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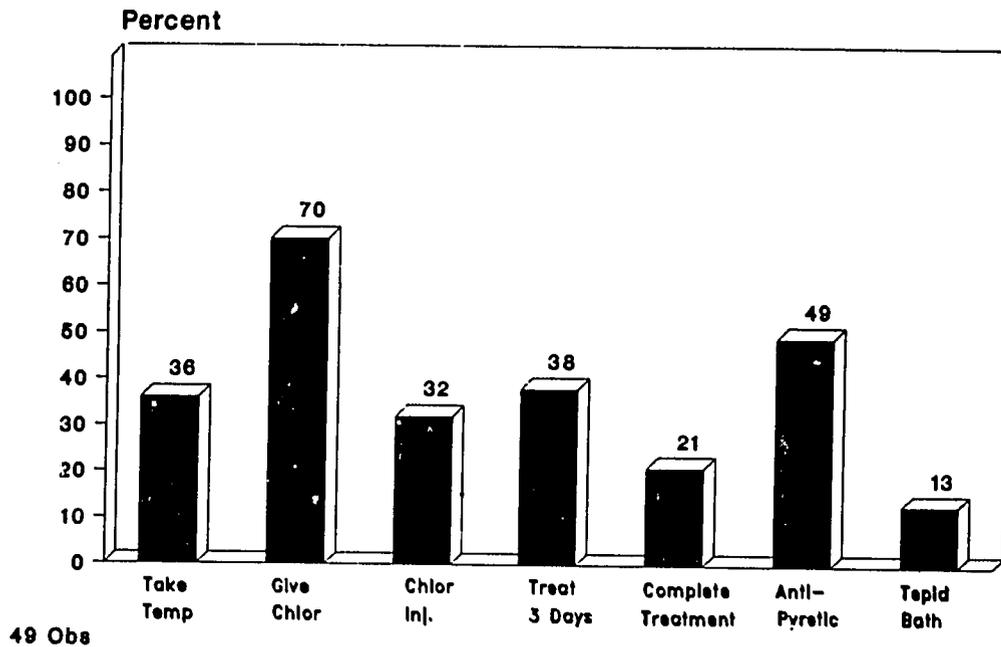
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# FACILITY ASSESSMENT SURVEY NSUKKA

## Fever: Case Management and Education by Health Workers



1991

Conducted by:  
Nsukka Local Government Health Department

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## SUMMARY OF FINDINGS

The Nsukka Facility Assessment Survey provides a concise summary of case management and education practices among health workers at government health facilities (with emphasis on immunization, diarrhoea, and fever/malaria) and the availability of necessary equipment and supplies. The facility assessment survey provides a useful tool, simple and relatively inexpensive, for monitoring the quality of health service delivery at the facility level.

Health worker practices for two critical components of primary health care, immunization and growth monitoring, were highlighted in this survey. Despite the availability of functional weighing scales in most health facilities, few health workers routinely weigh sick children. Growth monitoring using charts is generally done for immunized children only. While there is no official contraindication to immunizing sick children, less than half of the sick children presenting at health facilities had their immunization status checked. Failure to routinely monitor the growth/nutritional status of children and to check immunization status (both for children and mothers) constitute missed opportunities.

Immunization technique among health workers in Nsukka was generally very good, with sterile needles and syringes used to administer immunizations, and the correct dose of each antigen given at the correct site. Emphasis on EPI program activities throughout Nigeria over the past several years has contributed to improvements in immunization technique. Problems with immunization in Nsukka relate largely to inadequate education practices. Many mothers were not advised about the need to complete the immunization series, and management of reactions to vaccines was often not explained. Follow-up visit dates were often not recorded on the child's card.

In addition to correct immunization technique and patient education, necessary equipment and supplies, along with adequate cold chain maintenance, are critical for ensuring vaccine potency. In Nsukka, further efforts are required to ensure the availability of thermometers and temperature charts. Health workers must be encouraged to monitor the temperature of all refrigeration units on a daily basis.

Health worker skills in assessing dehydration due to diarrhoea and correct case management need strengthening. Few children with diarrhoea were weighed, and only half of the children had their skin turgor checked. The oral rehydration therapy use rate was very low in most facilities. There is a need for training to improve diarrhoea assessment and case management skills, as well as supervisory skills. Additional efforts are required to inform mothers about the importance of administering sugar-salt solution (SSS) and other home fluids to their children with diarrhoea. Many mothers have not even heard about SSS and few know how to prepare SSS correctly.

Although the majority of children presenting with fever at health facilities in Nsukka were treated with chloroquine, injections were given to almost one third of the children. Only in

instances where the child has severe vomiting and cannot take oral medication should chloroquine injection be given.

Sick children presenting at health facilities most often have more than one complaint. Children who have diarrhoea should also be assessed for nutritional status and proper counselling given where needed. Case management is most effective when the child's overall health status into consideration.

Many health facilities in Nsukka had inadequate equipment and supplies to carry out essential PHC activities. Potable water for handwashing and drinking is available at only half the facilities. Some facilities had neither ORS nor the ingredients to prepare SSS. Malaria diagnostic supplies and reagents are lacking and there are shortages of TT cards and DSN forms for routine 40-disease notification. Training efforts will be in vain unless the materials necessary to apply acquired skills are available to health workers.

Management and supervisory skills among facility heads and program officers require further attention. Training and retraining through the newly established continuing education unit of Enugu State Ministry of Health has begun to address this area of need. Training of LGA managers, complemented by routine field supervision and on-the-job training, will enhance skills and improve managerial performance.

This survey documents health worker practices at government health facilities in Nsukka, and highlights skill areas and logistics concerns that require attention. Routine supervisory visits (using checklists that address key problem areas identified in this survey) would serve as a useful tool for monitoring program efforts aimed at strengthening weak areas. A follow-up facility assessment survey after a suitable period of time would provide a more thorough review of health worker practices throughout the LGA. The Primary Health Care Team in Nsukka is faced with the challenge of using these data to strengthen the quality of health service delivery in the Local Government.

# **1 BACKGROUND**

Nsukka, one of eighteen Local Government Areas (LGA) in Enugu State, occupies a land area of 463 sq km and has an estimated 1991 population of 218,180. Nsukka comprises sixteen districts ("Autonomous Communities"), each with a traditional ruler. Each Autonomous Community is composed of a number of smaller towns and villages.

Nsukka has both an urban (Nsukka township) and a rural mix, with about three quarters of the population living in the rural areas. The climate is tropical, and the topography hilly with a few streams. Major occupations include farming and palm wine tapping.

Health services in Nsukka are provided through a state owned General Hospital, two Comprehensive Health Centres, six Primary Health Care Centres, and two Maternity Centres. The University in Nsukka has its own Medical Centre while the Comprehensive Health Centre at Obukpa serves as the clinical practice site for community health workers-in-training. There are twelve major private/voluntary health clinics and a number of smaller private health clinics in the Local Government.

Since 1988, when Nsukka became a "Willing" Model LGA, Federal Ministry of Health seed money has been provided to support Primary Health Care assessment and implementation activities. Baseline situation analyses have been completed at the LGA and Autonomous Community levels. Efforts are on-going to implement the various facets of Primary Health Care, including village health worker training and the establishment of health committees within Autonomous Communities. Major constraints facing the Primary Health Care program in Nsukka include inadequate transportation and logistics support, and a general skepticism about public sector health services.

Since mid-1991, the Combatting Childhood Communicable Diseases (CCCD) Project has provided support for Primary Health Care implementation in Nsukka. Major activities supported by CCCD include:

- management and supervisory skills training for PHC program managers and supervisors
- continuing education for facility-based PHC workers
- PHC orientation for LGA government officials and representatives of autonomous communities
- strengthening/establishment of ORT units and corners
- PHC supervision support through vehicle repair and maintenance

During 1992, CCCD will provide on-going support for continuing education programs to strengthen both technical and management/supervisory skills among program managers and facility-based health workers. Logistics support will be provided to enhance supervision and PHC implementation activities.

## **2 OBJECTIVES**

The Nsukka Facility Assessment Survey was conducted primarily to obtain information about case management and education practices among health workers in the Local Government. Special emphasis was placed on obtaining information about immunization and diarrhoea/fever case management and the availability of necessary equipment and supplies.

Specific objectives of the Facility Assessment Survey included:

- 1) to describe health worker skills in the assessment and case management of sick children under five years of age, with emphasis on diarrhoea and fever case management
- 2) to assess immunization technique and cold chain maintenance
- 3) to identify missed opportunities for immunization of women and children
- 4) to describe patient/mother education practices among health workers
- 5) to document the availability of equipment/supplies and selected essential drugs at health facilities
- 6) to describe management and supervisory skills among health workers and their supervisors
- 7) to identify logistical factors which may hinder the delivery of quality health services to children under five years

## **3 METHODS**

**Sample:** The assessment was conducted at eleven government health care facilities in Nsukka that provide routine immunization services. These facilities included general hospitals, comprehensive health centres, basic and rural health clinics, and MCH clinics.

**Survey Instrument:** Instruments used in the facility assessment included (see Appendix A):

- observation checklists for the case management of sick children and immunization
- exit interviews with mothers of sick children and children receiving immunization
- equipment/supply inventory
- questionnaires for interviews with health workers and their supervisors

**Survey Participants:** Survey participants were recruited from Nsukka Local Government and the Continuing Education Unit, Enugu State Ministry of Health (Appendix B). Three interviewer teams of four persons each (three interviewers and one team coordinator) were formed.

Survey participants were trained for five days on questionnaire content and survey methods. Training included an overview of survey goals and objectives and technical issues related to immunization and diarrhoea/fever case management. Each survey instrument was carefully reviewed to clarify the purpose of each item and how it was defined. Role plays with exit interview forms were conducted to reach consensus on correct language translation into Igbo. Two supervised field exercises were carried out at health facilities near the training site. Special meetings were conducted with team coordinators to review management and supervision responsibilities.

**Data collection:** A schedule of team visits to each facility was created in advance to ensure that visits coincided with provision of immunization services. On the morning of the survey, teams arrived at the facility well before the clinic opened for service, so that sterilization procedures could be observed. Upon arrival, the team coordinator introduced the general purpose of the survey to the head of the facility and explained methods that would be used. A brief tour was conducted to determine where services are provided, and to decide where interviewers should sit and where exit interviews should be conducted.

Mothers of children for whom an observation checklist was completed were given an identification card to present at the exit interview table. At the exit interview table, mothers of children with diarrhoea were asked to prepare sugar-salt solution. Observations and interviews continued in this fashion until five children with diarrhoea, five children with fever (as primary symptom), and five children being immunized had been observed. Multiple observations on sick children presenting with more than one complaint were allowed.

**Equipment/supply inventories and interviews with health workers (and supervisors, whenever available) were conducted by the team coordinator either after service hours or during a break in service delivery. While data were collected, team coordinators checked periodically for accuracy and completion. Validation observations on at least one mother/child in each program area (immunization, diarrhoea, and fever) were conducted.**

**Data analysis:** Data were manually abstracted into tables and tabulated by LGA health department personnel and survey interviewers, with technical support from CCCD staff.

