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**World Vision Relief & Development Inc.**

**KNOWLEDGE AND PRACTICE SURVEY  
FINAL EVALUATION  
BUNDIBUGYO CHILD SURVIVAL PROJECT  
BUNDIBUGYO DISTRICT, UGANDA**

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Submitted to:

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## LIST OF ABBREVIATIONS

<b>AC</b>	Area Coordinator
<b>ANC</b>	Antenatal Care
<b>BCG</b>	Bacilli Calmette-Guerin (tuberculosis vaccine)
<b>BCSP</b>	Bundibugyo Child Survival Project
<b>CHW</b>	Community Health Worker
<b>CSP</b>	Child Survival Project
<b>DHS</b>	Demographic Health Survey
<b>DPT</b>	Diphtheria/Pertussis/Tetanus Vaccine
<b>EPI</b>	Expanded Program on Immunization
<b>HIS</b>	Health Information System
<b>IGA</b>	Income-Generating Activity
<b>IUD</b>	Intrauterine Device
<b>JHU CSSP</b>	Johns Hopkins University Child Survival Support Program
<b>MOH</b>	Ministry of Health
<b>OPV</b>	Oral Polio Vaccine
<b>ORT/ORS</b>	Oral Rehydration Therapy/Oral Rehydration Solution
<b>PVO</b>	Private Voluntary Organization
<b>RC</b>	Resistance Council
<b>SSS</b>	Sugar/Salt Solution
<b>TBA</b>	Traditional Birth Attendant
<b>TT</b>	Tetanus Toxoid
<b>USAID</b>	U.S. Agency for International Development
<b>WCBA</b>	Women of Childbearing Age
<b>WHO</b>	World Health Organization
<b>WV/WVI</b>	World Vision/World Vision International
<b>WVRD</b>	World Vision Relief & Development

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## EXECUTIVE SUMMARY

A Knowledge and Practice final survey was conducted from November 1 to 14, 1992, to evaluate the progress of the Bundibugyo Child Survival Project (BCSP) after the completion of its initial funding period of three years. Staff from the project and the Ministry of Health (MOH) of Uganda were trained in the use of the standard World Health Organization/Expanded Program on Immunization (WHO/EPI) 30-Cluster Methodology and conducted the survey using this methodology in 30 of the Resistance Council (RC) zones, or villages, in the three sub-counties comprising the project area. The survey made use of a standardized questionnaire developed by The Johns Hopkins University PVO Child Survival Support Program, which was revised by staff from the BCSP and World Vision headquarters.

Major findings of the survey include the following:

1. Fifty-five percent of children 12 to 23 months of age were completely immunized, compared to a midterm estimate of 27% and an end-of-project target of 70%.
2. Fifty-five percent of mothers of children under two were immunized with TT2, compared to a midterm estimate of 29% and an end-of-project target of 50%.
3. Thirty-seven percent of mothers could correctly state the preparation of oral rehydration solution (ORS) or sugar/salt solution (SSS), compared to an end-of-project target of 50%.
4. Ninety-nine percent of mothers breastfed their children, but only 27% breastfed exclusively for the first four months of their child's life.
5. Of mothers whose child under two years had diarrhea in the last two weeks, 42% treated the diarrhea with ORS, and 42% treated it with anti-diarrheal medicines.
6. Ninety-five percent of children 12 to 23 months had received immunizations.
7. Seventy-three percent of mothers knew that their child should receive measles vaccine at nine months of age.
8. Thirty-eight percent of children with an immunization card and 28% of children overall had been weighed in the previous three-month period.
9. Twenty-two percent of mothers of children under two years who were not pregnant and did not want another child in the next two years were using a method of family planning.
10. Eighty-six percent of mothers reported that they had made at least one visit to a health center for prenatal care during their last pregnancy.

The project will use the survey results to plan activities for a one-year extension period and to assist in the writing of a proposal for funding for a subsequent three-year extension and expansion of activities.

## **I. INTRODUCTION**

### **A. Background**

The Bundibugyo Child Survival Project (BCSP) was funded by USAID for a three-year period beginning October 1, 1989, and ending September 30, 1992. The project works in collaboration with the Ministry of Health (MOH) of Uganda to provide a variety of Maternal and Child Health services, with its primary goal being to reduce mortality and morbidity among children 0 to 59 months (less than five years) due to vaccine-preventable diseases, dehydration due to diarrhea, and malnutrition. Actual implementation of services was delayed until mid-1990, so project activities have been in progress for only slightly over two years. A no-cost extension was approved and other additional funding has been received to extend the project for an additional year, to allow the project time to reach its objectives given this delay in start-up.

The BCSP covers Ntoroko county, which is located in the northern half of Bundibugyo District, at the border with Zaire, some 347 kilometers west of Kampala. Prior to the arrival of the project, this area had been largely ignored with regard to the provision of health and other social services, and was among the worst in Uganda in terms of infant and child mortality rates, immunization coverage rates, etc. The project functions with a core team in each of the three sub-counties of Ntoroko county--Karugutu, Ntoroko, and Rwebisengo--and has its base in Karugutu, which is a 30 kilometer distance away from Fort Portal, the nearest major town, down a tortuous gravel road on the side of a mountain, at an altitude of over 7,000 feet.

The three project communities differ greatly in both their physical features and the lifestyles of the people living there. The population of Karugutu, which is located in the Ruwenzori mountains, consists primarily of small-scale cultivators. Ntoroko covers several communities on the shores of and islands within Lake Albert, and its population is largely composed of fishermen. The population of Rwebisengo, which spans a vast plain, are largely nomadic cattle keepers. Two of the areas, Karugutu and Rwebisengo, are sparsely populated, and all three have significant portions which are inaccessible by any means other than foot. In all, roughly 40 different ethnic groups are represented.

The specific objectives of the BCSP as stated in the project's detailed implementation plan (DIP) are to attain the following:

1. Seventy percent of infants completely immunized before their first birthday with the percentages of children 12-23 months receiving specific antigens as follows: BCG-90%, OPV3/DPT3-85%, and measles-85%.
2. Fifty percent of women of childbearing age (WCBA), 15-49 years, immunized with two or more doses of tetanus toxoid (TT) vaccine.
3. Fifty percent reduction of the malnutrition rate among children under five years.
4. Sixty percent reduction in deaths due to diarrheal dehydration among children under five years.

5. Fifty percent of mothers with children under five years know how to correctly prepare and use oral rehydration solution (ORS) for diarrhea in their children.
6. Thirty percent of women in union using a modern family planning method.
7. One community health worker (CHW) and one traditional birth attendant (TBA) trained in each RC zone (smaller administrative units comprising the subcounty).
8. Thirty percent of houses have a pit latrine.
9. Fifty percent of springs in Karugutu protected.

## **B. Objectives of the Survey**

A final survey was planned to be conducted upon completion of the initial period of funding of the project. This survey, along with the baseline survey conducted at the beginning of the funding period, comprises one component of the BCSP's Health Information System (HIS), which was designed to provide information which could assist project planning, management, monitoring, and evaluation. To this end, several objectives were set for the final survey, including:

1. To provide quantitative information on the progress that the project has made since its inception toward reaching its stated objectives.
2. To assist project staff to formulate effective strategies for the one-year extension period and beyond.
3. To train 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, and the management and prevention of diarrheal diseases.
- ▶ 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, who constitute the primary target group of the project. 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, with adaptation and translation of the questionnaire, recruiting interviewers and supervisors, and obtaining permission and support from community leaders. Final preparations, training, surveying, data analysis, report writing, and feedback were conducted November 1-14, as follows:

- Days 1-3: — Arrival of survey trainer in Entebbe
- Continuation of preparations, including questionnaire modification and logistical arrangements
- Travel to Bundibugyo
- Installation of project computer at project site and instruction of selected staff in its use
  
- Day 4: — Training of supervisors
  
- Day 5: — Training of interviewers
  
- Day 6: — Field test of questionnaire
- Review of field test
- Finalization of questionnaire
  
- Day 7: — Preparation of questionnaires
- Preparation of data entry program on Survey Mate 1.762
- Awarding of certificates to supervisors and interviewers
  
- Days 8-10: — Household interviews
  
- Day 11: — Hand tabulation of data
- Input of data into Survey Mate for analysis
  
- Days 12-13: — Discussion of results and writing of report
  
- Day 14: — Feedback to interviewers, supervisors, and other project staff

## **II. METHODOLOGY**

### **A. The Questionnaire**

The questionnaire used in the survey (see Appendix A) was adapted from the "PVO Child Survival Knowledge and Practice Questionnaire" developed by USAID 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 JHU CSSP, WV headquarters, and the BCSP to customize this questionnaire to the specific 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 into Lutoro, the language spoken by the communities in the project area. Two individuals not involved in the first translation subsequently translated the Lutoro 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 Lutoro version (see Appendix B).

During training of supervisors and interviewers, and after field testing the questionnaire in an area adjacent to the project area, further modifications were made. In its final version, the questionnaire consisted of 44 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:	Immunization
Question 33:	Growth monitoring
Questions 34-44:	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:

$$n = z^2 pq/d^2 \quad \text{where}$$

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 JHU CSSP, a sample size of 270 was ultimately chosen, for the following reasons:

- a. The survey was measuring multiple interventions in addition to immunization.
- b. 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 nine mothers of children under two years were interviewed in each of the 30 clusters.

## C. Selection of the Sample

Based on household registers kept by the CHWs for each village in the project area, a list of all villages and their population was compiled (see Appendix C). The list did

not include two villages located on islands in Lake Albert, which are included in the project impact area but which do not include women. Following the WHO/EPI method, 30 clusters (villages) were randomly selected from this list during the training of supervisors. No clusters were selected to have more than one sample of nine chosen from them. All communities had previously been made aware that a survey may take place in their village, in order to ensure that proper channels were followed and necessary permission was obtained.

In all but one cluster, the household registers were used to select a random starting point. Prior to arrival in the village, supervisors used currency notes to select a random household from the list, and directed the interview team assigned to that village to the appropriate starting point. If for some reason the starting house was no longer occupied or present, it was removed from the list and another starting point was selected using the same procedure. In one cluster, a household list was not available. For this cluster, then, a geographically central location was identified (a church). Using a bottle, a random direction was chosen, and the interview team and supervisor counted the households from the church to the cluster boundary along that direction. 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. Additional households were chosen by finding the next nearest household (the one whose front door was closest to the house in question), 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 very few instances, a household contained more than one mother with a child under two, in which case only one of them was selected, randomly. If a mother had more than one child under two years, the mother was interviewed about the youngest, about whom it was assumed the mother would have the best recollection and accuracy of information.

In one cluster, only seven mothers with children under two were found after surveying all households in the cluster. The interview team then proceeded to the geographically nearest community, and starting with the nearest house to the one where they last were in the original cluster, the procedure was continued until two more mothers of children under two were found. The neighboring community was not one of the 30 originally sampled.

#### **D. Training of Supervisors and Interviewers**

The four supervisors and 21 interviewers selected for training included 13 BCSP staff, 11 MOH staff, and a primary schoolteacher from one of the impact communities. The first day of training involved only the supervisors, and 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.

The questionnaire was discussed thoroughly, including the purpose of each question and how to properly code respondent's answers. Proper interviewing techniques were

discussed, and a demonstration role play was conducted and discussed. The 30 clusters to be selected were chosen using the methodology learned, site assignments were given, and logistical arrangements were made. Finally, responsibility for conducting sessions on the following day's training of interviewers was delegated.

Each supervisor, with support from the survey trainer, facilitated different sessions during the training of interviewers, which covered the same topics as those covered during the training of supervisors. Increased emphasis on the proper conduct of interviews and more time for role playing were given during the second day of training.

Following the day of training of interviewers, a field test was conducted in two neighboring communities, Bubukwanga and Busaro, in the southern half of Bundibugyo District. 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. In the evening, 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.

A ceremony was conducted the following evening to award each participant with a certificate acknowledging successful completion of the training.

Training schedules for supervisors and interviewers are included as Appendices D and E.

## **E. Conduct of the Interviews**

Interviewers were teamed in pairs and assigned to a supervisor and to one or two of the three project impact areas, ensuring that no one was assigned to an area where they worked or lived, in order to minimize potential bias. Due to poor weather conditions and long distances required to travel to some clusters, many of which were accessible only by foot, arrangements were made ahead of time to accommodate interviewers and supervisors near the clusters to which they were assigned.

Ninety-eight interviews were conducted on the first day, 104 on the second, and 68 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, brought them to the starting household, and supervised interviews as well as the selection procedure for additional houses.

In order to ensure that consent was obtained, a consent form was developed and attached to the front of each questionnaire. The form (see Appendix F) explained the purpose of the survey and the nature of some of the questions, stressed the confidentiality of the process, indicated that participation was not required, and explained where to receive feedback on the results. Interviewers were instructed to sign the form to indicate that the form had been read to the mother and consent to be interviewed was obtained before each interview was conducted. While mothers were frequently found to be away from the house, no eligible mother refused to participate in the survey.

Almost all of the interviews were conducted in Lutoro. Wherever possible, this was given preference to using another language, since the questionnaires were translated only into Lutoro. On rare occasions, however, a mother was met who did not speak Lutoro, in which case she was interviewed in Swahili. One interview was read in Lutoro, while the mother responded in Swahili.

#### **F. Method for Data Analysis**

After completion of the interviews, data were analyzed both manually and with the use of the Survey Mate software program. Eight interviewers and the four supervisors were trained on how to conduct the manual tabulation, and one interviewer and one other project staff member were given training on the use of the computer and software. Not all questions were tabulated manually, due to time constraints.

### **III. RESULTS**

Following are the responses obtained from the 270 mothers interviewed (no questionnaires were removed from the analysis). Appendix G includes the confidence intervals for the major results, and all of the frequency tables have been included as Appendix H.

