with diarrhoea is dehydrated?
(Tick all answers given by the health worker—without prompting)

___ Lethargic or unconscious or not able to drink
___ Restless or irritable
___ Sunken eyes
___ Thirsty
___ Skin pinch goes back slowly
___ Dry mouth or dry eyes
___ Other (details need not be recorded)

19. What treatment and advice would you give for a child with mild diarrhoea of two days' duration?
(Tick all answers given by the health worker—without prompting)
___ ORS/ORT
___ Advise mother to give extra fluids at home
___ Advise mother to continue feeding (breast feeding if under 2 years)
___ Advise mother to return if blood or mucus in the stool
___ Advise mother to return if child not drinking well
___ Antibiotics
___ Antimotility drugs/antidiarrhoeal drugs
___ Other ________________________

20. If a child you diagnosed and treated for malaria three days previously is brought back by its mother or guardian with continuing fever and you believe the treatment was taken appropriately, what are the next things you would do?
(Tick all answers given by the health worker—without prompting)
___ Ask the mother to bring the child back every day for the next three days to be given chloroquine under direct observation.
___ Prescribe cotrimoxazole with a repeat course of oral chloroquine
___ Advise the mother to purchase fansidar since you do not have it
___ Refer to hospital
___ Reassess the child to determine if there is some other condition present
___ Other ________________________

21. Which of the following would cause you to refer a child to hospital without delay?
(Read the list to health worker and tick which are selected)
___ Child is drowsy/abnormally sleepy/unconscious
___ Child has had convulsions
___ Child is not eating or drinking anything
___ Child vomits everything
___ Fever does not respond to the drugs which have been given
___ Chest in-drawing or difficulty breathing or wheezing
___ Severe dehydration
___ Stiff neck
___ Severe malnutrition: visible severe wasting or edema of both feet
___ Severe pallor
___ Infant less than two months old with fever or fast breathing
___ Severe pallor
___ Other (details need not be recorded)

22. If a ten month old child comes to the clinic who is hot to the touch, has diarrhoea, and has received no immunisations, what would you do?
(Tick all answers given by the health worker—without prompting)
___ Give BCG
___ Give DPT-1
___ Give polio-1
___ Give measles immunisation
___ Assess and treat the fever
___ Assess and treat the diarrhoea
___ Tell the mother to return for immunisations when the child is well
Health Worker Perceptions

23. What do you think three important reasons which prevent mothers or guardians from bringing children to the health center when they are ill?

(Tick all answers given by the health worker—without prompting)

- Lack of money
- Lack of time, busy selling in the market or other work
- Ignorance
- Too many children
- Difficult or expensive transport
- Long distances to clinics
- Long waiting times in the clinics
- Lack of drugs in the clinics
- Long distances to clinics which mothers think are important
- Fear of febrile reactions or abscess formation
- Others (specify) ____________________________

24. What are reasons you think why mothers do not follow instructions given them by health workers?

(Tick all answers given by the health worker—without prompting)

- Mothers don't have enough time to carry out instructions given
- The mothers ignore the advice given
- Health Workers need additional training in communication skills
- Nobody cares whether health workers do communicate effectively
- The clinic doesn't have adequate materials (posters, flip charts, etc) to teach effectively
- The health center is too noisy and lacks privacy
- Mothers are confused by conflicting messages from health workers, some of whom are not up-to-date on recommended treatment and advice
- Other (specify) ____________________________

25. What are the biggest difficulties about your present job?

(Tick all answers given by the health worker—without prompting)

- Lack of adequate in-service training or upgrading
- Mothers don't bring children to clinic
- Staff shortages
- Lack of drugs or supplies
- Lack of supervision
- Lack of feedback on performance
- Inadequate transport
- Health facilities are inadequate and too small
- Lack of knowledge
- Inadequate salary
- Poor opportunities for promotion
- Demoralised
- Others______________________________

26. If you could choose three things which would improve the quality of care for children in your clinic, what would they be?

(can name more than three if desired, some probing questioning may be required.)