## **4 MAJOR FINDINGS**

All eleven government health facilities in Nsukka were included in the Facility Assessment Survey (Table 1). Among these facilities were two general hospitals that provide health services in Nsukka, along with two comprehensive health centres, five health clinics (including four rural health centres and one basic health clinic), and two maternal and child health clinics.

Four cadres of health workers were observed during the survey (Table 2). Of the 22 health workers observed treating sick children or providing immunization, the majority were Junior or Senior Community Health Extension Workers and Public Health Nurses.

### **4.1 Assessment of Sick Children**

A total of 63 observations of sick children were made (Table 3). Three quarters of these sick children (74.6%) had fever and 22.2% had diarrhoea as a primary complaint. Other problems noted among sick children included cough, otitis media, and accident-related injuries.

The following points highlight key findings (summarized in detail in Table 4 and Fig. 1) related to health worker assessment and prescription of drugs for sick children:

- Despite the availability of functional scales in many health facilities, few health workers routinely weigh sick children. Weight is more commonly assessed among children being immunized who have an immunization card, with a growth chart for plotting weight.
- Immunization status was checked for only two out of five sick children presenting at health facilities.
- The majority of health workers took a history of the child's illness by asking questions about duration and history of fever and/or diarrhoea. Only one third of health workers asked mothers about home treatment with western or traditional medicine before coming to the health facility.
- On the average, each sick child received 2.7 drugs for treatment of his or her illness. The number of drugs given per child ranged from one to five.

Patient education practices among health workers, summarized in Table 4 and Fig. 2, were as follows:

- While the majority of health workers explained how to administer medications to the child's mother, only half stressed the importance of *completing* the treatment. Most health workers explained to the mother that she should return to the health center if the child's condition gets worse.
- Health workers explained and demonstrated SSS preparation to very few mothers of sick children. Education about SSS was given most often to mothers of children with diarrhoea.
- Only one in three health workers asked the mother questions to determine whether she understood the information given to her. Even fewer health workers asked the mother if she herself had any questions.

**Table 1. List of facilities, by type and location**

List of primary health care facilities visited during Facility Assessment Survey, by type and location, Nsukka, 1991

<b>PHC Facility</b>	<b>Number</b>
<b>General Hospital</b>	
Bishop Shanahan Nsukka General	2
<b>Comprehensive Health Centre</b>	2
Obukpa Okpuje	
<b>Health Centre</b>	4
Isielu Nsukka Opi Umm Medical	
<b>Basic Health Clinic</b>	1
Lejja	
<b>Maternal and Child Welfare Clinic</b>	2
Eha-Nsiagu Ibagwani	
<b>Total</b>	<b>11</b>

**Table 2. Health workers observed, by title**

Health workers observed during Facility Assessment Survey,  
Nsukka, 1991

<b>Title</b>	<b>Number</b>
Senior Community Health Extension Worker	6
Junior Community Health Extension Worker*	8
Public Health Nurse	6
Midwife	2
<b>Total</b>	<b>22</b>

*\* Includes Community Health Aides/Assistants*

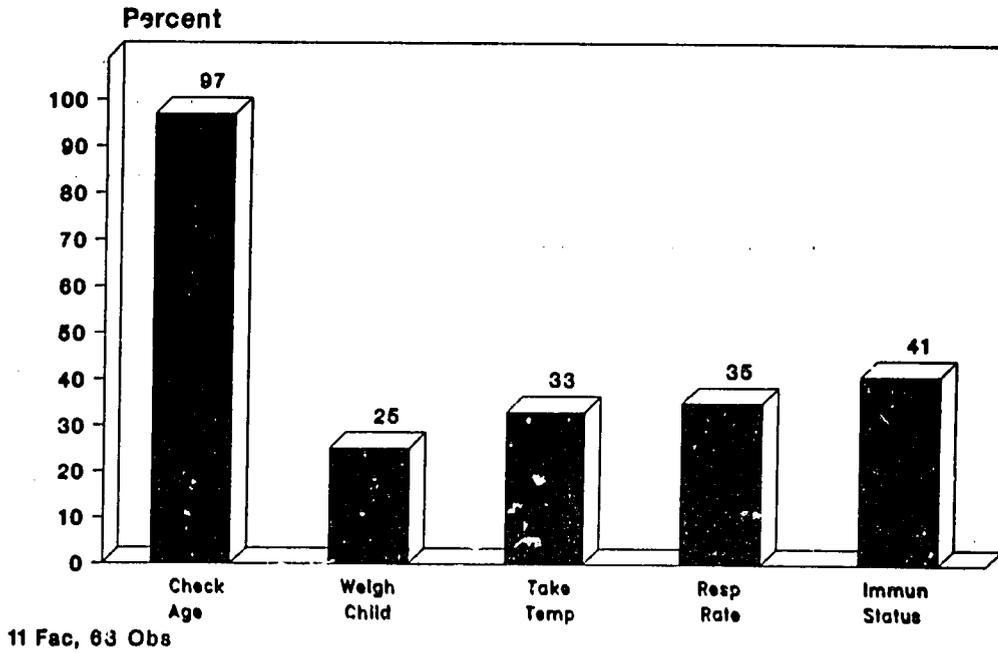
**Table 3. Sick child observations, by diagnosis**

Sick children presenting at health facilities, by health worker diagnosis,  
Nsukka, 1991

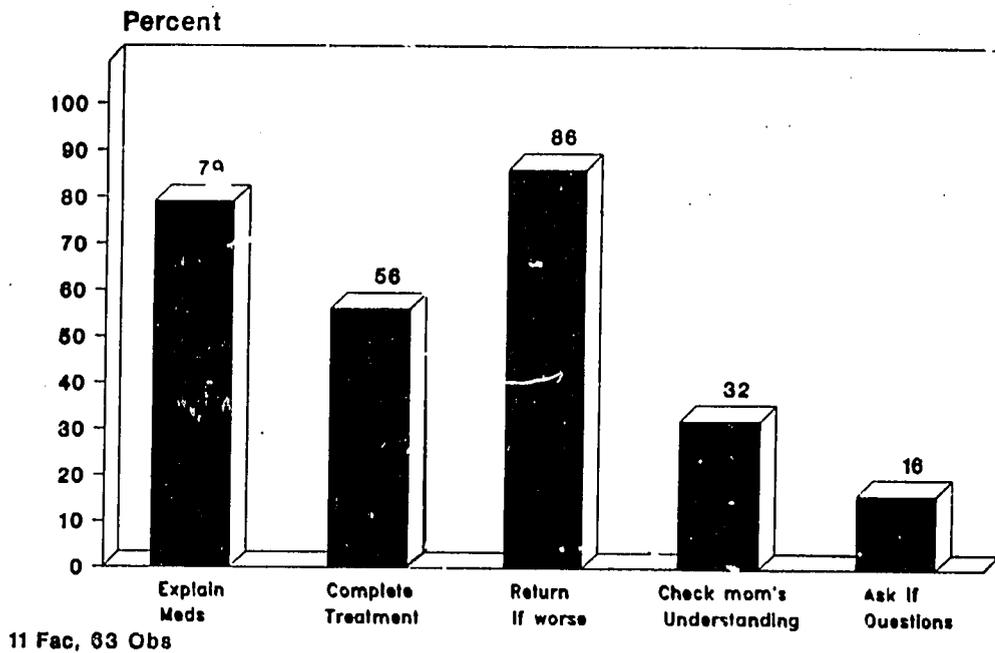
<b>Diagnosis</b>	<b>Number (%) of observations</b>
Fever	47 (74.6)
Diarrhoea	14 (22.2)
Other*	2 (3.2)
<b>Total</b>	<b>63</b>

*\* Other problems included malnutrition, otitis media, injuries, etc.  
These may have been coincident with fever and/or diarrhoea.*

**Figure 1**  
**Assessment of Sick Children**  
**Health Worker Practices**



**Figure 2**  
**Mothers of Sick Children**  
**Education by Health Workers**



**Table 4. Health worker practices in treating sick children**

Case management practices among health workers in the treatment of sick children presenting at health facilities, Nsukka, 1991

	Percentage	
	Yes	No
<i>Number of observations = 63</i>		
<i>Number of facilities = 11</i>		
<b>Does the health worker determine the child's:</b>		
Age	96.5	3.2
Weight	25.4	74.6
Temperature with a thermometer	33.3	65.1
Respiratory rate	34.9	65.1
Immunization status	41.3	58.7
<b>Does the health worker ask questions about:</b>		
General condition of the child	88.9	11.1
Duration of the illness	82.5	17.5
History of fever	74.6	25.4
Vomiting	31.7	68.3
Diarrhoea	23.8	76.2
Coughing	57.0	43.0
Difficulties with breathing	17.4	81.0
Problems with swallowing	9.5	90.5
History of home treatment with:		
Western medicine	34.9	65.1
Traditional medicine	27.0	73.0
<b>Does the health worker examine the child's:</b>		
Eyes	55.5	44.5
Ears	27.0	73.0
Throat	20.6	79.4
Breathing	38.1	61.9
Abdomen	49.9	50.1

**Table 4. Health worker practices in treating sick children (continued)**

	Percentage	
	Yes	No
<b>Does the health worker diagnose the child as having:</b>		
Fever	74.6	24.4
Malaria	47.6	52.4
Diarrhoea	22.2	77.8
Dehydration	—	100.0
Cough	50.8	49.2
Cold	36.5	63.5
Pneumonia/Bronchitis	12.7	87.3
Other	3.2	96.8
<b>Does the health worker give/prescribe:</b>		
Chloroquine		
Any form	42.8	57.2
Tablets	9.5	90.5
Syrup	22.2	77.8
Injection	12.7	87.3
Tab/syrup + injection	—	100.0
Paracetamol	57.1	42.9
Antibiotic	25.4	74.6
Cough mixture	12.7	87.3
Cold remedy	6.4	93.6
Vitamins	55.5	44.5
Phenerzon	—	100.0
Daraprin	—	100.0
At least one other drug	40.3	59.7
Average number drugs/child	2.7	
Range	1-5	

**Table 4. Health worker practices in treating sick children (continued)**

	Percentage	
	Yes	No
<b>Does the health worker explain to the mother:</b>		
How to administer medications	79.4	20.6
The importance of completing the treatment	55.5	44.5
That she should return to the health center if the child's condition gets worse	85.7	14.3
<b>Does the health worker:</b>		
Explain how to prepare SSS	22.2	77.8
Demonstrate how to prepare SSS	4.8	95.2
Ask the mother to demonstrate how to prepare SSS	3.2	96.8
Ask the mother questions to see if she has understood	31.7	68.3
Ask the mother if she has any questions	15.9	84.1