#### **A. Age Distribution**

1. The average age of mother interviewed was 25 years, ranging from 16 to 42. Of these, there were 65 mothers (24%) in the "high-risk" group: 44 (16%) were below 19 years and 21 (8%) were 35 years and above. Four of the mothers interviewed were unsure of their age, and the distribution clearly shows peaks at ages 20, 25, and 30 years, indicating some degree of approximation when stating age.
2. The average age of the children in the survey was 10.4 months. One hundred and fifty-four children (57%) were under one year of age, and 116 (43%) were between one and two years (or 12 and 23 months).

#### **B. Mother's Education and Income-Generating Work**

3. Of the mothers interviewed, 121 (45%) reported never having gone to school, while 142 (52%) went to primary school and 7 (3%) attended secondary schools or higher. Of the 142 who attended primary school, 25 indicated that they were unable to read. Combined with those who have received no schooling, a total of 146 of the mothers surveyed (54%) were presumably unable to read.
4. Ninety-eight (36%) of the mothers surveyed reported that they worked away from the home, while the majority, 172 (64%), did not do any such work.
5. Of the 270 mothers interviewed, 106 (39%) indicated that they did no work that earned them income. The rest of the mothers were involved in a variety of different income-generating activities, as follows: 57 (21%) sold prepared foods or dairy products; 44 (16%) harvested crops or picked fruits; 43 (16%) sold agricultural products or livestock; 22 (8%) made handicrafts, did weaving, sewing, etc.; 8 (3%) managed a shop; and 15 (6%) reported doing some other activity which earned them income. One mother held a salaried position.

6. When those mothers interviewed were away from home, 68 (25%) reported that they took their child under two years with them; 109 (40%) reported leaving the child with an older sibling, 14 (5%) with the husband, and 74 (27%) with other relatives. Additionally, 9 (3%) said that they left the child with neighbors, and 7 (3%) with the maid when away from the house.

### **C. Breastfeeding and Nutrition**

7. Of the 270 mothers in the survey, 221 (82%) were at the time breastfeeding the child under two years. The remaining 49 (18%) reported that they were not.
8. Of the 49 mothers who said that they were not currently breastfeeding, two said that they had never breastfed their child. The other 47 had breastfed the child at some point, but were no longer doing so. Thus, 268 of the 270 children in the survey (99%) had been breastfed at some point.
9. When asked how long after the delivery of their child they began breastfeeding, 137 of the 268 mothers who reported ever having breastfed (51%) indicated that it was within the first hour after delivery. Sixty-two mothers (23%) began breastfeeding between one and eight hours after delivery, while 63 (24%) waited more than eight hours. Six mothers could not remember when they first starting breastfeeding their child.
10. Using Survey Mate, the ages of the children were cross tabulated with the responses given regarding the foods and drinks that the mothers were giving their child. Of the 48 children under four months of age, only 13 (27%) were not receiving any other foods or drinks than breast milk; i.e., 27% of children under four months were exclusively breastfeeding. Thus, 73% of children in this age group were not being exclusively breastfed.

Of the 35 children in the four- to six-month age group, none was being exclusively breastfed, but one of the 187 children over six months of age was being exclusively breastfed.

Cross tabulations to determine the types of foods being given to children of weaning age (four months and above) indicated that 181 of 222 (82%) were being given fruits or vegetables rich in vitamin A, including mango, papaya, and green leafy vegetables. Also, 196 of 222 (88%) were being given foods rich in protein, including meat, fish, beans, soya, and eggs. Finally, 194 of 222 (87%) were being given foods with added calories in the form of sugar, fat, or oil.

11. All mothers interviewed were asked to relate actions which can enable a mother to keep breastfeeding. In response, 113 mothers (42%) replied that it was important for the mother to maintain proper nutrition; 22 (8%) mentioned the importance of frequent sucking to stimulate production; 11 (4%) mentioned breastfeeding as soon as possible after delivery, 10 (4%) said to take proper care of the breasts and nipples; 5 (2%) said to avoid bottle feeding; and 6 (2%) mentioned relactation. One hundred fourteen mothers (42%) did not know what they could do to keep breastfeeding, while 41 (15%) mentioned other actions, the most common of which was avoiding pregnancy.

12. Of the 270 mothers surveyed, 65% knew that additional foods should be added to breastfeeding starting between four and six months of age. The remaining 35% either didn't know, or had incorrect ideas: 25 mothers (9%) believed that other foods should start being added before four months, while 57 (21%) said it should be after six months. Fourteen mothers (5%) did not know when to start adding additional foods.
13. When asked what these additional foods to breastfeeding should be, 194 mothers (72%) said that they should be foods rich in protein, such as meat, fish, nuts, or milk; 114 (42%) mentioned foods rich in iron, such as green leafy vegetables; 65 (24%) said foods rich in vitamins, such as fruits; and 24 (9%) mentioned foods with added oil or sugar for additional calories. Only 19 mothers (7%) did not know what the additional foods should be, but 94 mothers (35%) mentioned foods which were of marginal nutritional significance, such as rice, potatoes, and "matoke", or plantains, the staple food.

#### **D. Diarrheal Diseases**

14. Of the 270 children under two years considered in the survey, 79 (29%) were reported by their mothers to have had diarrhea in the two-week period preceding the survey. Of the other 191 mothers, 190 said that the child had not had diarrhea, while one was not sure.
15. The 79 mothers who reported that their child had had an episode of diarrhea in the previous two weeks were asked how much they breastfed their child during the episode. Eleven mothers (14%) reported breastfeeding more than usual, and 34 (43%) said they continued breastfeeding at the usual level. Twenty-one mothers (27%) breastfed less than usual and six (8%) stopped breastfeeding altogether. Seven of the mothers (9%) were not breastfeeding the child at the time of the episode.
16. Of the 79 children with diarrhea, 19 (24%) were given more fluids other than breast milk and 27 (34%) were given the same amounts as usual. Thirteen (16%) received less other fluids than usual, and 17 (22%) stopped completely receiving any other fluids. Three mothers (4%) reported that they were not giving any other fluids at the time (i.e., they were exclusively breastfeeding).
17. Of the 79 children, 11 (14%) were given more solid or semisolid foods, and 26 (33%) were given the same amounts as usual. Sixteen (20%) were given less of these foods than usual, and 12 (15%) stopped receiving them. Fourteen mothers (18%) said that they were not giving any solid or semisolid foods to the child at the time of the episode.
18. When asked what treatments the mother used during this episode of diarrhea, 33 (42%) indicated that they made ORS from a packet, and one mother (1%) each gave the child SSS and a home-based fluid. Thirty-three mothers (42%) gave an antidiarrheal medicine, including local/traditional ones, and 15 (19%) used some other treatment for the diarrhea. Eleven mothers (14%) reported using no treatments at all.
19. Of the 79 mothers with children who had had diarrhea, 51 (65%) sought treatment or advice for it. The others did not.

20. Of the 51 who did, 13 (25%) asked the CHW in their area for advice or treatment, and 11 (22%) went to each of the following: a hospital, a health center, and relatives or friends. Five (10%) went to a private clinic or doctor, one (2%) to a drugstore, and one to a traditional birth attendant (TBA). Two sought advice or treatment from some other source.
21. All 270 mothers were asked what signs and symptoms would cause them to seek advice for their child if he or she had diarrhea. The most common response, given by 138 (51%) of the mothers, was tiredness or weakness. Other signs and symptoms given and the percent of mothers who gave the response, in decreasing order of frequency, include prolonged duration of the diarrhea (37%), various signs of dehydration such as dry mouth or sunken eyes (21%), vomiting (13%), loss of appetite (12%), fever (11%), and blood in the stool (2%). A total of 45 mothers (17%) reported that they did not know any signs and symptoms of diarrhea which would cause them to seek advice or treatment, and 19 (7%) gave signs and symptoms other than those listed on the questionnaire.
22. All mothers were also asked what important actions they should take in the event their child had diarrhea. The majority of mothers (60%) responded that they should give ORS or SSS in such a case. Additionally, 88 (33%) said that they should take the child to a hospital or health clinic; 40 (15%) said they should initiate fluids soon; 29 (11%) said they should give the child more to drink than usual; 16 (6%) said to give the child smaller, more frequent feedings; 14 (5%) said to feed the child more after the episode; and 34 (13%) mentioned other actions. No mother said that they should withhold fluids or food. Twenty-six mothers (10%) said that they did not know what they should do in case their child had diarrhea.
- 23.&
24. All mothers were asked to explain how to prepare either SSS or ORS from a packet. Based on the criteria established by the project to measure knowledge of the preparation of the solutions, 99 mothers (37%) could correctly state how to prepare one or the other of these. The remaining 171 either did not try or failed to explain the procedure correctly.
25. More than half of the mothers (53%) stated that they should give their child food with high caloric content when their child is recovering from an episode of diarrhea. Fifty-one (19%) said that they should give smaller, more frequent feedings, and 45 (17%) said that they should give more food than usual. Fifty-three mothers gave other actions, and 65 (24%) did not know what to do during the recovery period.
26. All 270 mothers were asked to name any measures that they could take to prevent their child from getting diarrhea. Ninety-seven (36%) mentioned covering food to protect it from flies; 87 (32%) mentioned boiling water; 49 (18%) said using clean utensils and containers when preparing food; 45 (17%) said collecting their drinking and cooking water from clean sources; 41 (15%) mentioned washing hands before preparing food, eating, or handling the child, 38 (14%) said using a latrine; 30 (11%) said collecting and storing water in clean containers; 18 (7%) mentioned avoiding contact with stools or feces; and 24 (9%) mentioned other measures, such as keeping the child's environment

clean. Eighty-eight mothers (33%) could not name any appropriate measure to prevent diarrhea.

#### **E. Immunizations**

27. Two hundred thirty-five of the 270 mothers (87%) indicated that their child had received immunizations. The other 35 mothers said that their child had never received any immunizations. Of the 116 children 12 to 23 months of age, 110 (95%) had received immunizations.
28. One hundred ninety-six mothers (73%) correctly stated that their child should receive the measles vaccine at nine months of age. The rest of the mothers (27%) either stated that they did not know when their child should receive the vaccine or gave an incorrect age.
29. When asked the main reason pregnant women need to be vaccinated with tetanus toxoid vaccine, 118 mothers surveyed (44%) stated that it was to protect both the mother and the newborn against tetanus. Twenty-two (8%) and 47 (17%) of mothers, respectively, said that it was to protect only the woman and only the newborn against tetanus. Eighty-three mothers (31%) gave another response or stated that they did not know the reason for giving pregnant women the TT vaccine.
30. One hundred seventy-seven mothers (66%) said that more than two TT injections were needed to protect the newborn infant from tetanus; 53 (20%) said two were needed; three (1%) said one was needed; one (0.4%) said none were needed; and 36 (13%) did not know.
31. Of the 270 mothers interviewed, 198 (73%) had an immunization card for their child. Among those who didn't, 19 (7%) said that they had lost it, and the other 53 (20%) never had one or gave other reasons why they could not produce it.
32. Based on the immunization cards only, following are the antigen-specific coverage rates for children 12- to 23-months of age, based on a denominator of 116 children surveyed in this age group:

<u>Vaccine</u>	<u>Number</u>	<u>Percent</u>
BCG	87	75.0
OPV1	88	75.9
OPV2	83	71.6
OPV3	74	63.8
DPT1	87	75.0
DPT2	79	68.1
DPT3	71	61.2
Measles	70	60.3

Among the 116 children surveyed in the 12- to 23-month age group, 64 had according to their card received BCG, OPV3, DPT3, and measles. Thus, 55.2% of children 12 to 23 months were found to have been fully immunized.

**F. Growth Monitoring**

33. Of the 198 children who had an immunization card present, 75 (38%) had been weighed at least one time in the three-month period preceding the survey. For children 0-11 months, this figure was 45% (49 of 108); and for children 12-23 months, 29% (26 of 90).

**G. Maternal Care**

34. One hundred seventy of the 270 mothers (63%) had a TT card for themselves. (There is also an antenatal card which records a variety of information related to antenatal card (ANC) in addition to receipt of TT vaccine. However, since this card is relatively new in the project area and is not widely used, it was not checked.) Fifty-two of the mothers surveyed (19%) said that they had lost the TT card, and 48 (18%) said that they never had one, or otherwise could not produce it.
35. Of the 170 mothers who had a TT card, 22 (13%) had had one TT injection and 148 (87%) had two or more, according to the card. Thus, of all 270 mothers surveyed, 55% had two or more TT injections, according to the cards.
36. Twenty (7%) of the mothers surveyed indicated that they were currently pregnant. Two hundred forty-eight (92%) said that they were not, and two mothers (1%) were not sure.
37. Of the 250 mothers who were not pregnant or were not sure if they were or not, 63 (25%) said that they wanted another child in the next two years, 179 (72%) said that they did not, and 8 (3%) were not sure.
38. Of the 187 mothers who were not pregnant and did not want or were not sure if they wanted another child in the next two years, 42 (22%) were using some method to avoid or postpone getting pregnant. The other 145 mothers (78%) were not currently using any method.
39. Of the 42 mothers who reported using some method to avoid or postpone getting pregnant, the methods that they reported using were as follows:

<u>Method</u>	<u>Number</u>	<u>Percent</u>
Tubal ligation	1	2
Injections	9	21
Pill	10	24
IUD	1	2
Condom	4	10
Foam/gel	1	2
Exclusive breastfeeding	3	7
Rhythm/calendar	2	5
Abstinence	6	14
Other	5	12

40. One hundred twenty-one of the 270 mothers surveyed (45%) said that a woman should see a health professional within the first three months after she knows

that she is pregnant; 130 (48%) said it should be between the third and sixth months; and 8 (3%) said it should be between 7 and 9 months. Eleven mothers (4%) said that they were not sure when a woman should first see a health professional after she knows that she is pregnant.