__________________________________________

__________________________________________

END OF THE HEALTH WORKER INTERVIEW

Thank the health worker for his/her cooperation and answer any questions that he/she may have about the correct recommendations for immunisations or management of sick children.
Appendix 2c: Observing the Health Worker

Observing the Health Worker

District __________ Facility __________ Date __ / __ / __
Interviewer __________ Health Worker [ ] A [ ] B [ ] C Survey No.__

Background information

1. Child's age from clinic card (months) __
2. What type of health worker is being observed?
   _ Clinical officer (CO) _ Environmental Health Technician (EHT)
   _ Registered nurse (ZRN) _ Enrolled Nurse (ZEN)
   _ Doctor (DR) _ Community Health Worker (CHW)
   _ Other ____________

Initial screening (circle correct answer)

Does the health worker determine the child's:

3. Age by questioning? Y N
4. Weight for age? Y N
5. Body temperature (by thermometer or by touch)? Y N
6. Immunisation status (by card)? Y N No card brought

Assessment questions

---BEGIN TIMING THE CONSULTATION NOW--- TIME: __________

About which of the following does the health worker ask?

7. Why the mother or guardian brought the child to the health center? Y N
   if so write down-
   1st cause ____________________ 2nd cause ____________________
   other causes____________________

8. Length of the illness Y N
9. Previous treatment for the same illness Y N (if No, jump to Q11)
10. If Yes- did she or he ask if treatment was at home or in a clinic? Y N
11. Fever in the past 24 hours Y N
12. Fits (convulsions) Y N
13. Change in level of consciousness/drowsy or sleepy? Y N NA
   (circle "NA" if child is alert)
14. Diarrhoea Y N (if No, jump to Q18)

15. If Yes - did health worker ask how many days? Y N

16. If Yes - was blood in the stool queried? Y N

17. If Yes - was frequency and consistency queried Y N

18. Cough or difficulty breathing? Y N

19. Vomiting Y N (if No, jump to Q21)

20. If Yes - did the health worker try to find out if just spitting up or vomiting everything? Y N

21. Able to breast feed? if under age two, does the health worker ask? Y N N/A

22. How well the child was eating? Y N

Examination of the child

Which of the following areas does the health worker examine?

23. Pinch the skin to check skin turgor? Y N

24. Count respiratory rate? Y N

25. Lift the shirt or dress to look for chest in-drawing? Y N

26. Listen to chest with stethoscope? Y N

27. Observe the palms or conjunctivae for pallor? Y N

Treatment prescribed for the child

28. What does the health worker administer, prescribe or recommend for the child (tick ALL which apply)
   _ Immunisation(s)
   _ Chloroquine, tablets or syrup
   _ Chloroquine, injection
   _ An antibiotic, tablets or syrup
   _ An antibiotic, injection
   _ Paracetamol
   _ ASA
   _ Vitamin A
   _ ORS or home available fluids
   _ Antimotility or anti diarrhoeal drug
   _ Other (specify) __________________________

   _ referral to hospital
   _ No drugs or treatments were advised
     (if you tick this, jump to Q40)

29. Total number of drugs administered or prescribed ___

30. Total number of injections administered ___

For any tablets or syrup dispensed or prescribed does the health worker explain:

31. Dose of medication? Y N
32. Times of day to give medication? Y N
33. Duration of treatment? Y N
34. Potential adverse reactions (side effects) Y N
35. Not to take any other medications along with those prescribed during this visit? Y N
36. What to do with any medications remaining at the end of treatment? Y N

If ORS is given or prescribed, does a health worker—

37. Explain how to prepare ORS? Y N
38. Demonstrate how to prepare ORS? Y N
39. Ask the mother to demonstrate how she will prepare ORS? Y N

Talking to the Mother

Does health worker explain to the mother or guardian:

40. What is wrong with the child? Y N
41. To give more fluids than usual? Y N
42. To continue breast feeding or encouraging the child to eat? Y N
43. What treatment mother should carry out at home? Y N
44. To return for further evaluation—
   ___ Fever does not go away after a certain length of time
   ___ the child is unable to drink
   ___ blood appears in the stool
   ___ diarrhoea persists
   ___ the child develops fast or difficult breathing
   ___ the child becomes worse for any reason
   ___ at the end of treatment for a check up
   ___ Other __________________________

Does the health worker ask open-ended questions to determine whether the mother guardian understands:

45. How to give medicine (dose, frequency, number of days)? Y N
46. When to return with the child? Y N

CHECK THE TIME AT THE END OF THE CONSULTATION WITH THE NURSE OR CLINICAL OFFICER
TIME: _____________ DURATION OF INTERVIEW: ___________ minutes

47. Please ask the health worker for his or her provisional diagnosis for this patient

END OF HEALTH WORKER OBSERVATION

At the end of the series of observations, be sure to thank the health worker for his or her help during the clinic session.
Appendix 2d: Exit Interview with the Mother or Guardian

Exit Interview with the Mother or Guardian of a Sick Child

District________________________ Facility name________________________ Date__/__/____

Interviewer______________________ Child's Age (months) ______ Survey No._______
☐ if referred to hospital by nurse or clinical officer

Greet the mother and tell her that you would like to ask some questions about her visit to the health center today. Make her feel free, and assure confidentiality of answers.

