

World Vision Relief and Development, Inc.

**World Vision/Zambia FY97
BASELINE KPC SURVEY REPORT
Gwembe Valley Child Survival Project
Southern Province
February, 1997**

**Beginning Date: October 1, 1996
Ending Date: September 30, 2000**

Submitted to:

**Child Survival Grant Program
USAID/BHR/PVC
1515 Wilson Boulevard, Room 700
Arlington, VA 22209**

WVRD/CSP Headquarters Contact:

Program Concerns

Martha Holley Newsome, M.P.H.
World Vision Relief and Development, Inc.
220 I Street, NE, Suite 270
Washington, DC 20002

Contract Concerns

David Taylor, Chief Operating Officer
World Vision Relief and Development, Inc.
34834 Weyerhauser Way South
Federal Way, WA 98001

Acknowledgments

World Vision Zambia would like to thank the following persons for their contributions to the preparation and conducting of the KPC survey and the compilation of this report:

Participants

Mrs M Namwako	WV/Zambia
Mrs E Maumbi	WV/Zambia
Mrs C Gondwe	WV/Zambia
Mrs M Lupiya	WV/Zambia
Ms L Ngandu	WV/Zambia
Mrs Patricia Chomba	WV/Zambia
Mrs Lois Chilumbu	WV/Zambia
Ms Florence Mukata	WV/Zambia
Mrs P Muleya	Ministry of Health
Mrs E A Mtonga	Ministry of Health
Mr Siavwapa	Ministry of Health
Chief Munyumbwe (Mr. Bernard Hanyimbo)	Gwembe Chief
Mr Siamukoko	Gwembe Social Secretary
Mrs B W Phiri	World Vision Zambia
Mrs J M Kwendakwema	World Vision Zambia
Mrs G C Ngoma	World Vision Zambia
Dr. Kwasi Nimo	World Vision Zambia
Mrs E Ngulube	Ministry of Health
Ms Anne Henderson	World Vision South Africa
Mr J Mwila	World Vision Zambia
Mr Luckson Lungu	World Vision Zambia
Mr Howard Mpamba	World Vision Zambia
Ms Priscilla Mando	World Vision Zambia

Training and Followup

Anne Henderson, WVRD Regional Health Support

Special Thanks goes to the chiefs and village administrators who assisted the teams within the villages and especially to all the mothers in the who so graciously and willingly agreed to participate in the survey. The survey team deserves great recognition as they did a superb job in the field. Their dedication and commitment manifested by diligent work over long hours and their perseverance in rough conditions is admirable. Their insights and knowledge applied during analysis and feedback is greatly valued.

**WVRD/Zambia
Gwembe Valley Child Survival Project
KPC Baseline Survey**

Table of Contents

EXECUTIVE SUMMARY	ii
LIST OF ABBREVIATIONS	iii
I. INTRODUCTION	1
A. Background	1
B. Project Objectives	1
C. Survey Objectives	2
D. Schedule of Activities	3
II. METHODOLOGY	4
A. The questionnaire	4
B. Determination of Sample Size	4
C. Selection of Sample	5
D. Training of Supervisors and Interviewers	7
E. Conduct of the interviews	8
F. Method of Data Analysis	9
III. RESULTS	10
IV. DISCUSSION	22
APPENDICES	
A. Estimated Budget Costs for Baseline Survey	
B. Map of Survey Area	
C. Population Data	
D. Questionnaires in Tonga and English	

EXECUTIVE SUMMARY

A baseline knowledge, practice and coverage (KPC) survey was carried out in the Gwembe Valley, Sinazongwe and Gwembe Districts, Southern Province of Zambia between February 6 - 17, 1997. The survey was completed with the guidance of WVRD Regional Technical Support, and with the cooperation of the Gwembe and Sinazongwe District Offices of Health, and World Vision of Zambia.