41. When asked what foods a pregnant woman should eat to avoid anemia, 207 of the 270 mothers (77%) knew that green leafy vegetables are rich in iron and so are helpful. One hundred eighty mothers (67%) said proteins rich in iron, such as eggs, fish, or meat, are good. Seventy-seven (29%) mentioned other foods, and 20 (7%) did not know what foods were good to prevent anemia.
42. Of the 270 mothers, 232 (86%) reported that they visited a health center for pregnancy or prenatal care, while 38 (14%) said that they did not.
43. Forty-seven percent of the mothers (126 out of 270) said that they ate less food than usual during their pregnancy with their child under two; 76 (28%) said that they ate the same amount as usual; and 67 (25%) said that they ate more than usual. One mother said she wasn't sure.
44. Ninety-seven (36%) of the mothers surveyed reported that a TBA tied and cut the umbilical cord at the delivery of the child under two. Seventy-six (28%) reported that a health professional (physician, nurse, or midwife) assisted; 73 (27%) said a family member and 16 (6%) said that they did it themselves. Seven mothers (3%) mentioned another person responsible, and one mother said that she couldn't remember who was present to tie and cut the cord.

#### **IV. DISCUSSION AND RECOMMENDATIONS**

##### **A. Age Distribution**

The distribution of ages of mothers interviewed was roughly normal, with a slight skew to mothers of younger ages. Of the total, 55% were 30 years or younger. The large proportion of mothers at "high risk" due to their age—24% were below 19 years or were 35 and older—are the focus of the project's relatively recent Safe Motherhood intervention. The need to provide education to mothers on the risks of giving birth at these ages and on appropriate precautions to take is apparent.

The distribution of ages of children under two, while representing more exclusively those under one, is within expected ranges. Birth dates were generally known by mothers, and were verified where possible against those listed on the immunization cards.

##### **B. Education and Income-Generating Work**

The large proportion of mothers never having attended school (45%), in addition to those who went to primary school but are unable to read (9%), indicates a need to devise health education strategies which do not require mothers to be literate. Project staff believe that the low literacy rate has hindered efforts to teach mothers; for example, many mothers cannot make use of written materials to remind them of how to prepare ORS or when to take their child for immunizations.

The fact that 40% of mothers lack a source of income may be associated with the lack of education and is likely to contribute to adverse health conditions. Many food items are inaccessible to a majority of mothers due to their cost. Sugar was a commonly cited example. The project has supported a variety of community-based income-generating activities and expects to continue to do so during the one-year extension period. Should an additional three-year extension period be granted, plans have been made to include an IGA component formally into the project's activities.

The result that 40% of mothers leave their child under two years in the care of an older sibling when they are away from the house was corroborated by the large number of such cases which were encountered during the survey. Because of the commonness of this practice, an attempt to provide school-age children with education regarding the health and proper care of younger siblings would be an appropriate and beneficial strategy. As 32% of mothers reported leaving the child with the husband or other relatives, education directed at the family in general is also warranted.

### **C. Breastfeeding and Nutrition**

The vast majority of mothers interviewed were breastfeeding their child under two, and cross tabulation with age revealed that a significant proportion of children were breastfed throughout the first two years. Furthermore, virtually all mothers interviewed (99%) had breastfed the child at some time after delivery, even if they were not doing so at the time of the survey.

Initiation of breastfeeding was also found to be in accordance with the message promoted by the project, although to a lesser extent. Slightly over half of those mothers who had at some time breastfed did so immediately after delivery, and an additional 23% did so within the first eight hours. A significant proportion (24%) delayed initial breastfeeding until after eight hours, however, with some mothers reportedly waiting as long as three days, as is the custom of some groups. The project should continue to stress the importance of initiating breastfeeding within the first hour after delivery, especially to those members of the population who have a different custom.

Although messages are given by the project to mothers regarding ways in which they can ensure an adequate supply of breast milk, including immediate breastfeeding, frequent sucking, avoiding bottle feeding, proper care of the nipples, and relactation, few mothers were able to answer question 11 with responses indicating that they knew these messages. This may indicate that the message is not clear or well-targeted and so is not understood and retained. Interviewers and supervisors both believed that the question as worded was not well understood, however, and this was the reason for the low response. The fact that many mothers failed to give any answer and many who did gave in response proper nutrition or avoiding pregnancy, indicates that this may be the case.

The most striking problem with regard to breastfeeding practices in the project area was revealed to be the early introduction of foods and fluids other than breast milk to the infant's diet. While knowledge of the message to start adding additional foods and drinks to the diet between four and six months was relatively high (64%), and only 9% stated that they should be added prior to four months, only 27% of mothers interviewed with children under four months (13 out of 48) were exclusively

breastfeeding. In other words, 73% of mothers with children under four months had already begun adding other foods or fluids to the child's diet (27% had added only water and/or milk). Of the 222 children aged four months and older, 221 were being given other foods or fluids other than breast milk.

Two factors were suggested to be primarily responsible for this widespread practice of early introduction of other fluids and foods. One is the culturally defined dietary importance placed on cow's milk, combined with relatively easy access, especially in Rwebisengo, where the majority of the population are cattle herders. Second, mothers who work away from the home (reportedly 36%) have decreased opportunities for breastfeeding and may therefore rely on other fluids and foods for their child while they are away. The project staff should re-evaluate their methods of impressing the message of exclusive breastfeeding on mothers, taking into account these possible explanatory factors, and should place significant emphasis on effective ways to relay it during the extension period.

Of the children over four months of age who were being given foods other than breast milk, 82% were being given vitamin A-rich fruits and/or vegetables, 88% were being given foods rich in protein; and 87% were being given food with sugar, fat, or oil added for additional calories. In this case, practice appears to be better than what was stated in response to questions about appropriate foods to be given. A considerable proportion of mothers said, for example, that the additional foods which should be added to a child's diet included the staple foods of the area—plantains, rice, and potatoes.

#### **D. Diarrheal Diseases**

The reported prevalence of diarrhea among children under two during the two-week period preceding the survey was higher than project staff expected. While diarrhea is accepted in the community as a normal phenomenon for children of this age, the project has taken steps which staff believed had decreased the incidence of the problem in the project area. Two results from the survey, though, may help to explain why the incidence of diarrhea is still high. First, the early introduction of foods and fluids other than breast milk, as mentioned earlier, may be a contributing factor. Second, knowledge concerning measures which can be undertaken at the household level to help prevent the occurrence of diarrhea was relatively low. One-third of mothers could not name any appropriate measure to take to prevent their child from getting diarrhea. An increased focus on education in these two areas may help to reduce the incidence of diarrhea in the project area.

The survey also established the need for further education of mothers on appropriate practices to take during and after their child's diarrhea. The importance of maintaining usual or increased levels of feeding, whether breast milk or other appropriate fluids and foods, as well as the importance of appropriate feeding practices during the "catch-up" period following an episode of diarrhea, must be emphasized. Education on signs and symptoms of diarrhea, particularly those indicating dehydration, should likewise be stressed and given in a clear and understandable way.

While 60% of mothers knew that they should give ORS or SSS when their child had diarrhea, knowledge of the correct preparation of such solutions was only 37%. This falls somewhat short of the end-of-project objective of 50%, but exceeds the 35%

target for the second year and is far above the most recently reported national use rate of 15% (MOH Demographic Health Survey, 1989). The criteria used for deciding whether or not a mother "knew" the correct preparation of ORS or SSS was that she be able to state the correct measurements for each ingredient, and if she had the containers and utensils available (many did not, saying they borrowed from a neighbor), that they be of the correct size. If a mother stated the correct measurements to use but produced containers or utensils of incorrect size, she was considered not to know the correct preparation. Most mothers knew that hands must be washed and that clean water and containers must be used, but this knowledge or the failure to state any or all of these did not affect the classification of her response as correct or incorrect.

A considerable proportion of the mothers (42%) used a variety of anti-diarrheal medicines during the child's diarrhea. Such medicines included ones that may be purchased in stores, as well as herbs and other traditional medicines, including enemas. These practices must be discouraged through education and concomitant promotion of the correct use of ORS or SSS. Due to the difficulty many mothers have in purchasing sugar, the promotion of other more easily accessible home-based fluids, such as sugarcane juice or fruit juices, should also be undertaken.

A positive result was the relatively high use of CHWs for advice and treatment of children with diarrhea. This demonstrates a degree of access to health workers who have been trained on the proper management of diarrhea which was previously lacking in these remote areas.

#### **E. Immunizations**

The survey revealed that 87% of children overall and 95% of those 12 to 23 months had received immunizations. These figures are somewhat higher than the percentages of children who had their cards present. While few mothers said that they had lost or never received a card, many stated that they kept the card at another location such as at their parent's house.

Based on the information contained on the cards which were present at the time of the interview, the coverage rates achieved show considerable progress from the figures given at baseline (based on MOH estimates) and those calculated from project records at midterm, as shown in the following table:

	<u>Baseline</u>	<u>Midterm</u>	<u>Final</u>
BCG	53	64	75
OPV3	21	41	64
DPT3	21	41	61
Measles	30	37	60
Fully Immunized	24	27*	55

\* Does not include Rwebisengo

The calculation for the final coverage rates used the total number of children 12-23 months (116) regardless of whether or not they had a card. Because it is likely that many of those without cards were also immunized, these rates probably underestimate the true coverage in the project area. Moreover, the project has achieved this

coverage in only slightly more than two years rather than the planned three, due to delays in start-up of project activities. The second year target for fully immunized children was 55%, and it is likely that in the extension year of the project, the stated end-of-project target of 70% will be reached.

The dropout rates for OPV (calculated  $[\text{OPV1-OPV3}]/\text{OPV1}$ ) and DPT (calculated  $[\text{DPT1-DPT3}]/\text{DPT1}$ ) are 15.9% and 18.4% respectively. The project should consider means of tracking immunization defaulters to reduce this rate even lower.

A relatively high proportion of mothers knew the month at which a child should receive measles vaccine (73%). Similarly, 69% stated that TT was given to protect the mother, the infant, or both mother and infant from tetanus, and 86% indicated that two or more TT were needed to protect the newborn from tetanus. All of these demonstrate good knowledge on the part of mothers with regard to immunization.

#### **F. Growth Monitoring**

While the project proposed to weigh children every two to three months, there have been several problems in accomplishing this. The survey results reflect these difficulties, revealing that only 38% of children with an immunization card and 28% of all children 0-23 months had been weighed in the three-month period preceding the survey. The percent of children weighed was considerably lower for children 12-23 months than for those 0-11 months (29% versus 45% of those with cards), reflecting the tendency of mothers in these communities to fail to continue bringing their child for growth monitoring after the child's immunizations are completed. The project will need to concentrate on devising a workable strategy for the promotion of growth monitoring, particularly for those children 12 months and above, during the coming year.

#### **G. Maternal Care**

The project has exceeded its end-of-project target of immunizing 50% of pregnant women with TT2, based on the information obtained from the TT cards of women who have delivered in the past two years. Of all 270 mothers surveyed, including those with no cards, 55% have been immunized with two or more TT. Again, given that many of the 37% of mothers who did not have the card were probably also immunized with TT2, this coverage rate likely under estimates the true value in the project area. Regardless, it is considerably higher than the national rate estimated at baseline of 14% (DHS, 1989).

Of mothers who were not pregnant and did not wish to have another child within the next two years, only 22% were using any method at all to avoid or postpone the pregnancy, and only 14% were using a modern method. This reflects the almost complete lack of access in the project area to child-spacing services, which the project does not provide, and does not bode well for those wishing to space births adequately. In the extension period, the project should consider the possibilities for facilitating MOH effort to make modern methods available to mothers who want them and should increase, in any event, its efforts to educate mothers on the importance of child spacing and on the methods available to them, modern or not.

Because the project has trained TBAs in the project area to detect high-risk births, it should also educate the community on the importance of seeing a health

professional (including such trained TBAs) during the first trimester of pregnancy. The relatively high percentage of mothers surveyed who had a TBA attending at their delivery indicates that the community is becoming aware of the presence of this group and is willing to utilize their services. The project should seek to maintain or upgrade TBA skills where appropriate, and to promote them to the community.

Finally, messages to attend prenatal care services and to eat foods rich in iron in order to prevent anemia seem to be well understood by mothers. The project's message to eat at increased levels during the pregnancy ("eating for two") needs increased emphasis, however, given that only 25% of mothers surveyed reported doing so. Such a message must overcome both cultural and economic factors which work to the contrary.

## V. FEEDBACK SESSIONS

Feedback sessions were conducted at several different levels following completion of the survey and analysis of the results. One was held for project staff, other interviewers, CHWs, and community leaders including the Assistant District Administrator, the highest ranking political leader in the project area. Feedback was also given to the District Medical Officer of the MOH at Bundibugyo District Hospital, to the Technical Advisor for Child Survival at the local USAID Mission, and to WV field office staff in Kampala. Finally, the three project area coordinators have incorporated feedback sessions in their respective areas into their workplans for the coming month.

## VI. SURVEY COSTS

Based on an exchange rate of 1,175 Ugandan shillings to one U.S. dollar, following are the expenses incurred in the conduct of the survey and survey training. Expenses related to the use of the survey trainer, who is a staff member at WVRD, were borne by WVRD and are not included.

	<u>Cost (\$)</u>
Preparation activities:	
Transport of the trainer to and from Kampala; meals for the trainer and supervisors	483.66
Survey training (3 days):	
Accommodation and feeding of interviewers and supervisors; supplies	500.62
Conduct of survey (3 days)	877.45
Fuel:	
Petrol for vehicles; diesel for the generator	<u>902.13</u>
Total	2,763.86

## **VII. APPENDICES**

- A. English Questionnaire**
- B. Lutoro Questionnaire**
- C. List of Villages**
- D. Training of Supervisors Schedule**
- E. Training of Interviewers Schedule**
- F. Consent Form**
- G. Confidence Intervals**
- H. Frequency Tables**

APPENDIX A - QUESTIONNAIRE (ENGLISH)

WORLD VISION UGANDA CSV

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: \_\_\_/11/92 (dd/mm/yy)

Interviewer Name: \_\_\_\_\_

Supervisor: \_\_\_\_\_

1. Name and age of mother

Name \_\_\_\_\_ Age (years) \_\_\_\_\_

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

Name \_\_\_\_\_

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, rugs, etc. [ ]
- c. Harvesting, fruit pickers [ ]
- d. Selling agricultural products or livestock [ ]
- e. Selling foods, dairy products [ ]
- f. Shop keeper, street vendor [ ]
- g. Salaried worker [ ]
- h. 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. Older children [ ]
- d. Relatives [ ]
- e. Neighbors/friends [ ]
- f. Maid [ ]

### 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?

- 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 porridge or mashed foods?