Information about the Illness

1. What condition does your child have that brought you to the clinic today?

2. Is this the child's first visit to the health center for this illness?
   ☐ First visit
   ☐ Return visit because the child is not getting better

3. How many days ago did you child first develop signs of illness? ____ days

4. Did you give any treatment at home for this illness before coming to the clinic? Y N (if No, jump to Q9)

5. If Yes-- For what condition? ______________
   (If “diarrhoea,” go to Q6; if “cough,” jump to Q7; and if “fever,” jump to Q8)

6. Did you give your child treatment for diarrhoea at home? Y N
   If Yes, what did you give—
   (tick what the mother volunteers—do not prompt)
   ☐ ORS (Madzi a Moyo)
   ☐ home available fluids (tea, milk, soda)
   ☐ extra water
   ☐ extra breast feeding
   ☐ antibiotics
   ☐ Panadol or ASA
   ☐ traditional medicines/herbs/tatoos
   ☐ medicines from private clinic
   ☐ other medications

7. Did you give your child treatment for coughing/difficult breathing at home? Y N
   If YES what did you give—
   (tick what the mother volunteers—do not prompt)
   ☐ cough syrup
   ☐ traditional medicines/herbs/tatoos
   ☐ Panadol or ASA
   ☐ medicines from private clinic
   ☐ antibiotics
   ☐ extra water
   ☐ kept child warm
   ☐ other medications
8. Did you give your child treatment for fever at home? Y N
   If YES, what did you give?
   (tick what the mother volunteers—do not prompt)
   ___ chloroquine syrup or tabs
   ___ Fansidar
   ___ antibiotics
   ___ Panadol or ASA (or other analgesics or antipyretics)
   ___ traditional medicines/herbs/tattoos
   ___ tepid bath/cooling sponging
   ___ medicines from private clinic
   ___ other _______________________

9. Did the health worker tell you what was wrong with your child? Y N

10. If Yes- What did he or she say was wrong with your child?
    (Tick all that the mother or guardian volunteers—do not prompt)
    ___ Fever/Malaria
    ___ Diarrhoea
    ___ Dysentery
    ___ Cold/upper respiratory infection
    ___ Pneumonia
    ___ Measles
    ___ Malnutrition
    ___ There was nothing wrong
    ___ Didn't understand what I was told
    ___ Other condition: (specify) ___________________

11. Were you given a date by the health worker when you should return with the child for a follow-up visit? Y N

12. Did the health worker tell you to bring the child back if it becomes worse? Y N

13. How will you know if your child becomes worse and should be brought back?
    (Tick all that the mother or guardian volunteers)
    ___ Fever doesn't go away
    ___ Child becomes drowsy or difficult to arouse
    ___ Child unable to eat
    ___ Child unable to drink
    ___ Blood in the stool
    ___ Diarrhoea persists
    ___ Child has fast or difficult breathing
    ___ Child fails to get better
    ___ Mother cannot explain or can't remember
    ___ Other: (specify) ___________________

Medications

14. Were you given any medicines or prescriptions for your child at the health center today? Y N (if NO, jump to Q19)

15. If Yes- Were you explained how to give the medications at home? Y N (if NO, jump to Q17)

16. If Yes- ask to see each medicine. For each medicine given ask—

    Please tell me how you are going to give this?