## 4.2 Diarrhoea Case Management

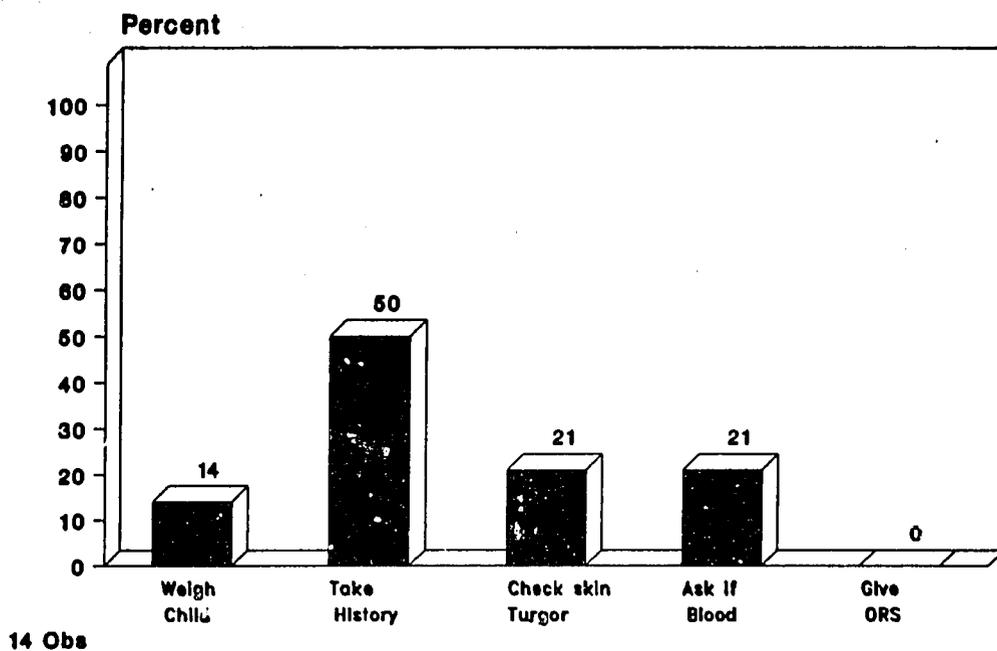
Among 63 sick children, fourteen (22.2%) had diarrhoea. Table 5 and Fig. 3 present health worker practices in the assessment and case management of these children. The following points summarize key findings:

- Weighing the child with diarrhoea is important both for determining the amount of ORS to give and for assessing fluid gain following ORS administration. In this survey, only one in ten children with diarrhoea was weighed. It appears the majority of health workers may use the child's age to estimate the amount of ORS needed.
- Skin turgor, a tool for assessing the extent of dehydration, was checked in only half of the children with diarrhoea.
- About half of the health workers took a complete history from the mother, asking questions about duration and number of stools in the past 24 hours. Very few health workers asked about the presence of blood in the stool.
- None of the children with diarrhoea were given or prescribed ORS. Only one in five children were given SSS. The majority of children with diarrhoea left the health facility without receiving any oral rehydration therapy at all.
- Several health workers prescribed antidiarrhoeal medicine such as kaolin or thalazole.

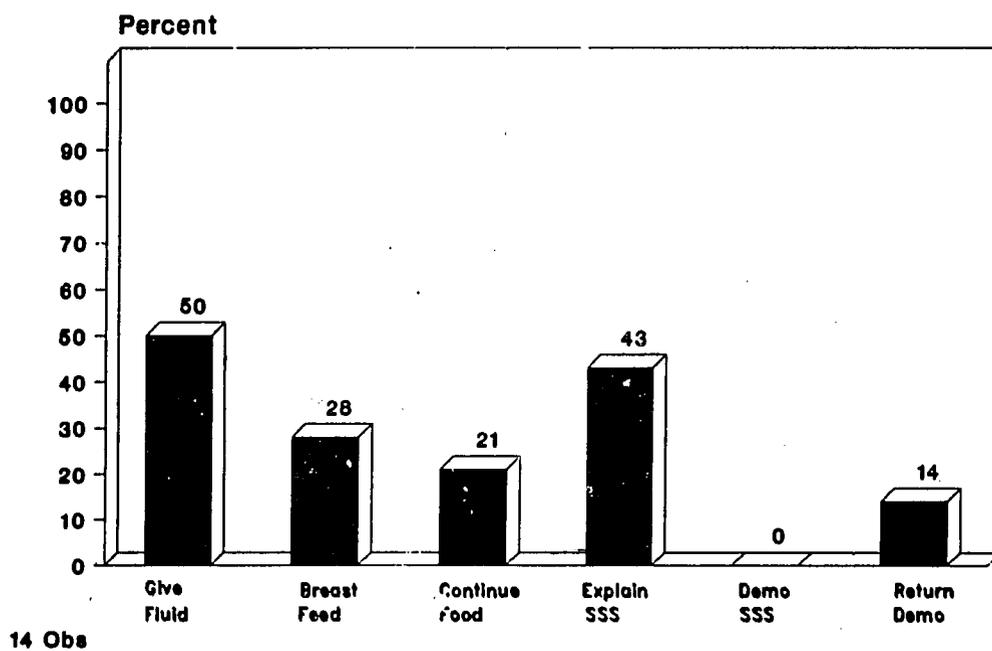
Education about follow-up treatment at home and SSS preparation (Fig. 4) are summarized below:

- While half of the mothers received information about the need to give more fluids than usual, few mothers were advised to give fluids after each diarrhoea or vomiting episode.
- Among mothers who were breastfeeding their child before the diarrhoea episode started, few were advised to continue throughout the episode. One in four mothers was encouraged to continue feeding the child.
- Less than half of the health workers *explained* SSS preparation to mothers of children with diarrhoea, and none of the health workers actually *demonstrated* how to prepare SSS.

**Figure 3**  
**Case Management of Diarrhoea**  
**Health Worker Practices**



**Figure 4**  
**Mothers of Children with Diarrhoea**  
**Education by Health Workers**



**Table 5. Health worker practices, children with diarrhoea**

Case management practices among health workers in the treatment of children presenting with diarrhoea, Nsukka, 1991

	Percentage	
	Yes	No
<i>Number of observations = 14</i>		
<i>Number of facilities = 11</i>		
<b>Does the health worker:</b>		
Determine the child's age	100.0	—
Determine the child's weight	14.3	85.7
Examine the child's skin turgor	21.4	78.6
<b>Does the health worker ask questions about:</b>		
Duration of diarrhoea	64.3	36.7
Number of stools in past 24 hours	50.0	50.0
Blood in stool	21.4	78.6
<b>Does the health worker explain the need to:</b>		
Give more fluids than usual	50.0	50.0
Give fluids after each diarrhoea episode	14.3	85.7
Give fluids after each vomiting episode	—	100.0
Continue breastfeeding the child*	28.4	71.4
Continue feeding the child	21.4	78.6
<b>Does the health worker:</b>		
Explain how to prepare SSS	42.8	57.2
Demonstrate how to prepare SSS**	—	100.0
Ask the mother to demonstrate how to prepare SSS	14.2	85.8
<b>Does the health worker give/prescribe:</b>		
ORS	—	100.0
SSS	21.4	78.6
Antidiarrhoeal	14.2	85.8

\* Among children currently breastfed

\*\* Demonstration on SSS preparation was done during group health education session

### **4.3 Fever Case Management**

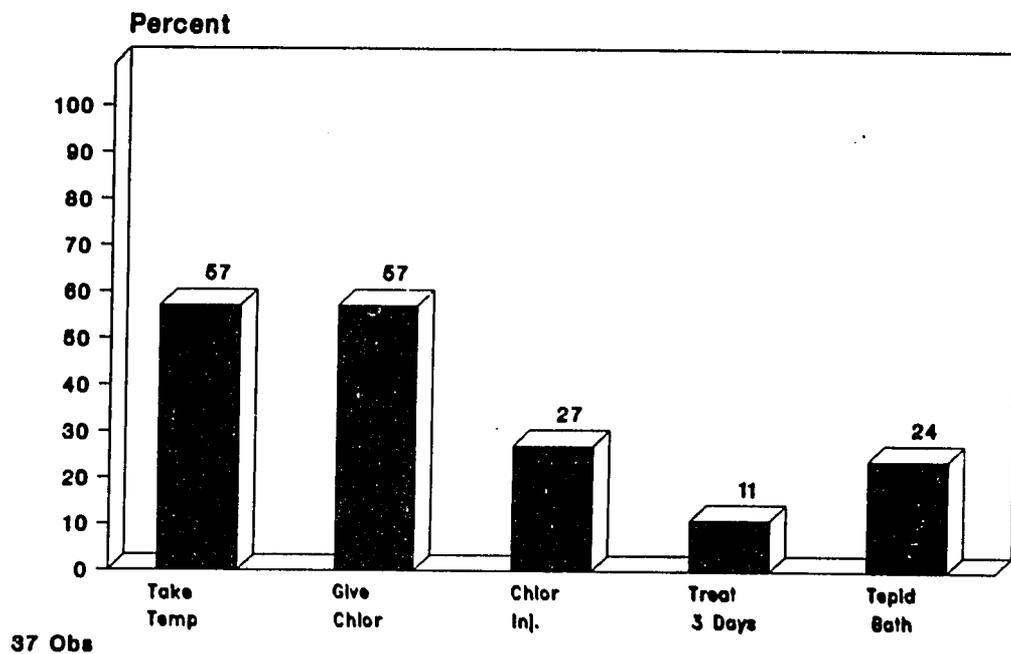
Forty-seven sick children (74.6%) had fever as a primary complaint. Key findings related to assessment and case management practices by health workers (summarized in Table 6) are highlighted below:

- About half of all health workers took the child's temperature using a thermometer.
- Following national malaria treatment guidelines, the majority of children with fever were given some form of chloroquine. About a quarter of the children were given tablets and one third were given syrup.
- Chloroquine injection was given to one in three children with fever.
- Paracetamol, an antipyretic, was given to the majority of children.

Education of mothers about follow-up treatment at home and measures to prevent malaria is a critical component of the overall case management support provided by health workers. When health worker education practices were observed (Fig. 5), the following points were noted:

- One in three mothers received instructions about how to administer the antimalarial medicine they were given. However, the importance of completing the treatment (i.e., giving chloroquine for *three days*) was stressed to very few mothers.
- About half of the mothers were told to give an antipyretic (like paracetamol) at home for fever.
- Few mothers were told to give a tepid sponge bath to children with fever.