- 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 papaya?
1. Yes [ ]
  2. No [ ]
  3. Doesn't know [ ]
- f. Are you giving **(name of child)** leafy green vegetables such as dodo, sombe, or ebisokoro?
1. Yes [ ]
  2. No [ ]
  3. Doesn't know [ ]
- g. Are you giving **(name of child)** meat or fish?
1. Yes [ ]
  2. No [ ]
  3. Doesn't know [ ]
- h. Are you giving **(name of child)** peanuts or beans?
1. Yes [ ]
  2. No [ ]
  3. Doesn't know [ ]
- i. Are you giving **(name of child)** eggs or yogurt?
1. Yes [ ]
  2. No [ ]
  3. Doesn't know [ ]
- j. Are you adding honey or sugar to **(name of child)**'s meals?
1. Yes [ ]
  2. No [ ]
  3. Doesn't know [ ]
- k. 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. Avoid bottle feeding of baby [ ]
- f. Relactation (mother can exclusively breastfeed again) [ ]
- g. Maintain proper nutrition [ ]
- 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 or sugar to food [ ]
- c. Give food rich in protein, such as meat, fish, or nuts [ ]
- d. Give food rich in iron, such as green, leafy vegetables [ ]
- e. Give food rich in vitamins, such as fruit [ ]
- 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. banana juice, porridge) [ ]
- 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 [ ]
- 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.

Have the mother explain to you how to prepare SSS or ORS from a packet.

Did the mother mention each of the following?

- |                         |     |    |
|-------------------------|-----|----|
| 1. Wash hands           | yes | no |
| 2. Use drinking water   | yes | no |
| 3. Use clean containers | yes | no |

Did the mother mention the correct measurements to use?

yes \_\_\_ no \_\_\_

Have the mother show you the containers/utensils that she uses.

- |                        |     |    |
|------------------------|-----|----|
| Are they available?    | yes | no |
| Are they correct size? | yes | no |

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 foods with high caloric content       | [ ] |
| d. Give more foods than usual                 | [ ] |
| 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. Use clean utensils/containers when preparing food               | [ ] |
| i. Boil water  | [ ] |
| j. Other (specify) _____   | [ ] |

### IMMUNIZATIONS

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

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

28. At what age should (name of child) receive measles vaccine?

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

29. 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 [ ]

30. 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 [ ]

31. Do you have an immunization card for (name of child)?

- 1. Yes (must see card) [ ]
- 2. Lost it ---> go to 34 [ ]
- 3. No ---> go to 34 [ ]

32.

Look at the vaccination 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		___/___/___

## GROWTH MONITORING

33.

Look at the growth monitoring section of the immunization card and record whether or not the child has been weighed in the last three months.

- |        |     |
|--------|-----|
| 1. Yes | [ ] |
| 2. No  | [ ] |

## MATERNAL CARE

34. Do you have a tetanus toxoid card?

- |            |                     |
|------------|---------------------|
| 1. Yes     | (must see card) [ ] |
| 2. Lost it | ---> go to 36 [ ]   |
| 3. No      | ---> go to 36 [ ]   |

35.

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

- |                |     |
|----------------|-----|
| 1. One         | [ ] |
| 2. Two or more | [ ] |

36. Are you pregnant now?

- |                 |                   |
|-----------------|-------------------|
| 1. Yes          | ---> go to 40 [ ] |
| 2. No           | [ ]               |
| 3. Doesn't know | [ ]               |

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

- |                 |                   |
|-----------------|-------------------|
| 1. Yes          | ---> go to 40 [ ] |
| 2. No           | [ ]               |
| 3. Doesn't know | [ ]               |

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

- |        |                   |
|--------|-------------------|
| 1. Yes | [ ]               |
| 2. No  | ---> go to 40 [ ] |

39. What is the main method you or your husband are using now to avoid or postpone getting pregnant?
1. Tubal ligation/vasectomy [ ]
  2. Injections [ ]
  3. Pill [ ]
  4. IUD [ ]
  5. Barrier method/diaphragm [ ]
  6. Condom [ ]
  7. Foam/gel [ ]
  8. Exclusive breastfeeding [ ]
  9. Rhythm/calendar [ ]
  10. Abstinence [ ]
  11. Coitus interruptus [ ]
  12. Other (specify) \_\_\_\_\_ [ ]
40. How soon after a woman knows she is pregnant should she see a health professional (physician, nurse, trained TBA, midwife)? (Probe for months.)
1. First trimester, 1-3 months [ ]
  2. Middle of pregnancy, 4-6 months [ ]
  3. Last trimester, 7-9 months [ ]
  4. No need to see health worker [ ]
  5. Doesn't know [ ]
41. 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) \_\_\_\_\_ [ ]
42. When you were pregnant with (name of child) did you visit a health center for pregnancy or prenatal care?
1. Yes [ ]
  2. No [ ]
43. 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 [ ]
44. 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 (LUTORO)

WORLD VISION UGANDA CSV

IDNUM \_\_\_\_\_

PVO CHILD SURVIVAL EBIKAGUZO HA KUMANYA N'OKUKORA

Ebikaguzo byona bikaguzibwe omukazi anyakwine omwana owali hansi yemyaka ebiri y'obukuru.

Ebiro by'okwezi akagulizibweho \_\_\_/11/92

Amabara ga kikaguzo \_\_\_\_\_

Nyampara \_\_\_\_\_

1. Amabara n'obukuru bwanyina Mwana  
Amabara . . . . . [Emyakaye] . . . . .
2. Amabara n'obukuru bwomwana owali hansi y'emyaka ebiri.

Amabara . . . . .

Ekiro yazalirweho \_\_\_/\_\_\_/\_\_\_ Obukurubwe [Mumyezi] . . . . .

**OBWEGESEBWA BW'OMUKAZI/EKYAKORA, RUNDI AKORAKI?**

3. Okahika ha Idaraki omukwegesibwa kwawe?
  1. Busaho [ ]
  2. Mu primary baitu timanyire kusoma [ ]
  3. Mu Primary kandi manyire kusoma [ ]
  4. Mu siniya n'okukira ho [ ]
4. Emirimo yawe ogikorra hara nenju yawe?
  1. Ego [ ]
  2. Nangwa [ ]
5. Okorra omulimo gwona ogukutahiza sente? (Ebigarukwamu ebyembaganiza; byona bihandike.)
  - a. Busaho [ ]
  - b. Ebyengaro, kuruka ebibo, ebirago n'ebindi [ ]
  - c. Ngesa ebyomumisiri, nsoroza ebijuma [ ]
  - d. Ntunda ebirimwa, n'ebyamatungo [ ]
  - e. Ntunda ebyokulya, amata, amagita, n'amahuli [ ]
  - f. Ntunda muduuka, mbungya ebitundwa [ ]
  - g. Nkorra empeera [ ]
  - h. Ebindi (soborra) [ ]

6. Noha alera (Nanka..) obwoba otali muka? (Ebigarukwamu ebyembaganiza bihandiike bulikimu.)

- a. Ngenda nawe [ ]
- b. Ise [ ]
- c. Bakurube [ ]
- d. Abobuzaale [ ]
- e. Abatahi/Abanywani [ ]
- f. Yaya [ ]

**OKWONKYA N'EBYE ENDIISA**

7. Ngyonkya (Nanka..)?

- 1. Ego ---> Genda ha kikaguzo kya 9 [ ]
- 2. Nangwa [ ]

8. Orayonkeze (Nanka...)?

- 1. Ego [ ]
- 2. Nangwa ---> Genda ha kikaguzo kya 10 [ ]

9. Hanyuma y'okuzara okatwaraho kasumiki nukwo oyonkye (Nanka..) omurundi gwokubanza?

- 1. Omu kasumi kesaha emu azairwe [ ]
- 2. Hagati ye saha emu kuhikya hasaha munana [ ]
- 3. Hanyuma y'esaha munana n'okukiraho ndamazire kuzara [ ]
- 4. Tindukwijuka [ ]

10 a. (Nanka ogu) nomugabira amaizi?

- 1. Ego [ ]
- 2. Nangwa [ ]
- 3. Timanyire [ ]

b. (Nanka..) nomugabira amata g'ente, g'embuzi, rundi ag'ensano?

- 1. Ego [ ]
- 2. Nangwa [ ]
- 3. Timanyire [ ]

c. (Nanka..) omugabira ebyokunywa nkobusera rundi ebyokuhuuta nkomukubi oguhonzirwe?

- 1. Ego [ ]
- 2. Nangwa [ ]
- 3. Timanyire [ ]

27

- d. Nanka omugabira ensande rundi ebi juma?
1. Ego [ ]
  2. Nangwa [ ]
  3. Timanyire [ ]
- e. (Nanka..) omugabira ebyokulya nka karoti, amapapali, emiyembe?
1. Ego [ ]
  2. Nangwa [ ]
  3. Timanyire [ ]
- f. (Nanka..) nomugabira emikubi erukwiragura nka dodo, sombe, ebisokoro?
1. Ego [ ]
  2. Nangwa [ ]
  3. Timanyire [ ]
- g. (Nanka..) nomugabira enyama rundi ensamaki?
1. Ego [ ]
  2. Nangwa [ ]
  3. Timanyire [ ]
- h. (Nanka..) nomugabira kaho, ebihimba, rundi soya?
1. Ego [ ]
  2. Nangwa [ ]
  3. Timanyire [ ]
- i. (Nanka..) nomugabira amahuli, rundi amacunda
1. Ego [ ]
  2. Nangwa [ ]
  3. Timanyire [ ]
- j. (Nanka..) omu byokulyabye rundi omubyokunywabye omuteeramu sukali rundi obwoki?
1. Ego [ ]
  2. Nangwa [ ]
  3. Timanyire [ ]
- k. Omubyokulya bye (Nanka..) omuteramuki ebisajwa, amagita, engazi, Autu?
1. Ego [ ]
  2. Nangwa [ ]
  3. Timanyire [ ]

11. Abakugu mu by'obwomezi nibakigumya ngu kikuru kwonkya omwana omu myaka ebiri eyokubanza mu bwomezibwe. Nyina omwana asobora kukora ki nukwo agumizeernu nayonkya? (Ebigarukwamu ebyembaganiza byona bihandike.)

- a. Timanyire [ ]
- b. Atandikireho kwonkya aho naho obwaramara kuzara (Omwana batamufereza amataga nyina ag'okubanza agekwasire) [ ]
- c. Yonkya kacu kacu nukwo amabere gagabise [ ]
- d. Kunabya amabeere n'enywanta [ ]
- e. Kwerinda kutamunywisiza ha mupiira n'ecupa [ ]
- f. Nyina mwana kumucukura kandi akanugarra ha mabere gonka hanyuma y'akasumi [ ]
- g. Omukyara arukwonkya aikale naliisibwa kurungi [ ]
- h. Ebindi nebindi (soborra)\_\_\_\_\_ [ ]

12. Nyina mwana nasemerra atandikedi kugabira omwana ebyokulya kwongerereza ha kwonka kwe?

- 1. Atandikire hagati y'amezi ana n'omukaaga [ ]
- 2. Atandike kumugabira karaho emyezi ena etakahikire [ ]
- 3. Atandike kumugabira ha myezi mukaga n'okukiraho [ ]
- 4. Timanyire [ ]

13. Byokulyaki ebi ebisemerire kwongerwa ha kwonka? (Ebigarukwamu byembaganiza byona bihandiike.)

- a. Timanyire [ ]
- b. Mu byokulyabye tamu amagita rundi sukaali [ ]
- c. Mugabire ebyokulya ebyombeka omubiri nka enyama, ensamaki, n'ebihimba [ ]
- d. Mugabire ebyokulya ebireeta esagama nk'emikubi erukwiragura (dodo, sombe, ebisokooro, rundi ebisunsa) [ ]
- e. Mugabire ebyokulya ebiyamba omubiri kurwanisa endwara nka ebijuma [ ]
- f. Ebindi nebindi (soborro)\_\_\_\_\_ [ ]

### ENDWARA Z'OKUTURUKA

14. (Nanka..) ararwaireho kuturuka omu wiki ibiri ezihingwire?

- 1. Ego [ ]
- 2. Nangwa ---> Genda ha kikaguzo kya 21 [ ]
- 3. Tindukwijuka ---> Genda ha kikaguzo kya 21 [ ]

15. (Nanka..) obwakaba arwaire kuturuka (wamwonkyaga)... (somera nyima mwana binu)...