The Baseline KPC survey was carried out with the specific objective of obtaining population-based data for use in defining and prioritizing the project's activities, goals and objectives based on areas of identified need. The data is especially valuable in that it was gathered from households rather than based on national figures or the observations of a few individuals within the project area. The KPC survey results were discussed by the District deputy health director and district council, area chief, project personnel and the team of supervisors and interviewers who were comprised of program coordinators, and nurses serving in health facilities and on outreach teams throughout the Gwembe Valley in order to provide background information for the development of the project plans as outlined in the Detailed Implementation Plan.

World Vision Relief and Development, whose headquarters are in Washington, D.C., and World Vision of Zambia are supporting the implementation of the Gwembe Valley Child Survival Project, a Child Survival XII Project. The project received a USAID grant from the Child Survival and Health Office of the Private and Voluntary Cooperation Bureau for Food and Humanitarian Assistance, to implement a Child Survival Program for a potential beneficiary population of 32,120 WCBA's & 26,310 Children under five from October 1, 1996 to September 30, 2000.

The questionnaire contained 57 questions and was used to collect information from mothers of children under 24 months of age in the project area. The questions were based on a standardized survey format recommended and provided by the Johns Hopkins University Child Survival Support Program. The project management of Gwembe Valley Child Survival Project, in collaboration with World Vision's Regional Health Support person, customized the standardized survey questionnaire to adapt the instrument to the project's needs in regard to project interventions and objectives for the project area. A selected team of DOH staff and WV project staff participated in a three day training program in the "30 cluster sample" survey methodology, enabling them to competently conduct this type of survey and utilize the information for project planning and management. Five teams of 2 interviewers each and a supervisor conducted the 30 cluster Baseline survey over a period of 6 days. Each cluster yielded 9 household interviews of mothers with children less than two years of age. A total of 270 interviews were completed and were used in the results.

Some of the major findings of the survey include: 85.3% of infants were breastfed within the first eight hours after delivery; 87.5% of mothers were exclusively breastfeeding their infants less than 4 months of age; 100% of infants between six and ten months were being given solid or semi-solid foods; 57.4% percent of children between 20 and 24 months are still breastfeeding; 75.3% of mothers with children who had diarrhea in the previous two weeks gave the same amount or more fluids and 86.6% treated their child with ORT; 31.9% of mothers knew that signs of dehydration are cause for referral for diarrhea; 31.1% of the households surveyed had a latrine and 72.6% of

the households had access to a clean (protected) water source; 84.9% of the mothers sought medical treatment for their child less than 24 months of age who had fast or difficult breathing in the last two weeks; complete immunization for children 12 - 23 months of age was 79.5% and TT2 for mothers was 63.7%; 80% of mothers had at least one antenatal visit during their last pregnancy; 66% of mothers during the birth of their child had the cord cut by a family member or themselves; and 9.8% of mothers of children less than 24 months of age who were not pregnant or who did not desire a child in the next 2 years, were using a modern method of contraception. The survey results were key in facilitating and guiding the detailed implementation plan for the project area providing particular assistance in the prioritizing and targeting of project interventions.

List of Abbreviations

ARI	Acute Respiratory Infection
BCG	Bacille Calmette-Guerian Vaccine
CBD	Community Based Distribution
CDC	Centers for Disease Control
CHW	Community Health Worker
CS	Child Survival
CSP	Child Survival Project
CSSP	Child Survival Support Program
DHS	Demographic and Health Survey
DIP	Detailed Implementation Plan
DPT	Diphtheria, Pertussis and Tetanus Vaccine
EPI	Expanded Program on Immunization
BHR/PVC	Bureau of Humanitarian Relief/Office of Private Voluntary Cooperation
GM	Growth Monitoring
HIS	Health Information System
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IGA	Income Generating Activity
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
JSI	John Snow, Inc.
KPC	Knowledge, Practice and Coverage
MCH	Maternal/Child Health
MOH	Ministry of Health
OPV	Oral Polio Vaccine
ORS	Oral Rehydration Solution
ORT	Oral Rehydration Therapy
PHC	Primary Health Care
PVO	Private Voluntary Organization
SCM	Standard Case Management
TBA	Traditional Birth Attendant
TOT	Training of Trainers
TT	Tetanus Toxoid
UNICEF	United Nations' Children's Fund
WCBA	Women of Childbearing Age
WHO	World Health Organization
WVRD	World Vision Relief and Development
WV-Z	World Vision of Zambia

I. INTRODUCTION

A. Background

WVRD, whose headquarters are in Washington, D.C. and WV-Z are supporting the implementation of Gwembe Valley Child Survival Project, a Child Survival XII Project based in the Southern Province of Zambia. The project received an USAID grant from the Child Survival/Health department of the office of Private and Voluntary Cooperation at the Bureau for Humanitarian Response, to implement a Child Survival Program from October 1, 1996 to September 30, 2000.