**Table 5**  
**Fever Case Management**  
**and Education by Health Workers**



**Table 6. Health worker practices, children with fever**

Case management practices among health workers in the treatment of children presenting with fever, Nsukka, 1991

<i>Number of observations = 47</i>	Percentage	
	Yes	No
<b>Does the health worker determine the child's:</b>		
Age	100.0	—
Weight	25.5	74.5
Temperature with a thermometer	36.2	63.8
<b>Does the health worker explain to the mother:</b>		
How to administer malaria medications	38.0	62.0
The importance of completing the 3-day treatment	21.3	78.7
The need to give an antipyretic	42.6	57.3
give a tepid bath	12.8	87.2
<b>Does the health worker give/prescribe:</b>		
Chloroquine		
Any form	70.3	29.7
Tablets	23.4	76.6
Syrup	38.3	61.7
Injection	31.9	68.1
Tab/Syr + Injection	23.4	76.6
Paracetamol	85.1	14.9

#### **4.4 Immunization Practices**

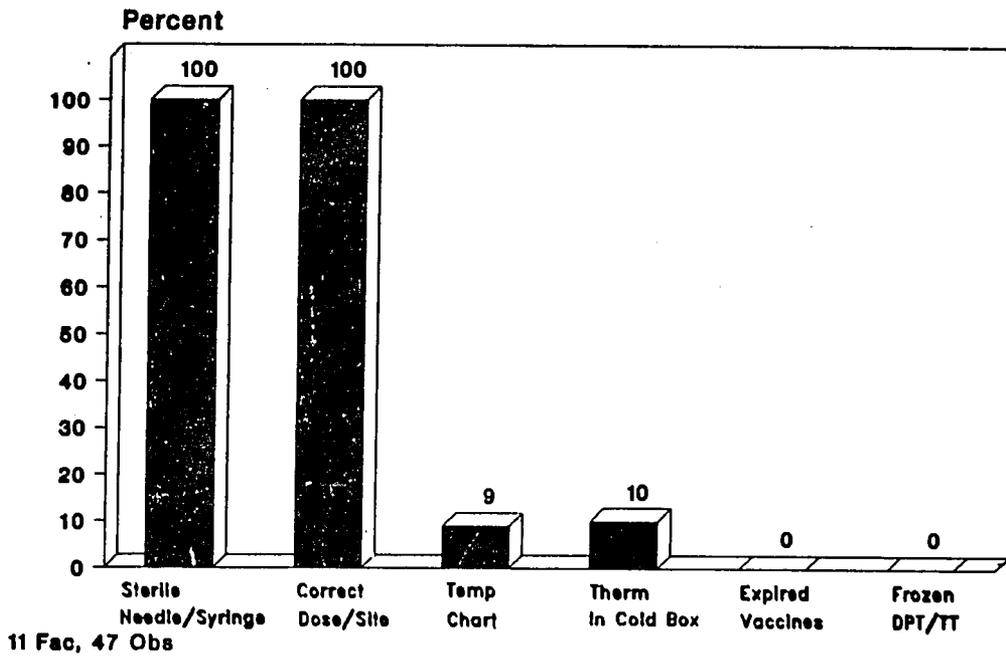
During the survey, observations were made on 49 children receiving immunization. Health worker technique and education practices are summarized in Table 7 and Figs. 6-7.

- All health workers used a sterile needle and syringe to immunize the child.
- The correct antigen dose was given for all immunizations and all health workers immunized the child at the correct site.
- All health workers recorded the date on which the immunization was given on the child's immunization card.
- A majority of health workers explained the importance of completing the immunization series and coming back for follow-up doses. The date for the child's next visit was recorded on the immunization card for only half of the children.
- Most mothers were told what diseases the immunization could prevent, possible reactions (side effects) to the immunizations, and what to do if the child had such a reaction.
- About half of the health workers asked the mother questions (to determine whether she understood the information given to her). One in four health workers asked the mother if she herself had any questions.

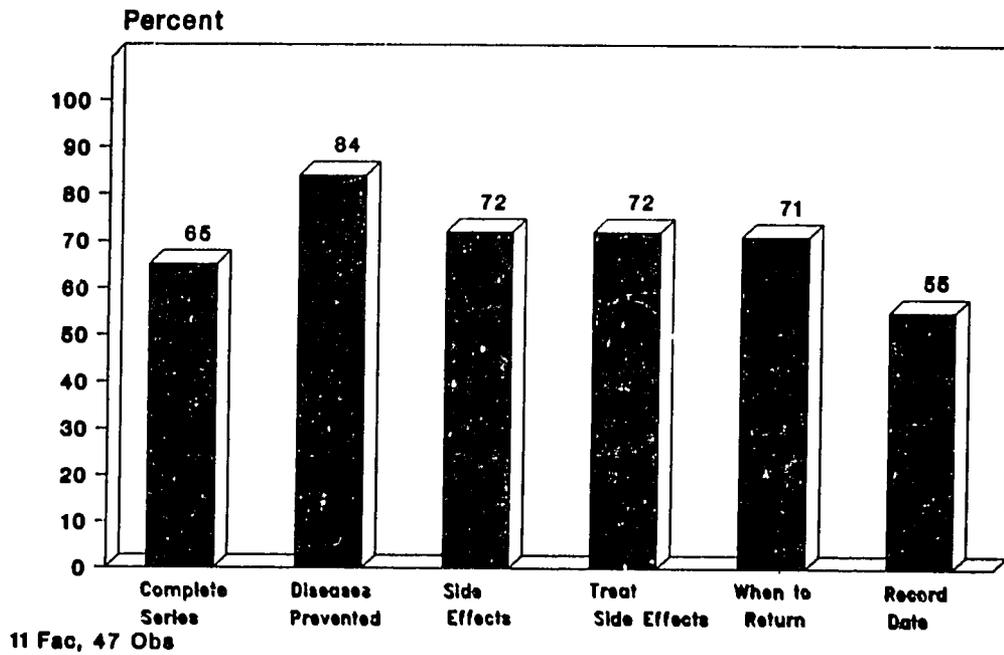
Adequate cold chain maintenance is necessary to ensure vaccine potency. The following cold chain practices (summarized in Fig. 6 and Table 10) were observed at health facilities in Nsukka:

- One out of six refrigerators and none of the nine cold boxes had a temperature chart to monitor temperature.
- Only three refrigeration units (refrigerators and cold boxes) had a thermometer inside.
- Expired vaccines were not a problem in any of the health facilities.
- No facility had frozen DPT or tetanus toxoid (TT).

**Figure 6**  
**Immunization and Cold Chain Maintenance**  
**Health Worker Practices**



**Figure 7**  
**Mothers of Immunized Children**  
**Education by Health Workers**



**Table 7. Health worker practices, immunization**

Immunization practices among health workers, Nsukka, 1991

	Percentage responding:	
	Yes	No
<i>Number of observations = 49</i>		
<i>Number of facilities = 11</i>		
<b>Does the health worker determine the child's:</b>		
Age	100.0	—
Weight	64.6	35.4
Temperature with a thermometer	—	100.0
<b>Does the health worker:</b>		
Use a sterile needle	100.0	—
Use a sterile syringe	100.0	—
Administer the correct dose	100.0	—
Immunize at the correct site	100.0	—
<b>Does the health worker explain to the mother:</b>		
Importance of completing the immunization series	65.3	34.7
Diseases prevented by these vaccines	83.7	16.3
Possible reactions to the vaccines	72.3	27.7
What to do if there is a reaction	83.7	16.3
When she should return to the health center	71.4	28.6
<b>Does the health worker:</b>		
Ask the mother questions to see if she has understood	53.0	46.9
Ask the mother if she has any questions	26.5	73.5
<b>Does the health worker record on the child's immunization card:</b>		
Today's date	100.0	—
Date of next visit	55.1	44.9

\* Information about immunization was presented during group health session

**Table 8. Missed opportunities for immunization**

Missed opportunities for immunization among children and mothers presenting at health facilities, Nsukka, 1991

<i>Number of observations = 99</i>	Number (%)	
	Yes	No
<i>Among sick children:</i>		
Was immunization card available	48/99 (48.8)	51/99 (51.2)
Did health worker check the child's immunization status	37/48 (77.1)	11/48 (22.9)
Was child referred for immunization if needed	20/37 (54.0)	17/37 (46.0)
<i>Among mothers of sick children:</i>		
Does mother have a health (TT) card	0/99 (—)	99/99 (100.0)
Did health worker check mother's TT status	—	(100.0)
Was mother referred for immunization if needed	—	(100.0)

When a sick child visits a health facility, immunization status should be routinely checked and the child referred for immunization, if needed. Information presented in Table 8 indicates that there are a substantial number of "missed opportunities" for immunizing children and their mothers at health facilities in Nsukka.

- Immunization cards were available for only one half of sick children presenting at health facilities. When an immunization card was available, most health workers checked the child's immunization status. Only half of those needing immunization were referred for immunization on that day.

- None of the mothers who accompanied their sick child to the health facility had her own health (TT) card with her. Thus, mothers who may have been in need of TT immunization were not identified and the vaccine was not administered.

## 4.5 Mothers Knowledge and Practices

Knowledge and practices among mothers of sick and immunized children, as reported during exit interviews, are presented in Table 9 and Figs. 8-9.

In this survey, among mothers of *sick children* leaving the health facility ---

- more than half understood what to do for the child upon returning home
- almost all knew when it may be necessary to bring the child back
- almost all knew that they should return to the health facility if the child's condition became worse

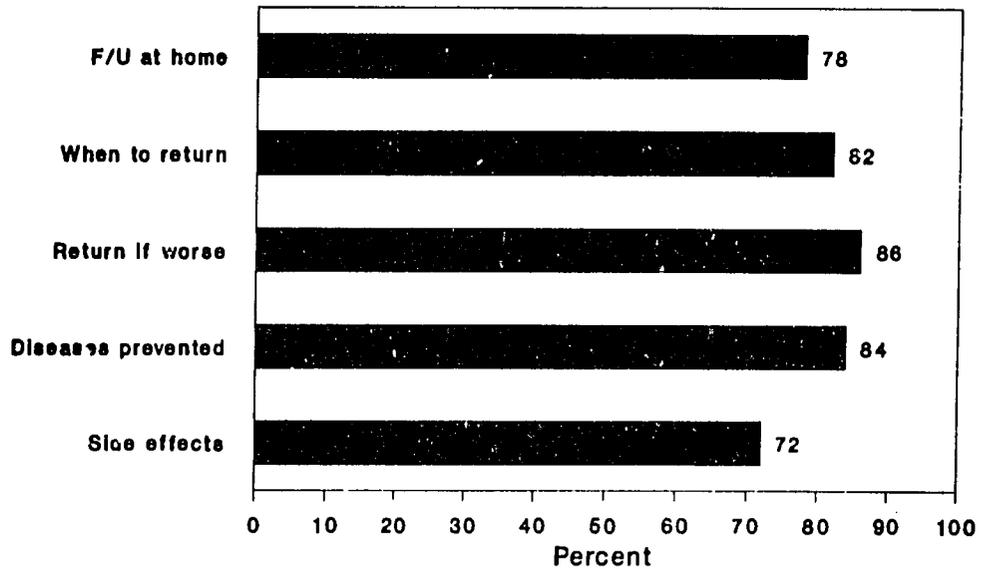
Among mothers of children with *diarrhoea* ---

- about half had heard about the "solution which one gives to children with diarrhoea"
- about half did something at home *before* coming to the health facility to treat the child's diarrhoea. Of these mothers, very few gave sugar-salt solution (SSS); about half gave increased fluids of some other type
- very few knew that SSS could prevent dehydration and help stop diarrhoea in their children
- few knew how to prepare SSS and could actually demonstrate the correct amount of water, salt, and sugar to be added

