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World Vision Relief & Development Inc.

KNOWLEDGE AND PRACTICE SURVEY
FINAL EVALUATION
Ogbomoso South Child Survival Project
Oyo State, Nigeria

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LIST OF ABBREVIATIONS

ANC	Antenatal Care
BCG	Bacilli Calmette-Guerin (tuberculosis vaccine)
CDD	Control of Diarrheal Diseases
CSP	Child Survival Project
DIP	Detailed Implementation Plan
DPT	Diphtheria/Pertussis/Tetanus Vaccine
EPI	Expanded Program on Immunization
HIS	Health Information System
IGA	Income-Generating Activity
IUD	Intrauterine Device
JHU CSSP	Johns Hopkins University Child Survival Support Program
LGA	Local Government Area
MOH	Ministry of Health
OPV	Oral Polio Vaccine
ORT/ORS	Oral Rehydration Therapy/Oral Rehydration Solution
OSCSP	Ogbomoso South Child Survival Project
PHC	Primary Health Care
PVO	Private Voluntary Organization
SD	Standard Deviation
SSS	Sugar/Salt Solution
TBA	Traditional Birth Attendant
TT	Tetanus Toxoid
USAID	U.S. Agency for International Development
USNCHS	U.S. National Center for Health Statistics
VHW	Village Health Worker
WCBA	Women of Childbearing Age
WHO	World Health Organization
WV/WVI	World Vision/World Vision International
WVRD	World Vision Relief & Development

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EXECUTIVE SUMMARY

The Ogbomoso South Child Survival Project (OSCSP) was funded by USAID and World Vision International for implementation of Child Survival activities for a four-year period beginning October 1, 1988, and ending September 30, 1992. A Knowledge and Practice survey was conducted from November 22 to December 7, 1992, to evaluate the progress made by this project toward meeting its stated objectives and to assist the project to begin formulating strategies for the upcoming three-year extension and expansion. OSCSP staff, representatives from the Ministry of Health (MOH) of Nigeria, and members of the community were trained in the use of the World Health Organization/Expanded Program on Immunization (WHO/EPI) 30 cluster methodology and conducted the survey using this methodology in 30 clusters selected from the project area. The survey made use of a standardized questionnaire developed by The Johns Hopkins University PVO Child Survival Support Program, modified by staff from the OSCSP, WV headquarters, and the JHU PVO CSSP.

Major findings of the survey include the following:

1. Sixty-four percent of children 12-23 months were fully immunized, compared to an end-of-project target of 80%.

2. Fifty-nine percent of mothers with a child having diarrhea treated the diarrhea with SSS or ORS, up from 7% at baseline, but short of the end-of-project target of 80%.

3. Forty-six percent of mothers correctly stated the formula for the preparation of SSS, down from 79% reported at midterm and short of the target of 80%.

4. During the episodes of diarrhea in the two-week period preceding the survey, 58% of mothers breastfed at normal or increased levels, 55% gave the same or increased amounts of other fluids, and 35% gave the same or increased amounts of food. The end-of-project target for appropriate feeding during diarrheal episodes was 70%.

5. Twenty-three percent of children were found to be moderately or severely malnourished based on weight-for-age standards, representing a reduction of approximately 40% in the malnutrition rate since baseline versus a target of 30%.

6. All of the children in the survey were breastfed after delivery, and 92% of children under two were still being breastfed. However, only 22% of children under four months were being exclusively breastfed.

7. Seventy-seven percent of children under two suffering from fever received Chloroquine, compared to a target of 60%.

8. Seventy-one percent of mothers received malaria prophylaxis during pregnancy, compared to a target of 70%.

9. Thirty-six percent of mothers who were not pregnant and who did not want another child in the next two years were using a modern method of family planning, compared to a target of 30%.

I. INTRODUCTION

A. Background

World Vision (WV)'s Ogbomoso South Child Survival Project (OSCSP) was initiated in Ogo Oluwa Local Government Area (LGA), Oyo State, Nigeria, in October 1988. With a total budget of approximately $500,000 (including USAID and matching funds from WV), the project serves a population of just over 37,000 with a goal of reducing infant and child morbidity and mortality due to diarrheal diseases, vaccine-preventable diseases, and malnutrition. Working with its partner agency, the Baptist Medical Center, the project aims to support and strengthen community and local Ministry of Health (MOH) health systems in an effort to achieve this goal.

The project area is situated in the savannah zone of western Nigeria, roughly halfway between Lagos and the capital, Abuja. The area is remote and primarily rural and benefits only from extremely limited health and other social services. The population consists predominantly of those from the Yoruba ethnic group and is primarily engaged in subsistence agriculture as a way of life.

Difficulties in securing a partner agency delayed start-up of the project until July 1989, so project activities have been implemented for a period of just over three years. The main interventions of the project include immunization, control of diarrheal diseases (CDD), growth monitoring, nutrition promotion, child spacing, and control of malaria. The specific objectives of the project, as stated in the Detailed Implementation Plan (DIP), are as follows:

1. To fully immunize 80% of registered infants under two years with the six EPI vaccines.

2. To immunize 80% of registered women of child bearing age (WCBA) with two doses of tetanus toxoid (TT) vaccine.

3. To increase to 80% the number of registered mothers of children under five who use ORT during episodes of diarrhea in their child.

4. To increase to 80% the number of mothers who are competent in the use of ORT.

5. To ensure that 70% of registered mothers with children under five continue to breastfeed and observe appropriate feeding practices during and after diarrheal episodes in the children.

6. To weigh 80% of children under two years every month, and 80% of children two to five years every two months.

7. To ensure that 50% of mothers with children under two years practice appropriate infant feeding.

8. To ensure that 70% of pregnant mothers and children under five receive malaria prophylaxis.

9. To ensure that 30% of women in union are practicing contraception.

USAID has approved an extension of project activities until September 30, 1995, including an expansion of the project area to include three Health Districts of an adjacent LGA, Orire, also in Oyo State.

B. Objectives of the Survey

The final survey, together with a financial analysis and a formal assessment by an external evaluation team of the sustainability of the project, comprised the final evaluation of the OSCSP through its first four-year period of funding. In addition to evaluation, the survey was also intended, as one component of the OSCSP's Health Information System (HIS), to provide information to assist project planning, management, and monitoring. To this end, several objectives were set for the final survey, including:

1. Providing quantitative information on the progress the project has made since its inception toward reaching its stated objectives.

2. Assisting project staff to formulate effective strategies for the three-year extension and expansion.

3. Training project and MOH staff on the methodology and implementation of 30 cluster sampling survey techniques.

The survey was designed to provide information specifically on the following issues of interest:

- Knowledge and practices of mothers of children under two regarding breast-feeding, nutrition, immunization, growth monitoring, child spacing, antenatal care, maternal nutrition, delivery, management and prevention of diarrheal diseases, and prevention and treatment of malaria

- Appropriate target groups for health education

- Access to immunization and growth monitoring services

- Coverage rates of BCG, DPT, polio, and measles vaccines, and for children 12-23 months of age, the fully immunized rate

- ORT use rate

Questionnaires were directed at mothers of children under two years of age. While certain project interventions target a group more broad than this, all interventions include under twos as a primary target group. Some activities, especially promotion of appropriate breastfeeding and other feeding practices, are directed specifically at

this group. Restricting the sample to these mothers also allows the survey to measure the extent to which the project has been able to reach those children born during the life of the project.

C. Schedule of Activities

Preparations for the survey began in September 1992 with adapting and translating the questionnaire, recruiting interviewers and supervisors, notifying communities, and obtaining support from community leaders. Final preparations, training, household interviews, data analysis, report writing, and feedback were subsequently conducted from November 22-December 7, as follows:

November 22-23:	—	Arrival of survey trainer in Lagos
	—	Continuation of preparations, including questionnaire modification and logistical arrangements
	—	Briefing with Mr. Eugene Chiavaroli, USAID Affairs Officer, Nigeria
	—	Travel to Ogbomoso
November 24:	—	Training of supervisors
November 25:	—	Training of interviewers
November 26:	—	Field test of questionnaire
	—	Review of field test
	—	Finalization and production of questionnaires
November 27-December 2:	—	Household interviews
December 3:	—	Training on hand tabulation of data
	—	Input of data into Survey Mate 1.762 for analysis
December 4-6:	—	Discussion of results and writing of report
December 7:	—	Feedback session with interviewers, supervisors, other project staff, and community leaders

Note: Household interviews for the final survey were conducted from November 27-30. From November 30 to December 2, a baseline survey was conducted covering the initial project area combined with the expansion area, using the same survey team and a similar questionnaire (see Baseline Survey Report under separate cover).

II. Methodology

A. The Questionnaire

The questionnaire used in the survey (see Appendix A) was adapted from the USAID "PVO Child Survival Knowledge and Practice Questionnaire" developed in

collaboration with The Johns Hopkins University Child Survival Support Program (JHU CSSP) and other U.S. and international experts. Consultations were made with staff from the JHU CSSP, WV headquarters, and the OSCSP to customize this questionnaire to the specific project interventions and to conditions in the project area.

A copy of the questionnaire was sent to the project site prior to the beginning of survey training and was translated by a team of nurses from the project staff into Yoruba, the primary language spoken by the communities in the project area. Two individuals not involved in the first translation subsequently translated the Yoruba version back into English. Finally, both the first and second groups of translators met together to discuss differences in the translations and to agree on the proper Yoruba version (see Appendix B).

During the training of supervisors and interviewers and after field testing the questionnaire in an area adjacent to the project area, some minor modifications were made. In its final version, the questionnaire consisted of 50 questions, as follows:

Questions 1-2:	Age of mother and child
Questions 3-6:	Mother's education and occupation
Questions 7-13:	Breastfeeding and nutrition
Questions 14-26:	Diarrheal diseases and their management
Questions 27-32:	Malaria control and treatment
Questions 33-38:	Immunization
Questions 39-40:	Growth monitoring
Questions 41-50:	Maternal care, child spacing, and delivery practices

B. Determination of Sample Size

The conduct of the survey followed the WHO/Expanded Program on Immunization (EPI) 30 cluster methodology (see Lemeshow and Stroh, 1988, and Bennett, et. al., 1991). To determine the size of the sample to be selected, the following formula was used:

$n = z^2 pq/d^2$ where
- n = sample size
- z = statistical certainty desired
- p = estimated prevalence, coverage rate, or level of knowledge
- q = 1-p (the proportion without the attribute of interest)
- d = precision desired

In accordance with the WHO/EPI methodology, the desired precision (d) was set at .10 and statistical certainty at 95% (z = 1.96). The value of p was set at .5, the value which requires the maximum sample size. The resulting sample size, n, was 96. This is the size of the sample to be chosen if a simple random sample is selected, and it is desired that the population estimate obtained from this sample be within 10% of the true value in the population 95% of the time (given repeated samples and an unbiased sample selection).

To compensate for the effect of choosing a sample of people in clusters rather than as randomly selected individuals, it is necessary to approximately double the sample size (see Henderson and Sundaresan, 1982). Based on consultations with staff from the JHU CSSP, a sample size of 240 was ultimately chosen, for the following reasons:

1. The survey was measuring multiple interventions in addition to immunization.

2. Some questions did not apply to all mothers interviewed and so were skipped, thus reducing the sample size.

To achieve the desired sample size, a total of eight mothers of children under two years were interviewed in each of the 30 clusters.

C. Selection of the Sample

A list of villages in the project area and the population size of each was compiled, based on the household registration data collected by the project in December 1990 (see Appendix C). After arranging this list in alphabetical order, 30 clusters were randomly selected following the WHO/EPI method, prior to the arrival of the survey trainer. The 30 selected clusters came from 24 different villages, as two relatively large villages accounted for eight of the selected clusters (five in one, three in the other). Each selected village was subsequently visited by WV project staff to make them aware of the upcoming survey and to inform them of the dates of the household interviews.

In accordance with the WHO/EPI method, the selection of the eight households for interview started with the random selection of a starting household, as follows: first, a geographically central location was identified in the village to be surveyed. By spinning a bottle on a level surface, a random direction was chosen, and the interview team and supervisor counted all households along a line from the center to the periphery of the cluster in the specified direction. Using the identification number on a currency note, one of these households was randomly selected as the starting point.

If the starting house contained a mother of a child under two years, she was included in the sample and was interviewed; otherwise, the interviewers proceeded to the next house. This and all other additional households were chosen by finding the next nearest household (the one whose front door was closest), staying within the boundaries of the cluster. If there was uncertainty regarding which house was closest, interviewers were trained to choose randomly between or among them.

Eligible households were defined as those having a mother with a child under two years. In several instances, a household contained more than one mother with a child under two, in which case only one of them was randomly selected for interview. If a mother had more than one child under two years, the mother was interviewed regarding the youngest, about whom it was assumed the mother would have the best recollection and accuracy of information.

In several clusters, fewer than eight mothers with children under two were identified from among all households in the cluster. The interview team then proceeded to the geographically nearest community (excluding those already selected as among the 30 original clusters), and starting with the nearest house to the one where the interview team last was in the original cluster, the procedure was continued until a total of eight mothers of children under two were found.

In the two villages from which more than one cluster was to be selected, a physical survey was made of the village prior to the conduct of interviews, and the village was divided geographically into the same number of mutually exclusive regions as the number of clusters to be selected. Each of these regions was then considered to be a separate cluster, and eight households were selected from each following the same method as that outlined above.

D. Training of the Supervisors and Interviewers

Four supervisors were invited to participate in the survey, including the Principal Medical Officer, Assistant Chief Health Sister, and Chief Program Officer for Oyo State, and one Public Health Nurse from the OSCSP staff. An interview and screening test were used to select 16 interviewers from among approximately 40 secondary school graduates who applied for the positions. Training of the supervisors, along with several other members of staff and one representative from the MOH not involved in the survey, was conducted by the survey trainer, Tom Ventimiglia, Program Development Officer from WVRD. Topics covered during the supervisors' training included a) purpose and objectives of the survey, b) WHO/EPI 30 cluster methodology, c) determination of sample size, d) selection of the starting household, and e) responsibilities of supervisors. In addition, the questionnaire was discussed thoroughly, including the purpose of each question and how to code respondents' answers. Proper interviewing techniques were discussed, and a demonstration role-play was conducted and discussed.

The OSCSP manager and three of the supervisors facilitated different sessions, with support from the survey trainer, during the training of interviewers. This training covered the same topics as those covered during the training of supervisors, with increased emphasis on the proper conduct of interviews and more time for role-playing. Training schedules for supervisors and interviewers are included as Appendices D and E.

Following the day of training of interviewers, a field test was conducted in a village near the project base but not included in the project area. Each interviewer identified and interviewed a minimum of two mothers of children under two years. Supervisors observed interviews, reviewed the completed questionnaires, and provided individual feedback to each interviewer. Following the completion of the field test, the survey team met as a group to review the experiences of the field test, discuss problems encountered, review errors made in completing the questionnaire form, and make minor revisions in the questionnaire.

E. Conduct of the Interviews

Interviewers were teamed in pairs, and two pairs of interviewers were assigned to each supervisor. Each pair of interviewers was also assigned a village health worker (VHW), who acted as a guide in the villages and weighed the child under two during the interview. VHWs did not conduct any interviews and have been trained by the project to weigh babies for the growth monitoring component of the project.

Seventy-one interviews were conducted on the first day, 121 on the second, and 48 on the third. On the first day, all interviews were conducted in pairs, with one person interviewing and one recording responses. On the second and third days, some interviews were both conducted and recorded by only one interviewer. Supervisors traveled to the cluster sites with the interviewers, selected the starting household, observed interviews, supervised the selection procedure for additional houses, and reviewed questionnaires for accuracy.

Almost all of the interviews were conducted in Yoruba, since this was the only language for which a translation was made, but mothers whose Yoruba was poor were not excluded from the survey. While every effort was made to conduct the interview as much as possible in Yoruba, translation of questions into other languages which mothers could understand was sometimes necessary. Although mothers were frequently found to be away from the house, no eligible mother refused to participate in the survey.

F. Method for Data Analysis

After completion of the interviews, three senior project staff were trained on how to conduct the manual tabulation of data. A few questions were analyzed manually as part of the training, but the majority of data analysis was done using the Survey Mate software program.

III. Results

Following are the responses obtained from the 240 mothers interviewed (no questionnaires were removed from the analysis). Appendix F includes confidence intervals for the major results, and all of the frequency tables have been included as Appendix G.