- 1. Okukira nkoku omwonkya bulikiro (rundi) [ ]
- 2. Nka buli kiro (rundi) [ ]
- 3. Okutainganiza nkoku oyonkya buli kiro? [ ]
- 4. Okalekera kimu kumwonkya [ ]
- 5. Atayonke nakati [ ]

16. (Nanka..) obuyali arwaire kuturuka wamugabiraga ebyokunywa ebindi... (somera nyina mwana binu)...
1. Okukira nkoku omugabira bulikiro (rundi) [ ]
  2. Nkoku omugabira bulikiro (rundi) [ ]
  3. Okutainganiza nkoku omugabira bulikiro? [ ]
  4. Okalekera kimu kumugabira [ ]
  5. Namwonkyaga kwonka [ ]
17. (Nanka..) obwakaba arwaire kuturuka wamugabiraga ebyo—kunywa nk'obusera rundi ebyokulya ebigumire... (Somera nyina mwana binu)...
1. Kuhinguzaho emirundi okira kumugabira (rundi) [ ]
  2. Nka buli kasumi (rundi) [ ]
  3. Okutainganiza hamirundi okira kumugabira? [ ]
  4. Okalekera kimu kumugabira [ ]
  5. Wamwonkyaga kwonka [ ]
18. (Nanka..) obwakabe arwaire kuturuka okamuha bujanjabiki obworaba wamujanjabire? (Ebigarukwamu byembaganiza byona bihandike.)
- a. Ntamuhe bujanjabi bwona [ ]
  - b. Nkamugabira ORISI eya kapakiti [ ]
  - c. Nkamutaburra sukali, ekisura n'amaizi [ ]
  - d. Nkamugabira ebyokunywa ebijungirwa muka nka ensande, n'ebikaka ebikamwirwe, n'obusera [ ]
  - e. Bakamutaho kainamira yamaizi (Nebindi) [ ]
  - f. Bakamugabira emibazi eyekijungu eyetanga kuturuka [ ]
  - g. Ebindi nebindi (soborra) \_\_\_\_\_ [ ]
19. (Nanka..) obuyarwaire kuturuka okakaguliriza amagezi agarukwata ha kuturuka rundi enjanjaba yomuntu arukuturuka?
1. Ego [ ]
  2. Nangwa [ ] ---> Genda ha kikaguzo 21 [ ]
20. Amagezi agarukukwata hakuturuka rundi agokujanjaba (nanka..) kuturuka okagekaguza hali oha? (Ebigarukwamu byembaganiza obihandiike kimu kimu.)
- a. Ha Irwarro erikoto [ ]
  - b. Ha clinika ya Gavumenti [ ]
  - c. Omu basaho abakwekozesha [ ]
  - d. Omu duuka y'embibazi [ ]
  - e. Hali makenzi [ ]
  - f. Ha muraguzi [ ]
  - g. Ha musehenyi [ ]
  - h. Ha owo'obuzaale/enganjani [ ]
  - i. Handi (soborra) \_\_\_\_\_ [ ]

21. Bwokurorrahoki obwakukuhambiriize kuserra amagezi rundi okujanjaba okuturuka kwomwana (Nanka..)? (Ebigarukwamu ebyebaganiza obihandiike byona.)

- a. Timbumanyire [ ]
- b. Okutanaka [ ]
- c. Omuswija [ ]
- d. Okwoma seminwa, kugwayo amaiso, kunyaara otukali tuke, ( kahoibwamu amaizi mumubiri) [ ]
- e. Kumara obusumi bwingi naturuka (nka ebiro 14) [ ]
- f. Kuturuka iswa lirumu esagama [ ]
- g. Kwangirwa kulya [ ]
- h. Okuceka nokuhwa amari [ ]
- i. Ebindi soborra \_\_\_\_\_ [ ]

22. Bintuki ebikuru ebyosemeriire kukora kakuba (Nanka..) akwatwa kuturuka? (Ebigarukwamu by'ebaganiza bihandiike byonna.)

- a. Timanyire [ ]
- b. Mutandikise ebyokunywa aho naho [ ]
- c. Gabira omwana ebyokunywa bingi kukira ebyabuli kiro [ ]
- d. Kutabura ORISI omulingo oguhikire, kutabura sukali, ekisura n'amaizi n'okubigabira omwana, omunywise n'ebindi [ ]
- e. Omwana mugabire obwokulya bukebuke buli kacu [ ]
- f. Omwana mutwale hairwarro erikuru rundi kilinika ya Govumenti [ ]
- g. Omwana muliise muno kukira bulijo obwaba yakakira kuturuka [ ]
- h. Otamuha ebyokunywa [ ]
- i. Otamuha ebyokulya [ ]
- j. Ebindi (soborra) \_\_\_\_\_ [ ]

23. Omanyire kutabura ekyokunywa ekya sukali n'ekisura rundi ekyokunywa ekindi ekisobora kugarramu omurwaire arukuturuka amaizi?

- 1. Ego [ ]
  - 2. Tinduku kimanya kurungi [ ]
  - 3. Nangwa [ ]
- > Genda ha kikaguzo kya 25 [ ]

Gamba nyina omwana akusoborre omulingo gw'okutabura ekyokunywa ekya sukali n'ekisura rundi ORISI ey'akapakiti.

Nyina omwana binu abigambire?

- |  |         |            |
|--|---------|------------|
| 1. Kunaba engaro                       | ego ___ | nangwa ___ |
| 2. Kukozeza amaizi ag'okunywa amayonjo | ego ___ | nangwa ___ |
| 3. Kukozeza ebikwato ebionjo           | ego ___ | nangwa ___ |

Nyina omwana ayolekere ebipimo ebihikire ebyeyambisibwa?

ego \_\_\_ nangwa \_\_\_

Leka nyina omwana akwoleke ebikwato akwatiramu.

Abiine biri aho?

ego \_\_\_ nangwa \_\_\_

Nibyoo ebipimo ebihikire?

ego \_\_\_ nangwa \_\_\_

25. Biki ebikuru nyina omwana ebyasemeriire okukora omwana obwaba nakyakira endwara y'okuturuka? (Ebigarukwamu by'embaganiza bihandiike byonna)

- |   |     |
|---|-----|
| a. Timanyire                                      | [ ] |
| b. Omwana mugabire obwokulya bukebuke buli kacu   | [ ] |
| c. Mugabire ebyokulya ebigarramu amani            | [ ] |
| d. Mugabire ebyokulya bingiho kukira ebyabulikiro | [ ] |
| e. Ebindi soborra _____                           | [ ] |

26. Osobora kukoraki kutangira omwana wawe atakwatwa kuturuka? (Ebigarukwamu by'embaganiza bihandiike byonna)

- |  |     |
|--|-----|
| a. Timanyire   | [ ] |
| b. Naaba mungaro otakatekanize byokulya, otakagabiire omwana naiwe otakaliire    | [ ] |
| c. Ebyokulya bifundikire bitahikwaho ensohera                                    | [ ] |
| d. Amaizi agokunywa n'agokucumba agaihe omwiziba eryombekerwe lyaziti wa kurungi | [ ] |
| e. Amaizi agaleetere kandi agaahule omubikwato ebionjo                           | [ ] |
| f. Weyambise ebyoloni  | [ ] |
| g. Werinde kutakwata amazi   | [ ] |
| h. Kozesa ebikwato ebionjo omukuteekaniza ebyokulya                              | [ ] |
| i. Cumba amaizi  | [ ] |
| j. Ebindi soborra _____  | [ ] |

### OKUGEMESA

27. (Nanka..) aragemerweho?

- |              |     |
|--------------|-----|
| 1. Ego       | [ ] |
| 2. Nangwa    | [ ] |
| 3. Timanyire | [ ] |

28. Omwana aseneriire kuhikya bukuruki nukwo agemwe oruseru? (gamba ameezi)

- 1. [     ]
- 2. Timanyire [     ]

29. Osohora kumpa ensonga enkuru habwaki abakazi b'enda basemeriire kugemwa hab'womugangamo (Tetanus)?

- 1. Okutangira omwana na nyina endwara ey'omugangamo [     ]
- 2. Kutangira nyina mwana wenka omugangamo [     ]
- 3. Kutangira omwana wenka omugangamo [     ]
- 4. Timanyire [     ]

30. Omukazi w'enda asemeriire aterwe ebikato bingaha ebyomugangamo nukwo omwana mundaye ata kwatwa omugangamo?

- 1. Kimu [     ]
- 2. Bibiri [     ]
- 3. Kukira ha bibiri [     ]
- 4. Ataterwa na kimu [     ]
- 5. Timanyire [     ]

31. Oine kaada yokugemesa omwana (Nanka..)?

- 1. Ego (kandi asemeriire agikwoleke) [     ]
- 2. Ekabura ---> Genda hakikaguzo kya 34 [     ]
- 3. Nangwa ---> Genda hakikaguzo kya 34 [     ]

32.

---

Dora ha kaada yo'kugemesa ohandiike ebiro by'okwezi bya buli kugemesa kwona mummyanya enu.

(kiro/kwezi/mwaka)

Akakonko (RCG)	_/_/_
Polio	1 _/_/_ 2 _/_/_ 3 _/_/_
DPT	1 _/_/_ 2 _/_/_ 3 _/_/_
Oruseru	_/_/_
Measles	_/_/_

---

## KUROLERRA ENKURA Y'OMWANA

33.

Dora ha kikaada kyomwana nukwo ohandiike binu: Omumezi asatu agahingwire omwana onu arapimirwe?

1. Ego [ ]
2. Nangwa [ ]

## ENDOLERRA Y'ABAKYARA

34. Oina kaada eibakugemeraho omugangamo?

1. Ego (oine kurora kaada) [ ]
2. Ekabura ---> genda hakikaguzo kya 36 [ ]
3. Nangwa ---> genda hakikaguzo kya 36 [ ]

35.

Dora ha kaada eibagemeraho omugangamo ohandiike omuhendo gw'ebikato by'omugangamo omumwanya gunu:

1. Kimu [ ]
2. Bibiri nokikiraho [ ]

36. Hati bunu oine enda?

1. Ego ---> Genda ha kikaguzo kya 40 [ ]
2. Nangwa [ ]
3. Timanyire [ ]

37. Omu myaka ebiri erukwija wakugondeze kuzara omwana ondi?

1. Ego ---> Genda ha kikaguzo kya 40 [ ]
2. Nangwa [ ]
3. Tinkacwiremu [ ]

38. Oine omulingo gwona ogwoorukweyambisa bwire bunu nukwo otazarra haihi haihi?

1. Ego [ ]
2. Nangwa ---> Genda ha kikaguzo kya 40 [ ]

39. Mulingoki omukuru iwe rundi baro ogumurukweyambisa kwerinda kucwererra?

1. Omusaija bakamusara obuseke obuletamu obusito rundi omukazi bakamuboha enseke [ ]
2. Nterwa enkinzo [ ]
3. Nkozesa obujuma [ ]
4. Nyinenda yange bakagitamu enpeta (IUD) [ ]
5. Ha murwa gwa nyinenda njwekaho akapiira [ ]
6. Lba nyowe ajwara akapiira ha busaijabwe [ ]
7. Nkozesa omubazi gw'ekifuro omubukazi gwrite obusito [ ]
8. Nyonkya nukwo ntatwara enda [ ]
9. Mbalirra ebiro ebinsobora kutwarramu enda rundi kugenderamu mu bigere (Omukwezi) [ ]
10. Nyowe naiba nyowe twerinda kutate:ana-habwaakasumi [ ]
11. Lba nyowe obwaba ali haihi kumara, aihamu obusaija bwe asesa obusito aheru [ ]
12. Ebindi n'ebindi \_\_\_\_\_ [ ]

40. Omukazi obwamanya ngu atwaire enda asemeriire kurora ngana di nabakugu omu byokujanjaba abakazi benda (nka Dakitali, Naasi rundi Omuzalisa rundi omusehenyi) "omubutisya"? (Mukagulirize asemeriire arolengana nawe enda ehikize meeziki.)

1. Kutandika n'okwezi kwokubanza kuhikya mu kwakasatu [ ]
2. Kutandika nokwezi kwakana kuhikya mu kwa mukaga [ ]
3. Kutandika nokwezi kwa musanju kuhikya mukwa mwenda [ ]
4. Tikirukwetagisa kurorangana n'omukugu omubyokujanjaba abakazi b'enda [ ]
5. Timanyire [ ]

41. Byokulyaki ebisemeriire kuliibwa omukazi wenda nukwo ayerinde kuhoibwamu esagama habwokutwara enda? (Ebigarukwamu byembaganiza byoona hihandiike.)

- a. Timbimanyire [ ]
- b. Ebyokulya ebyombeka omubiri n'ebigarramu esagama nka (amahuli, ensamaki, enyama) [ ]
- c. Emikubi erukwiragura erukugarramu esagama [ ]
- d. Ebindi bisoborreho \_\_\_\_\_ [ ]

42. Obuwali otwaire enda yomwana (nanka..) okahikaho mberebajanjabira hoona nka ha clinika za Gavumenti, nukwo oheebwe amagezi otakazaire?