Finally, among mothers of *immunized* children ---

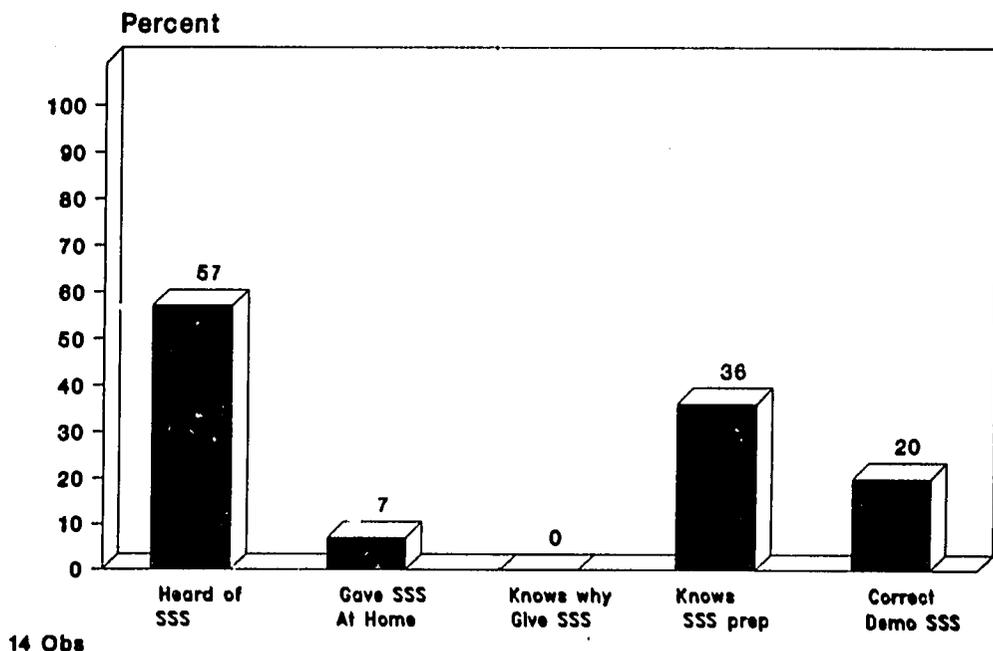
- the majority knew which diseases the immunization would prevent
- three out of four knew possible side effects which might occur

**Figure 8**  
**Mothers of Sick and Immunized Children**  
**Knowledge upon Leaving Health Facility**



63 Obs, sick children  
 49 Obs, immunized children

**Figure 9**  
**Mothers' Knowledge of Diarrhoea**  
**and SSS Preparation**



14 Obs

**Table 9. Mothers' knowledge and practices**

Knowledge and practices among mothers of sick and immunized children,  
as reported during exit interviews, Nsukka, 1991

	Number (%)	
	Yes	No
<b>Mothers of sick children (n=63)</b>		
Those who know:		
What to do when she returns home	49 (77.8)	14 (22.2)
When to bring the child back	52 (82.3)	11 (17.5)
To return if the child's condition becomes worse	54 (85.7)	9 (14.3)
<b>Mothers of children with diarrhoea (n=14)</b>		
Did you do anything at home to treat the child	8 (57.1)	6 (32.9)
What did you do at home		
Gave SSS	1 (12.5)	7 (87.5)
Gave more fluids	—	8 (100.0)
Other	4 (50.0)	4 (50.0)
Have you heard of the solution which one gives to children with diarrhoea	8 (57.1)	6 (32.9)
Do you know why people give SSS to children with diarrhoea		
To stop diarrhoea	7 (50.0)	7 (50.0)
To prevent dehydration	—	14 (100.0)
Did the health worker explain how to prepare SSS in the clinic today	12 (85.7)	2 (14.3)
Do you yourself know how to prepare SSS	5 (35.8)	9 (64.2)

**Table 9. Mothers' knowledge and practices (continued)**

	Number (%)	
	Yes	No
<b>Mothers who know correct amount of:</b>		
Water	3 (60.0)	2 (40.0)
Salt	2 (40.0)	3 (60.0)
Sugar	2 (40.0)	3 (60.0)
<b>Mothers who demonstrate correct amount of:</b>		
Water	2 (40.0)	3 (60.0)
Salt	1 (20.0)	4 (80.0)
Sugar	2 (40.0)	3 (60.0)
<b>Mothers of immunized children (n=49)</b>		
<b>Those who know:</b>		
Diseases the immunization would prevent	41 (82.9)	8 (16.3)
Possible side effects	34 (72.3)	15 (27.7)

#### **4.6 Equipment and Supply Inventory**

An *equipment/supply* inventory conducted at all eleven health facilities (Table 10. Fig. 10) revealed that ---

- potable water, for drinking and handwashing, was not available at six facilities
- most facilities had a functional weighing scale
- needles and syringes were not in stock at most facilities, though all facilities had a functional steam sterilizer
- a functional refrigerator was available at seven facilities, and ten facilities had a cold box
- childhood antigens (measles, DPT, OPV, and BCG) and tetanus toxoid were not available at two facilities

*Essential drugs* available included ---

- chloroquine (tablets and/or syrup) --- NOT IN STOCK at most facilities
- cotrimoxazole tablets --- NOT IN STOCK at most facilities
- ORS packets --- NOT IN STOCK at most facilities

For *sugar-salt solution (SSS)* ---

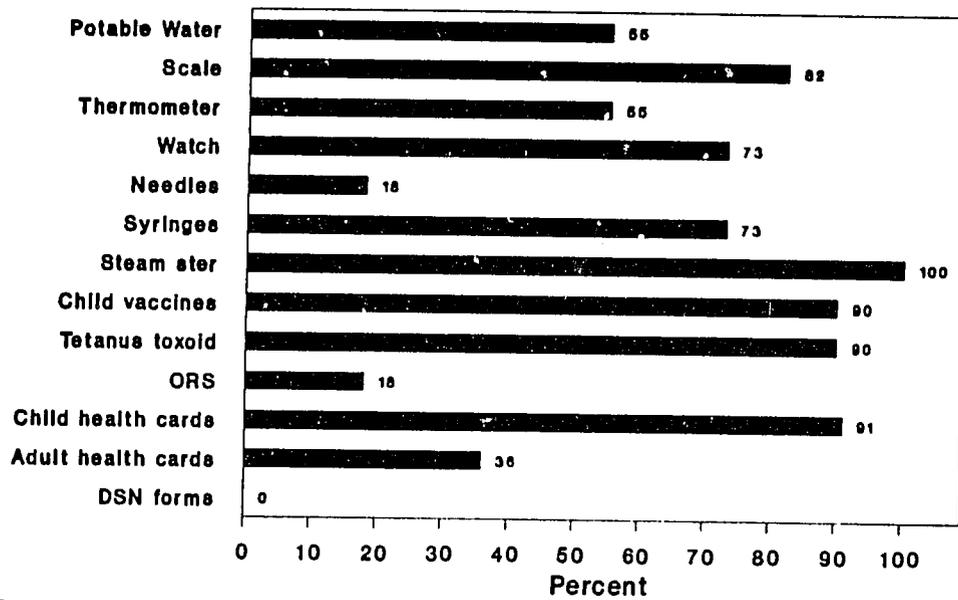
- containers, bowls, and spoons for SSS preparation were available at only half of the facilities
- sugar and salt were not available at most facilities

Most facilities in Nsukka had neither ORS nor ingredients for SSS preparation.

**A review of *record-keeping supplies* revealed that ---**

- **whereas child health/immunization cards were available at all facilities, adult health cards and tetanus toxoid cards were generally not available**
- **two facilities did not have an immunization register**
- **notifiable disease forms (DSN) were not available at any facility**

**Figure 10**  
**Equipment/Supplies, Vaccines, and ORS**  
**Availability at Health Facilities**



11 Fac

**Table 10. Equipment/supplies, vaccines, and drug inventory**

Equipment/supplies, vaccines, and selected essential drugs available at health facilities, Nsukka, 1991

<i>Number of facilities = 11</i>	Number (%)	
	Yes	No
<b>Potable water</b>	6 (54.5)	5 (45.5)
<b>General equipment/supplies:</b>		
Thermometer	6 (54.5)	5 (45.5)
Weighing scale, functional	9 (81.8)	2 (18.2)
Timer	9 (81.8)	2 (18.2)
Watch (with second hand)	8 (72.7)	3 (27.3)
Oxygen cylinder	5 (45.5)	6 (54.5)
full	4 (80.0)	1 (20.0)
Needles		
disposable	2 (18.2)	9 (81.8)
reusable	4 (36.4)	7 (63.6)
Syringes	8 (72.7)	3 (27.3)
Steam sterilizer, functional	11 (100.0)	—
Kerosene stove, functional	9 (81.8)	2 (18.2)
<b>Cold storage:</b>		
Refrigerator, functional	6 (54.5)	5 (45.5)
temperature chart	1	5
thermometer inside	2	4
spare cylinder	—	6
Cold Box	10 (90.9)	1 (9.1)
temperature chart	—	10 (100.0)
thermometer inside	1 (10.0)	9 (90.0)
Either refrigerator or cold box	11 (100.0)	—
expired vaccines	—	11 (100.0)
frozen DPT or TT	—	11 (100.0)
frozen blocks	3 (27.3)	8 (72.7)

**Table 10. Equipment/supplies, vaccines, and drug inventory (continued)**

	Number (%)	
	Yes	No
<b>Vaccines*:</b>		
Measles	10 (90.9)	1 (9.1)
DPT	10 (90.9)	1 (9.1)
OPV	10 (90.9)	1 (9.1)
BCG	9 (81.8)	2 (18.2)
TT	10 (90.9)	1 (9.1)
<b>Selected essential drugs:</b>		
Chloroquine tablets	4 (36.4)	7 (63.6)
syrup	3 (27.3)	8 (72.7)
Cotrimoxazole tablets	3 (27.3)	8 (72.7)
syrup	3 (27.3)	8 (72.7)
ORS packets		
Any size	2 (18.2)	9 (81.8)
600 ml	2 (18.2)	9 (81.8)
1 liter	—	11 (100.0)
<b>SSS/ORS supplies:</b>		
Containers (for measuring)	6 (54.5)	5 (45.5)
Bowls	6 (54.5)	4 (45.5)
Spoons	5 (45.5)	6 (54.5)
Sugar	4 (36.4)	7 (63.6)
Salt	4 (36.4)	7 (63.6)
<b>Record-keeping supplies:</b>		
Child health (immunization) cards	10 (90.9)	1 (9.1)
Adult health cards	4 (36.4)	7 (63.6)
TT cards	2 (18.2)	9 (81.8)
Immunization register	9 (81.8)	2 (18.2)
Notifiable disease (DSN) forms	—	11 (100.0)

\* For purposes of the survey, vaccines were brought to facilities without vaccines in stock so that health workers could demonstrate immunization technique.

## **4.7 Management and Supervision Skills**

Interviews were conducted with eleven health workers and eleven supervisors (Table 11) to determine management and supervisory skills. Key management practices among *health workers* (summarized in Table 12, Fig. 11) included the following:

- One in four of the health workers interviewed had a workplan.
- Target populations for measles, TT, malaria, and diarrhoea were not known by most health workers.
- Most health workers do not have a written job description
- Schedules for supervisory visits were generally not available
- Most health workers report that routine supervisory visits are helpful in keeping their technical skills up-to-date.
- Health worker performance is not evaluated regularly
- About half of the health workers felt comfortable discussing problems with his or her supervisor.
- Reports (mainly health statistics and patient data) are regularly submitted by about half of the health workers. These reports are not often used on the job.