A. Age Distribution

1. The average age of the mothers interviewed was 27.7 years. The youngest mother interviewed was 17, and the oldest was 47. The age distribution shows marked peaks at five-year intervals (ages 20, 25, 30, etc.), with the greatest number of mothers giving 25 or 30 as their age. While only one mother was less than 18 years, 43 (17.9%) were 35 or older. Thus, a total of 44 mothers interviewed (18.3%), are classified as being at high risk due to their age.

2. The average age of the children included in the survey was 10.5 months. Children under one year of age were better represented (making up 58% of the

total) than those between one and two years (42%). The most common age of the child in the survey was one month (22 of 240).

B. Mother's Education and Income-Generating Work

3. Nearly half of the mothers interviewed (115 of 240, or 48%) indicated that they had received no schooling at all. Another 19 mothers (8%) reported having attended primary school but being unable to read. Sixty-five mothers (27%) attended primary school and could read, and the remaining 41 (17%) reported having reached secondary school or higher.

4. A total of 217 mothers (90%) indicated that they did work which took them away from the home, while the other 23 (10%) said that they did not.

5. Only four of the 240 mothers (2%) reported having no work which brought them income. Of the 236 mothers who did have such work, the most common activities reported were harvesting or fruit picking (31%), selling agricultural products (25%), selling goods in a shop or on the street (17%), and selling foods or dairy products (16%). Four mothers (2%) reported earning income from weaving, making mats, etc.; two (1%) had salaried positions; and 26 listed other types of work such as tailoring and typing for which they received some income.

6. Asked who takes care of their child under two years when they are away, 132 mothers (55%) said that they take the child with them. Among those who didn't, 36 (15%) left the child with a relative, 35 (15%) with an older child, 20 (8%) with the husband, 14 (6%) with another wife of the husband, and two (1%) with neighbors. One mother reported leaving the child at a day care center when she was away.

C. Breastfeeding and Nutrition

7. Of the 240 mothers with a child under two years, 220 (92%) reported that they were currently breastfeeding the child, and the remaining 20 (8%) were not.

8. All of the 20 mothers who were not breastfeeding their child under two years at the time of the survey reported that they did breastfeed the child previously. Thus, all 240 children in the survey were breastfed at some point after birth.

9. When asked how long after the delivery of the child the mother began to breastfeed, 62 (26%) said that they breastfed immediately. 88 mothers (37%) said that they first breastfed the child between 1 and 8 hours after delivery, while 83 (35%) said that it was not until more than 8 hours after delivery. Seven mothers (3%) could not remember when they first breastfed the child.

10. All 240 mothers were asked what foods and fluids other than breast milk they were giving to their child under two years. Responses to this question were cross-tabulated with the age of the child to determine the feeding and weaning practices of mothers in the survey. Results indicated that of the 51 children

under four months of age, only 11 (22%) were being exclusively breastfed; i.e., only 22% of children under four months received no fluids or foods other than breast milk. Another 22 children in this age group (43%) received only water or "agbo," a tea made from boiling any of a variety of local herbs, which is widely believed to protect a child from disease. Among the remaining children 0-3 months of age, 13 (25%) were receiving only other fluids (milk, juice, and/or water), and 5 (10%) were receiving other fluids as well as semisolid and solid foods.

Of children four to six months of age, two of 33 (6%) were still being exclusively breastfed, and none of the 156 children aged 7 to 23 months were (although one child of this age was reportedly only being given water or agbo). Of the children of weaning age (4 months and above), 160 out of 189 (85%) were getting mango, papaya, carrot, or some other source of vitamin A and/or green leafy vegetables as a source of iron and vitamins. Proteins rich in iron, such as meat, eggs, or fish and/or plant sources of protein such as groundnuts, lentils, soya, cowpeas, or beans were being given to 171 (90%) of these children. Finally, as a source of additional calories, honey, sugar, fat, and/or oil was added to the food of 167 of the 189 children (88%) in this age group.

11. Mothers were asked what they could do to keep on breastfeeding their child under two. Of the majority of mothers (82%) who responded to this question with a response other than those listed on the questionnaire, virtually all mentioned that proper nutrition or a balanced diet were important factors. Of those options listed, 35 mothers (15%) mentioned taking care of the breasts and nipples, 28 (12%) said frequent sucking by the child to stimulate production, and one said that after separation from the breast, exclusive breastfeeding can continue. No mother mentioned the importance of breastfeeding soon after delivery, exclusive breastfeeding for the first four months, or avoiding bottle feeding. Thirty mothers (13%) did not know any ways to keep on breastfeeding during the first four months of a child's life.

12. Most mothers (140 of 240, or 58%) knew that they should start adding other foods to breastfeeding when the child reached between four and six months of age. Forty-four (18%) thought it should be before the fourth month, 47 (20%) thought it should be later than the sixth month, and nine (4%) did not know when additional foods should be introduced.

13. Asked what these additional foods to breastfeeding should be, 170 mothers (71%) mentioned foods rich in protein, 57 mothers (24%) mentioned foods rich in vitamin A, and 41 (17%) mentioned foods rich in iron. Thirty mothers (13%) mentioned the importance of adding additional calories to food in the form of oil. More than half of the mothers (52%) said that these additional foods should include pap or porridge made from yam flour.

D. Diarrheal Diseases

14. Sixty-two of the 240 mothers interviewed (26%) reported that their child under two years had had diarrhea at some point during the two-week period preceding the interview.

15. Of the 62 mothers whose child reportedly had had an episode of diarrhea, eight were not breastfeeding the child at the time of the episode. Of those who were, 15 (28%) reported breastfeeding the child more than usual, and 16 (30%) reported breastfeeding at the usual level. Twenty mothers (37%) reported breastfeeding less than usual, and three (6%) said that they stopped breastfeeding altogether during the episode of diarrhea.

16. Only two of the mothers whose child had had diarrhea were giving the child no fluids other than breast milk at the time of the episode. Of the 60 who were, 21 (34%) gave more of these other fluids than usual, and 14 (21%) gave the usual amounts. However, 15 (25%) said that they gave less other fluids than usual, and 10 mothers (17%) stopped giving the child any other fluids.

17. Five of the 62 mothers whose child had had diarrhea were not giving the child any solid or semisolid foods during the time of the episode. Of the 57 who were, 12 (21%) gave the child more of these foods than usual, and eight (14%) gave the usual amount. The majority of mothers (65%) gave less foods than usual (42%) or stopped completely giving any foods (23%).

18. The 62 mothers who said that their child had had diarrhea in the two-week period preceding the survey were asked what treatments, if any, they provided. Almost 40% of the mothers (24 of 62) gave sugar/salt solution (SSS) to the child, and 12 (19%) made oral rehydration solution (ORS) from a packet. Twenty-four of the 62 (39%) also reported giving some sort of medicine or antibiotics, six (10%) gave some other treatment (frequently a traditional treatment from herbs), and seven (11%) said that they gave no treatment for the diarrhea.

19. A majority of these 62 mothers (61%) said that they sought advice or treatment from others for their child's diarrhea, while 39% did not.

20. Of the 38 mothers who did seek advice or treatment, the most common source of that advice or treatment, used by 13 (34%) of the mothers, was the village health post, manned by World Vision's VHWs. Six mothers (16%) sought advice or treatment from a hospital, five (13%) from private clinics or doctors, and four (11%) from a health center. Five mothers (13%) went to relatives or friends for advice or treatment, three (8%) went to a drug store, two (5%) went to a TBA, and one (3%) went to a "drug peddler."

21. All 240 mothers were asked what signs and symptoms would cause them to seek advice or treatment for their child if the child had diarrhea. One hundred mothers (42%) mentioned signs of dehydration such as a dry mouth, sunken

eyes, decreased urine output, etc.; 67 (28%) mentioned fever; 62 (26%) said weakness, tiredness, or failure to play; 51 (21%) said diarrhea of a duration exceeding two weeks; 34 (14%) mentioned loss of appetite; eight (3%) said vomiting; and seven (3%) mentioned blood in the stool. Twenty-three mothers mentioned other signs that would cause them to seek advice or treatment for their child's diarrhea, and 18 (8%) said that they did not know any such signs or symptoms.

22. When asked what important actions they should take if their child had diarrhea, 176 of the 240 mothers (73%) said that they should give SSS or ORS to prevent dehydration, and 65 (27%) said they should take the child to a health facility. Eighteen mothers (8%) responded that they should give the child smaller, more frequent feeds, 10 (4%) said to give the child more food after the episode was finished, five (2%) said give the child more to drink than usual, and one said that fluids should be initiated as soon as possible. Other responses were given by 25 (10%) of the mothers, often including the provision of nutritious food or drugs. No mother indicated that an important action for her to take in the treatment of her child's diarrhea included withholding fluids or foods. Six mothers (3%) could not name any action that they felt was important to take for diarrhea in their child.

23. &
24. All mothers were asked to state the method for preparing SSS. Only those mothers who identified all of the ingredients and gave the proper measurements of each were counted as knowing how to prepare SSS correctly. Of the 240 mothers asked, 107 (46%) gave the correct formula for the preparation of SSS, while the remainder did not know the formula or gave one or more incorrect measurements or ingredients.

25. All mothers were asked what important actions they should take during the period when a child is recovering from diarrhea. In response, 97 mothers (40%) mentioned giving foods with high caloric content, 63 (26%) mentioned giving smaller, more frequent feeds, and 40 (17%) mentioned giving higher amounts of food than usual. Thirty-eight mothers (16%) mentioned other actions that they would take during the recovery period, including giving the child drugs, maintaining good nutrition, and ensuring a hygienic environment to prevent additional episodes. Fifty mothers (21%) did not know any important actions to take during this time.

26. When asked what they could do to prevent their child from getting diarrhea, 113 mothers (47%) mentioned washing their hands before preparing food for and feeding the child, and the same number mentioned covering food to protect it from flies. Forty-two mothers (18%) mentioned the use of clean water for drinking and cooking, and 20 (8%) said collecting and storing water in clean containers. Eighteen (8%) mentioned defecating away from the house or play areas of children, six (3%) said they ensure their child avoids contact with feces, and four (2%) mentioned the role of latrines. Thirty-six mothers (15%)

mentioned other means of preventing diarrhea in their child, most often relating to the maintenance of a clean environment. One quarter of the mothers interviewed (60 of 240) could not name any preventive measures.

E. Control and Treatment of Malaria

27. A total of 106 mothers (44%) reported that their child under two years had been ill with fever at some time during the two-week period prior to the interview. The others (56%) said their child had not had a fever during this period.

28. Of the 106 mothers whose child had had a fever, 101 (95%) said that the child received some form of treatment for it, while the other 5% did not.

29. Only three of the 101 mothers (3%) whose child received treatment for the fever gave the treatment themselves. Thirty-seven (37%) went to the village health post for treatment, 20 (20%) went to a private clinic or doctor, 17 (17%) went to a hospital, 13 (13%) went to a drugstore, four (4%) went to a health center, four (4%) went to a traditional healer, three (3%) went to a TBA, and five (5%) went to some other place or person for treatment (primarily drug peddlers).

30. For treatment of the fever, 82 of the 101 mothers whose child was treated (81%) reported that chloroquine was given. Paracetemol was given to 68 (67%) of the children, and 41 mothers (41%) said some other treatment was given (usually "multivites" or "tonic") or did not know what was given.

31. Of all 240 mothers interviewed, 170 (71%) reported having received Daraprim ("Sunday-Sunday medicine") during the last trimester of their pregnancy with the child under two.

32. All mothers were asked to name any preventive measures that they knew to protect their child from getting malaria. In response, 45 mothers (19%) mentioned keeping bushes low around the house, 38 (16%) mentioned removing stagnant water around the house, 26 (11%) mentioned spraying insecticides, and 24 (10%) mentioned using screens on windows and doors. Ninety-seven mothers (40%) mentioned other preventive measures, which in virtually all cases was the use of anti-malarial drugs. Avoidance of the sun was also commonly believed to reduce the child's chance of getting a fever. Of all mothers interviewed, 79 (33%) stated that they knew of no way to prevent their child from getting malaria.

F. Immunizations

33. Ninety percent of the mothers surveyed (217 of 240) reported that their child under two years had received at least one immunization. Of the 102 children aged 12-23 months, 98 (96%) were reported to have been immunized.

34. All mothers were asked at what age a child should receive the measles vaccine. Ninety-one of 239 mothers asked this question (38%) said that the measles vaccine should be given at nine months of age, while 148 (62%) either said that they did not know the age or gave a response other than nine months. The most frequently given incorrect response was 12 months, the age at which yellow fever vaccine is given.

35. Asked the main reason pregnant women should be vaccinated with tetanus toxoid vaccine, 108 mothers interviewed (45%) knew that it was to protect both mother and newborn from tetanus. Ten mothers (4%) believed that TT is given to protect only the mother from tetanus, and 55 (23%) believed that it is to protect only the newborn. The remaining 67 mothers (28%) either stated that they did not know the reason, or gave a response other than those having to do with protecting the mother or newborn from tetanus.

36. Asked how many TT should be given to a pregnant woman to protect a newborn infant from tetanus, 88 mothers (37%) said two, while 101 mothers (42%) said more than two were necessary. Eighteen mothers (8%) said a pregnant woman needed only one, and 33 (14%) said that they did not know how many TT were needed to protect the newborn from tetanus.

37. One hundred ninety-seven of the 240 mothers surveyed (82%) had a Road to Health card for their child under two, on which immunizations of the child and mother and growth monitoring activities are recorded. Among those who didn't have this card, 19 (8%) said that the card had been lost or was in another location, and 24 (10%) said that they had never received the card at all.

38. Of the 102 children aged 12 to 23 months in the sample, following are the number and percent who had received each vaccine, according to the Road to Health cards (children in this age group who did not have a card are counted as not having received the vaccine).

Vaccine	Number	Percent
BCG	85	83.3
OPV1	85	83.3
OPV2	83	81.4
OPV3	74	72.5
DPT1	85	83.3
DPT2	83	81.4
DPT3	74	72.5
Measles	67	65.7
Yellow Fever	4	3.9

Of the 102 children 12 to 23 months of age, 65 (63.7%) were found to be fully immunized (received one dose of BCG, OPV1, OPV2, OPV3, DPT1, DPT2, DPT3, and measles), according to card.

G. Growth Monitoring

39. Using the Road to Health cards, interviewers checked whether the child under two had been weighed in the last month (during the month of October). Of the 197 children with cards present, 61 (31%) had been weighed and 136 (69%) had not. Accounting for the 10 children in the survey who were born in November 1992 (who thus could not have been weighed in October) and the 43 children who did not have a card, 61 of a total of 230 eligible children (27%) were found to have been weighed in the last month.

40. All but one of the children in the survey were weighed during the interview, and their weights were classified according to WHO "Anthropometric Reference Values for Use in the African Region," based on USNCHS weight for age standards. Those children whose weight for age was less than or equal to one standard deviation (SD) below the median were classified as "normal" weight for age. Those whose weight for age was greater than one SD but less than or equal to two SD below the median were classified as being "possibly malnourished." Those whose weight for age was greater than two SD but less than three SD below the median were classified as having "moderate malnutrition," and those with weight for age greater than three SD below the median were classified as having "severe malnutrition." The results of this classification are as shown below.

Classification	Number	Percent
Normal	122	51.1
Possible mild malnutrition	62	25.9
Moderate malnutrition	40	16.7
Severe malnutrition	15	6.3

H. Maternal Care

41. The number of TT injections that a mother received according to the Road to Health card for the child under two years was recorded for those that had the card. Of these, 25 (13%) had received one TT injection, 115 (58%) had received two or more, and 57 (29%) showed having received none. Thus, of all 240 mothers, 25 (10%) had received one TT, 115 (48%) had received two or more, and 100 (42%) had none, assuming that those without a card had received none.

42. Of all 240 mothers interviewed, five (2%) reported that they were pregnant, while 235 (98%) said that they were not.

43. Of the 235 mothers who said that they were not pregnant, 49 (21%) said that they wanted another child within the next two years, 180 (77%) said that they did not, and six (3%) said that they were not sure whether they wanted another child in the next two years or not.

44. Of the 186 mothers who were not pregnant and who said that they did not want another child in the next two years or were not sure if they did or not, 78 (42%) reported using some method to avoid or postpone getting pregnant. The remaining 108 (58%) said that they or their partner were not using any such method.

45. Of the 78 mothers who reported that they or their partner were using some method to avoid or postpone becoming pregnant, the methods used were as follows.