1. Ego [ ]
2. Nanga [ ]

43. Obuwali oine enda yomwana (nanka..) ebyokulya ebiwalyaga.... (Musomere ebihandikirwe hanu:)

1. Byakirahoga ebyokira kulya bulikiro? [ ]
2. Byainganaga n'ebiyokira kulya buli kiro? [ ]
3. Byabaga bike kukiraho ebyokira kulya buli kiro? [ ]
4. Tinkwijuka [ ]

44. Obuwazaire omwana (Nanka..) nooha yamusaliire nokuboha orulerarwe?

- |    |  |     |
|----|--|-----|
| 1. | Ninyowe nyenka   | [ ] |
| 2. | Omu ha bomuka yaitu  | [ ] |
| 3. | Omusehenyi waitu   | [ ] |
| 4. | Omu ha bakugu abatendekerwe nka (Naasi, Dakitali, omuzalisa) | [ ] |
| 5. | Abandi soborra _____   | [ ] |
| 6. | Tindukwijuka   | [ ] |

**APPENDIX C**  
**BCSP POPULATION DATA AS OF AUGUST 1992**

Village (RCI)	Total Population
Kabasindagizi*	213
Nyabusokoma	502
Karambi	233
Nyabikungu*	387
Nombe I	209
Nombe II*	421
Kacwamba	271
Nyabuhuru*	402
Nyakatooke	275
Itojo	229
Wanka*	306
Kanyamukole	329
Karugutu T.C.*	564
Nyambigha	320
Kyabandara*	514
Ibanda I	315
Ibanda II*	383
Ibanda III	419
Kisina*	297
Karuwe	153
Economic	192
Itale	278
Masandama*	580
Rwebisengo*	1,173
Makondo*	447
Kanyamukura*	352
Harukoba	401

Village (RCI)	Total Population
Majumba I	344
Majumba II*	154
Kiranga I	357
Kiranga II*	357
Rwebinyonyi	110
Bweramule*	1,058
Kayanja	326
Kabimbiri*	523
Sasa*	542
Haibale*	680
Kibuuku	520
Butungama*	464
Budiba*	860
Masojo	260
Kasungu*	662
Nyakasenyi*	792
Kyabukunguru*	570
Masaka*	802
Rwangara*	690
Katanga	474
Kamuga*	410
Mulango	132
Katolingo	121
Ntoroko Central*	484
Ntoroko North*	641
Kanara	667
Ntoroko West*	370
<b>TOTAL</b>	<b>23,535</b>

\*Selected Cluster

## APPENDIX D

### SCHEDULE FOR TRAINING OF SUPERVISORS November 4, 1992

<u>Time</u>	<u>Activity/Topic</u>
7:45 - 8:30	Breakfast
8:30 - 9:00	Devotions
9:10 - 10:10	Administrative issues; purpose of survey
10:10 - 10:30	Break
10:30 - 11:30	Sample size; cluster method; choosing clusters
11:30 - 12:00 PM	Starting point selection
12:00 - 1:00	Questionnaire
1:00 - 2:00	Lunch
2:00 - 2:30	Questionnaire (continued)
2:30 - 4:00	Role play
4:00 - 4:30	Break
4:30 - 5:00	Supervision
5:00 - 6:00	Hand tabulation
6:00 - 6:15	Site assignments

## APPENDIX E

### SCHEDULE FOR TRAINING OF INTERVIEWERS November 5, 1992

<u>Time</u>	<u>Activity/Topic</u>
7:45 - 8:30	Breakfast
8:30 - 9:00	Devotions
9:00 - 9:10	Welcome and introductions
9:10 - 9:40	Administrative issues
9:40 - 10:10	Background of project and purpose of survey
10:10 - 10:30	Break
10:30 - 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 - 4:45	Hand tabulation
4:45 - 6:00	Site assignments, supervision, and field test

**APPENDIX F**  
**CONSENT FORM**

My name is \_\_\_\_\_, and I am representing World Vision. I would like to ask you some questions so that health workers can learn more about the health of children in your village. Some questions are about the health of your child, and some questions are asked to learn what you do when your child is sick. Some questions are asked about family planning (or child spacing). Asking these questions will help us to know what to teach mothers and how to plan programs in order to improve the health of children in this village.

We are asking these questions to mothers with children under two years of age. You have been randomly selected from among all mothers who live in the project area and have children less than two years of age. Every effort will be made to keep the information you provide me confidential. Reports will not mention any individuals.

The interview will take about 25 minutes. If you decide not to participate, it will not affect the health care you would otherwise receive. If you do participate, you can choose not to answer any question or end the interview at any time.

If you have questions about the study or would like to know about the results, you can contact (supervisor) at \_\_\_\_\_.

May I ask you these questions?

Village: \_\_\_\_\_

Name of Interviewer: \_\_\_\_\_

Date: \_\_\_\_\_

## APPENDIX G - CONFIDENCE INTERVALS

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

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

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

### **Children under four months who were exclusively breastfeeding**

$$\begin{aligned} 95\% \text{ Confidence Interval} &= .27 \pm (1.96)(\text{square root of } [(.27 \times .73)/48]) \\ &= .27 \pm .13 \\ &= (.14, .40) \text{ or } (14\% \text{ to } 40\%) \end{aligned}$$

### **Mothers who knew correct age for weaning**

$$\begin{aligned} 95\% \text{ Confidence Interval} &= .65 \pm (1.96)(\text{square root of } [(.65 \times .35)/270]) \\ &= .65 \pm .06 \\ &= (.59, .71) \end{aligned}$$

### **Children who had diarrhea in previous two weeks**

$$95\% \text{ Confidence Interval} = (.24, .34)$$

### **Mothers who breastfed at normal or increased levels during the child's diarrhea**

$$95\% \text{ Confidence Interval} = (.46, .68)$$

### **Mothers who gave usual or increased amounts of other fluids during the child's diarrhea**

$$95\% \text{ Confidence Interval} = (.47, .69)$$

### **Mothers who gave usual or increased amounts of foods during the child's diarrhea**

$$95\% \text{ Confidence Interval} = (.36, .58)$$

### **Mothers who treated their child's diarrhea with ORS, SSS, or home-based fluids**

$$95\% \text{ Confidence Interval} = (.33, .55)$$

### **Mothers who said that they should treat their child's diarrhea with ORT**

$$95\% \text{ Confidence Interval} = (.54, .66)$$

### **Mothers who could correctly state the formula for preparation of ORS or SSS**

$$95\% \text{ Confidence Interval} = (.31, .43)$$

### **Mothers who could not name any measures to take to prevent diarrhea in their child**

$$95\% \text{ Confidence Interval} = (.27, .39)$$

**Children who were reported to have received immunizations**

95% Confidence Interval = (.83, .91)

**Mothers who knew correct age for a child to receive measles vaccine**

95% Confidence Interval = (.68, .78)

**Mothers who knew that two or more TT are needed to protect a newborn from tetanus**

95% Confidence Interval = (.82, .90)

**Children who had an immunization card**

95% Confidence Interval = (.68, .78)

**Children 12 to 23 months who were fully immunized**

95% Confidence Interval = (.46, .64)

**Children with a card who had been weighed in the previous three months**

95% Confidence Interval = (.31, .45)

**Mothers who had a TT card**

95% Confidence Interval = (.57, .69)

**Mothers who had received two or more TT injections**

95% Confidence Interval = (.49, .61)

**Non-pregnant mothers not wanting another child in the next two years who were using any method of family planning**

95% Confidence Interval = (.16, .28)

**Non-pregnant mothers not wanting another child in the next two years who were using a modern method of family planning**

95% Confidence Interval = (.09, .19)

## APPENDIX H - FREQUENCY TABLES

Survey Mate Frequencies Program Uganda tables

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

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Mean = 25.14                      Standard Deviation = 5.90

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Value		Frequency		Percentage		Cumulative Percentage
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BLANK		4		0.00		0.00
16		5		1.88		1.88
17		15		5.64		7.52
18		24		9.02		16.54
19		13		4.89		21.43
20		25		9.40		30.83
21		5		1.88		32.71
22		10		3.76		36.47
23		15		5.64		42.11
24		12		4.51		46.62
25		21		7.89		54.51
26		16		6.02		60.53
27		13		4.89		65.41
28		12		4.51		69.92
29		10		3.76		73.68
30		31		11.65		85.34
31		3		1.13		86.47
32		9		3.38		89.85
33		1		0.38		90.23
34		5		1.88		92.11
35		6		2.26		94.36
36		4		1.50		95.86
37		2		0.75		96.62
38		2		0.75		97.37
39		4		1.50		98.87
40		2		0.75		99.62
42		1		0.38		100.00

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Total		266		100.00		100.00
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Field No. 9 Age of Child in Months (AGE-KID)

Mean = 10.44                  Standard Deviation = 6.40

Value	Frequency	Percentage	Cumulative Percentage
0	13	4.81	4.81
1	12	4.44	9.26
2	9	3.33	12.59
3	14	5.19	17.78
4	10	3.70	21.48
5	15	5.56	27.04
6	10	3.70	30.74
7	16	5.93	36.67
8	11	4.07	40.74
9	16	5.93	46.67
10	12	4.44	51.11
11	16	5.93	57.04
12	14	5.19	62.22
13	13	4.81	67.04
14	9	3.33	70.37
15	15	5.56	75.93
16	8	2.96	78.89
17	10	3.70	82.59
18	13	4.81	87.41
19	5	1.85	89.26
20	12	4.44	93.70
21	3	1.11	94.81
22	9	3.33	98.15
23	5	1.85	100.00
Total	270	100.00	100.00

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

Mean = 2.04                  Standard Deviation = 0.99

Value	Frequency	Percentage	Cumulative Percentage
1	121	44.81	44.81
2	25	9.26	54.07
3	117	43.33	97.41
4	7	2.59	100.00
Total	270	100.00	100.00

Field No. 11 Work Away from Home (WORKAWAY)

Mean = 1.64 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
1	98	36.30	36.30
2	172	63.70	100.00
Total	270	100.00	100.00

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

Mean = 1.61 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	106	39.26	39.26
2	164	60.74	100.00
Total	270	100.00	100.00

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

Mean = 1.92 Standard Deviation = 0.27

Value	Frequency	Percentage	Cumulative Percentage
1	22	8.15	8.15
2	248	91.85	100.00
Total	270	100.00	100.00

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

Mean = 1.84 Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
1	44	16.30	16.30
2	226	83.70	100.00
Total	270	100.00	100.00

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

Mean = 1.84 Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
1	43	15.93	15.93
2	227	84.07	100.00
Total	270	100.00	100.00

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

Mean = 1.79 Standard Deviation = 0.41

Value	Frequency	Percentage	Cumulative Percentage
1	57	21.11	21.11
2	213	78.89	100.00
Total	270	100.00	100.00

Field No. 17 Is a shopkeeper or street vendor (IGA-SHOP)

Mean = 1.97 Standard Deviation = 0.17

Value	Frequency	Percentage	Cumulative Percentage
1	8	2.96	2.96
2	262	97.04	100.00
Total	270	100.00	100.00

Field No. 18 Is a salaried worker (IGA-SLRY)

Mean = 2.00 Standard Deviation = 0.06

Value	Frequency	Percentage	Cumulative Percentage
1	1	0.37	0.37
2	269	99.63	100.00
Total	270	100.00	100.00

Field No. 19 Does other for income (IGA-OTHk)

Mean = 1.94 Standard Deviation = 0.23

Value	Frequency	Percentage	Cumulative Percentage
1	15	5.56	5.56
2	255	94.44	100.00
Total	270	100.00	100.00

Field No. 20 Mother takes child with her (CT-MOTHR)

Mean = 1.75 Standard Deviation = 0.43

Value	Frequency	Percentage	Cumulative Percentage
1	68	25.19	25.19
2	202	74.81	100.00
Total	270	100.00	100.00

Field No. 21 Husband takes care if mom away (CT-HSBND)

Mean = 1.95 Standard Deviation = 0.22

Value	Frequency	Percentage	Cumulative Percentage
1	14	5.19	5.19
2	256	94.81	100.00
Total	270	100.00	100.00

Field No. 22 Older children take if mom away (CT-SBLNG)

Mean = 1.60 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	109	40.37	40.37
2	161	59.63	100.00
Total	270	100.00	100.00

Field No. 23 Relatives take if mom away (CT-RLTVE)

Mean = 1.73 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
1	74	27.41	27.41
2	196	72.59	100.00
Total	270	100.00	100.00

Field No. 24 Neighbors take child if mom away (CT-NGHBR)

Mean = 1.97 Standard Deviation = 0.18

Value	Frequency	Percentage	Cumulative Percentage
1	9	3.33	3.33
2	261	96.67	100.00
Total	270	100.00	100.00

Field No. 25 Maid takes child if mom away (CT-MAID)

Mean = 1.97 Standard Deviation = 0.16

Value	Frequency	Percentage	Cumulative Percentage
1	7	2.59	2.59
2	263	97.41	100.00
Total	270	100.00	100.00

Field No. 26 Breastfeeding Now (BF-NOW)

Mean = 1.18 Standard Deviation = 0.39

Value	Frequency	Percentage	Cumulative Percentage
1	221	81.85	81.85
2	49	18.15	100.00
Total	270	100.00	100.00

Field No. 27 Breastfed Ever (BF-EVER)

Mean = 1.04      Standard Deviation = 0.20

Value | Frequency | Percentage | Cumulative Percentage

BLANK	221	0.00	0.00
1	47	95.92	95.92
2	2	4.08	100.00
Total	49	100.00	100.00

Field No. 28 How Soon Breastfed After Delivery (BF-WHEN)

Mean = 1.77      Standard Deviation = 0.89

Value | Frequency | Percentage | Cumulative Percentage

BLANK	2	0.00	0.00
1	137	51.12	51.12
2	62	23.13	74.25
3	63	23.51	97.76
4	6	2.24	100.00
Total	268	100.00	100.00

Field No. 29 Giving Water (WATER)

Mean = 1.14      Standard Deviation = 0.34

Value | Frequency | Percentage | Cumulative Percentage

1	233	86.30	86.30
2	37	13.70	100.00
Total	270	100.00	100.00

Field No. 30 Giving Milk or Formula (MILK)

Mean = 1.36 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
1	174	64.44	64.44
2	96	35.56	100.00
Total	270	100.00	100.00

Field No. 31 Giving Semisolid Foods (SEMISLDS)

Mean = 1.30 Standard Deviation = 0.46

Value	Frequency	Percentage	Cumulative Percentage
1	190	70.37	70.37
2	80	29.63	100.00
Total	270	100.00	100.00

Field No. 32 Giving Fruits or Juices (JUICES)

Mean = 1.51 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	133	49.26	49.26
2	137	50.74	100.00
Total	270	100.00	100.00

Field No. 33 Giving Carrot Squash Mango Papaya (VIT-A)

Mean = 1.53 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	126	46.67	46.67
2	144	53.33	100.00
Total	270	100.00	100.00

Field No. 34 Giving Leafy Green Vegetables (DGLVs)

Mean = 1.31 Standard Deviation = 0.47

Value	Frequency	Percentage	Cumulative Percentage
1	185	68.52	68.52
2	85	31.48	100.00
Total	270	100.00	100.00

Field No. 35 Giving Meat or Fish (MEATFISH)

Mean = 1.35 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
1	176	65.19	65.19
2	94	34.81	100.00
Total	270	100.00	100.00

Field No. 36 Giving Peanuts Lentils Beans (BEANS)

Mean = 1.28 Standard Deviation = 0.46

Value	Frequency	Percentage	Cumulative Percentage
1	195	72.22	72.22
2	74	27.41	99.63
3	1	0.37	100.00
Total	270	100.00	100.00

Field No. 37 Giving Eggs or Yogurt (EGGS)

Mean = 1.39 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	164	60.74	60.74
2	106	39.26	100.00
Total	270	100.00	100.00