**Key management and supervisory practices among facility *supervisors* (summarized in Table 13, Fig. 12) included the following:**

- **None of the supervisors had a map of the Local Government or knew the LGA population.**
- **Job descriptions, standing orders, and procedures to evaluate health workers were available among half of the supervisors.**
- **Supervisory schedules are generally not available. Most supervisors do report making more frequent supervisory visits to health workers not performing well.**
- **Supervisory checklists are rarely used to monitor health worker performance.**
- **Some supervisors reported having cancelled planned supervisory visits due to lack of transport.**
- **Most supervisors had observed facility-level health education activities in the past six months.**

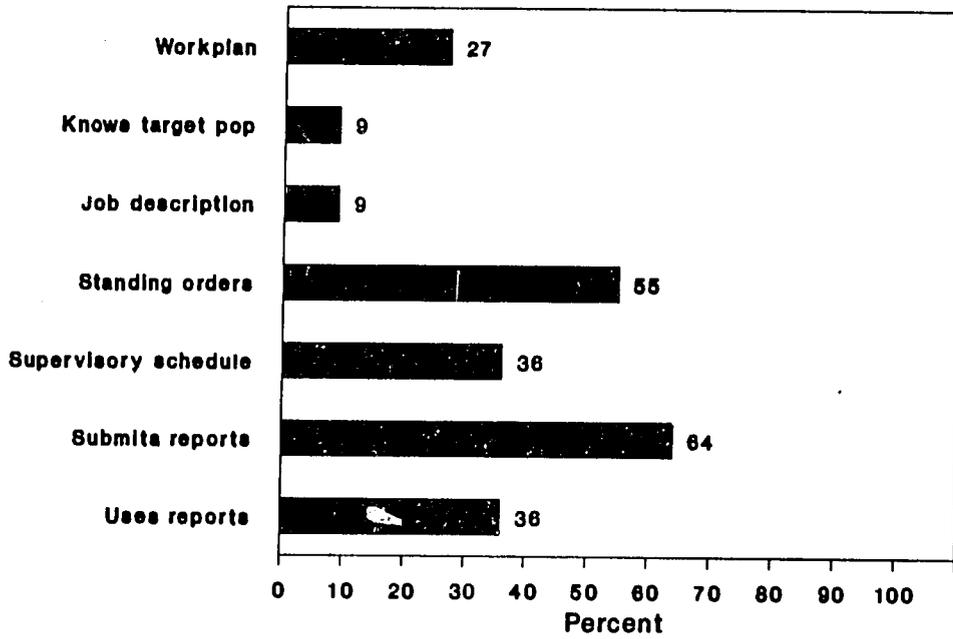
**Table 11. Health workers and supervisors interviewed, by title**

Health workers and supervisors interviewed during  
Facility Assessment Survey, by title, Nsukka, 1991

<b>Title/position</b>	<b>Number</b>
<b>Health workers:</b>	
Community Health Supervisor	1
Senior Community Health Extension Worker	3
Junior Community Health Extension Worker*	2
Other	5
Total	11
<b>Supervisors:</b>	
Head of Unit/Facility	9
Nursing Administrator	2
Total	11

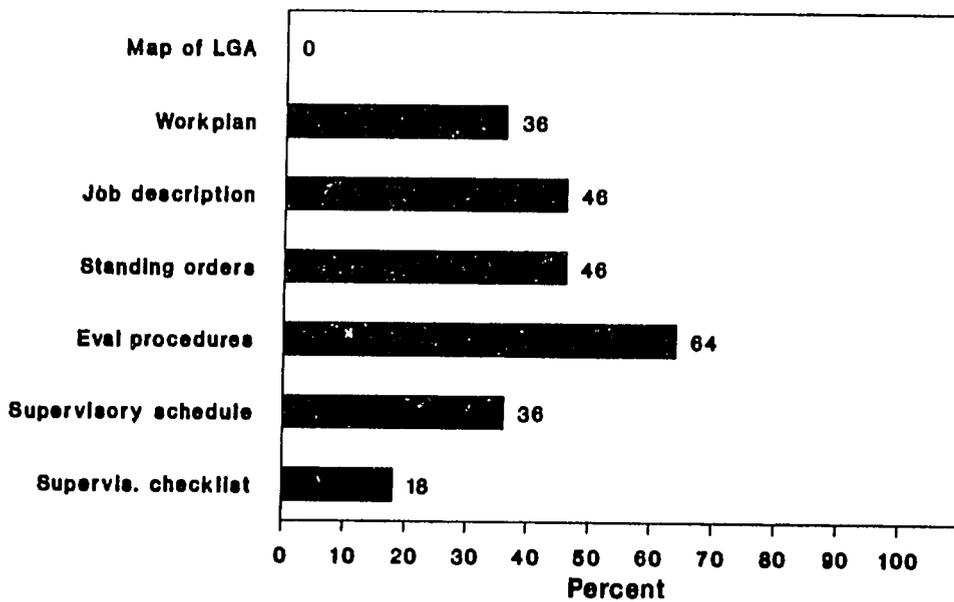
*\* Includes Community Health Aides/Assistants*

**Figure 11**  
**Management Skills among Health Workers**



11 Obs

**Figure 12**  
**Management and Supervisory Skills Among Supervisors**



**Table 12. Management skills among health workers**

Management skills among health workers interviewed during the Facility Assessment Survey, Nsukka, 1991

<i>Number of interviews = 11</i>	Number (%)	
	Yes	No
<b>Workplan:</b>		
Does the health worker have a written workplan	3 (27.3)	8 (72.7)
Was the workplan developed with health worker input	3 (27.3)	8 (72.7)
<b>Target populations:</b>		
Were target populations explained to the health worker by his/her supervisor for:		
Measles	1 (9.1)	10 (90.9)
Tetanus Toxoid	1 (9.1)	10 (90.9)
Malaria	—	11 (100.0)
Diarrhoea	—	11 (100.0)
Does the health worker know target populations for:		
Measles	1 (9.1)	10 (90.9)
Tetanus Toxoid	—	11 (100.0)
Malaria	—	11 (100.0)
Diarrhoea	—	11 (100.0)
<b>Job description:</b>		
Does the health worker have a written job description	1 (9.1)	10 (90.9)
<b>Standing orders:</b>		
Are there written standing orders or job guidelines	6 (54.5)	5 (45.5)

**Table 12. Management skills among health workers (continued)**

	Number (%)	
	Yes	No
<b>Supervisory visits:</b>		
Is there a schedule for supervisory visits	4 (36.4)	7 (63.6)
Were any supervisory visits canceled in the past 6 months	4 (36.4)	7 (63.6)
Does the supervisor keep health workers' skills up to date	9 (81.8)	2 (18.2)
Is the health workers' performance evaluated regularly	3 (27.3)	8 (72.7)
Does he/she discuss problems with supervisor	6 (63.6)	5 (36.4)
<b>Reports:</b>		
Does the health worker submit reports regularly	7 (63.6)	4 (36.4)
Does he/she use the reports on the job	5 (36.4)	6 (63.6)

**Table 13. Management/supervision skills among supervisors**

Management and supervision skills among supervisors of health facilities,  
Nsukka, 1991

<i>Number of interviews = 11</i>	Number (%)	
	Yes	No
<b>Does the supervisor have:</b>		
Map of the LGA	—	11 (100.0)
Written workplan	4 (36.4)	7 (63.6)
Job descriptions for all cadres of health workers	4 (46.4)	7 (63.6)
Standing orders for all cadres of health workers	4 (46.4)	7 (63.6)
Procedures to evaluate health workers	7 (63.6)	4 (36.4)
<b>Does the supervisor know:</b>		
Which villages/towns do not have access to a health facility	8 (72.7)	3 (27.3)
Population of the LGA	—	11 (100.0)
Target populations for:		
Measles	1 (9.1)	10 (90.9)
Tetanus Toxoid	--	11 (100.0)
Malaria	--	11 (100.0)
Diarrhoea	—	11 (100.0)
Were they explained to staff	—	11 (100.0)
<b>Does/has the supervisor:</b>		
Follow a supervisory schedule	4 (36.4)	7 (63.6)
Use supervisory checklists to assess health worker performance	2 (18.2)	9 (81.8)
Make more visits to health workers not performing well	8 (72.7)	3 (27.3)
Cancelled any planned supervisory visits because of lack of transport	4 (36.4)	7 (63.6)
Observed any health education activities in the last 6 months	9 (81.8)	2 (18.2)

Appendix A

FACILITY ASSESSMENT SURVEY

+++++  
LGA: \_\_\_\_\_ Facility: \_\_\_\_\_ Obs #: \_\_\_\_\_ Date: \_\_/\_\_/91  
Health Worker Observed (Title): \_\_\_\_\_ Interviewer: \_\_\_\_\_  
+++++

OBSERVATION CHECKLIST #1  
\*\*\*SICK CHILDREN\*\*\*

DOES THE HEALTH WORKER DETERMINE THE CHILD'S:

- 1. Age ..... Y N
- 2. Weight ..... Y N
- 3. Temperature with a thermometer ..... Y N  
Temperature by touching the skin ..... Y N
- 4. Respiratory rate ..... Y N

5. Does the child have a health (immunization) card.. Y N

If Yes, does the health worker:

- Check the child's immunization status ..... Y N
- Refer for immunization (when needed) ..... Y N

6. Does the mother have a health (TT) card ..... Y N

If Yes, does the health worker:

- Check the mother's TT status ..... Y N
- Refer for TT immunization (when needed) ..... Y N

DOES THE HEALTH WORKER ASK QUESTIONS ABOUT:

- 7. General condition of the child ..... Y N
- 8. Duration of the illness ..... Y N
- 9. History of fever ..... Y N
- 10. Vomiting ..... Y N
- 11. Diarrhea ..... Y N
- 12. Duration of diarrhea ..... Y N
- 13. Number of stools/past 24 hrs ..... Y N
- 14. Blood in the stool ..... Y N
- 15. Coughing ..... Y N

- |     |                                     |   |   |
|-----|-------------------------------------|---|---|
| 16. | Difficulties with breathing .....   | Y | N |
| 17. | Problems with swallowing .....      | Y | N |
| 18. | History of home treatment with:     |   |   |
|     | Traditional medicine/practice ..... | Y | N |
|     | Western medicine .....              | Y | N |

**DOES THE HEALTH WORKER EXAMINE THE CHILD'S:**

- |     |                 |   |   |
|-----|-----------------|---|---|
| 19. | Eyes .....      | Y | N |
| 20. | Ears .....      | Y | N |
| 21. | Throat .....    | Y | N |
| 22. | Breathing ..... | Y | N |
| 23. | Abdomen .....   | Y | N |
| 24. | Skin fold ..... | Y | N |

**\*\*\*DIAGNOSIS\*\*\***

**DOES THE HEALTH WORKER DIAGNOSE THE CHILD AS HAVING:**

- |     |                   |   |   |
|-----|-------------------|---|---|
| 25. | Diarrhea .....    | Y | N |
| 26. | Dehydration ..... | Y | N |

If Yes: \_\_\_\_\_ Slight  
                  \_\_\_\_\_ Moderate  
                  \_\_\_\_\_ Severe

- |     |                            |   |   |
|-----|----------------------------|---|---|
| 27. | Cough .....                | Y | N |
| 28. | Cold .....                 | Y | N |
| 29. | Pneumonia/Bronchitis ..... | Y | N |
| 30. | Fever .....                | Y | N |
| 31. | Malaria .....              | Y | N |
| 32. | Other: _____               |   |   |