Method	Number	Percent
Tubal ligation/vasectomy	2	3
Norplant	2	3
Injections	4	5
Pill	10	13
IUD	4	5
Barrier method/diaphragm	13	17
Condom	21	27
Foam/gel	11	14
Abstinence	11	14

No other methods were reported as being used.

46. All mothers were asked to name any methods of family planning of which they were aware. One quarter of the mothers (60 of 240) could not name any method. Other responses given, in decreasing order of frequency, were the diaphragm (30%), condom (28%), sterilization (28%), oral contraceptive pill (24%), injections (24%), foam/gel (22%), IUD (18%), abstinence (13%), Norplant (4%), a "traditional ring" (1%), and rhythm/calendar (0.4%).

47. Asked what foods a pregnant woman should eat to avoid becoming anemic, 198 mothers (83%) mentioned proteins rich in iron, such as fish and meat, 158 (66%) mentioned leafy green vegetables rich in iron, and 54 (23%) mentioned other foods, most commonly the staple foods (yam or rice) or fruits. Only five mothers (2%) said that they didn't know any foods which were useful for preventing pregnancy anemia.

48. A total of 216 mothers (90%) reported that they visited a health facility for pregnancy or prenatal care during the time they were pregnant with the child under two. The other 24 mothers (10%) said that they did not receive any such care.

49. During the pregnancy with the child under two, the majority of mothers (137 of 240, or 57%) reported having eaten less food than usual. Seventy-seven mothers (32%) said that they ate more than usual, and 26 (11%) said that they ate the same amount of food as usual.

50. Asked who had tied and cut the umbilical cord at the delivery of the child under two, 125 mothers (52%) said that it was a health professional (physician, nurse, or midwife), 69 (29%) said that it was a family member, 35 (15%) said a TBA, five (2%) said they did it themselves, four (2%) mentioned other people responsible, and two mothers (1%) couldn't remember who had tied and cut the cord.

IV. Discussion

A. Age Distribution

The distribution of ages reported by mothers shows marked peaks at five-year intervals, indicating that there was a significant amount of approximation by mothers when stating their age. Birthdates of children seemed to be better known, however, and were verified by checking the birthdate given on the Road to Health card where possible.

While delivering at a young age was not revealed to be very prevalent, a significant proportion of mothers interviewed (17%) were 35 years or older. These mothers are classified by the project as being at "high risk" due to their age.

B. Education and Income-Generating Work

Assuming that those mothers who reported not going to school cannot read, the survey revealed a literacy rate of only 44%, which corresponds to that given at baseline in the DIP.

Although the vast majority of mothers reported having a source of income, given the nature of the work that is done, the level of this income is low and is in most cases insufficient to meet basic needs.

While a large proportion of mothers reported working away from home, cross tabulation of the age of the child with the caretaker of the child when the mother is away revealed that 86% of mothers with children zero to four months take the child with them whenever they go, versus less than 50% of mothers with children seven months and older.

C. Breastfeeding and Nutrition

Given normal procedures for cleaning of the baby, washing of the mother, etc., after delivery, project staff believe that breastfeeding within one hour after delivery may not be realistic in many instances. Thus, mothers who begin breastfeeding within the first eight hours are considered to be acting in accordance with the message of the project. That 63% of mothers surveyed are doing so is encouraging given the cultural resistance in many areas to giving colostrum that project staff have had to try to overcome.

The survey confirmed that breastfeeding practices overall are positive. All 240 children in the survey were breastfed after delivery, and over 90% of children under

two years were still being breastfed. The main problem with breastfeeding practices was revealed to be the early introduction of primarily other fluids into the infant's diet. While the end-of-project target was 50%, only 22% of those children under four months of age were found to be exclusively breastfeeding, while another 68% were receiving other fluids such as water, "agbo," fruit juice, or milk. Most of those were being given "agbo," which is believed to protect the infant from disease. Quantities given are generally small; breastfeeding continues on demand; and the concoction is sterile, given that it is boiled. It is a practice rooted in the culture which has been very difficult to overcome.

Knowledge of when other fluids and foods should be added to breast milk appeared to be significantly better than practice. Only 18% stated that such foods should be added prior to the fourth month, while nearly 60% knew that they should not be added until between the fourth and sixth month. However, it is probably the case that mothers don't consider water or "agbo" as a food, and most are, then, practicing what they know and not adding foods, per se, until the fourth month. Moreover, while 20% said that foods should not be added until after six months, this was not found in practice.

For children of weaning age (four months and older), feeding practices were generally good, particularly in light of the depressed economic condition of most households. At least 85% of mothers with a child in this age group reported giving the child foods rich in vitamin A, iron, protein, and calories. In this case, practice was significantly better than knowledge, as a much lower percentage of mothers mentioned these foods as ones that should be given. This may reflect that mothers have learned what to do, but simply cannot say what it is they are doing. In any case, the results are encouraging, given strong cultural beliefs against giving certain foods, especially proteins, to children (in addition to causing a variety of ailments, from hemorrhoids to worms, some proteins—meat and eggs, for instance—are believed to cause a child to steal).

Although the project includes among its messages a variety of measures mothers can take to ensure continued breastfeeding of their child, very few mothers mentioned these measures in response to question 11. To large degree, this may reflect the fact that these measures—including, for example, frequent sucking—are already almost universally practiced in the project area and are thus taken for granted. Bottle feeding, similarly, is essentially not even an option for the vast majority of mothers, due both to the cost of this practice and to universal acceptance and practice of breastfeeding. The role of proper nutrition in lactation, while perhaps less influential, is less of a given for most mothers in the community and thus receives more emphasis in messages and in mothers' beliefs.

D. Diarrheal Diseases

The relatively high prevalence of diarrhea reported by mothers of children under two during the two-week period prior to the survey was somewhat unexpected, yet not entirely surprising, given the poor water supply and lack of sanitation facilities. Very few latrines exist in the project area, and even fewer are used, due to insufficient

water to keep them clean and because of cultural resistance to their use (i.e., the belief that defecating over another's stools can cause disease). Knowledge in general about means of preventing diarrhea was revealed to be very low, in spite of the fact that the project emphasizes the "four Fs" of preventing diarrhea—fingers, feces, food, and flies—plus the connection between water and diarrhea. The survey revealed that mothers make some connection between diarrhea and water or food, but virtually none between diarrhea and feces (only 2% of mothers mentioned the use of a latrine to prevent diarrhea). Fully one quarter of mothers could not offer any means of preventing diarrhea.

The management and treatment of diarrhea by mothers in the survey showed considerable improvement since the initiation of the project, when only 7% of mothers of children under five were estimated to use ORT for their child with diarrhea, and since midterm, when 45% did. Among those mothers in the final survey whose child suffered from diarrhea in the preceding two weeks, 59% prepared SSS or ORS for the child. This did, however, fall somewhat short of the end-of-project target, which was set at 80%. Over 70% of all mothers said that they should provide SSS or ORS, however, again underlining a gap between knowledge and practice.

Similarly, while a target of 70% was set for mothers who continued to breastfeed and observe appropriate feeding practices during an episode of diarrhea in their child, the survey revealed that only 58% of mothers breastfed at normal or increased levels, 55% gave the same or increased amounts of other fluids, and 35% gave the same or increased amounts of food.

Finally, while the project set as an objective to ensure that 80% of mothers were competent in ORT use, only 46% of mothers correctly stated the formula for preparation of SSS. This figure represents a significant decline from the figure of 79% reported at midterm. One possible contributing factor to this decline may be the government's educational campaign on radio teaching how to prepare large quantities of SSS (using buckets, etc.) in the face of recent cholera outbreaks. This campaign has led to considerable confusion in the community regarding the correct proportions of ingredients to use when preparing a quantity of SSS for the consumption of one child.

While mothers were not asked what actions they took following the episode of diarrhea in their child, knowledge regarding appropriate actions was revealed to be low, and messages concerning this aspect of the control of diarrheal diseases have been noted as among those needing increased emphasis.

One evident positive impact of the project has been the increased access of the community to trained health workers, through the WV-established village health posts. One of every three mothers whose child had diarrhea reported using these posts as a source for advice or treatment for the diarrhea, more than twice the number who went to hospitals, private clinics, or health centers. Because there are only very few of these health facilities in the project area (there are no hospitals), the

health posts are clearly serving an important need. That only one mother sought advice from a "drug peddler," which the project discourages, is also a positive sign.

E. Control and Treatment of Malaria

Malaria is the most common illness affecting children in the target area, which seems to be borne out by the result that 44% of mothers reported that their child had suffered from fever in the two-week period preceding the survey (fever was assumed to be an indication of malaria in the survey, as it is in practice in the community, as blood screening equipment is generally not available or accessible). Again, the most frequently used source for advice or treatment of the fever was the village health post. This increased access is partly to credit for the fact that 77% of the children with fever were able to receive Chloroquine, against a target (set at midterm) of 60%.

Similarly, access of mothers to malaria prophylaxis during pregnancy reached the target set (71% versus a target of 70%). The objective to provide children with prophylaxis as well was dropped at midterm in favor of concentrating on pregnant mothers and on proper treatment of children. Knowledge of mothers, however, on means of preventing malaria still centers on chemoprophylaxis and very little else.

F. Immunizations

The fully immunized coverage rate (64%) fell short of the target of 80%. The coverage rate varies considerably from one area to the next, as do most indicators, because several communities and in particular the large, more urban ones (from which eight of the 30 clusters were selected) remain somewhat uncooperative with project efforts to foster their active participation in project activities. A general lack of knowledge of mothers regarding the correct age for vaccination against measles (only 38% knew that measles vaccine should be given at nine months) likely also contributes to the lower than targeted fully immunized rate.

Yellow fever vaccine has only recently become part of the regular immunization schedule, and supplies have been very inconsistent. This vaccine is provided at 12 months of age and may have contributed to some degree to the confusion of some mothers over when to bring their child in for measles vaccine.

Coverage rates do show marked improvement over those estimated for Ogbomoso LGA at baseline and midterm. During the most recent evaluation, after the third year, immunization coverage was determined by history as well as by card, so the rates are not comparable with those determined in this survey. Rates given in the table below were calculated using all children aged 12-23 months as a denominator, whether or not they had a card. As those without a card were considered as not immunized for the purpose of this calculation, and as some of these children have presumably been immunized (many of the mothers among the 8% who were classified as having had a card but lost it reported that the card was in Ogbomoso, where many families also maintain a home), these rates likely underestimate the true coverage in the project area.

	Baseline	Midterm	Final
BCG	62	56	83
OPV3	23	44	73
DPT3	23	44	73
Measles	N/A	54	66
Fully Immunized	N/A	N/A	64

The dropout rates for OPV (calculated [OPV1 - OPV3]/OPV1) and DPT (calculated [DPT1 - DPT3]/DPT1) are both 13.0%. Difficulties with the HIS for much of the first period of funding hampered project efforts to track immunization defaulters. However, this rate shows significant improvement over that reported at midterm of 23%, and reflects much of the recent progress that has been made in the HIS, staffing, and other areas.

G. Growth Monitoring

While baseline figures for the rate of malnutrition in the project area are not strictly comparable to those obtained in the final survey, the fact that only 23% of those children in the survey were found to be moderately or severely malnourished is considered to be a marked improvement. Corresponding figures quoted in the DIP, using different or unspecified methods of analysis, were 40% and 37.7%. If these figures are accurate for the age group considered here, the current figure represents more than a 40% reduction (the target set was a 30% reduction in the prevalence of malnutrition).

A specific objective of the project related to the reduction in the rate of malnutrition was to weigh 80% of all children under two years every month. For the month of October, the last full month before the survey, only 27% of children were weighed, according to card. Part of this apparent shortfall can be explained by the fact that at midterm, the project's emphasis changed from weighing monthly all children under two years to weighing on a monthly basis only those children found to be malnourished. Furthermore, project staff felt that October was an atypical month, however, when regular activities like growth monitoring were largely put on hold in order to make plans for the new fiscal year, to hold orientation for new staff and reorientation for old staff, and to become acquainted with the new communities. Consequently, project records for weighing during the month of September were examined which indicated that a much larger percentage of children in this age group were weighed.

H. Maternal Care

Mothers' knowledge regarding the reason for giving TT to a pregnant woman and the number of TT needed to protect a newborn baby was considerably higher than knowledge regarding the correct age for a child to receive measles vaccine. Measurement of the TT coverage rate was complicated by the recent MOH policy of recording a woman's TT injections during pregnancy on the card of the child who is to be born. Thus, the record indicates only the number of TT that the mother

received during the pregnancy with that particular child, and does not include those she may have received earlier. This caused considerable difficulty in determining the total number of TT received over the lifetime of the woman, not only for the survey, but also in day-to-day operation of the project and for local facilities involved in immunizing women with TT. This problem has led the OSCSP manager to design a mother's TT card on which all her TT would be recorded, which will be presented to the MOH officials involved to obtain approval for its use.

For the purposes of determining a rate for this survey, the coverage rate for TT2 of 48% of mothers must be considered a bare minimum, given that it was based strictly on the records shown on the card of the child under two, if the child had this card, disregarding any TT the mother may have received during previous pregnancies. Comparison with similar figures from baseline and midterm estimates (24% and 12% respectively) which are also unrealistically low due to the same difficulties, nevertheless indicates considerable progress made.

The survey revealed that 42% of mothers who were not pregnant and who stated that they did not want another child in the next two years (or were not sure) were using some form of contraception. The actual rate is in fact much higher than this if one considers the number of mothers breastfeeding (which includes over 90% of those surveyed, but none of whom mentioned it as a means of contraception), not only because of the physiological contraceptive effect of breastfeeding, but also because of the cultural taboo against having sexual relations while breastfeeding. The modern method use rate was 67 of 186, or 36%, higher than the objective of 30%, and far exceeding the midterm estimate of 5%.

While knowledge about appropriate types of food to eat during pregnancy was good, the practice of mothers regarding the amount of food eaten during pregnancy was not as positive. While one of the project messages is to increase the amount eaten during pregnancy, only 32% of mothers surveyed reported doing so, while nearly twice as many ate less. There are no apparent cultural blocks to the practice of eating more, but it does not yet seem to be a common one.

While most mothers reported visiting a health facility for pregnancy or prenatal care during their pregnancy, a large proportion of mothers in the survey (31%) were assisted in their delivery by non-health personnel.

V. Feedback Sessions

A feedback session was conducted following completion of the survey and analysis of the results. Attending were the entire OSCSP staff and the PHC Coordinator for Ogu Oluwa LGA. Plans have been made to provide the USAID Affairs Officer with feedback upon his return to Lagos, and project staff have incorporated feedback sessions to the Baptist Medical Center, to representatives from the local MOH, to the VHWs, and to the communities at large into their workplans for the coming month.

VI. Survey Costs

As the final and baseline surveys were conducted together, with one training, the same set of supervisors and interviewers, etc., and as both were conducted in the same general area each over a period of two and a half days, costs related to training, per diems, transport, etc. have been divided evenly between the two surveys. The cost of the survey trainer, a member of the staff of WVRD, was borne by WVRD and is not included below.