The project area is situated within Southern Province, approximately 200km from the capital, Lusaka. The targeted area includes Gwembe and Sinazongwe Districts which are located along Lake Kariba and have a total population of 146,000. The predominant ethnic group in the area is the Tonga, who characteristically live in homesteads rather than typical villages. The majority of the population is Christian and a smaller percentage Moslem. Most villagers are subsistence farmers producing maize or sorghum (which has only one planting season per year). Villagers located along the lake are involved in fishing and there is a small percentage of the districts' population involved in cash crop production mainly cotton. The population is poor and the status of women is reflected in the low literacy rate among women (1997 KPC Survey - 42.6%), together with early age of marriage (14-17 years of age).

The site was targeted by WV-Z in collaboration with the Zambian MOH for implementation of the CS project as there are elevated levels of infant and child morbidity and mortality related to malnutrition, malaria, diarrhea and ARI conditions which are further complicated by low coverage of primary health services. The constraints to health care delivery in Southern Province are many: the "hilly" terrain with poor road infrastructure (further complicated during the rainy season), villagers' poor access (distance) to health facilities, insufficient health staffing and supervision, and poor referral system. The national infant mortality rate (IMR) for Zambia is 108 per 1,000. The maternal mortality rate is 202/100,000 and under-five mortality is 191/1,000 nationally (Situation of Children in Zambia, 1994). The site was also targeted by WV-Z as it has been chosen as an Area Development Project which represents a 15 year commitment from the organization to the development of the area. The proposed child survival initiatives for the Valley will be further enhanced by WV-Z's complementary programs including a joint nutrition/agriculture project to address basic issues of food security and a Water and Sanitation project.

B. Project Goals:

The aim of the Gwembe Valley CSP is to reduce maternal, infant and child morbidity and mortality by strengthening the capacity and supporting the MOH in the delivery of PHC services and by empowering individuals/villagers to prevent and manage disease in their communities.

This goal will be achieved through the following objectives:

- 1) Mobilizing the delivery of high impact child survival interventions for infants, children under five and WCBA;

- 2) Facilitating the formation, training and supervision of community health workers (CHWs), traditional birth attendants (TBAs) and neighborhood committees in the delivery/promotion of key preventative health messages, management of common diseases and basic problem analysis and solving skills;
- 3) Strengthening the capacity of the MOH personnel in the planning and provision of PHC services for the communities in their service areas.

The program interventions along with the percent of time that the project will dedicate to each area are as follows:

Malaria management	20%
Control of Diarrheal Diseases	20%
HIV/AIDS Prevention	20%
Maternal Care	15%
Family Planning	15%
Immunization (EPI)	10%

The nutrition intervention will be addressed through another funding source which will support a nutrition/agriculture joint initiative which focuses on enhancing food security and household nutritional practices (breastfeeding, supplemental feeding practices and growth monitoring.) Additional resources are also being pursued for water and sanitation initiatives as well as upgrading of health facilities to address obstetrical emergencies.

PVOs with new FHA/PVC Child Survival grants have conducted 30-cluster baseline KPC surveys using a standardized questionnaire developed by JHU. This survey serves as an effective planning, management and evaluation tool and allows for the collection of a larger data base for comparison as it is implemented within all USAID funded Child Survival projects. To assist with this process, WVRD's regional support person, Ms. Anne Henderson, who has undergone the CSSP/ KPC Survey Training of Trainers (TOT) course and implemented several KPC surveys in the past, came to the project site to train staff and provide support in the implementation of the survey in the organization of the standardized questionnaire, the purpose of each question, as well as adaptation of the questionnaire to program objectives. The project staff were trained in conducting a standard WHO 30-cluster survey, analysis and strategic use of data information particularly in the detailed implementation plan process, and development of a report from the completed survey questionnaires.