**\*\*\*EDUCATION OF THE MOTHER\*\*\***

**DOES THE HEALTH WORKER EXPLAIN TO THE MOTHER:**

- |     |  |   |   |
|-----|--|---|---|
| 33. | How to administer medications .....  | Y | N |
| 34. | The importance of completing the treatment .....   | Y | N |
| 35. | The need to:   |   |   |
|     | . give more fluids than usual .....  | Y | N |
|     | . give fluids after each diarrhea episode .....  | Y | N |
|     | . give fluids after each vomiting episode .....  | Y | N |
|     | . continue breastfeeding the child .....   | Y | N |
|     | . continue feeding the child .....   | Y | N |
|     | . give an antipyretic .....  | Y | N |
|     | . give a tepid bath .....  | Y | N |
| 36. | That she should return to the health center<br>if the child's condition gets worse ..... | Y | N |

**DOES THE HEALTH WORKER:**

- |     |   |   |   |
|-----|---|---|---|
| 37. | Explain how to prepare SSS .....                    | Y | N |
| 38. | Demonstrate how to prepare SSS .....                | Y | N |
| 39. | Ask the mother to demonstrate how to prepare SSS... | Y | N |

**DOES THE HEALTH WORKER:**

- |     |  |   |   |
|-----|--|---|---|
| 40. | Ask the mother questions to see if she<br>has understood ..... | Y | N |
| 41. | Ask the mother if she has any questions .....                  | Y | N |

**FACILITY ASSESSMENT SURVEY**

+++++  
**LGA:** \_\_\_\_\_ **Facility:** \_\_\_\_\_ **Obs #:** \_\_\_\_\_ **Date:** \_\_/\_\_/91

**Health Worker Observed (Title):** \_\_\_\_\_ **Interviewer:** \_\_\_\_\_  
 +++++

**OBSERVATION CHECKLIST #2  
 \*\*\*IMMUNIZATION\*\*\***

**DOES THE HEALTH WORKER DETERMINE THE CHILD'S:**

- |  |   |   |
|--|---|---|
| 1. Age .....   | Y | N |
| 2. Weight .....  | Y | N |
| 3. Temperature with a thermometer .....                      | Y | N |
| Temperature by touching the skin .....                       | Y | N |
| 4. Does the <b>child</b> have a health (immunization) card.. | Y | N |
| <b>If Yes, does the health worker:</b>                       |   |   |
| Check the child's immunization status .....                  | Y | N |
| 5. Does the <b>mother</b> have a health (TT) card .....      | Y | N |
| <b>If Yes, does the health worker:</b>                       |   |   |
| Check mother's TT status .....                               | Y | N |
| Refer for TT immunization (when needed) .....                | Y | N |
| 6. Is the child sick today .....                             | Y | N |

**DOES THE HEALTH WORKER:**

- |   |   |   |
|---|---|---|
| 7. Immunize the child .                           | Y | N |
| Send the child to the immunization service .....  | Y | N |
| 8. Use a sterile needle for each injection .....  | Y | N |
| 9. Use a sterile syringe for each injection ..... | Y | N |
| 10. Administer the correct dose .....             | Y | N |
| 11. Immunize at the correct site .....            | Y | N |

**DOES THE HEALTH WORKER EXPLAIN TO THE MOTHER:**

- |     |  |   |   |
|-----|--|---|---|
| 12. | The importance of completing the immunization series ..... | Y | N |
| 13. | What diseases can be prevented by these vaccines..         | Y | N |
| 14. | The possible reactions to these vaccines .....             | Y | N |
| 15. | What to do if there is a reaction .....                    | Y | N |
| 16. | When she should return to the health center .....          | Y | N |

**DOES THE HEALTH WORKER:**

- |     |   |   |   |
|-----|---|---|---|
| 17. | Ask the mother questions to see if she has understood ..... | Y | N |
| 18. | Ask the mother if she has any questions .....               | Y | N |

FACILITY ASSESSMENT SURVEY

+++++
LGA: Facility: Obs #: Date: \_\_/\_\_/91

Health Worker Observed (Title): Interviewer:
+++++

EXIT INTERVIEW #1
\*\*\*ALL CHILDREN\*\*\*

"I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT YOUR VISIT TO THE HEALTH CENTER"

1. In which village/town do you live? \_\_\_\_\_

2. How old is the child? Years \_\_\_\_\_ Months \_\_\_\_\_

3. What is the reason for your visit today?

- Child suffering from: \_\_\_ Fever
\_\_\_ Cough
\_\_\_ Diarrhea
\_\_\_ Other

Child in good health needing: \_\_\_ Immunization (Go to Q.6)
\_\_\_ Other: \_\_\_\_\_

4. Did you receive any medicine (prescription) for your child ..... Y N

CHECK ALL MEDICINE GIVEN/PREScribed FOR THE CHILD:

- \_\_\_ ORS
\_\_\_ SSS
\_\_\_ Chloroquine (Tablets)
\_\_\_ Chloroquine (Syrup)
\_\_\_ Chloroquine (Injection)
\_\_\_ Other Antimalarial: \_\_\_\_\_
\_\_\_ Paracetamol (Antipyretic)
\_\_\_ Antidiarrheal
\_\_\_ Antibiotic
\_\_\_ Cough Mixture (Benylin, Tussifin, Linctus, Codeine, etc.)
\_\_\_ Cold Remedy (Actifed, Phenergan, etc.)
\_\_\_ Other: \_\_\_\_\_

**FILL IN THE TABLE BELOW BY ASKING THE MOTHER:**

- . How much medicine do you give the child at one time?
- . How many times do you give it to the child each day?
- . For how many days will you give the medicine to the child?

<u>MEDICINE</u>	<u>How much each time?</u>	<u>How many times each day?</u>	<u>For how many days?</u>
Chloroquine (Tab)	_____ Tsp	_____	_____
Chloroquine (Syr)	_____ Tsp	_____	_____
Antibiotic (Tab)	_____ Tabs	_____	_____
Antibiotic (Syr)	_____ Tabs	_____	_____
Paracetamol (Tab)	_____ Tabs	_____	_____
Paracetamol (Syr)	_____ Tsp	_____	_____

5. Did the health worker tell you what to do for the child when you return home ..... Y N

What did he tell you? (Check all that apply)

- \_\_\_\_\_ Give more fluids than usual
- \_\_\_\_\_ Give fluids after each diarrhea episode
- \_\_\_\_\_ Give fluids after each vomiting episode
- \_\_\_\_\_ Continue breastfeeding the child
- \_\_\_\_\_ Continue feeding the child
- \_\_\_\_\_ Give an antipyretic (medicine against fever)
- \_\_\_\_\_ Give a tepid bath
- \_\_\_\_\_ Other: \_\_\_\_\_

6. Did the health worker tell you when to bring the child back ..... Y N

What did he say? (Check all that apply)

There is no need to return  
(Child is in good health and has received all necessary immunizations)

Return for the child's next immunization

When?  Knows  
 Doesn't know

Return if the child's condition becomes worse

How will you know if the child's condition becomes worse?

- If he has fever
- If he refuses to eat
- If diarrhea gets worse
- If he has chest indrawing
- Other: \_\_\_\_\_

7. Did the health worker greet you ..... Y N

FACILITY ASSESSMENT SURVEY

+++++
LGA: Facility: Obs #: Date: \_\_/\_\_/91

Health Worker Observed (Title): Interviewer:
+++++

EXIT INTERVIEW #2
\*\*\*CHILD WITH DIARRHEA\*\*\*

1. Did you do anything at home for this child with diarrhea Y N

If Yes, what did you do? Gave SSS (Go to Q.3)
Gave Home Fluids
Other:

2. Have you ever heard of the solution (liquid) which one gives to children with diarrhea Y N

3. Why do people give SSS to children with diarrhea?

- To stop diarrhea
To prevent dehydration
Other:
Doesn't know

4. Did the health worker show you how to prepare SSS in the clinic today Y N

5. Do you yourself know how to prepare SSS Y N

If Yes: "PLEASE, TELL ME HOW YOU PREPARE SSS"

6. The amount of WATER the mother said she adds is:

- Correct (2 Fanta bottles or a Beer bottle)
Incorrect

7. The amount of SALT the mother said she adds is:

- Correct (1 level tsp)
Incorrect

8. The amount of SUGAR the mother said she adds is:

Correct (10 level tsp or 5 cubes)  
 Incorrect

**"PLEASE, SHOW ME HOW YOU PREPARE SSS."**

**NOTE WHETHER THE MOTHER PREPARED THE SSS CORRECTLY.**

**DID SHE ADD THE CORRECT AMOUNT OF WATER? SALT? SUGAR?**

9. The amount of **WATER** the mother added is:

Correct (2 Fanta bottles or a Beer bottle)  
 Incorrect

10. The amount of **SALT** the mother added is:

Correct (1 level tsp)  
 Incorrect

11. The amount of **SUGAR** the mother added is:

Correct (10 level tsp or 5 cubes)  
 Incorrect

FACILITY ASSESSMENT SURVEY

+++++  
LGA: \_\_\_\_\_ Facility: \_\_\_\_\_ Obs #: \_\_\_\_\_ Date: \_\_/\_\_/91

Health Worker Observed (Title): \_\_\_\_\_ Interviewer: \_\_\_\_\_  
+++++

EXIT INTERVIEW #3  
\*\*\*IMMUNIZED CHILD\*\*\*

1. Did the health worker tell you which diseases  
the immunization would prevent ..... Y N

If Yes, which diseases? \_\_\_\_\_ Measles  
\_\_\_\_\_ Diphtheria  
\_\_\_\_\_ Pertussis ("Whooping Cough")  
\_\_\_\_\_ Tetanus  
\_\_\_\_\_ Poliomyelitis  
\_\_\_\_\_ Tuberculosis

2. Did the health worker tell you what might happen  
as a side effect after the immunization ..... Y N

If Yes, what? \_\_\_\_\_ Child might have fever  
\_\_\_\_\_ Child might have painful arms  
\_\_\_\_\_ Other: \_\_\_\_\_

3. May I see the child's health (immunization) card?

CHECK ALL VACCINES GIVEN TODAY: \_\_\_\_\_ BCG  
\_\_\_\_\_ DPT  
\_\_\_\_\_ OPV  
\_\_\_\_\_ Measles

WAS THE FOLLOWING INFORMATION CORRECTLY RECORDED:

Today's Date ..... Y N  
Date of next visit ..... Y N

**FACILITY ASSESSMENT SURVEY**

+++++  
**LGA:** \_\_\_\_\_ **Facility:** \_\_\_\_\_ **Type:** \_\_\_\_\_

**Interviewer:** \_\_\_\_\_ **Date:** \_\_\_\_/\_\_\_\_/91  
 +++++

**\*\*\*EQUIPMENT/SUPPLIES\*\*\***

- |    |   |   |   |
|----|---|---|---|
| 1. | Thermometer .....                       | Y | N |
| 2. | Weighing scale .....                    | Y | N |
|    | In working order? .....                 | Y | N |
| 3. | Immunization register .....             | Y | N |
| 4. | Child health (immunization) cards ..... | Y | N |
| 5. | Adult health cards .....                | Y | N |
| 6. | TT cards .....                          | Y | N |
| 7. | Timer .....                             | Y | N |
| 8. | Watch (60 second) .....                 | Y | N |
| 9. | Oxygen cylinder .....                   | Y | N |
|    | If yes:     _____ Empty                 |   |   |
|    | _____ Full                              |   |   |