Category	Cost
Travel	$ 246
Training Expenses	107
Per Diem for Supervisors and Interviewers	876
Supplies and Miscellaneous	68
Total Cost	**$1,297**

VII. Appendices

A. English Questionnaire
B. Yoruba Questionnaire
C. List of Villages and 30 Clusters Selected
D. Training of Supervisors Schedule
E. Training of Interviewers Schedule
F. Confidence Intervals
G. Frequency Tables

APPENDIX A - QUESTIONNAIRE (ENGLISH)

WORLD VISION NIGERIA CS IV **IDNUM:_____**

PVO Child Survival Knowledge and Practice Questionnaire

All questions are to be addressed to the mother with a child under two years (less than 24 months old)

Interview date: ___/___/92 (dd/mm/yy)

Interviewer name:_____

Supervisor:_____

Village:_____

---

1. Name and age of mother

   Name_____ Age (years)_____

2. Name, age, and sex of the child under two years old

   Name_____ Sex _____

   Birth date ___/___/___ **(dd/mm/yy)** Age in months_____

MOTHER'S EDUCATION/OCCUPATION

3. What was the highest educational level you attained?

   1. None [ ]
   2. Primary does not read [ ]
   3. Primary reads [ ]
   4. Secondary and higher [ ]

4. Do you work away from home?

   1. Yes [ ]
   2. No [ ]

5. Do you do any "income generating work"? **(Multiple answers possible; record all answers.)**

   a. Nothing [ ]
   b. Handicraft, weaving, mats, etc. [ ]
   c. Harvesting, fruit pickers [ ]
   d. Selling agricultural products [ ]
   e. Selling foods, dairy products [ ]
   f. Servant/services [ ]
   g. Shop keeper, street vendor [ ]
   h. Salaried worker [ ]
   i. Other (specify)_____ [ ]

6. Who takes care of **(name of child)** while you are away from home? **(Multiple answers possible; record all answers.)**

a. Mother takes child with her [ ]
b. Husband/partner [ ]
c. Other wives [ ]
d. Older children [ ]
e. Relatives [ ]
f. Neighbors/friends [ ]
g. Maid [ ]
h. Nursery school/day care [ ]

BREASTFEEDING/NUTRITION

7. Are you breastfeeding **(name of child)**?

1. Yes **---> go to 9** [ ]
2. No [ ]

8. Have you ever breastfed **(name of child)**?

1. Yes [ ]
2. No **---> go to 10** [ ]

9. After the delivery, when did you breast-feed **(name of child)** for the first time?

1. During the first hour after delivery [ ]
2. From one to eight hours after delivery [ ]
3. More than eight hours after delivery [ ]
4. Do not remember [ ]

10. a. Are you giving **(name of child)** water or herbal teas?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

b. Are you giving **(name of child)** cow milk, goat milk, or formula?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

c. Are you giving **(name of child)** semisolid foods such as gruels (pap) or porridge?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

d. Are you giving **(name of child)** fruits or juices?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

e. Are you giving **(name of child)** carrot, mango, or pawpaw?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

f. Are you giving **(name of child)** leafy green vegetables such as spinach?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

g. Are you giving **(name of child)** meat, eggs, or fish?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

h. Are you giving **(name of child)** lentils, groundnuts, soya, cowpeas, or beans?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

i. Are you adding honey or sugar to **(name of child)**'s meals?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

j. Are you adding fat or oil to **(name of child)**'s meals?

1. Yes [ ]
2. No [ ]
3. Doesn't know [ ]

11. Health workers believe that it is very important to breastfeed during the first two years of a baby's life. What can a mother do to keep on breastfeeding? **(Multiple answers possible; record all answers.)**

a. Doesn't know [ ]
b. Breastfeed as soon as possible after delivery (don't discard colostrum) [ ]
c. Frequent sucking to stimulate production [ ]
d. Care of breasts, nipples [ ]
e. Breastfeed exclusively for the first 4 months [ ]
f. Avoid bottle feeding of baby [ ]
g. Relactation (mother can exclusively breastfeed again) [ ]
h. Other (specify)_____ [ ]

12. When should a mother start adding foods to breastfeeding?

1. Start adding between four and six months [ ]
2. Start adding earlier than four months [ ]
3. Start adding six months or later [ ]
4. Doesn't know [ ]

13. What should those additional foods to breastfeeding be? **(Multiple answers possible; record all answers)**

a. Doesn't know [ ]
b. Add oil to food [ ]
c. Food rich in vitamin A, such as pawpaw [ ]
d. Food rich in protein, such as crayfish or groundnuts [ ]
e. Food rich in iron, such as green vegetables [ ]
f. Other (specify)_____ [ ]

DIARRHEAL DISEASES

14. Has **(name of child)** had diarrhea during the last two weeks?

1. Yes [ ]
2. No **---> go to 21** [ ]
3. Doesn't remember **---> go to 21** [ ]

15. During **(name of child)**'s diarrhea, did you breastfeed **(read the choices to the mother)....**

1. More than usual? [ ]
2. Same as usual? [ ]
3. Less than usual? [ ]
4. Stopped completely [ ]
5. Child not breastfed [ ]

16. During **(name of child)**'s diarrhea, did you provide **(name of child)** with fluids other than breast milk.... **(Read the choices to the mother)....**

1. More than usual? [ ]
2. Same as usual? [ ]
3. Less than usual? [ ]
4. Stopped completely [ ]
5. Exclusively breastfeeding [ ]

17. During **(name of child)**'s diarrhea, did you provide **(name of child)** with solid/semisolid foods such as porridge.... **(Read the choices to the mother)....**

1. More than usual? [ ]
2. Same as usual? [ ]
3. Less than usual? [ ]
4. Stopped completely [ ]
5. Exclusively breastfeeding [ ]

18. When **(name of child)** had diarrhea, what treatments, if any, did you use? **(Multiple answers possible; record all answers.)**

a. Nothing [ ]
b. ORS packet [ ]
c. Sugar-salt solution [ ]
d. Home-based fluids (e.g. boiled plaintain water, corn pap, coconut water, etc.) [ ]
e. Infusions or other fluids [ ]
f. Anti-diarrhea medicine or antibiotics [ ]
g. Other (specify)_____ [ ]

19. When **(name of child)** had diarrhea, did you seek advice or treatment for the diarrhea?

1. Yes [ ]
2. No **---> go to 21** [ ]

20. From whom did you seek advice or treatment for the diarrhea of **(name of child)**? **(Multiple answers possible; record all answers.)**

a. General hospital [ ]
b. Health center/clinic/post [ ]
c. Private clinic/doctor [ ]
d. Pharmacy/drugstore [ ]
e. Village health worker [ ]
f. Traditional healer [ ]
g. Traditional birth attendant [ ]
h. Relatives or friends [ ]
i. Other (specify)_____ [ ]

21. What signs/symptoms would cause you to seek advice or treatment of **(name of child)**'s diarrhea? **(Multiple answers possible; record all answers.)**

a. Doesn't know [ ]
b. Vomiting [ ]
c. Fever [ ]
d. Dry mouth, sunken eyes, decreased urine output (signs of dehydration) [ ]
e. Diarrhea of prolonged duration (at least 14 days) [ ]
f. Blood in stool [ ]
g. Loss of appetite [ ]
h. Weakness or tiredness [ ]
i. Other (specify)_____ [ ]

22. What are important actions you should take if **(name of child)** has diarrhea? **(Multiple answers possible; record all answers.)**

a. Doesn't know [ ]
b. Initiate fluids soon [ ]
c. Give the child more to drink than usual [ ]
d. Proper mixing/administration of ORS, SSS, etc. [ ]
e. Give the child smaller more frequent feeds [ ]
f. Take the child to the hospital/health center/village health post [ ]
g. feed the child more after diarrheal episode [ ]
h. withhold fluids [ ]
i. withhold foods [ ]
j. other (specify)_____ [ ]

23. Do you know how to prepare sugar-salt solution or other oral rehydration solution?

1. Yes [ ]
2. Not sure [ ]
3. No ---> **go to 25** [ ]

24. Please tell me the formula for preparing sugar-salt solution. **(Check all correct answers.)**

a. One level teaspoon of salt [ ]
b. Ten level teaspoons or five cubes of sugar [ ]
c. One beer bottle or two soft drink bottles of clean water [ ]
d. Nothing correct [ ]

25. What are important actions a mother should take when a child is recovering from diarrhea? **(Multiple answers possible; record all answers.)**

a. Doesn't know [ ]
b. Give the child smaller more frequent feeds [ ]
c. Give more foods than usual [ ]
d. Give foods with high caloric content [ ]
e. Other (specify)_____ [ ]

26. What can you do to prevent your child from getting diarrhea? **(Multiple answers possible; record all answers.)**

a. Doesn't know [ ]
b. Wash hands before preparing food, feeding baby, eating, etc. [ ]
c. Cover foods to protect from flies [ ]
d. Collect drinking/cooking water from protected and clean sources [ ]
e. Collect and store water in clean containers [ ]
f. Use latrines [ ]
g. Avoid contact with stools/feces [ ]
h. If no latrine, defecate away from house, water source, paths, where children play, etc. [ ]
i. Other (specify)_____ [ ]

MALARIA CONTROL AND TREATMENT

27. Has **(name of child)** been ill with fever in the last two weeks?

    1. Yes [ ]
    2. No **---> go to 31** [ ]
    3. Doesn't remember **---> go to 31** [ ]

28. Did **(name of child)** receive any treatment for the fever?

    1. Yes [ ]
    2. No **---> go to 31** [ ]
    3. Doesn't remember **---> go to 31** [ ]

29. Who treated the fever of **(name of child)**? **(Multiple answers possible; record all answers.)**

    a. General hospital [ ]
    b. Health center/clinic/post [ ]
    c. Private clinic/doctor [ ]
    d. Pharmacy/drugstore [ ]
    e. Village health worker [ ]
    f. Traditional healer [ ]
    g. Traditional birth attendant [ ]
    h. Relatives or friends [ ]
    i. Self [ ]
    j. Other (specify)_____ [ ]

30. What treatment was **(name of child)** given for the fever? **(Multiple answers possible; record all answers.)**

    a. Chloroquine [ ]
    b. Paracetamol [ ]
    c. Other (specify)_____ [ ]

31. During the last trimester of your pregnancy with **(name of child)** did you receive Sunday-Sunday medicine (Daraprim)?

    1. Yes [ ]
    2. No [ ]

32. What can you do to prevent your child from getting malaria? **(Multiple answers possible; record all answers.)**

    a. Doesn't know [ ]
    b. Keep surrounding bushes low [ ]
    c. Get rid of stagnant water [ ]
    d. Screen doors and windows [ ]
    e. Spray room with insecticides [ ]
    f. Other (specify)_____ [ ]

IMMUNIZATIONS

33. Has **(name of child)** ever received any immunizations?

    1. Yes [ ]
    2. No [ ]
    3. Doesn't know [ ]

34. At what age should a child receive measles vaccine?

    1. **Specify in months** [ ]
    2. Doesn't know [ ]

35. Can you tell me the main reason why pregnant women need to be vaccinated with tetanus toxoid vaccine?

    1. To protect both mother/newborn against tetanus [ ]
    2. To protect only the woman against tetanus [ ]
    3. To protect only the newborn against tetanus [ ]
    4. Doesn't know or other [ ]

36. How many tetanus toxoid injections does a pregnant woman need to protect the newborn infant from tetanus?

    1. One [ ]
    2. Two [ ]
    3. More than two [ ]
    4. None [ ]
    5. Doesn't know [ ]

37. Do you have an Road to Health card for **(name of child)**?

    1. Yes **(must see card)** [ ]
    2. Lost it **---> go to 42** [ ]
    3. No **---> go to 42** [ ]

38.

Look at the Road to Health card and record the dates of all the immunizations in the space below. (dd/mm/yy)

BCG		__/__/__
OPV	1st	__/__/__
	2nd	__/__/__
	3rd	__/__/__
DPT	1st	__/__/__
	2nd	__/__/__
	3rd	__/__/__
Measles		__/__/__
Yellow Fever		__/__/__

GROWTH MONITORING

39.

Look at the growth monitoring section of the Road to Health card and record whether or not the child was weighed the month of October.

1. Yes [ ]
2. No [ ]

40.

Record the weight of the child in kgs. _____ kg.

Classification: A____ B____ C____ D____

MATERNAL CARE

41.

Look at the card and record the number of TT vaccinations in the space below.

1. One [ ]
2. Two or more [ ]
3. None [ ]

42. Are you pregnant now?

1. Yes ---> **go to 46** [ ]
2. No [ ]
3. Doesn't know [ ]

43. Do you want to have another child in the next two years?

1. Yes ---> **go to 46** [ ]
2. No [ ]
3. Doesn't know [ ]

44. Are you currently using any method to avoid or postpone getting pregnant?

1. Yes [ ]
2. No ---> **go to 46** [ ]

45. What is the main method you or your husband are using now to avoid or postpone getting pregnant?

1. Tubal ligation/vasectomy [ ]
2. Norplant [ ]
3. Injections [ ]
4. Pill [ ]
5. IUD [ ]
6. Barrier method/diaphragm [ ]
7. Condom [ ]
8. Foam/gel [ ]
9. Exclusive breastfeeding [ ]
10. Rhythm/calendar [ ]
11. Abstinence [ ]
12. Coitus interruptus [ ]
13. Other (specify)_____ [ ]

46. What methods of family planning do you know? **(Multiple answers possible; record all answers.)**

a. None
b. Tubal ligation/vasectomy [ ]
c. Norplant [ ]
d. Injections [ ]
e. Pill [ ]
f. IUD [ ]
g. Barrier method/diaphragm [ ]
h. Condom [ ]
i. Foam/gel [ ]
j. Exclusive breastfeeding [ ]
k. Rhythm/calendar [ ]
l. Abstinence [ ]
m. Coitus interruptus [ ]
n. Other (specify)_____ [ ]

47. What foods are good for a pregnant woman to eat to prevent pregnancy anemia? **(Multiple answers possible; record all answers.)**

a. Doesn't know [ ]
b. Proteins rich in iron (eggs, fish, meat) [ ]
c. Leafy green vegetables, rich in iron [ ]
d. Other (specify)_____ [ ]

48. When you were pregnant with **(name of child)** did you visit a health center for pregnancy or prenatal care?

1. Yes [ ]
2. No [ ]

49. During **(name of child)**'s pregnancy, was the amount of food you ate....

1. More than usual? [ ]
2. Same as usual? [ ]
3. Less than usual? [ ]
4. Doesn't know [ ]

50. At the delivery of **(name of child)**, who tied and cut the cord?

1. Self [ ]
2. Family member [ ]
3. Traditional birth attendant [ ]
4. Health professional (physician, nurse, or midwife) [ ]
5. Other (specify)_____ [ ]
6. Doesn't know [ ]

APPENDIX B - QUESTIONNAIRE (YORUBA)

WORLD VISION INTERNATIONAL **IDNUM_____**
OGBOMOSO SOUTH CHILD SURVIVAL PROJECT CS IV

Ibere yi wa fun iya omo ti ojo ori omo re ko to osu merinlelogun

---

Ojo iforowanilenu wo: ___/___/92

Oruko Olubere_____

Oruko Alabojuto_____

Oruko ilu/ileto_____

---

1. Oruko ati ojo ori iya omo

   Oruko _____ Ojo ori_____

2. Oruko ati ojo ori omo ti ko ju odun meji lo

   Oruko _____ Eya_____

   Ojo ibi _____/_____/_____ Ojo ori ni osu_____
   Ojo Osu Odun

ISE/IKEKO IYA OMO

3. Nibo ni e ka iwe de?

   1. Ng ko lo si ile iwe rara [ ]
   2. Alakobere, sugbon ko le ka iwe [ ]
   3. Alakobere ti o le ka iwe [ ]
   4. Iwe mewa tabi ju bee lo [ ]

4. Nje ise yin maa ngbe yin jade kuro ni ile?

   1. Beeni [ ]
   2. Beeko [ ]

5. Iru ise wo l'e n se ti on mu owo wole? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ko si [ ]
b. Mo nhun aso tabi ise ona [ ]
c. Mo nba awon agbe kore ere oko won [ ]
d. Mo nta nkan ogbin [ ]
e. Mo nta ounje, wara ati bebelo [ ]
f. Ise omo odo [ ]
g. Mo nkiri oja tabi mojuto soobu [ ]
h. Mo nsise ti mo ngbowo osu [ ]
i. Nkan miran (ni pato)_____ [ ]

6. Talo ntoju (daruko omo naa) ti e ko ba si ni ile? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Mo ngbe omo lo si ibi ki bi ti mo ba fe lo [ ]
b. Baba omo [ ]
c. Orogun mi [ ]
d. Awon egbon omo [ ]
e. Awon ebi [ ]
f. Aladugbo tabi ore [ ]
g. Omo odo [ ]
h. Omo nlo je'le o sin mi [ ]

OYAN MIMU/OUNJE TI O PE YE

7. Nje on fun (daruko omo naa) ni oyan mu?

1. Beeni **----->lo si ibeere kesan (9)** [ ]
2. Beeko [ ]

8. Nje o ti fun (daruko omo naa) ni oyan mu ri?

1. Beeni [ ]
2. Beeko **----->lo si ibeere kewa (10)** [ ]

9. Igba wo ni o fun (daruko omo naa) ni oyan mu fun igba akoko lehin ibimo?

1. Laarin wakati kan lehin ibimo [ ]
2. Lehin wakati kini si ikejo lehin ibimo [ ]
3. Lehin wakati kejo lehin ibimo [ ]
4. Mo ti gbagbe [ ]

10. a. Nje o maa nfun (daruko omo naa) ni omi (tabi agbo)?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

b. Nje o maa nfun (daruko omo naa) ni omi omu maalu, omi omu ewure tabi wara agolo)?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

c. Nje o maa nfun (daruko omo naa) ni apoki ounje bii ogi tabi asaro?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

d. Nje o maa nfun (daruko omo naa) ni eso tabi omi eso?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

e. Nje o maa nfun (daruko omo naa) ni karooti, mango, tabi ibepe?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

f. Nje o maa nfun (daruko omo naa) ni efo tabi ewebe je?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

g. Nje o maa nfun (daruko omo naa) ni eran, eyin, tabi eja?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

h. Nje o maa nfun (daruko omo naa) ni egusi, epa tabi ewa?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

i. Nje o maa nfi oyin tabi suga si ounje (daruko omo naa)?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

j. Nje o maa nfi ora tabi epo si ounje (daruko omo naa)?