C. Survey Objectives:

The Baseline KPC Survey was carried out as a component of the project start-up with the specific objective of obtaining population-based data which could be used to further define and prioritize the project's activities, goals and objectives based on areas of identified need. The information obtained is especially valuable as it was gathered from the project area's households rather than based on national figures or on the observations of a few individuals within the area. The questionnaire used in the survey was targeted towards obtaining information which is related to health status and health indicators which contribute towards increasing child survival and health among WCBA. The information collected included:

- Mothers' age, education level, income generation activities and the presence of caregivers.
- Knowledge of mothers of children under two years of age about: breastfeeding/infant feeding practices; management of diarrhea episodes, acute respiratory illness and malaria; the immunization schedule; need for prenatal care and assistance with high-risk pregnancies; HIV/AIDS transmission and prevention; and existing community groups and leaders.
- Actual practices of mothers in regard to breastfeeding, nutrition, growth monitoring, immunization, treatment of diarrhea, acute respiratory infections and malaria, use of family planning methods, antenatal attendance and delivery assistance, water source and latrine presence.
- Target groups for health education messages.
- For children aged 12-23 months: the coverage rates of BCG, DPT-3, OPV-3, measles vaccines and drop-out rates; and TT2 coverage for WCBA.

As the project will focus on changing mothers' knowledge and practices regarding basic preventative health practices, the survey will provide useful information for the planning, managing and evaluation of progress towards objectives. The information is in the process of being shared with various levels of health care supervisors and staff working within the MOH, local government and community groups and will serve as a vehicle to link the health sectors with the communities they serve as they learn more about the knowledge and practices of women and children in their service areas.

D. Schedule of Activities

- | | |
|----------------------|--|
| February 3 - 4, 1997 | Meeting with Core Group regarding survey preparations and KPC survey methodology. (Also initial contacts made on site in August, 1996 and through E-mail and fax communications during October, November, December, 1996 and January, 1997 for survey preparations and team selection). |
| February 5 - 7 | Training of supervisors and interviewers, finalization of the translation of the questionnaire, and field training exercise and discussion. |
| February 10 - 16 | Conduct of survey household interviews. |
| February 14 - 18 | Analysis of Survey Results (EPI-INFO) |
| February 24 - 25 | Group discussion of results and implications for targeting of district / project activities with participation of District MOH leadership, District Council leadership and area Chief; preparation for community feedback session and debriefing of key results and implications with WV-Z |

National leadership.

II. METHODOLOGY

A. The Questionnaire

The questionnaire contained 57 questions and was used to collect information from mothers of children under 24 months of age. The questions were based on a standardized survey format recommended and provided by USAID Child Survival Support Office. The project management of the Gwembe Valley CSP, in collaboration with WV's Regional Health Support person, customized the standardized survey questionnaire to adapt the instrument to the project's needs in regards to project interventions and objectives for the project area.

The first two questions ask the age of the mother and her youngest child (< 24 months) and the name, age and relationship of a caregiver if there is one; questions 3 - 5 collect data regarding mother's literacy, employment, and who cares for the child when the mother is away from home; questions 6 - 11 inquire about breastfeeding and other infant feeding practices; questions 12 - 13 ask questions concerning the child's attendance at growth monitoring sessions and possession of a growth monitoring card; questions 14 - 19 ask questions regarding immunizations received as well as mother's knowledge regarding measles and tetanus vaccine schedule and purpose; questions 20 - 29 refer to diarrheal disease and management of the child with diarrhea; questions 30 - 31 inquire about source of drinking water and presence of latrine facilities; questions 32 - 36 ask about prevalence and management of the child with ARI; questions 37 - 42 ask about management of the child with malaria and presence and treatment of malaria during the last pregnancy; questions 43 - 50 ask about knowledge and practices related to pre-natal care, delivery assistance and family planning; questions 51 - 55 ask about HIV/AIDS transmission and prevention knowledge; and questions 56 and 57 ask about leaders and organizations present within the community.