**AMOUNT  
IN STOCK**

- |     |                                   |   |   |       |
|-----|-----------------------------------|---|---|-------|
| 10. | Needles (Disposable) .....        | Y | N | _____ |
| 11. | Needles (Reusable) .....          | Y | N | _____ |
| 12. | Syringes .....                    | Y | N | _____ |
| 13. | Sterilization method: _____ Steam |   |   |       |
|     | _____ Boiling                     |   |   |       |
|     | _____ Other: _____                |   |   |       |
| 14. | Steam sterilizer .....            | Y | N |       |
|     | In working order? .....           | Y | N |       |
| 15. | Kerosene stove .....              | Y | N |       |
|     | In working order? .....           | Y | N |       |
| 16. | Electric cooker .....             | Y | N |       |
|     | In working order? .....           | Y | N |       |

17. Refrigerator ..... Y N  
 In working order? ..... Y N
- Type:   \_\_\_ Electric           Condition:   \_\_\_ Good  
          \_\_\_ Kerosene                 \_\_\_ Fair  
          \_\_\_ Gas                         \_\_\_ Poor
- Thermometer inside ..... Y N  
 Temperature today: \_\_\_\_\_
- Temperature chart ..... Y N  
 Since start of month, number of days  
 when temperature was: 0-8 \_\_\_\_\_  
                                   <0 \_\_\_\_\_  
                                   : 3 \_\_\_\_\_
- Spare cylinder for refrigerator ..... Y N
18. Cold box ..... Y N
- Condition:   \_\_\_ Good  
              \_\_\_ Fair  
              \_\_\_ Poor
- Thermometer inside ..... Y N  
 Temperature today: \_\_\_\_\_
- Temperature chart ..... Y N  
 Since start of month, number of days  
 when temperature was: 0-8 \_\_\_\_\_  
                                   <0 \_\_\_\_\_  
                                   >8 \_\_\_\_\_
19. Expired vaccines in refrigerator/cold box ..... Y N  
 20. Frozen DPT or TT in refrigerator/cold box ..... Y N  
 21. Frozen cold blocks available ..... Y N  
 22. Bowls to prepare ORS ..... Y N  
 23. Containers to measure ORS ..... Y N  
 24. Spoons to give ORS ..... Y N  
 25. Sugar for SSS ..... Y N  
 26. Salt for SSS ..... Y N  
 27. Potable water at health center ..... Y N

**\*\*\*MEDICINE\*\*\***

			<b>AMOUNT IN STOCK</b>	
28.	Chloroquine (Tablets) .....	Y	N	_____ Tabs
	Chloroquine (Syrup) .....	Y	N	_____ ml
29.	Cotrimoxazole (Tablets) .....	Y	N	_____ Tabs
	Cotrimoxazole (Syrup) .....	Y	N	_____ ml
30.	ORS Packets:			
	600 ml .....	Y	N	_____ Pkts
	1 Liter .....	Y	N	_____ Pkts
	6 Liters .....	Y	N	_____ Pkts
31.	Vaccines:			
	Measles .....	Y	N	_____ Doses
	DPT .....	Y	N	_____ Doses
	OPV .....	Y	N	_____ Doses
	BCG .....	Y	N	_____ Doses
	TT .....	Y	N	_____ Doses
32.	Notifiable Disease Report Forms .....	Y	N	_____ Forms

**FACILITY ASSESSMENT SURVEY**

+++++  
**LGA:** \_\_\_\_\_ **Facility:** \_\_\_\_\_ **Obs #:** \_\_\_\_\_

**Health Worker's Title:** \_\_\_\_\_ Community Health Officer  
 \_\_\_\_\_ Community Health Supervisor  
 \_\_\_\_\_ Community Health Aide  
 \_\_\_\_\_ Senior Community Health  
 Extension Worker  
 \_\_\_\_\_ Public Health Nurse  
 \_\_\_\_\_ Other: \_\_\_\_\_

**Interviewer:** \_\_\_\_\_ **Date:** \_\_\_\_/\_\_\_\_/91

**\*\*\*HEALTH WORKER INTERVIEW\*\*\***

1. Is there a written **WORKPLAN** for the clinic ..... Y N  
 Can I see it ..... Y N  
 Did you help develop this plan ..... Y N

2. Is there a schedule for **supervisory visits** ..... Y N  
 Can I see it ..... Y N

3. How many times has your supervisor visited in the  
 past six months? \_\_\_\_\_ When was the last visit? \_\_\_\_\_

During these visits, how many times did he/she  
 observe you:

Immunize someone \_\_\_\_\_  
 Treat malaria \_\_\_\_\_  
 Give ORT \_\_\_\_\_

How long was he/she here for that visit? \_\_\_\_\_

What did the supervisor do during that visit:

Talked to: \_\_\_\_\_

Activities: \_\_\_\_\_

Other: \_\_\_\_\_

4. Have any planned supervisory visits been canceled in the last 6 months ..... Y N
5. Has the supervisor explained to you the target populations for:

Measles Immunization ..... Y N  
 Tetanus Toxoid ..... Y N  
 Malaria ..... Y N  
 Diarrhea ..... Y N

Does the health worker know the target populations for:

Measles Immunization ..... Y N  
 Tetanus Toxoid ..... Y N  
 Malaria ..... Y N  
 Diarrhea ..... Y N

6. Do you have a written JOB DESCRIPTION ..... Y N  
 Can I see it ..... Y N

7. Do you have written guidelines or STANDING ORDERS for your work ..... Y N  
 Can I see them ..... Y N

8. Does your supervisor do anything to keep your technical skills up to date ..... Y N  
 What does he do? \_\_\_\_\_

9. Is your performance evaluated regularly ..... Y N  
 How? \_\_\_\_\_

10. Do you have to submit any **REPORTS** ..... Y N

Type of Report	Submitted To	How Often	Up to Date?
----------------	--------------	-----------	-------------

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Do you use the information from these reports to help you in your job ..... Y N

11. What are the most significant **PROBLEMS** you face in doing your job?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Have you discussed these problems with your supervisor ..... Y N

What was the response? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

12. Are there any areas where you would like to receive more **TRAINING** from your supervisor ..... Y N

What are these areas: \_\_\_\_\_

\_\_\_\_\_

**FACILITY ASSESSMENT SURVEY**

+++++

LGA: \_\_\_\_\_ Facility: \_\_\_\_\_ Obs #: \_\_\_\_\_

Supervisor's Title: \_\_\_\_\_ PHC Coordinator  
 \_\_\_\_\_ EPI/CDD Manager  
 \_\_\_\_\_ Head of Unit  
 \_\_\_\_\_ Other: \_\_\_\_\_

Interviewer: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/91

+++++

**\*\*\*SUPERVISOR INTERVIEW\*\*\***

1. Do you have a **MAP** of the LGA ..... Y N  
 Can I see it ..... Y N

2. Do you know which villages/towns in the LGA  
 do **NOT** have access to a health facility ..... Y N

What villages/towns are those?  
 Why don't they have access?

VILLAGE/TOWN	REASON
_____	_____
_____	_____
_____	_____

- . Can you tell me the **population** of the LGA ..... Y N  
 What is it? \_\_\_\_\_

4. Do you know the **target populations** for...

Measles Immunization ..	Y	N	What is it?	_____
Tetanus Toxoid .....	Y	N	What is it?	_____
Malaria .....	Y	N	What is it?	_____
Diarrhea .....	Y	N	What is it?	_____

Have you explained these targets to the staff  
in your clinics ..... Y N

5. Do you have a written **WORKPLAN** ..... Y N  
 Can I see it ..... Y N  
 Who helped develop this plan? \_\_\_\_\_  
   \_\_\_\_\_ No one  
   \_\_\_\_\_ Health workers  
   \_\_\_\_\_ Other: \_\_\_\_\_

6. Do you have a **SUPERVISORY SCHEDULE** ..... Y N  
 Can I see it ..... Y N  
 Did you give a copy to all health facilities  
in the LGA ..... Y N

7. Do you make the same number of visits to all  
the people you supervise ..... Y N  
 Do you make more visits to people who are  
not performing well ..... Y N

8. Have you had to cancel any planned supervisory  
visits in the last 6 months because you did  
not have transportation ..... Y N

9. Do you have **JOB DESCRIPTIONS** for all the cadres  
of health workers in the LGA ..... Y N  
 Can I see them ..... Y N  
 Do you have an extra copy of these  
that I can take with me ..... Y N

10. In the past 6 months, have you visited this facility to supervise health worker activities ..... Y N

How many times? \_\_\_\_\_

During these visits, how many times did you see the health worker:

Immunize someone \_\_\_\_\_  
Treat malaria \_\_\_\_\_  
Give ORT \_\_\_\_\_

Do you have **supervisory checklists** to assess their performance ..... Y N  
Can I see them ..... Y N

When was your last supervisory visit here? \_\_\_\_\_

How long were you here for that visit? \_\_\_\_\_

11. Are there **STANDING ORDERS** or performance manuals available for all categories of health workers ... Y N  
Can I see them ..... Y N

12. Do you have other ways of keeping the health workers up to date ..... Y N

What are they: \_\_\_\_\_

13. Have you observed any **health education** activities in the last 6 months ..... Y N

About how many:

Group sessions in clinic \_\_\_\_\_  
Group sessions in community \_\_\_\_\_  
Home visits \_\_\_\_\_

14. Do you have procedures you use to evaluate the performance of health workers ..... Y N

What are they: \_\_\_\_\_

15. When did this facility (or other facilities in the LGA) last receive:

Drugs \_\_\_\_\_  
Vaccines \_\_\_\_\_  
ORS Packets \_\_\_\_\_  
Supplies \_\_\_\_\_

16. Are there adequate quantities of all supplies and drugs in stock now ..... Y N

17. Have there been any months since last January when you ran out of drugs or supplies ..... Y N

How many months did it happen? \_\_\_\_\_

18. How many health facilities are in the LGA? \_\_\_\_\_

How many of these facilities are supposed to send you reports? \_\_\_\_\_

How often do they send reports? \_\_\_\_\_

How often SHOULD they send reports? \_\_\_\_\_

19. What do you think are the most important needs for training in order to improve health services?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

20. What are the most significant problems you face in supervising health workers?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

21. Have you attended any training programs  
in the last two years ..... Y N

What were they about? Who sponsored them? Where were they?

Topic	Sponsor	Location
_____	_____	_____
_____	_____	_____
_____	_____	_____

## **Appendix B**

### **Participants Facility Assessment Survey Nsukka Local Government**

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**Name**

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Mr. E. Ogbene\*  
Dr. P.N.C. Ochili  
Mrs. E. Aneke  
Mrs. C.N. Omeje  
Mr. Alphonsus Ugwu  
Mrs. C.O. Anioke\*  
Mrs. R.C. Apam  
Mr. Amechi Ugwu  
Mr. Alfred Ugwu  
Mrs. Esther Opkoko

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*\* Facilitators*