Field No. 38 Adding Honey or Sugar (HONEY)

Mean = 1.41 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	158	58.52	58.52
2	112	41.48	100.00
Total	270	100.00	100.00

Field No. 39 Adding Fat or Oil (FATOROIL)

Mean = 1.30 Standard Deviation = 0.46

Value	Frequency	Percentage	Cumulative Percentage
1	188	69.63	69.63
2	82	30.37	100.00
Total	270	100.00	100.00

Field No. 40 Doesn't Know how to keep on BF (BF-DK)

Mean = 1.58 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	114	42.22	42.22
2	156	57.78	100.00
Total	270	100.00	100.00

Field No. 41 Breastfeed soon to keep on BF (BF-SOON)

Mean = 1.96 Standard Deviation = 0.20

Value	Frequency	Percentage	Cumulative Percentage
1	11	4.07	4.07
2	259	95.93	100.00
Total	270	100.00	100.00

Field No. 42 Frequent sucking to keep on BF (BF-SUCK)

Mean = 1.92 Standard Deviation = 0.27

Value	Frequency	Percentage	Cumulative Percentage
1	22	8.15	8.15
2	248	91.85	100.00
Total	270	100.00	100.00

Field No. 43 Take care of breasts to keep on BF (BF-CARE)

Mean = 1.96 Standard Deviation = 0.19

Value	Frequency	Percentage	Cumulative Percentage
1	10	3.70	3.70
2	260	96.30	100.00
Total	270	100.00	100.00

Field No. 44 Avoid bottle to keep on BF (BF-NOBTL)

Mean = 1.98 Standard Deviation = 0.14

Value	Frequency	Percentage	Cumulative Percentage
1	5	1.85	1.85
2	265	98.15	100.00
Total	270	100.00	100.00

Field No. 45 Relactation to keep on BF (BF-RLCTT)

Mean = 1.98 Standard Deviation = 0.15

Value	Frequency	Percentage	Cumulative Percentage
1	6	2.22	2.22
2	264	97.78	100.00
Total	270	100.00	100.00

Field No. 46 Good nutrition to keep on BF (BF-NUTRN)

Mean = 1.58                      Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	113	41.85	41.85
2	157	58.15	100.00
Total	270	100.00	100.00

Field No. 47 Other to keep on BF (BF-OTHER)

Value	Frequency	Percentage	Cumulative Percentage
1	41	15.19	15.19
2	229	84.81	100.00
Total	270	100.00	100.00

Field No. 48 When to Start Adding Foods to BF (ADD-WHEN)

Mean = 1.67                      Standard Deviation = 0.98

Value	Frequency	Percentage	Cumulative Percentage
1	174	64.44	64.44
2	25	9.26	73.70
3	57	21.11	94.81
4	14	5.19	100.00
Total	270	100.00	100.00

Field No. 49 Doesn't know what add'l foods are (ADD-DK)

Mean = 1.93                      Standard Deviation = 0.26

Value	Frequency	Percentage	Cumulative Percentage
1	19	7.04	7.04
2	251	92.96	100.00
Total	270	100.00	100.00

160

Field No. 50 Should add oil or sugar to food (ADD-OIL)

Mean = 1.91 Standard Deviation = 0.29

Value	Frequency	Percentage	Cumulative Percentage
1	24	8.89	8.89
2	246	91.11	100.00
Total	270	100.00	100.00

Field No. 51 Should add food rich in protein (ADD-PRTN)

Mean = 1.28 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
1	194	71.85	71.85
2	76	28.15	100.00
Total	270	100.00	100.00

Field No. 52 Should add food rich in iron (ADD-IRON)

Mean = 1.58 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
1	114	42.22	42.22
2	156	57.78	100.00
Total	270	100.00	100.00

Field No. 53 Should add food rich in vitamins (ADD-VTMN)

Mean = 1.76 Standard Deviation = 0.43

Value	Frequency	Percentage	Cumulative Percentage
1	65	24.07	24.07
2	205	75.93	100.00
Total	270	100.00	100.00

Field No. 54 Should add other foods to BF (ADD-OTHR)

Mean = 1.65 Standard Deviation = 0.48

Value | Frequency | Percentage | Cumulative Percentage

1	94	34.81	34.81
2	176	65.19	100.00
Total	270	100.00	100.00

Field No. 55 Had Diarrhea in Last 2 Weeks (HAD-DIAR)

Mean = 1.71 Standard Deviation = 0.46

Value | Frequency | Percentage | Cumulative Percentage

1	79	29.26	29.26
2	190	70.37	99.63
3	1	0.37	100.00
Total	270	100.00	100.00

Field No. 56 Breastfed During Diarrhea (BF-DIAR)

Mean = 2.54 Standard Deviation = 1.11

Value | Frequency | Percentage | Cumulative Percentage

BLANK	191	0.00	0.00
1	11	13.92	13.92
2	34	43.04	56.96
3	21	26.58	83.54
4	6	7.59	91.14
5	7	8.86	100.00
Total	79	100.00	100.00

Field No. 57 Fluids During Diarrhea (FLUIDS-D)

Mean = 2.47 Standard Deviation = 1.19

Value | Frequency | Percentage | Cumulative Percentage

BLANK	191	0.00	0.00
1	19	24.05	24.05
2	27	34.18	58.23
3	13	16.46	74.68
4	17	21.52	96.20
5	3	3.80	100.00

Total 79 100.00 100.00

Field No. 58 Solid/semisolid Foods During Diar (FOODS-D)

Mean = 2.90 Standard Deviation = 1.33

Value | Frequency | Percentage | Cumulative Percentage

BLANK	191	0.00	0.00
1	11	13.92	13.92
2	26	32.91	46.84
3	16	20.25	67.09
4	12	15.19	82.28
5	14	17.72	100.00

Total 79 100.00 100.00

Field No. 59 Did nothing when had diarrhea (TRT-NTHG)

Mean = 1.86 Standard Deviation = 0.35

Value | Frequency | Percentage | Cumulative Percentage

BLANK	191	0.00	0.00
1	11	13.92	13.92
2	68	86.08	100.00

Total 79 100.00 100.00

Field No. 60 Gave ORS packet when had diarrhea (TRT-PCKT)

Mean = 1.58 Standard Deviation = 0.50

Value | Frequency | Percentage | Cumulative Percentage

BLANK	191	0.00	0.00
1	33	41.77	41.77
2	46	58.23	100.00
Total	79	100.00	100.00

Field No. 61 Gave SSS when had diarrhea (TRT-SSS)

Mean = 1.99 Standard Deviation = 0.11

Value | Frequency | Percentage | Cumulative Percentage

BLANK	191	0.00	0.00
1	1	1.27	1.27
2	78	98.73	100.00
Total	79	100.00	100.00

Field No. 62 Gave home-based fluid when had D (TRT-HBF)

Mean = 1.99 Standard Deviation = 0.11

Value | Frequency | Percentage | Cumulative Percentage

BLANK	191	0.00	0.00
1	1	1.27	1.27
2	78	98.73	100.00
Total	79	100.00	100.00

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

Mean = 2.00 Standard Deviation = 0.00

Value | Frequency | Percentage | Cumulative Percentage

BLANK 191 0.00 0.00  
2 79 100.00 100.00

Total 79 100.00 100.00

Field No. 64 Gave medicine when had diarrhea (TRT-MEDC)

Mean = 1.58 Standard Deviation = 0.50

Value | Frequency | Percentage | Cumulative Percentage

BLANK 191 0.00 0.00  
1 33 41.77 41.77  
2 46 58.23 100.00

Total 79 100.00 100.00

Field No. 65 Did other treatments when had diar (TRT-OTHR)

Mean = 1.81 Standard Deviation = 0.39

Value | Frequency | Percentage | Cumulative Percentage

BLANK 191 0.00 0.00  
1 15 18.99 18.99  
2 64 81.01 100.00

Total 79 100.00 100.00

Field No. 66 Advice or Treatment Sought (ADVICE-D)

Mean = 1.35 Standard Deviation = 0.48

Value | Frequency | Percentage | Cumulative Percentage

BLANK	191	0.00	0.00
1	51	64.56	64.56
2	28	35.44	100.00
Total	79	100.00	100.00

Field No. 67 Sought advice from hospital (ADV-HOSP)

Mean = 1.78 Standard Deviation = 0.42

Value | Frequency | Percentage | Cumulative Percentage

BLANK	219	0.00	0.00
1	11	21.57	21.57
2	40	78.43	100.00
Total	51	100.00	100.00

Field No. 68 Sought advice from health center (ADV-HCTR)

Mean = 1.78 Standard Deviation = 0.42

Value | Frequency | Percentage | Cumulative Percentage

BLANK	219	0.00	0.00
1	11	21.57	21.57
2	40	78.43	100.00
Total	51	100.00	100.00

Field No. 69 Sought advice from private doctor (ADV-PRVT)

Mean = 1.90 Standard Deviation = 0.30

Value | Frequency | Percentage | Cumulative Percentage

BLANK	219	0.00	0.00
1	5	9.80	9.80
2	46	90.20	100.00
Total	51	100.00	100.00

Field No. 70 Sought advice from drugstore (ADV-PHAR)

Mean = 1.98 Standard Deviation = 0.14

Value | Frequency | Percentage | Cumulative Percentage

BLANK	219	0.00	0.00
1	1	1.96	1.96
2	50	98.04	100.00
Total	51	100.00	100.00

Field No. 71 Sought advice from CHW (ADV-CHW)

Mean = 1.75 Standard Deviation = 0.44

Value | Frequency | Percentage | Cumulative Percentage

BLANK	219	0.00	0.00
1	13	25.49	25.49
2	38	74.51	100.00
Total	51	100.00	100.00

Field No. 72 Sought advice from trad'l healer (ADV-HLR)

Mean = 2.00 Standard Deviation = 0.00

Value | Frequency | Percentage | Cumulative Percentage

BLANK	219	0.00	0.00
2	51	100.00	100.00
Total	51	100.00	100.00

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

Mean = 1.98 Standard Deviation = 0.14

Value | Frequency | Percentage | Cumulative Percentage

BLANK	219	0.00	0.00
1	1	1.96	1.96
2	50	98.04	100.00
Total	51	100.00	100.00

Field No. 74 Sought advice from relatives (ADV-RLTV)

Mean = 1.78 Standard Deviation = 0.42

Value | Frequency | Percentage | Cumulative Percentage

BLANK	219	0.00	0.00
1	11	21.57	21.57
2	40	78.43	100.00
Total	51	100.00	100.00

Field No. 75 Sought advice from other source (ADV-OTHR)

Value	Frequency	Percentage	Cumulative Percentage
BLANK	219	0.00	0.00
1	2	3.92	3.92
2	49	96.08	100.00
Total	51	100.00	100.00

Field No. 76 Doesn't know S and S (S&S-DK)

Mean = 1.83      Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
1	45	16.67	16.67
2	225	83.33	100.00
Total	270	100.00	100.00

Field No. 77 S and S is vomiting (S&S-VOMT)

Mean = 1.87      Standard Deviation = 0.34

Value	Frequency	Percentage	Cumulative Percentage
1	36	13.33	13.33
2	234	86.67	100.00
Total	270	100.00	100.00

Field No. 78 S and S is fever (S&S-FVR)

Mean = 1.89      Standard Deviation = 0.32

Value	Frequency	Percentage	Cumulative Percentage
1	31	11.48	11.48
2	239	88.52	100.00
Total	270	100.00	100.00

Field No. 79 S and S is signs of dehydration (S&S-DHYD)

Mean = 1.79 Standard Deviation = 0.41

Value	Frequency	Percentage	Cumulative Percentage
1	58	21.48	21.48
2	212	78.52	100.00
Total	270	100.00	100.00

Field No. 80 S and S is prolonged diarrhea (S&S-LONG)

Mean = 1.63 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
1	99	36.67	36.67
2	171	63.33	100.00
Total	270	100.00	100.00

Field No. 81 S and S is blood in stool (S&S-BLUD)

Mean = 1.98 Standard Deviation = 0.15

Value	Frequency	Percentage	Cumulative Percentage
1	6	2.22	2.22
2	264	97.78	100.00
Total	270	100.00	100.00

Field No. 82 S and S is loss of appetite (S&S-NOAP)

Mean = 1.88 Standard Deviation = 0.32

Value	Frequency	Percentage	Cumulative Percentage
1	32	11.85	11.85
2	238	88.15	100.00
Total	270	100.00	100.00

Field No. 83 S and S is weakness or tiredness (S&S-WEAK)

Mean = 1.49 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
1	138	51.11	51.11
2	132	48.89	100.00
Total	270	100.00	100.00

Field No. 84 S and S is other (S&S-OTHR)

Mean = 1.93 Standard Deviation = 0.26

Value	Frequency	Percentage	Cumulative Percentage
1	19	7.04	7.04
2	251	92.96	100.00
Total	270	100.00	100.00

Field No. 85 Doesn't know actions to take (ACT-DK)

Mean = 1.90 Standard Deviation = 0.30

Value	Frequency	Percentage	Cumulative Percentage
1	26	9.63	9.63
2	244	90.37	100.00
Total	270	100.00	100.00

Field No. 86 Should initiate fluids soon (ACT-FLUD)

Mean = 1.85 Standard Deviation = 0.36

Value	Frequency	Percentage	Cumulative Percentage
1	40	14.81	14.81
2	230	85.19	100.00
Total	270	100.00	100.00

Field No. 87 Should give more to drink (ACT-DRNK)

Mean = 1.89 Standard Deviation = 0.31

Value	Frequency	Percentage	Cumulative Percentage
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1	29	10.74	10.74
2	241	89.26	100.00

Total	270	100.00	100.00
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Field No. 88 Should give ORS or SSS (ACT-ORS)

Mean = 1.40 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
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1	162	60.00	60.00
2	108	40.00	100.00

Total	270	100.00	100.00
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Field No. 89 Should give smaller frequent feeds (ACT-FEED)