1. Beeni [ ]
2. Beeko [ ]
3. Ng o mo [ ]

11. Awon onise eto ilera gbagbo pe o se pataki lati fun omo ni omi oyan mu fun odun meji akoko. Kini iya omo le se lati maa ri oyan fun omo ni akoko yi? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won)**

a. Ng o mo [ ]
b. Fifun omo ni omi oyan mu ni kete lehin ibimo (Mase da omi oyan akoko nu) [ ]
c. Fifun omo ni omi oyan nigba gbogbo lati lee je ki oyan se [ ]
d. Itoju oyan ati ori oyan [ ]
e. Fifun omo ni omi oyan nikan fun osu merin akoko [ ]
f. Yiyago fun lilo "Fida" (bottle feeding) fun omo [ ]
g. Omi oyan tun lee yo lehin ti a ti dawo fifun omo ni oyan fun igba die duro (ki iya si tun maa fun omo l'omu lo) [ ]
h. Awon nkan miran (ni pato)_____ [ ]

12. Igba wo ni iya lee beere si fi ounje miran kun oyan mimu?

1. Beere sii fi kun un lati osu merin si ekefa [ ]
2. Beere si ni ifi kun un ki osu merin to pe [ ]
3. Beere si ni ifi kun un lati osu mefa siwaju [ ]
4. Ng ko mo [ ]

13. Awon ounje wo ni a lee fi kun oyan mimu? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ng o mo [ ]
b. Fifi epo si ounje [ ]
c. Fifun un ni ounje ti o jeki o riran kedere bi karooti, ibepe ate bebelo [ ]
d. Fifun ni ounje ti o mu ara dagba bi eran, eja, ewa [ ]
e. Fifun un ni ounje ti o ni eroja ti o npese eje [ ]
f. Awon nkan miran (ni pato)_____ [ ]

IGBE GBURU

14. Nje (daruko omo) ti ya igbe gburu laarin ose meji sehin?

1. Beeni [ ]
2. Beeko **----->lo si ibeere mokanlelogun (21)** [ ]
3. Ng ko mo **----->lo si ibeere mokanlelogun (21)** [ ]

15. Nigbati (daruko omo) nyagbe gburu, nje o nfun un ni oyan mu..... **(Ka awon idahun si iya omo leti):**

1. Ju ti tele? [ ]
2. Bi ti tele? [ ]
3. Din ku si ti tele? [ ]
4. Dawo re duro patapata [ ]
5. O ti fi oyan sile ki igbe ki o to bere [ ]

16. Nigbati (daruko omo) n yagbe gburu, nje o nfun ni ohun mimu miran yato fun oyan..... **(Ka awon idahun si iya omo leti):**

1. Ju ti tele? [ ]
2. Bi ti tele? [ ]
3. Din ku si ti tele? [ ]
4. Dawo re duro patapata [ ]
5. Kiki omi oyan nikan lo n mu [ ]

17. Nigbati (daruko omo) n yagbe gburu, nje o fun un ni ounje apoki tabi owe..... **(Ka awon idahun si iya omo leti.)**

1. Ju ti tele? [ ]
2. Bi ti tele? [ ]
3. Din ku si ti tele? [ ]
4. Dawo re duro patapata [ ]
5. Kiki omi oyan nikan lo n mu [ ]

18. Nigbati (daruko omo) n yagbe, gburu, iru itoju wo l'o fun un? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ng ko se nkan kan [ ]
b. Omi ilera ti igbalode [ ]
c. Omi ilera atowo da oni suga ati iyo [ ]
d. Omi ilera adaiyeba bi iru eyi ti a fi se ogede, omi eko ati omi agbon [ ]
e. Omi fifa si ara tabi orisi miran [ ]
f. Oogun idagbe tabi apa kokoro [ ]
g. Awon nkan miran (ni pato)_____ [ ]

19. Nigbati (daruko omo) nya igbe gbuuru, nje o gba imoran nibikibi?

1. Beeni [ ]
2. Beeko **----->lo si ibeere 21** [ ]

20. Nibo ni o ti gba imoran tabi itoju fun igbe gbuuru (daruko omo)? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ile iwosan ti ijoba [ ]
b. Ile eto ilera alabode (kari aye) [ ]
c. Ile iwosan aladani [ ]
d. Ile itaja oogun [ ]
e. Eleto ilera [ ]
f. Onisegun ibile [ ]
g. Agbebi abe ile [ ]
h. Awon ebi ati ore [ ]
i. Awon miran (ni pato)_____ [ ]

21. Iru awon ami wo lo le mu ki o lo gba itoju tabi imoran fun igbe gburu (daruko omo)? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ng ko mo [ ]
b. Eebi [ ]
c. Iba (Ara gbigbona) [ ]
d. Enu gbigbe, oju kikowonu, Airi ito to to bi o ti ye (Ki omi ara gbe) [ ]
e. Igbe gburu olojo pipe (okere tan ose meji) [ ]
f. Igbe orin [ ]
g. Ai le jeun daada [ ]
h. Ailera tabi ki o ma re eniyan [ ]
i. Awon miran (ni pato)_____ [ ]

22. Kini awon ohun pataki ti oye ki o se bi (daruko omo) ba nyagbe gbuuru? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ng ko mo [ ]
b. Ng o bere si fun un ni omi mu kiakia [ ]
c. Ng o fun un ni omi mu lopolopo [ ]
d. Pipo ati fifun omo ni omi ilera mu [ ]
e. Fifun omo ni ounje diedie lera lera [ ]
f. Gbigbe omo lo si ile iwosan tabi ile eto alabode (kari aye) [ ]
g. Fifi kun ounje re lehin ti igbe gburu ba dawo duro [ ]
h. Dawo omi fifun omo duro [ ]
i. Dawo ounje fifun omo duro [ ]
j. Awon omiran (ni pato)_____ [ ]

23. Nje o mo bi a se le po omi ilera?

1. Beeni [ ]
2. Ko da mi l'oju [ ]
3. Beeko **----->lo si ibeere 25** [ ]

24. Bawo la se le po omi ilera? **(Fi ami si gbogbo eleyi ti iya omo gba.)**

a. Pireju sibi iyo kekere kan [ ]
b. Pireju sibi suga kekere mewa tabi onikoro marun [ ]
c. Omi ti o kun igo bia kan tabi igo Fanta meji [ ]
d. Ko gba ikankan [ ]

25. Kini o ye ki iya omo se nigba ti igbe omo re ba sese dawo duro? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won)**

a. Ng ko mo [ ]
b. Fifun omo ni ounje diedie lera lera [ ]
c. Fifi kun ounje omo naa ju ti tele [ ]
d. Fifun omo naa ni awon ounje ti o n fun omo ni okun [ ]
e. Awon miran (ni pato)_____ [ ]

26. Awon ona wo lo le gba lati dena arun igbe gburu? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ng ko mo [ ]
b. Fifo owo nu ki a to bere si wa ounje, fun omo l'ounje, tabi jeun [ ]
c. Da bobo ounje kuro lowo esinsin [ ]
d. Mimu omi ti o mo gaara lati ibi ti o dara [ ]
e. Pipon ati titoju omi sinu ikoko ti o mo [ ]
f. Ki a maa lo salanga [ ]
g. Ki a ma se fowo kan igbe [ ]
h. Bi a ko ba ni salanga, ki a ma se yagbe si itosi ile, eti omi, oju ona, nibi isere omo ati beebee lo [ ]
i. Awon miran (ni pato)_____ [ ]

IDABOBO/ITOJU IBA

27. Nje (daruko omo naa) gbona rara larin ose meji sehin?

1. Beeni [ ]
2. Beeko **----->lo si ibeere 31** [ ]
3. Ng o ranti **----->lo si ibeere 31** [ ]

28. Nje o gba imoran tabi itoju fun (daruko omo naa) ni igba ti o ni arun iba?

1. Beeni [ ]
2. Beeko **----->lo si ibeere 31** [ ]
3. Ng o ranti **----->lo si ibeere 31** [ ]

29. Ta lo se itoju (daruko omo) nigba ti ara re gbona? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ile iwosan ti ijoba [ ]
b. Ile iwosan alaboode tabi ti kari aye [ ]
c. Ile iwosan aladani [ ]
d. Ile igboogun [ ]
e. Ile eto ilera [ ]
f. Onisegun ibile [ ]
g. Agbebi abele alapoti [ ]
h. Awon ebi tabi ore [ ]
i. Fun ra'ra mi [ ]
j. Awon miran (ni pato)_____ [ ]

30. Iru itoju wo ni (daruko omo naa) gba fun iba? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Aporo iba (Chloroquine) [ ]
b. Amara tutu (Paracetamol) [ ]
c. Awon miran (ni pato)_____ [ ]

31. Nigbati o ku dede ki o bi (daruko omo naa) je o gba ogun idena iba (Ogun Sande-sande)?

1. Beeni [ ]
2. Beeko [ ]

32. Bawo la se le dena arun iba? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ng o mo [ ]
b. Ki a ge koriko ti o wa ni ayika wa [ ]
c. Ki a ma se jeki adagun omi wa ni ayika wa [ ]
d. Fifi awon efon si oju ferese ati ilekun [ ]
e. Finfin oogun apa kokoro [ ]
f. Nkan miran (ni pato)_____ [ ]

ABERE AJESARA

33. Nje (daruko omo) gba abere ajesara kankan ri?

1. Beeni [ ]
2. Beeko [ ]
3. Ng ko mo [ ]

34. Ojo ori wo ni o ye ki omo gba abere ajesara ti o nde na arun igbona olode (eyi, yikiyiki)?

1. Ko ojo ori ni osu [ ]
2. Ng ko mo [ ]

35. Nje o le so idi pataki ti o fi ye ki aboyun tabi obinrin ti o n sowo omo gba abere ajesara ti o ndena eran 'pa fun mi?

1. Lati daabobo iya ati omo tuntun lowo kokoro eran'pa [ ]
2. Lati daabobo iya nikan lowo kokoro eran 'pa [ ]
3. Lati daabobo omo titun nikan lowo kokoro eran 'pa [ ]
4. Ng ko mo tabi idi miran [ ]

36. Abere ajesara ti ndena eran 'pa melo ni o ye ki aboyun tabi obinrin ti o nsowo omo gba lati le dabobo omo titun lowo kokoro eran 'pa?

1. Eyokan [ ]
2. Meji [ ]
3. Oju meji lo [ ]
4. Ko ni lo abere kankan [ ]
5. Ng ko mo [ ]

37. Nje (daruko omo) ni kaadi eto ilera?

1. Beeni **(o gbodo ri kaadi naa)** [ ]
2. O sonu **-----> lo si ibere 42** [ ]
3. Ko ni kaadi ri **-----> lo si ibere 42** [ ]

38.

Wo kaadi abere ajesara na ki o si ko ojo ti o gba gbogbo abere ajesara si aaye ti o wa ni isale yii:

BCG		__/__/__
Atola (OPV)	Ekinni	__/__/__
	Ekeji	__/__/__
	Eketa	__/__/__
DPT	Ekinni	__/__/__
	Ekeji	__/__/__
	Eketa	__/__/__
Igbona Olode (Yikiyiki, Eyi) (Measles)		__/__/__
Iba Ponju-Ponto (Yellow Fever)		__/__/__

IWON OMODE

39.

Wo kaadi iwon omo naa ki o si se akosile awon nkan wonyi: Nje a won omo naa ni osu kewa (October) odun yi?

1. Beeni [ ]
2. Beeko [ ]

40.

Kini iwon omo naa loni? _____ kgs.

Ipo ti o wa: A_____ B_____ C_____ D_____

ITOJU AWON OBINRIN TO NSOWO OMO

41.

Wo kaadi iwon ki o si se akosile iye igba ti o gba abere eranpa si awon aaye ti o wa ni isale yii:

1. Eekan [ ]
2. Eeemeji tabi jubelo [ ]
3. Ko gba nkankan [ ]

42. Nje oloyun nisinsin yi?

1. Beeni **----->lo si ibeere 46** [ ]
2. Beeko [ ]
3. Ng ko mo [ ]

43. N je o fe bi omo miran laarin odun meji si akoko yi?

1. Beeni **----->lo si ibeere 46** [ ]
2. Beeko [ ]
3. Ng ko mo [ ]

44. Nje e n lo nkan fetosomo bibi lati dena oyun nisisiyi?

1. Beeni [ ]
2. Beeko **----->lo si ibeere 46** [ ]

45. Iru feto somo bibi wo ni iwo tabi oko re n lo nisisiyi ni pato lati dena oyun?

1. Pariola [ ]
2. Oni kaasu ti apa [ ]
3. Alabere [ ]
4. Onikoro [ ]
5. Kikelomo [ ]
6. Adenderi ti obinrin [ ]
7. Adenderi ti okunrin [ ]
8. Ahoyaya tabi tenporo ti oju ara [ ]
9. Fifun omo lomu lai fi nkan miran laa [ ]
10. Ki ka ojo osu [ ]
11. Ki oko ma sun mo obinrin rara [ ]
12. Ma je ko daa si [ ]
13. Tabi iru miran (ni pato)_____ [ ]

46. Awon ona wo lo mo lati fi eto si omo bibi? **(Idahun le ju eyo kan lo, e fi ami sigbogbo idahun won.)**

a. Ng ko mo ikankan [ ]
b. Pariola [ ]
c. Oni kaasu ti apa [ ]
d. Alabere [ ]
e. Onikoro [ ]
f. Kikelomo [ ]
g. Adenderi ti obinrin [ ]
h. Adenderi ti okunrin [ ]
i. Ahoyaya tabi tenporo ti oju ara [ ]
j. Fifun omo lomu lai fi nkan miran laa [ ]
k. Ki ka ojo osu [ ]
l. Ki oko ma sun mo obinrin rara [ ]
m. Ma je ko daa si [ ]
n. Tabi iru miran (ni pato)_____ [ ]

47. Yoo to akokowo lehin igbati obinrin ba mo pe ohun loyun ko to le ri osise ilera (Noosi, Agbebi abe ile?) **(Wadi osu)**

1. Osu kinni si osu keta [ ]
2. Osu kerin si osu kefa [ ]
3. Osu keje si osu kesan [ ]
4. Ko se pataki lati ri eleto ilera [ ]
5. Ng ko mo [ ]

48. Awon ounje wo ni o dara fun alaboyun lati maa je lati dena aileje to? **(Idahun le ju eyo kan lo, e fi ami si gbogbo idahun won.)**

a. Ng ko mo [ ]
b. Awon ounje to le mu ara dagba ti o si le fun ni l'eje bi (eyin, eja, eran) [ ]
c. Ewebe ti o ni eroja to nfun ni leje [ ]
d. Awon ohun miran (ni pato)_____ [ ]

49. Ni igbati o loyun (daruko omo naa) nje o lo si ile eto ilera kankan bii (Ile Igboogun, Ile Eto ilera) fun itoju oyun re?