    Then probe to find out—

    HOW MUCH medicine will be given the child EACH TIME?
    WHEN DURING THE DAY it is given?
    And FOR HOW MANY DAYS is the medicine to be given?
    (Write “+” if mother answers correctly, otherwise write “-” if incorrect or does not know)
<table>
<thead>
<tr>
<th>Medicine</th>
<th>How much is to be given at each dose</th>
<th>When during the day is it to be given</th>
<th>For how many days is it to be taken</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Chloroquine tabs</td>
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<tr>
<td>☐ Chloroquine syrup</td>
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<tr>
<td>☐ Cotrimoxazole tabs</td>
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<td>☐ Cotrimoxazole syrup</td>
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<tr>
<td>☐ Paracetamol tabs</td>
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<tr>
<td>☐ Paracetamol syrup</td>
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<tr>
<td>☐ ORS</td>
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<tr>
<td>☐ Amoxicillin tabs</td>
<td></td>
<td></td>
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<tr>
<td>☐ Amoxicillin syrup</td>
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<tr>
<td>☐ Erythromycin suspension</td>
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<td>☐ Pen V/orapen</td>
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<tr>
<td>☐ Metronidazole</td>
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<td>☐ Nalidixic acid</td>
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<tr>
<td>☐ Vitamin A</td>
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<tr>
<td>☐ FeSO₄</td>
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<tr>
<td>☐ Folic Acid</td>
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<tr>
<td>☐ other</td>
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</tr>
</tbody>
</table>

17. Did the health worker(s) tell you about the possible adverse reactions (side effects) which the medicine(s) or prescription you were given might have?  Y  N

18. Did the health worker(s) tell you what to do with any medications remaining after your child's treatment is completed?  Y  N

19. For all mothers, not just those whose children have diarrhoea—
Could you please demonstrate to me how ORS is prepared? (Have necessary items available including measures; it is not necessary for mother or guardian to actually open the ORS sachet)
How much water is used to prepare ORS?
   ___ Correct volume (about 1 litre)
   ___ Incorrect volume (much less than 1 litre)
   ___ Incorrect volume (much more than 1 litre)
   ___ Doesn't know correct volume
   ___ 1 sachet to be added (correct)
   ___ Incorrect number of sachets suggested
   ___ Doesn't know correct number of sachets

20. If ORS is not available, can you explain to me how you would make SSS at home?
   (Correct = 8 level teaspoonfuls of sugar + 1 level teaspoonful of salt + 1 litre of clean water or 4 level tablespoonfuls + 1 level teaspoonful + 1 litre of clean water)
   ___ Correctly explained
   ___ Incorrectly explained
   ___ Does not know

21. Did the health worker tell you home nursing care to do for the child when you return home?  Y  N
   If Yes, what did the health worker tell you to do?
   (Tick all mother volunteers—do not prompt)
   ___ Give more fluids
   ___ Continue or increase feedings or breast feeding
   ___ Give medicine
   ___ Tepid baths for fever
   ___ Keep the child warm
   ___ Avoid giving medications other than those prescribed at this visit
   ___ Wasn't told anything
   ___ Can't remember
   ___ Other
Immunizations

22. Did you bring your child's immunization card? Y N

23. If No, why was it not brought? ________________________________

24. Did the clinician at the clinic today ask to look at the child's immunization card? Y N

25. Interviewer: examine the immunization record.
Did the child receive needed vaccines at this visit?
   __ Yes
   __ Can't know since mother did not bring card
   __ No if no-
ask--- __ mother or guardian has been told when to return for needed immunization
   __ none are needed at this visit
   __ should have received, I have referred the child back for immunization

26. If your child is ill with fever, or cough or diarrhoea or some other illness, would you still bring him/her to the MCH clinic for immunizations? Y N

27. Have you ever come to the clinic for an immunization session but for various reasons failed to have your child immunized? Y N

28. If Yes, was this because— (tick what mother volunteers, do not prompt)
   __ immunization session was cancelled
   __ immunization session was finished by the time I arrived
   __ supplies had run out by the time I arrived
   __ I was late
   __ There was no place to sit—I got tired of standing and left
   __ There was a long queue and I couldn't wait
   __ I was told that my child was too ill to receive immunization, and to return again
   __ Other reasons_____________________

Mother or Guardian satisfaction

29. How long did you have to wait before being first seen by any clinic staff?
   ______ minutes or hours and minutes

30. Do you think this waiting time was too long? Y N

31. Are there any parts of your visit to the clinic today with which you were not satisfied? Y N

32. If YES, what parts of your visit are you not satisfied about?
   __________________________________________________________

33. If you could suggest three ways in which service could be improved for children at this health center, what would they be? (may ask probing questions if needed)
   __________________________________________________________

34. Do you have any other comments (good or bad) about the service you received at the clinic today?

35. Do you have any questions about your child's illness or treatment which I could answer for you at this time? Minor questions or incorrect understanding can be cleared up; for major problems mothers should see clinic staff again. Thank the mother for answering questions, and wish her and her baby well.

END OF INTERVIEW