Mean = 1.94 Standard Deviation = 0.24

Value	Frequency	Percentage	Cumulative Percentage
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1	16	5.93	5.93
2	254	94.07	100.00

Total	270	100.00	100.00
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Field No. 90 Should take child to hospital (ACT-HSPT)

Mean = 1.67 Standard Deviation = 0.47

Value	Frequency	Percentage	Cumulative Percentage
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1	88	32.59	32.59
2	182	67.41	100.00

Total	270	100.00	100.00
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Field No. 91 Should feed child more after (ACT-RCVR)

Mean = 1.95 Standard Deviation = 0.22

Value	Frequency	Percentage	Cumulative Percentage
1	14	5.19	5.19
2	256	94.81	100.00
Total	270	100.00	100.00

Field No. 92 Should withhold fluids (ACT-NOFL)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	270	100.00	100.00
Total	270	100.00	100.00

Field No. 93 Should withhold food (ACT-NOFD)

Mean = 2.00 Standard Deviation = 0.00

Value	Frequency	Percentage	Cumulative Percentage
2	270	100.00	100.00
Total	270	100.00	100.00

Field No. 94 Should do other if have diarrhea (ACT-OTHR)

Mean = 1.87 Standard Deviation = 0.33

Value	Frequency	Percentage	Cumulative Percentage
1	34	12.59	12.59
2	236	87.41	100.00
Total	270	100.00	100.00

Field No. 95 Knows how to prepare ORS or SSS (KNOWSORS)

Mean = 1.63 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
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1	99	36.67	36.67
2	171	63.33	100.00

Total	270	100.00	100.00
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Field No. 96 Doesn't know what to do in recover (RCV-DK)

Mean = 1.76 Standard Deviation = 0.43

Value	Frequency	Percentage	Cumulative Percentage
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1	65	24.07	24.07
2	205	75.93	100.00

Total	270	100.00	100.00
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Field No. 97 Give smaller feeds in recovery (RCV-FEED)

Mean = 1.81 Standard Deviation = 0.39

Value	Frequency	Percentage	Cumulative Percentage
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1	51	18.89	18.89
2	219	81.11	100.00

Total	270	100.00	100.00
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Field No. 98 Give high calories in recovery (RCV-CAL)

Mean = 1.47 Standard Deviation = 0.50

Value	Frequency	Percentage	Cumulative Percentage
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1	143	52.96	52.96
2	127	47.04	100.00

Total	270	100.00	100.00
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Field No. 99 Give more foods than usual (RCV-MOR)

Mean = 1.83 Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
1	45	16.67	16.67
2	225	83.33	100.00
Total	270	100.00	100.00

Field No. 100 Should do other in recovery (RCV-OTHR)

Mean = 1.80 Standard Deviation = 0.40

Value	Frequency	Percentage	Cumulative Percentage
1	53	19.63	19.63
2	217	80.37	100.00
Total	270	100.00	100.00

Field No. 101 Doesn't know how to prevent (PRV-DK)

Mean = 1.67 Standard Deviation = 0.47

Value	Frequency	Percentage	Cumulative Percentage
1	88	32.59	32.59
2	182	67.41	100.00
Total	270	100.00	100.00

Field No. 102 Wash hands to prevent (PRV-WASH)

Mean = 1.85 Standard Deviation = 0.36

Value	Frequency	Percentage	Cumulative Percentage
1	41	15.19	15.19
2	229	84.81	100.00
Total	270	100.00	100.00

Field No. 103 Cover foods to prevent (PRV-COVR)

Mean = 1.64 Standard Deviation = 0.48

Value	Frequency	Percentage	Cumulative Percentage
1	97	35.93	35.93
2	173	64.07	100.00
Total	270	100.00	100.00

Field No. 104 Use clean water to prevent (PRV-WATR)

Mean = 1.83 Standard Deviation = 0.37

Value	Frequency	Percentage	Cumulative Percentage
1	45	16.67	16.67
2	225	83.33	100.00
Total	270	100.00	100.00

Field No. 105 Store water properly to prevent (PRV-STOR)

Mean = 1.89 Standard Deviation = 0.31

Value	Frequency	Percentage	Cumulative Percentage
1	30	11.11	11.11
2	240	88.89	100.00
Total	270	100.00	100.00

Field No. 106 Use latrines to prevent (PRV-LTRN)

Mean = 1.86 Standard Deviation = 0.35

Value	Frequency	Percentage	Cumulative Percentage
1	38	14.07	14.07
2	232	85.93	100.00
Total	270	100.00	100.00

Field No. 107 Avoid feces to prevent (PRV-FCES)

Mean = 1.93 Standard Deviation = 0.25

Value	Frequency	Percentage	Cumulative Percentage
1	18	6.67	6.67
2	252	93.33	100.00
Total	270	100.00	100.00

Field No. 108 Use clean utensils to prevent (PRV-UTSL)

Mean = 1.82 Standard Deviation = 0.39

Value	Frequency	Percentage	Cumulative Percentage
1	49	18.15	18.15
2	221	81.85	100.00
Total	270	100.00	100.00

Field No. 109 Boil water to prevent (PRV-BOIL)

Mean = 1.68 Standard Deviation = 0.47

Value	Frequency	Percentage	Cumulative Percentage
1	87	32.22	32.22
2	183	67.78	100.00
Total	270	100.00	100.00

Field No. 110 Do other to prevent diarrhea (PRV-OTHR)

Mean = 1.91 Standard Deviation = 0.29

Value	Frequency	Percentage	Cumulative Percentage
1	24	8.89	8.89
2	246	91.11	100.00
Total	270	100.00	100.00

Field No. 111 Ever Received Immunizations (EVERIMMD)

Mean = 1.13 Standard Deviation = 0.34

Value	Frequency	Percentage	Cumulative Percentage
1	235	87.04	87.04
2	35	12.96	100.00
Total	270	100.00	100.00

Field No. 112 What Age to Get Measles Vaccine (MSLS-AGE)

Mean = 1.27 Standard Deviation = 0.45

Value	Frequency	Percentage	Cumulative Percentage
1	196	72.59	72.59
2	74	27.41	100.00
Total	270	100.00	100.00

Field No. 113 Reason for TT Vaccine (WHY-TT)

Mean = 2.35 Standard Deviation = 1.31

Value	Frequency	Percentage	Cumulative Percentage
1	118	43.70	43.70
2	22	8.15	51.85
3	47	17.41	69.26
4	83	30.74	100.00
Total	270	100.00	100.00

Field No. 114 How Many TT Needed to Protect Kid (NO.-TT)

Mean = 3.05 Standard Deviation = 0.88

Value	Frequency	Percentage	Cumulative Percentage
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1	3	1.11	1.11
2	53	19.63	20.74
3	177	65.56	86.30
4	1	0.37	86.67
5	36	13.33	100.00

Total	270	100.00	100.00
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Field No. 115 Has an Immunization Card (IMM-CARD)

Mean = 1.46 Standard Deviation = 0.80

Value	Frequency	Percentage	Cumulative Percentage
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1	198	73.33	73.33
2	19	7.04	80.37
3	53	19.63	100.00

Total	270	100.00	100.00
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Field No. 140 Child has been weighed last 3 mos. (GM3MONTH)

Mean = 1.62 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
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BLANK	72	0.00	0.00
1	75	37.88	37.88
2	123	62.12	100.00

Total	198	100.00	100.00
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Field No. 141 Have a TT Card (TT-CARD)

Mean = 1.55 Standard Deviation = 0.78

Value	Frequency	Percentage	Cumulative Percentage
1	170	62.96	62.96
2	52	19.26	82.22
3	48	17.78	100.00
Total	270	100.00	100.00

Field No. 142 TT Vaccinations Shown on Card (TT-CARD)

Mean = 1.87 Standard Deviation = 0.34

Value	Frequency	Percentage	Cumulative Percentage
BLANK	100	0.00	0.00
1	22	12.94	12.94
2	148	87.06	100.00
Total	170	100.00	100.00

Field No. 143 Is Mother Pregnant Now (PREGNANT)

Mean = 1.93 Standard Deviation = 0.28

Value	Frequency	Percentage	Cumulative Percentage
1	20	7.41	7.41
2	248	91.85	99.26
3	2	0.74	100.00
Total	270	100.00	100.00

Field No. 144 Wants Another Kid in Next 2 Years (WANTMORE)

Mean = 1.78 Standard Deviation = 0.49

Value	Frequency	Percentage	Cumulative Percentage
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BLANK	20	0.00	0.00
1	63	25.20	25.20
2	179	71.60	96.80
3	8	3.20	100.00

Total	250	100.00	100.00
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Field No. 145 Currently Using a FP Method (USING-FP)

Mean = 1.78 Standard Deviation = 0.42

Value	Frequency	Percentage	Cumulative Percentage
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BLANK	83	0.00	0.00
1	42	22.46	22.46
2	145	77.54	100.00

Total	187	100.00	100.00
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Field No. 146 Main Method of FP Used (MAIN-FP)

Mean = 5.86 Standard Deviation = 3.73

Value	Frequency	Percentage	Cumulative Percentage
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BLANK	228	0.00	0.00
1	1	2.38	2.38
2	9	21.43	23.81
3	10	23.81	47.62
4	1	2.38	50.00
6	4	9.52	59.52
7	1	2.38	61.90
8	3	7.14	69.05
9	2	4.76	73.81
10	6	14.29	88.10
12	5	11.90	100.00

Total	42	100.00	100.00
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Field No. 147 When Woman Should See Health Pro (WHNSEEHP)

Mean = 1.70 Standard Deviation = 0.87

Value	Frequency	Percentage	Cumulative Percentage
1	121	44.81	44.81
2	130	48.15	92.96
3	8	2.96	95.93
5	11	4.07	100.00
Total	270	100.00	100.00

Field No. 148 Doesn't know how to prevent anemia (ANM-DK)

Mean = 1.93 Standard Deviation = 0.26

Value	Frequency	Percentage	Cumulative Percentage
1	20	7.41	7.41
2	250	92.59	100.00
Total	270	100.00	100.00

Field No. 149 Eat proteins w/ iron to prvt anemi (ANM-PROT)

Mean = 1.33 Standard Deviation = 0.47

Value	Frequency	Percentage	Cumulative Percentage
1	180	66.67	66.67
2	90	33.33	100.00
Total	270	100.00	100.00

Field No. 150 Eat LGLVs to prevent anemia (ANM-DGLV)

Mean = 1.23 Standard Deviation = 0.42

Value | Frequency | Percentage | Cumulative Percentage

1 207 76.67 76.67

2 63 23.33 100.00

Total 270 100.00 100.00

Field No. 151 Eat other to prevent anemia (ANM-OTHR)

Mean = 1.71 Standard Deviation = 0.45

Value | Frequency | Percentage | Cumulative Percentage

1 77 28.52 28.52

2 193 71.48 100.00

Total 270 100.00 100.00

Field No. 152 Did Mom Seek PNC at Health Site (SEEK-PNC)

Mean = 1.14 Standard Deviation = 0.35

Value | Frequency | Percentage | Cumulative Percentage

1 232 85.93 85.93

2 38 14.07 100.00

Total 270 100.00 100.00

Field No. 153 Ate How Much During Pregnancy (ATE-MUCH)

Mean = 2.23 Standard Deviation = 0.83

Value | Frequency | Percentage | Cumulative Percentage

1	67	24.81	24.81
2	76	28.15	52.96
3	126	46.67	99.63
4	1	0.37	100.00

Total 270 100.00 100.00

Field No. 154 Who Tied and Cut Cord (CUT-CORD)

Mean = 2.96 Standard Deviation = 0.96

Value | Frequency | Percentage | Cumulative Percentage

1	16	5.93	5.93
2	73	27.04	32.96
3	97	35.93	68.89
4	76	28.15	97.04
5	7	2.59	99.63
6	1	0.37	100.00

Total 270 100.00 100.00

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1992 ANNUAL REPORT FORM A: COUNTRY PROJECT PIPELINE ANALYSIS  
W.V.R.D./UGANDA BUNDIBUGYO CHILD SURVIVAL PROJECT  
#OTR-0500-A-00-9156-00

FIELD	Actual Expenditures To Date (09/01/89 to 9/30/92)			Projected Expenditures Against Remaining Obligated Funds (10/01/92 to 08/31/93)			Total Agreement Budget (Columns 1 & 2) (09/01/89 to 08/31/93)		
	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL	A.I.D.	W.V.R.D.	TOTAL
<b>COST ELEMENTS</b>									
<b>I. PROCUREMENT</b>									
A. Supplies	58,696	26,131	84,827	50,004	(5,131)	44,873	108,700	21,000	129,700
B. Equipment	0	96,091	96,091	23,500	(2,341)	21,159	23,500	93,750	117,250
C. Services/Consultants	7,715	2,217	9,932	30,705	103	30,808	38,420	2,320	40,740
SUB-TOTAL I	66,411	124,439	190,850	104,209	(7,369)	96,840	170,620	117,070	287,690
<b>II. EVALUATION/SUB-TOTAL II</b>	16,952	0	16,952	22,638	3,000	25,638	39,590	3,000	42,590
<b>III. INDIRECT COSTS</b>									
Overhead on Field 20%	52,125	27,203	79,328	30,000	(14,532)	15,468	82,125	12,671	94,796
SUB-TOTAL III	52,125	27,203	79,328	30,000	(14,532)	15,468	82,125	12,671	94,796
<b>IV. OTHER PROGRAM COSTS</b>									
A. Personnel	84,127	0	84,127	96,238	21,321	117,559	180,365	21,321	201,686
B. Travel/Per diem	89,561	191	89,752	(5,761)	12,187	6,426	83,800	12,378	96,178
C. Other Direct Costs	91,385	19,666	111,051	42,115	9,234	51,349	133,500	28,900	162,400
SUB-TOTAL IV	265,073	19,857	284,930	132,592	42,742	175,334	397,665	62,599	460,264
<b>TOTAL FIELD</b>	400,561	171,499	572,060	289,439	23,841	313,280	690,000	195,340	885,340