1. Beeni [ ]
2. Beeko [ ]

50. Nigbati o loyun (daruko omo naa) nje iwon ounje ti o nje.... **(Ka awon ibere wonyi si eti iya)**

1. Ju ti tele lo? [ ]
2. Ri bi titele? [ ]
3. Dinku si ti tele? [ ]
4. Ng ko mo [ ]

51. Tani o ge, ti o si di iwo (daruko omo naa) lehin ibimo?

1. Iwo funraare [ ]
2. Molebı kan [ ]
3. Agbebi abe ile [ ]
4. Onisegun oyinbo (Dokita, Noosi tabi Agbebi) [ ]
5. Awon miran (ni pato)_____ [ ]
6. Ng ko mo [ ]

APPENDIX C — OGO OLUWA LOCAL GOVERNMENT POPULATION SUMMARY (DECEMBER 1990)

Name of Village	Population	Cumulative	Selected Clus[illegible]
Aba Aje	135	135	
Aba Ayorunbo	133	268	
Aba Epo	110	378	
Abanda	48	426	
Aba Ofa	52	478	
Aba Oguro	91	569	SELECTED
Aba Oku	250	819	
Abule Monmodu	19	838	
Abule Olode	47	885	
Afilala	211	1,096	
Agbeja	119	1,215	
Agric Settlement	867	2,087	SELECTED
Ajaawa	3,483	5,565	SELECTED (3)
Ajflanwa/Fanimaroko	220	5,785	
Alaasoko	166	5,951	
Alabameta	166	6,117	
Alagbon	253	6,370	
Alaguodo	77	6,447	
Alase, Oniru, Abajobi	400	6,847	SELECTED
Alausa Oke Oba	200	7,047	
Alausa Oloye	261	7,308	
Araromi Oke Awo	164	7,472	
Arogbo	165	7,637	
Aroje	169	7,806	
Arowomole Peere	141	7,947	SELECTED
Aroya	159	8,106	
Asagba	66	8,172	

Name of Village	Population	Cumulative	Selected Cluster
Atoba	94	8,266	
Ayede	600	8,866	
Ayegun Adio	85	8,951	
Ayegun Araro	100	9,051	
Ayegun Ayikiti	108	9,159	SELECTED
Ayegun Idi Igba	47	9,206	
Ayegun Oke	26	9,232	
Ayegun Yemetu	322	9,554	
Ayetoro	45	9,599	
Ayetoro Oke Awo	246	9,845	
Baale Ijeru	52	9,897	
Egun Aja	53	9,950	
Eleesade	315	10,265	
Eleesun	233	10,498	SELECTED
Elega Oke Oba	69	10,567	
Elega Oyo Road	1,713	12,280	SELECTED
Elekunkun	42	12,322	
Elepo	28	12,350	
Elere	420	12,770	
Fadesekere	73	12,843	
Ibapon Adindi	208	13,051	SELECTED
Ibapon Oyewale	187	13,238	
Ibapon	170	13,408	
Ibere	429	13,837	
Idewure	1,440	15,277	SELECTED
Idi Araba	494	15,771	SELECTED
Idi Ayin	106	15,877	
Idi Iroko	113	15,990	
Idi Oori Akinwande	58	16,048	SELECTED

Name of Village	Population	Cumulative	Selected Cluster
Idi Oori Alausa	55	16,103	
Igbo Ile Oje	193	16,296	
Ikolaba Ayegun	201	16,497	
Ile Tuntun	358	16,855	SELECTED
Ilofe	286	17,141	
Ilu Ode	241	17,382	
Ipeba	541	17,923	SELECTED
Iroo	677	18,600	
Ita Moya	126	18,726	
Iwata	151	18,877	
Iwo Ate/Ilu Baale	1,579	20,456	SELECTED (2)
Jagunode	34	20,490	
Kajola Okepele	55	20,545	
Kekere Ode	39	20,584	
Kinndin	41	20,625	
Kufo	106	20,731	
Ladanu	204	20,935	
Lagbedu	1,016	21,951	SELECTED
Masifa/Adetunji	258	22,209	
Moleru/Elewuro	375	22,584	
Mosunmaje	164	22,748	SELECTED
Mowolowo	627	23,375	
Obaninsunwa	132	23,507	
Ode Alagbede Igboya	57	23,564	
Odo Oba	5,643	29,207	SELECTED (5)
Odo'fo	422	29,629	
Oguro/Olugusi	124	29,753	
Oguro Alagbede	148	29,901	
Ojutaye	357	30,258	SELECTED

Name of Village	Population	Cumulative	Selected Cluster
Oke Amuro	165	30,423	
Olodo	174	30,597	
Ologorun	111	30,708	
Olokiti	109	30,817	
Olokoo	231	31,038	
Olokoto	70	31,118	
Olopete	254	31,372	
Olorunda	212	31,584	SELECTED
Oluboyepe	192	31,776	
Omoba'Lasoko	150	31,296	
Onipakun	21	31,947	
Onipele	130	32,077	
Oniyeye	95	32,172	
Oolo	914	33,086	SELECTED
Opa Aro	19	33,105	
Orile Oje	179	33,284	
Osalagbede	37	33,321	
Osupa	745	34,066	SELECTED
Otamokun/Alaruru	1,023	35,089	
Owode Elega	444	35,533	SELECTED
Owolaake	299	35,832	
Parapo	132	35,964	
Pontela Akinola	456	36,420	
Pontela Olode	415	36,835	
Sekona	130	36,965	
Yakoyo	76	37,041	
TOTAL	**37,041**	**37,041**	

APPENDIX D

SCHEDULE FOR TRAINING OF SUPERVISORS
November 24, 1992

Time	Activity/Topic
9:00 - 9:15	Welcome and introductions
9:15 - 9:45	Administrative issues
9:45 - 10:30	Background on project; purpose of survey
10:30 - 11:30	Sample size; cluster method
11:30 - 12:00 PM	Starting point selection
12:00 - 1:00	Questionnaire
1:00 - 2:00	Lunch
2:00 - 3:00	Questionnaire (continued)
3:00 - 4:30	Role play
4:30 - 4:45	Break
4:45 - 5:15	Supervision
5:15 - 5:30	Site assignments

APPENDIX E

SCHEDULE FOR TRAINING OF INTERVIEWERS
November 25, 1992

Time	Activity/Topic
9:00 - 9:10	Welcome and introductions
9:10 - 9:40	Administrative issues
9:40 - 10:10	Background on project and purpose of survey
10:10 - 11:00	Sample size; cluster method
11:00 - 11:15	Starting point selection
11:15 - 1:00 PM	Questionnaire
1:00 - 2:00	Lunch
2:00 - 4:00	Role play
4:00 - 4:30	Break
4:30 - 5:30	Site assignments, supervision, and field test

APPENDIX F - CONFIDENCE INTERVALS

Using the formula below, confidence intervals for the main survey results have been calculated.

95% Confidence Limits = p $\pm$ (z)(square root of [pq/n])

Where: p = proportion of the sample in the survey with the attribute
q = proportion of the sample in the survey without the attribute, or 1 - p
z = statistical certainty chosen (for statistical certainty of 95%, z = 1.96)
n = sample size

Mothers who breastfed within the first 8 hours after delivery
95% Confidence Interval = .63 $\pm$ (1.96)(square root of [{.63 x .37}/240])
= .63 $\pm$ .06
= (.57, .69)

Children under four months who were exclusively breastfeeding
95% Confidence Interval = .22 $\pm$ (1.96)(square root of [{.22 x .78}/51])
= .22 $\pm$ .11
= (.11, .33) or (11% to 33%)

Children four months and older who were exclusively breastfeeding (.03, .09)

Mothers who knew correct age for weaning (.52, .64)

Children who had diarrhea in previous two weeks (.20, .32)

Mothers who breastfed at normal or increased levels during the child's diarrhea (.45, .71)

Mothers who gave usual or increased amounts of other fluids during the child's diarrhea (.42, .68)

Mothers who gave usual or increased amounts of foods during the child's diarrhea (.23, .47)

Mothers who treated their child's diarrhea with ORS, SSS, or home-based fluids (.47, .71)

Mothers who said that they should treat their child's diarrhea with ORT (.67, .79)

Mothers who could correctly state the formula for preparation of ORS or SSS (.40, .52)

Mothers who could not name any measures to take to prevent diarrhea in their child (.20, .30)

Children who had fever in previous two weeks (.38, .50)

Children with fever who received Chloroquine (.69, .85)

Mothers who received malaria prophylaxis during pregnancy (.65, .77)

Mothers who could not name any measures to take to prevent malaria in their child (.27, .39)

Children who were reported to have received immunizations (.86, .94)

Mothers who knew correct age for a child to receive measles vaccine (.32, .44)

Children who had a Road to Health card (.77, .87)

Children 12 to 23 months who had received:	**BCG**	(.76, .90)
	OPV1/DPT1	(.76, .90)
	OPV3/DPT3	(.64, .82)
	Measles	(.57, .75)

Children 12 to 23 months who were fully immunized (.55, .73)

Children who were moderately or severely malnourished by weight-for-age (.18, .28)

Mothers who had received two or more TT injections during the pregnancy with the index child (.42, .54)

Non-pregnant mothers not wanting another child in the next two years who were using any method of family planning (.35, .49)

Non-pregnant mothers not wanting another child in the next two years who were using a modern method of family planning (.29, .43)

Mothers who reported receiving prenatal care during the pregnancy with the index child (.86, .94)

Mothers who reported eating more food than usual during the pregnancy with the index child (.26, .38)

APPENDIX G - FREQUENCY TABLES

Survey Mate Frequencies Program Nigeria Final Survey

Field No. 5 Age of Mother (AGE-MOM)

Mean = 27.66 Standard Deviation = 6.15

Value	Frequency	Percentage	Cumulative Percentage
BLANK	8	0.00	0.00
17	1	0.43	0.43
18	4	1.72	2.16
19	3	1.29	3.45
20	26	11.21	14.66
21	7	3.02	17.67
22	11	4.74	22.41
23	8	3.45	25.86
24	12	5.17	31.03
25	35	15.09	46.12
26	11	4.74	50.86
27	5	2.16	53.02
28	16	6.90	59.91
29	2	0.86	60.78
30	35	15.09	75.86
31	1	0.43	76.29
32	9	3.88	80.17
33	1	0.43	80.60
34	2	0.86	81.47
35	21	9.05	90.52
36	2	0.86	91.38
37	1	0.43	91.81
38	5	2.16	93.97
40	8	3.45	97.41
42	2	0.86	98.28
43	1	0.43	98.71
45	2	0.86	99.57
47	1	0.43	100.00
Total	232	100.00	100.00

Field No. 9 Age of Child in Months (AGE-KID)

Mean = 10.46 Standard Deviation = 7.03

Value	Frequency	Percentage	Cumulative Percentage
0	11	4.58	4.58
1	22	9.17	13.75
2	9	3.75	17.50
3	9	3.75	21.25
4	11	4.58	25.83
5	16	6.67	32.50
6	6	2.50	35.00
7	11	4.58	39.58
8	9	3.75	43.33
9	10	4 17	47.50
10	11	4.58	52.08
11	13	5.42	57.50
12	7	2.92	60.42
13	8	3.33	63.75
14	9	3.75	67.50
15	5	2.08	69.58
16	11	4.58	74.17
17	7	2.92	77.08
18	15	6.25	83.33
19	9	3.75	87.08
20	5	2.08	89.17
21	13	5.42	94.58
22	6	2.50	97.08
23	7	2.92	100.00
Total	240	100.00	100.00

Field No. 10 Highest Educational Level of Mom (ED-LEVEL)

Mean = 2.13 Standard Deviation = 1.19

Value	Frequency	Percentage	Cumulative Percentage
1	115	47.92	47.92
2	19	7.92	55.83
3	65	27.08	82.92
4	41	17.08	100.00
Total	240	100.00	100.00

Field No. 11 Work Away from Home (WORKAWAY)

Mean = 1.10 Standard Deviation = 0.30

Value	Frequency	Percentage	Cumulative Percentage
1	217	90.42	90.42
2	23	9.58	100.00
Total	240	100.00	100.00

Field No. 12 No Income Generating Work (NO-IGA)

Mean = 1.98 Standard Deviation = 0.13

Value	Frequency	Percentage	Cumulative Percentage
1	4	1.67	1.67
2	236	98.33	100.00
Total	240	100.00	100.00

Field No. 13 Does handicrafts or weaving (IGA-HAND)

Mean = 1.98 Standard Deviation = 0.13

Value	Frequency	Percentage	Cumulative Percentage
1	4	1.67	1.67
2	236	98.33	100.00
Total	240	100.00	100.00

Field No. 14 Does harvesting or fruit picking (HANDCRFT)

Mean = 1.69 Standard Deviation = 0.46

Value	Frequency	Percentage	Cumulative Percentage
1	75	31.25	31.25
2	165	68.75	100.00
Total	240	100.00	100.00

Field No. 15 Sells ag. products (IGA-SLAG)

Mean = 1.75 Standard Deviation = 0.44

Value	Frequency	Percentage	Cumulative Percentage
1	61	25.42	25.42
2	179	74.58	100.00
Total	240	100.00	100.00

Field No. 16 Sells foods or dairy products (IGA-SLFD)

Mean = 1.84 Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
1	39	16.25	16.25
2	201	83.75	100.00
Total	240	100.00	100.00

Field No. 17 Is a servant (IGA-SERV)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	240	100.00	100.00
Total	240	100.00	100.00

Field No. 18 Is a shopkeeper or street vendor (IGA-SHOP)

Mean = 1.83 Standard Deviation = 0.38

Value	Frequency	Percentage	Cumulative Percentage
1	41	17.08	17.08
2	199	82.92	100.00
Total	240	100.00	100.00

Field No. 19 Is a salaried worker (IGA-SLRY)

Mean = 1.99 Standard Deviation = 0.09

Value	Frequency	Percentage	Cumulative Percentage
1	2	0.83	0.83
2	238	99.17	100.00
Total	240	100.00	100.00

Field No. 20 Does other for income (IGA-OTHR)

Mean = 1.89 Standard Deviation = 0.31

Value	Frequency	Percentage	Cumulative Percentage
1	26	10.83	10.83
2	214	89.17	100.00
Total	240	100.00	100.00

Field No. 21 Mother takes child with her (CT-MOTHR)

Mean = 1.45 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	132	55.00	55.00
2	108	45.00	100.00
Total	240	100.00	100.00

Field No. 22 Husband takes care if mom away (CT-HSBND)

Mean = 1.92 Standard Deviation = 0.28

Value	Frequency	Percentage	Cumulative Percentage
1	20	8.33	8.33
2	220	91.67	100.00
Total	240	100.00	100.00

Field No. 23 Other wives take care if mom away (CT-WIVES)

Mean = 1.94 Standard Deviation = 0.23

Value	Frequency	Percentage	Cumulative Percentage
1	14	5.83	5.83
2	226	94.17	100.00
Total	240	100.00	100.00

Field No. 24 Older children take if mom away (CT-SBLNG)

Mean = 1.85 Standard Deviation = 0.35

Value	Frequency	Percentage	Cumulative Percentage
1	35	14.58	14.58
2	205	85.42	100.00
Total	240	100.00	100.00

Field No. 25 Relatives take if mom away (CT-RLTVE)

Mean = 1.85 Standard Deviation = 0.36

Value	Frequency	Percentage	Cumulative Percentage
1	36	15.00	15.00
2	204	85.00	100.00
Total	240	100.00	100.00

Field No. 26 Neighbors take child if mom away (CT-NGHBR)

Mean = 1.99 Standard Deviation = 0.09

Value	Frequency	Percentage	Cumulative Percentage
1	2	0.83	0.83
2	238	99.17	100.00
Total	240	100.00	100.00

Field No. 27 Maid takes child if mom away (CT-MAID)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	240	100.00	100.00
Total	240	100.00	100.00

Field No. 28 Nursery school if mom away (DT-NRSRY)

Mean = 2.00 Standard Deviation = 0.06

Value	Frequency	Percentage	Cumulative Percentage
1	1	0.42	0.42
2	239	99.58	100.00
Total	240	100.00	100.00

Field No. 29 Breastfeeding Now (BF-NOW)

Mean = 1.08 Standard Deviation = 0.28

Value	Frequency	Percentage	Cumulative Percentage
1	220	91.67	91.67
2	20	8.33	100.00
Total	240	100.00	100.00

Field No. 30 Breastfed Ever (BF-EVER)

Mean = 1.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
BLANK	220	0.00	0.00
1	20	100.00	100.00
Total	20	100.00	100.00

Field No. 31 How Soon Breastfed After Delivery (BF-WHEN)

Mean = 2.15 Standard Deviation = 0.84

Value	Frequency	Percentage	Cumulative Percentage
1	62	25.83	25.83
2	88	36.67	62.50
3	83	34.58	97.08
4	7	2.92	100.00
Total	240	100.00	100.00

Field No. 32 Giving Water (WATER)

Mean = 1.10 Standard Deviation = 0.30

Value	Frequency	Percentage	Cumulative Percentage
1	217	90.42	90.42
2	23	9.58	100.00
Total	240	100.00	100.00

Field No. 33 Giving Milk or Formula (MILK)

Mean = 1.78 Standard Deviation = 0.42

Value	Frequency	Percentage	Cumulative Percentage
1	53	22.08	22.08
2	187	77.92	100.00
Total	240	100.00	100.00

Field No. 34 Giving Semisolid Foods (SEMISLDS)

Mean = 1.28 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
1	174	72.50	72.50
2	66	27.50	100.00
Total	240	100.00	100.00

Field No. 35 Giving Fruits or Juices (JUICES)

Mean = 1.20 Standard Deviation = 0.41

Value	Frequency	Percentage	Cumulative Percentage
1	192	80.00	80.00
2	47	19.58	99.58
3	1	0.42	100.00
Total	240	100.00	100.00

Field No. 36 Giving Carrot Mango Papaya (VIT-A)

Mean = 1.47 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	128	53.33	53.33
2	112	46.67	100.00
Total	240	100.00	100.00

Field No. 37 Giving Leafy Green Vegetables (DGLVs)

Value	Frequency	Percentage	Cumulative Percentage
1	151	62.92	62.92
2	89	37.08	100.00
Total	240	100.00	100.00

Field No. 38 Giving Meat or Fish (MEATFISH)

Mean = 1.35 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
1	155	64.58	64.58
2	85	35.42	100.00
Total	240	100.00	100.00

Field No. 39 Giving Peanuts Lentils Beans (BEANS)

Mean = 1.29 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
1	171	71.25	71.25
2	69	28.75	100.00
Total	240	100.00	100.00

Field No. 40 Adding Honey or Sugar (HONEY)

Mean = 1.42 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	140	58.33	58.33
2	100	41.67	100.00
Total	240	100.00	100.00

Field No. 41 Adding Fat or Oil (FATOROIL)

Mean = 1.35 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
1	157	65.42	65.42
2	83	34.58	100.00
Total	240	100.00	100.00

Field No. 42 Doesn't Know how to keep on BF (BF-DK)

Mean = 1.88 Standard Deviation = 0.33

Value	Frequency	Percentage	Cumulative Percentage
1	30	12.50	12.50
2	210	87.50	100.00
Total	240	100.00	100.00

Field No. 43 Breastfeed soon to keep on BF (BF-SOON)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	240	100.00	100.00
Total	240	100.00	100.00

Field No. 44 Frequent sucking to keep on BF (BF-SUCK)

Mean = 1.88 Standard Deviation = 0.32

Value	Frequency	Percentage	Cumulative Percentage
1	28	11.67	11.67
2	212	88.33	100.00
Total	240	100.00	100.00

Field No. 45 Take care of breasts to keep on BF (BF-CARE)

Mean = 1.85 Standard Deviation = 0.35

Value	Frequency	Percentage	Cumulative Percentage
1	35	14.58	14.58
2	205	85.42	100.00
Total	240	100.00	100.00

Field No. 46 BF exclusively to keep on BF (BF-EXCLS)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	240	100.00	100.00
Total	240	100.00	100.00

Field No. 47 Avoid bottle to keep on BF (BF-NOBTL)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	240	100.00	100.00
Total	240	100.00	100.00

Field No. 48 Relactation to keep on BF (BF-RLCTT)

Mean = 2.00 Standard Deviation = 0.06

Value	Frequency	Percentage	Cumulative Percentage
1	1	0.42	0.42
2	239	99.58	100.00
Total	240	100.00	100.00

Field No. 49 Other to keep on BF (BF-OTHER)

Mean = 1.18 Standard Deviation = 0.39

Value	Frequency	Percentage	Cumulative Percentage
1	196	81.67	81.67
2	44	18.33	100.00
Total	240	100.00	100.00

Field No. 50 When to Start Adding Foods to BF (ADD-WHEN)

Mean = 1.69 Standard Deviation = 0.91

Value	Frequency	Percentage	Cumulative Percentage
1	140	58.33	58.33
2	44	18.33	76.67
3	47	19.58	96.25
4	9	3.75	100.00
Total	240	100.00	100.00

Field No. 51 Doesn't know what add'l foods are (ADD-DK)

Mean = 1.99 Standard Deviation = 0.11

Value	Frequency	Percentage	Cumulative Percentage
1	3	1.25	1.25
2	237	98.75	100.00
Total	240	100.00	100.00

Field No. 52 Should add oil or sugar to food (ADD-OIL)

Mean = 1.88 Standard Deviation = 0.33

Value	Frequency	Percentage	Cumulative Percentage
1	30	12.50	12.50
2	210	87.50	100.00
Total	240	100.00	100.00

Field No. 53 Should add food rich in protein (ADD-VITA)

Mean = 1.76 Standard Deviation = 0.43

Value	Frequency	Percentage	Cumulative Percentage
1	57	23.75	23.75
2	183	76.25	100.00
Total	240	100.00	100.00

Field No. 54 Should add food rich in protein (ADD-PRTN)

Mean = 1.29 Standard Deviation = 0.46

Value	Frequency	Percentage	Cumulative Percentage
1	170	70.83	70.83
2	70	29.17	100.00
Total	240	100.00	100.00

Field No. 55 Should add food rich in iron (ADD-IRON)

Mean = 1.83 Standard Deviation = 0.38

Value	Frequency	Percentage	Cumulative Percentage
1	41	17.08	17.08
2	199	82.92	100.00
Total	240	100.00	100.00

Field No. 56 Should add other foods to BF (ADD-OTHR)

Mean = 1.48 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	125	52.08	52.08
2	115	47.92	100.00
Total	240	100.00	100.00

Field No. 57 Had Diarrhea in Last 2 Weeks (HAD-DIAR)

Mean = 1.74 Standard Deviation = 0.44

Value	Frequency	Percentage	Cumulative Percentage
1	62	25.83	25.83
2	178	74.17	100.00
Total	240	100.00	100.00

Field No. 58 Breastfed During Diarrhea (BF-DIAR)

Mean = 2.56 Standard Deviation = 1.28
No. of Cases after Deletions and Exclusions = 62

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
1	15	24.19	24.19
2	16	25.81	50.00
3	20	32.26	82.26
4	3	4.84	87.10
5	8	12.90	100.00
Total	62	100.00	100.00

Field No. 59 Fluids During Diarrhea (FLUIDS-D)

Mean = 2.32 Standard Deviation = 1.20
No. of Cases after Deletions and Exclusions = 62

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
1	21	33.87	33.87
2	14	22.58	56.45
3	15	24.19	80.65
4	10	16.13	96.77
5	2	3.23	100.00
Total	62	100.00	100.00

Field No. 60 Solid/semisolid Foods During Diar (FOODS-D)

Mean = 2.85 Standard Deviation = 1.20
No. of Cases after Deletions and Exclusions = 62

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
1	12	19.35	19.35
2	8	12.90	32.26
3	24	38.71	70.97
4	13	20.97	91.94
5	5	8.06	100.00
Total	62	100.00	100.00

Field No. 61 Did nothing when had diarrhea (TRT-NTHG)

Mean = 1.89 Standard Deviation = 0.32

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
1	7	11.29	11.29
2	55	88.71	100.00
Total	62	100.00	100.00

Field No. 62 Gave ORS packet when had diarrhea (TRT-PCKT)

Mean = 1.81 Standard Deviation = 0.40

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
1	12	19.35	19.35
2	50	80.65	100.00
Total	62	100.00	100.00

Field No. 63 Gave SSS when had diarrhea (TRT-SSS)

Mean = 1.61 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
1	24	38.71	38.71
2	38	61.29	100.00
Total	62	100.00	100.00

Field No. 64 Gave home-based fluid when had D (TRT-HBF)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
2	62	100.00	100.00
Total	62	100.00	100.00

Field No. 65 Gave infusions when had diarrhea (TRT-INFN)

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
2	62	100.00	100.00
Total	62	100.00	100.00

Field No. 66 Gave medicine when had diarrhea (TRT-MEDC)

Mean = 1.61 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
1	24	38.71	38.71
2	38	61.29	100.00
Total	62	100.00	100.00

Field No. 67 Did other treatments when had diar (TRT-OTHR)

Mean = 1.90 Standard Deviation = 0.30

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
1	6	9.68	9.68
2	56	90.32	100.00
Total	62	100.00	100.00

Field No. 68 Advice or Treatment Sought (ADVICE-D)

Mean = 1.39 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
BLANK	178	0.00	0.00
1	38	61.29	61.29
2	24	38.71	100.00
Total	62	100.00	100.00

Field No. 69 Sought advice from hospital (ADV-HOSP)

Mean = 1.84 Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
BLANK	202	0.00	0.00
1	6	15.79	15.79
2	32	84.21	100.00
Total	38	100.00	100.00

Field No. 70 Sought advice from health center (ADV-HCTR)

Mean = 1.89 Standard Deviation = 0.31

Value	Frequency	Percentage	Cumulative Percentage
BLANK	202	0.00	0.00
1	4	10.53	10.53
2	34	89.47	100.00
Total	38	100.00	100.00

Field No. 71 Sought advice from private doctor (ADV-PRVT)

Mean = 1.87 Standard Deviation = 0.34

Value	Frequency	Percentage	Cumulative Percentage
BLANK	202	0.00	0.00
1	5	13.16	13.16
2	33	86.84	100.00
Total	38	100.00	100.00

Field No. 72 Sought advice from drugstore (ADV-PHAR)

Mean = 1.92 Standard Deviation = 0.27

Value	Frequency	Percentage	Cumulative Percentage
BLANK	202	0.00	0.00
1	3	7.89	7.89
2	35	92.11	100.00
Total	38	100.00	100.00

Field No. 73 Sought advice from CHW (ADV-CHW)

Mean = 1.66 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
BLANK	202	0.00	0.00
1	13	34.21	34.21
2	25	65.79	100.00
Total	38	100.00	100.00

Field No. 74 Sought advice from trad'l healer (ADV-HLR)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
BLANK	202	0.00	0.00
2	38	100.00	100.00
Total	38	100.00	100.00

Field No. 75 Sought advice from TBA (ADV-TBA)

Mean = 1.95 Standard Deviation = 0.23

Value	Frequency	Percentage	Cumulative Percentage
BLANK	202	0.00	0.00
1	2	5.26	5.26
2	36	94.74	100.00
Total	38	100.00	100.00

Field No. 76 Sought advice from relatives (ADV-RLTV)

Mean = 1.87 Standard Deviation = 0.34

Value	Frequency	Percentage	Cumulative Percentage
BLANK	202	0.00	0.00
1	5	13.16	13.16
2	33	86.84	100.00
Total	38	100.00	100.00

Field No. 77 Sought advice from other source (ADV-OTHR)

Mean = 1.97 Standard Deviation = 0.16

Value	Frequency	Percentage	Cumulative Percentage
BLANK	202	0.00	0.00
1	1	2.63	2.63
2	37	97.37	100.00
Total	38	100.00	100.00

Field No. 78 Doesn't know S and S (S&S-DK)

Mean = 1.93 Standard Deviation = 0.26

Value	Frequency	Percentage	Cumulative Percentage
1	18	7.50	7.50
2	222	92.50	100.00
Total	240	100.00	100.00

Field No. 79 S and S is vomiting (S&S-VOMT)

Mean = 1.97 Standard Deviation = 0.18

Value	Frequency	Percentage	Cumulative Percentage
1	8	3.33	3.33
2	232	96.67	100.00
Total	240	100.00	100.00

Field No. 80 S and S is fever (S&S-FVR)

Mean = 1.72 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
1	67	27.92	27.92
2	173	72.08	100.00
Total	240	100.00	100.00

Field No. 81 S and S is signs of dehydration (S&S-DHYD)

Mean = 1.58 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	100	41.67	41.67
2	140	58.33	100.00
Total	240	100.00	100.00

Field No. 82 S and S is prolonged diarrhea (S&S-LONG)

Mean = 1.79 Standard Deviation = 0.41

Value	Frequency	Percentage	Cumulative Percentage
1	51	21.25	21.25
2	189	78.75	100.00
Total	240	100.00	100.00

Field No. 83 S and S is blood in stool (S&S-BLUD)

Mean = 1.97 Standard Deviation = 0.17

Value	Frequency	Percentage	Cumulative Percentage
1	7	2.92	2.92
2	233	97.08	100.00
Total	240	100.00	100.00

Field No. 84 S and S is loss of appetite (S&S-NOAP)

Mean = 1.86 Standard Deviation = 0.35

Value	Frequency	Percentage	Cumulative Percentage
1	34	14.17	14.17
2	206	85.83	100.00
Total	240	100.00	100.00

Field No. 85 S and S is weakness or tiredness (S&S-WEAK)

Mean = 1.74 Standard Deviation = 0.44

Value	Frequency	Percentage	Cumulative Percentage
1	62	25.83	25.83
2	178	74.17	100.00
Total	240	100.00	100.00

Field No. 86 S and S is other (S&S-OTHR)

Mean = 1.90 Standard Deviation = 0.30

Value	Frequency	Percentage	Cumulative Percentage
1	23	9.58	9.58
2	217	90.42	100.00
Total	240	100.00	100.00

Field No. 87 Doesn't know actions to take (ACT-DK)

Mean = 1.98 Standard Deviation = 0.16

Value	Frequency	Percentage	Cumulative Percentage
1	6	2.50	2.50
2	234	97.50	100.00
Total	240	100.00	100.00

Field No. 88 Should initiate fluids soon (ACT-FLUD)

Mean = 2.00 Standard Deviation = 0.06

Value	Frequency	Percentage	Cumulative Percentage
1	1	0.42	0.42
2	239	99.58	100.00
Total	240	100.00	100.00

Field No. 89 Should give more to drink (ACT-DRNK)

Mean = 1.98 Standard Deviation = 0.14

Value	Frequency	Percentage	Cumulative Percentage
1	5	2.08	2.08
2	235	97.92	100.00
Total	240	100.00	100.00

Field No. 90 Should give ORS or SSS (ACT-ORS)

Mean = 1.27 Standard Deviation = 0.44

Value	Frequency	Percentage	Cumulative Percentage
1	176	73.33	73.33
2	64	26.67	100.00
Total	240	100.00	100.00

Field No. 91 Should give smaller frequent feeds (ACT-FEED)

Mean = 1.93 Standard Deviation = 0.26

Value	Frequency	Percentage	Cumulative Percentage
1	18	7.50	7.50
2	222	92.50	100.00
Total	240	100.00	100.00

Field No. 92 Should take child to hospital (ACT-HSPT)

Mean = 1.73 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
1	65	27.08	27.08
2	175	72.92	100.00
Total	240	100.00	100.00

Field No. 93 Should feed child more after (ACT-RCVR)

Mean = 1.96 Standard Deviation = 0.20

Value	Frequency	Percentage	Cumulative Percentage
1	10	4.17	4.17
2	230	95.83	100.00
Total	240	100.00	100.00

Field No. 94 Should withhold fluids (ACT-NOFL)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	240	100.00	100.00
Total	240	100.00	100.00

Field No. 95 Should withhold food (ACT-NOFD)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	240	100.00	100.00
Total	240	100.00	100.00

Field No. 96 Should do other if have diarrhea (ACT-OTHR)

Mean = 1.90 Standard Deviation = 0.31

Value	Frequency	Percentage	Cumulative Percentage
1	25	10.42	10.42
2	215	89.58	100.00
Total	240	100.00	100.00

Field No. 97 Knows how to prepare ORS or SSS (KNOWSORS)

Mean = 1 55 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	107	44.58	44.58
2	133	55.42	100.00
Total	240	100.00	100.00

Field No. 98 Doesn't know what to do in recover (RCV-DK)

Mean = 1.79 Standard Deviation = 0.41

Value	Frequency	Percentage	Cumulative Percentage
1	50	20.83	20.83
2	190	79.17	100.00
Total	240	100.00	100.00

Field No. 99 Give smaller feeds in recovery (RCV-FEED)

Mean = 1.74 Standard Deviation = 0.44

Value	Frequency	Percentage	Cumulative Percentage
1	63	26.25	26.25
2	177	73.75	100.00
Total	240	100.00	100.00

Field No. 100 Give more foods in recovery (RCV-MORE)

Mean = 1.83 Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
1	40	16.67	16.67
2	200	83.33	100.00
Total	240	100.00	100.00

Field No. 101 Give high calories in recovery (RCV-CAL)

Mean = 1.60 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	97	40.42	40.42
2	143	59.58	100.00
Total	240	100.00	100.00

Field No. 102 Should do other in recovery (RCV-OTHR)

Mean = 1.84 Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
1	38	15.83	15.83
2	202	84.17	100.00
Total	240	100.00	100.00

Field No. 103 Doesn't know how to prevent (PRV-DK)

Mean = 1.75 Standard Deviation = 0.43

Value	Frequency	Percentage	Cumulative Percentage
1	60	25.00	25.00
2	180	75.00	100.00
Total	240	100.00	100.00

Field No. 104 Wash hands to prevent (PRV-WASH)

Mean = 1.53 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	113	47.08	47.08
2	127	52.92	100.00
Total	240	100.00	100.00

Field No. 105 Cover foods to prevent (PRV-COVR)

Mean = 1.53 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	113	47.08	47.08
2	127	52.92	100.00
Total	240	100.00	100.00

Field No. 106 Use clean water to prevent (PRV-WATR)

Mean = 1.83 Standard Deviation = 0.38

Value	Frequency	Percentage	Cumulative Percentage
1	42	17.50	17.50
2	198	82.50	100.00
Total	240	100.00	100.00

Field No. 107 Store water properly to prevent (PRV-STOR)

Mean = 1.92 Standard Deviation = 0.28

Value	Frequency	Percentage	Cumulative Percentage
1	20	8.33	8.33
2	220	91.67	100.00
Total	240	100.00	100.00

Field No. 108 Use latrines to prevent (PRV-LTRN)

Mean = 1.98 Standard Deviation = 0.13

Value	Frequency	Percentage	Cumulative Percentage
1	4	1.67	1.67
2	236	98.33	100.00
Total	240	100.00	100.00

Field No. 109 Avoid feces to prevent (PRV-FCES)

Mean = 1.98 Standard Deviation = 0.16

Value	Frequency	Percentage	Cumulative Percentage
1	6	2.50	2.50
2	234	97.50	100.00
Total	240	100.00	100.00

Field No. 110 Defecate away to prevent (PRV-DFCT)

Mean = 1.93 Standard Deviation = 0.26

Value	Frequency	Percentage	Cumulative Percentage
1	18	7.50	7.50
2	222	92.50	100.00
Total	240	100.00	100.00

Field No. 111 Do other to prevent diarrhea (PRV-OTHR)

Mean = 1.85 Standard Deviation = 0.36

Value	Frequency	Percentage	Cumulative Percentage
1	36	15.00	15.00
2	204	85.00	100.00
Total	240	100.00	100.00

Field No. 112 Has child had fever in last 2 wks (HADFEVER)

Mean = 1.56 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	106	44.17	44.17
2	134	55.83	100.00
Total	240	100.00	100.00

Field No. 113 Child got treatment for fever (TRTFEVER)

Mean = 1.05 Standard Deviation = 0.21

Value	Frequency	Percentage	Cumulative Percentage
BLANK	134	0.00	0.00
1	101	95.28	95.28
2	5	4.72	100.00
Total	106	100.00	100.00

Field No. 114 Treated fever at hospital (FVR-HOSP)

Mean = 1.83 Standard Deviation = 0.38

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	17	16.83	16.83
2	84	83.17	100.00
Total	101	100.00	100.00

Field No. 115 Treated fever at health center (FVR-HCNT)

Mean = 1.96 Standard Deviation = 0.20

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	4	3.96	3.96
2	97	96.04	100.00
Total	101	100.00	100.00

Field No. 116 Treated fever at private clinic (FVR-PRVT)

Mean = 1.80 Standard Deviation = 0.40

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	20	19.80	19.80
2	81	80.20	100.00
Total	101	100.00	100.00

Field No. 117 Treated fever at pharmacy (FVR-PHRM)

Mean = 1.87 Standard Deviation = 0.34

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	13	12.87	12.87
2	88	87.13	100.00
Total	101	100.00	100.00

Field No. 118 Treated fever at village helth pst (FVR-VHW)

Mean = 1.63 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	37	36.63	36.63
2	64	63.37	100.00
Total	101	100.00	100.00

Field No. 119 Treated fever at trad'l healer (FVR-TRAD)

Mean = 1.96 Standard Deviation = 0.20

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	4	3.96	3.96
2	97	96.04	100.00
Total	101	100.00	100.00

Field No. 120 Treated fever at TBA (FVR-TBA)

Mean = 1.97 Standard Deviation = 0.17

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	3	2.97	2.97
2	98	97.03	100.00
Total	101	100.00	100.00

Field No. 121 Treated fever at relatives/friends (FVR-FRND)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
2	101	100.00	100.00
Total	101	100.00	100.00

Field No. 122 Treated fever by self (FVR-SELF)

Mean = 1.97 Standard Deviation = 0.17

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	3	2.97	2.97
2	98	97.03	100.00
Total	101	100.00	100.00

Field No. 123 Treated fever at other (FVR-OTHR)

Mean = 1.95 Standard Deviation = 0.22

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	5	4.95	4.95
2	96	95.05	100.00
Total	101	100.00	100.00

Field No. 124 Chloroquine was given for fever (CHLRQUNE)

Mean = 1.19 Standard Deviation = 0.39

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	82	81.19	81.19
2	19	18.81	100.00
Total	101	100.00	100.00

Field No. 125 Paracetemol was given for fever (PARACTML)

Mean = 1.33 Standard Deviation = 0.47

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	68	67.33	67.33
2	33	32.67	100.00
Total	101	100.00	100.00

Field No. 126 Other was given for fever (OTHRTRTF)

Value	Frequency	Percentage	Cumulative Percentage
BLANK	139	0.00	0.00
1	41	40.59	40.59
2	60	59.41	100.00
Total	101	100.00	100.00

Field No. 127 Mother got Sunday-Sunday treatment (SUNDAY)

Mean = 1.29 Standard Deviation = 0.46

Value	Frequency	Percentage	Cumulative Percentage
1	170	70.83	70.83
2	70	29.17	100.00
Total	240	100.00	100.00

Field No. 128 Don't know how to prevent malaria (MAL-DK)

Mean = 1.67 Standard Deviation = 0.47

Value	Frequency	Percentage	Cumulative Percentage
1	79	32.92	32.92
2	161	67.08	100.00
Total	240	100.00	100.00

Field No. 129 Keep bushes low to prevent malaria (MAL-BUSH)

Mean = 1.81 Standard Deviation = 0.39

Value	Frequency	Percentage	Cumulative Percentage
1	45	18.75	18.75
2	195	81.25	100.00
Total	240	100.00	100.00

Field No. 130 Get rid of water to prevent malari (MAL-WATR)

Mean = 1.84 Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
1	38	15.83	15.83
2	202	84.17	100.00
Total	240	100.00	100.00

Field No. 131 Screens to prevent malaria (MAL-SCRN)

Mean = 1.90 Standard Deviation = 0.30

Value	Frequency	Percentage	Cumulative Percentage
1	24	10.00	10.00
2	216	90.00	100.00
Total	240	100.00	100.00

Field No. 132 Spray room to prevent malaria (MAL-SPRY)

Mean = 1.89 Standard Deviation = 0.31

Value	Frequency	Percentage	Cumulative Percentage
1	26	10.83	10.83
2	214	89.17	100.00
Total	240	100.00	100.00

Field No. 133 Other to prevent malaria (MAL-OTHR)

Mean = 1.60 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	97	40.42	40.42
2	143	59.58	100.00
Total	240	100.00	100.00

Field No. 134 Ever Received Immunizations (EVERIMMD)

Mean = 1.10 Standard Deviation = 0.33

Value	Frequency	Percentage	Cumulative Percentage
1	217	90.42	90.42
2	21	8.75	99.17
3	2	0.83	100.00
Total	240	100.00	100.00

Field No. 135 What Age to Get Measles Vaccine (MSLS-AGE)

Mean = 1.62 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	92	38.33	38.33
2	148	61.67	100.00
Total	240	100.00	100.00

Field No. 136 Reason for TT Vaccine (WHY-TT)

Mean = 2.34 Standard Deviation = 1.30

Value	Frequency	Percentage	Cumulative Percentage
1	108	45.00	45.00
2	10	4.17	49.17
3	55	22.92	72.08
4	67	27.92	100.00
Total	240	100.00	100.00

Field No. 137 How Many TT Needed to Protect Kid (NO.-TT)

Mean = 2.76 Standard Deviation = 1.08

Value	Frequency	Percentage	Cumulative Percentage
1	18	7.50	7.50
2	88	36.67	44.17
3	101	42.08	86.25
5	33	13.75	100.00
Total	240	100.00	100.00

Field No. 138 Has an Immunization Card (IMM-CARD)

Mean = 1.28 Standard Deviation = 0.63

Value	Frequency	Percentage	Cumulative Percentage
1	197	82.08	82.08
2	19	7.92	90.00
3	24	10.00	100.00
Total	240	100.00	100.00

Field No. 166 Child was weighed in October (GMOCTOBR)

Mean = 1.69 Standard Deviation = 0.46
No. of Cases after Deletions and Exclusions = 197

Value	Frequency	Percentage	Cumulative Percentage
BLANK	43	0.00	0.00
1	61	30.96	30.96
2	136	69.04	100.00
Total	197	100.00	100.00

Field No. 167 Weight classification (WT-CLASS)

Mean = 1.78 Standard Deviation = 0.94

Value	Frequency	Percentage	Cumulative Percentage
BLANK	1	0.00	0.00
1	122	51.05	51.05
2	62	25.94	76.99
3	40	16.74	93.72
4	15	6.28	100.00
Total	239	100.00	100.00

Field No. 168 TT Vaccinations Shown on Card (TT-CARD)

Mean = 2.16 Standard Deviation = 0.63

Value	Frequency	Percentage	Cumulative Percentage
BLANK	43	0.00	0.00
1	25	12.69	12.69
2	115	58.38	71.07
3	57	28.93	100.00
Total	197	100.00	100.00

Field No. 169 Is Mother Pregnant Now (PREGNANT)

Mean = 1.98 Standard Deviation = 0.14

Value	Frequency	Percentage	Cumulative Percentage
1	5	2.08	2.08
2	235	97.92	100.00
Total	240	100.00	100.00

Field No. 170 Wants Another Kid in Next 2 Years (WANTMORE)

Mean = 1.82 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
BLANK	5	0.00	0.00
1	49	20.85	20.85
2	180	76.60	97.45
3	6	2.55	100.00
Total	235	100.00	100.00

Field No. 171 Currently Using a FP Method (USING-FP)

Mean = 1.58 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
BLANK	54	0.00	0.00
1	78	41.94	41.94
2	108	58.06	100.00
Total	186	100.00	100.00

Field No. 172 Main Method of FP Used (MAIN-FP)

Mean = 6.56 Standard Deviation = 2.49

Value	Frequency	Percentage	Cumulative Percentage
BLANK	162	0.00	0.00
1	2	2.56	2.56
2	2	2.56	5.13
3	4	5.13	10.26
4	10	12.82	23.08
5	4	5.13	28.21
6	13	16.67	44.87
7	21	26.92	71.79
8	11	14.10	85.90
11	11	14.10	100.00
Total	78	100.00	100.00

Field No. 173 Doesn't know any FP method (FP-DK)

Mean = 1.75 Standard Deviation = 0.43

Value	Frequency	Percentage	Cumulative Percentage
1	60	25.00	25.00
2	180	75.00	100.00
Total	240	100.00	100.00

Field No. 174 Knows tubal ligation/vasectomy (FP-TUBES)

Mean = 1.73 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
1	66	27.50	27.50
2	174	72.50	100.00
Total	240	100.00	100.00

Field No. 175 Knows Norplant (FP-NORPL)

Mean = 1.96 Standard Deviation = 0.19

Value	Frequency	Percentage	Cumulative Percentage
1	9	3.75	3.75
2	231	96.25	100.00
Total	240	100.00	100.00

Field No. 176 Knows injections (FP-INJCT)

Mean = 1.76 Standard Deviation = 0.43

Value	Frequency	Percentage	Cumulative Percentage
1	57	23.75	23.75
2	183	76.25	100.00
Total	240	100.00	100.00

Field No. 177 Knows Pill (FP-PILL)

Mean = 1.76 Standard Deviation = 0.43

Value	Frequency	Percentage	Cumulative Percentage
1	58	24.17	24.17
2	182	75.83	100.00
Total	240	100.00	100.00

Field No. 178 Knows IUD (FP-IUD)

Mean = 1.82 Standard Deviation = 0.39

Value	Frequency	Percentage	Cumulative Percentage
1	44	18.33	18.33
2	196	81.67	100.00
Total	240	100.00	100.00

Field No. 179 Knows barrier method/diaphragm (FP-DPHRG)

Mean = 1.70 Standard Deviation = 0.46

Value	Frequency	Percentage	Cumulative Percentage
1	71	29.58	29.58
2	169	70.42	100.00
Total	240	100.00	100.00

Field No. 180 Knows condom (FP-CONDM)

Mean = 1.72 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
1	67	27.92	27.92
2	173	72.08	100.00
Total	240	100.00	100.00

Field No. 181 Knows foam/gel (FP-FOAM)

Mean = 1.78 Standard Deviation = 0.41

Value	Frequency	Percentage	Cumulative Percentage
1	52	21.67	21.67
2	188	78.33	100.00
Total	240	100.00	100.00

Field No. 182 Knows exclusive BF (FP-EXBF)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	240	100.00	100.00
Total	240	100.00	100.00

Field No. 183 Knows rhythm/calendar (FP-RHYTH)

Mean = 2.00 Standard Deviation = 0.06

Value	Frequency	Percentage	Cumulative Percentage
1	1	0.42	0.42
2	239	99.58	100.00
Total	240	100.00	100.00

Field No. 184 Knows abstinence (FP-ABSTN)

Mean = 1.88 Standard Deviation = 0.33

Value	Frequency	Percentage	Cumulative Percentage
1	30	12.50	12.50
2	210	87.50	100.00
Total	240	100.00	100.00

Field No. 185 Knows coitus interruptus (FP-WDRAW)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	240	100.00	100.00
Total	240	100.00	100.00

Field No. 186 Knows other FP method (FP-OTHER)

Mean = 1.99 Standard Deviation = 0.09

Value	Frequency	Percentage	Cumulative Percentage
1	2	0.83	0.83
2	238	99.17	100.00
Total	240	100.00	100.00

Field No. 187 When Woman Should See Health Pro (WHNSEEHP)

Mean = 1.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
BLANK	239	0.00	0.00
1	1	100.00	100.00
Total	1	100.00	100.00

Field No. 188 Doesn't know how to prevent anemia (ANM-DK)

Mean = 1.98 Standard Deviation = 0.14

Value	Frequency	Percentage	Cumulative Percentage
1	5	2.08	2.08
2	235	97.92	100.00
Total	240	100.00	100.00

Field No. 189 Eat proteins w/ iron to prvt anemi (ANM-PROT)

Mean = 1.18 Standard Deviation = 0.38

Value	Frequency	Percentage	Cumulative Percentage
1	198	82.50	82.50
2	42	17.50	100.00
Total	240	100.00	100.00

Field No. 190 Eat DGLVs to prevent anemia (ANM-DGLV)

Mean = 1.34 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
1	158	65.83	65.83
2	82	34.17	100.00
Total	240	100.00	100.00

Field No. 191 Eat other to prevent anemia (ANM-OTHR)

Mean = 1.78 Standard Deviation = 0.42

Value	Frequency	Percentage	Cumulative Percentage
1	54	22.50	22.50
2	186	77.50	100.00
Total	240	100.00	100.00

Field No. 192 Did Mom Seek PNC at Health Site (SEEK-PNC)

Mean = 1.10 Standard Deviation = 0.30

Value	Frequency	Percentage	Cumulative Percentage
1	216	90.00	90.00
2	24	10.00	100.00
Total	240	100.00	100.00

Field No. 193 Ate How Much During Pregnancy (ATE-MUCH)

Mean = 2.25 Standard Deviation = 0.91

Value	Frequency	Percentage	Cumulative Percentage
1	77	32.08	32.08
2	26	10.83	42.92
3	137	57.08	100.00
Total	240	100.00	100.00

Field No. 194 Who Tied and Cut Cord (CUT-CORD)

Mean = 3.25 Standard Deviation = 0.99

Value	Frequency	Percentage	Cumulative Percentage
1	5	2.08	2.08
2	69	28.75	30.83
3	35	14.58	45.42
4	125	52.08	97.50
5	4	1.67	99.17
6	2	0.83	100.00
Total	240	100.00	100.00