The questionnaire was originally written in English and then translated by project staff into Tonga and then translated back into English (Annex D, Questionnaires in Tonga and English)

B. Determination of Sample Size

The sample size was calculated with the following formula:

$$n = z^2(pq)/d^2$$

where: **n** = sample size

z = statistical certainty chosen

p = estimated prevalence / coverage rate / level to be investigated

q = 1 - **p**

d = precision desired

The value of **p** was defined by the coverage rate that requires the largest sample size (**p** = .5), seeing that many different variables were being looked at. The value **d** which depends on the precision, or margin of error, desired was set at **d** = .1. The statistical certainty was chosen to be

95% ($z = 1.96$). Given the above values, the following sample size (n) needed was:

$$n = (1.96 \times 1.96)(.5 \times .5)/(.1 \times .1)$$

$$n = (3.84)(.25)/.01$$

$$n = 96$$

It would be a very time-consuming and expensive exercise to randomly select an identified individual from the survey population, and then perform this selection 96 times to identify a sample of $n = 96$. It is also important to note that lists of every individual in the population were not available. In order to save time and resources, a 30 cluster sample survey in which several individuals within an area (cluster) are selected to reach the required sample size was chosen. Surveying in a cluster creates a bias as individuals who live near each other are more likely to be similar to one another. In order to compensate for this bias, experience has shown that the sample size should be doubled.

Given the values of p , d , and z as stated above, a minimum sample of 210 (7 per cluster) is required (Henderson, et. al., 1982). In general, when using a 30 cluster sample survey, the sample size used should be approximately double the value n , when: $n = (z \times z)(pq)/(d \times d)$. In this case, a sample size of 270 (9 per cluster) was selected so as to ensure that sub-samples (example - sets of questions related to diarrhea, malaria and respiratory infection which will not be answered by all mothers) would be large enough to obtain useful management source information. A number which was divisible by 30 was chosen to facilitate the process.

C. Selection of the Sample

The sample consisted of 270 women with children 0-23 months of age living in the communities of Sinazongwe and Gwembe Districts. Nine mothers with children less than 24 months of age from different households were selected in each of 30 randomly selected cluster sites.

The Gwembe Valley zone was divided into clusters based on villages. A cumulative list of all villages within the area was made with their corresponding populations. The total population was then divided by 30 to determine the sampling interval. A random number was then chosen between zero and the sampling interval, to determine the site of the first cluster. The sampling interval was then added to the random number to determine where in the population list the second cluster would be drawn from. The sampling interval was then added to that number, and this process was continued until 30 sites for cluster sampling were determined. Three of the villages which were selected by this process were not able to be included due to access problems with the heavy rains in the area and filling up of streams making them impassable. In these three cases, the next geographically closest village was selected to be included in the cluster sample. When observing the villages from which clusters were taken upon the area maps, it could easily be seen that the selection process allowed for a sample covering all areas of the zone.

Each supervisor received the cluster assignments for their teams the evening before the survey was to take place. Verbal permission was obtained from the Zone Administrator and upon arriving at the village sites, with the purpose and objectives of the KPC Survey being explained along with what involvement would be needed. The cooperation of the village leaders and

community members throughout the survey process was excellent and very much appreciated.

Upon arriving at the village site and meeting the local administration, the team proceeded to the center of the village as the first step in the random selection of the first household. A glass bottle was then spun on the ground to randomly determine a direction in the village. The team then counted all houses which were along the line in the random direction chosen from the starting midpoint until the boundary of the village. A random number was then selected between 1 and the number of houses counted. The supervisor and interviewer then went to the number of the house selected to see if there was a mother with a child (0 - 23 months) in the home, and if she granted permission, the first interviewer was left at this house to begin the questionnaire. The rest of the team then continued to the next closest door (nearest house) to see if there was a mother with a child (0 - 23 months). This process was repeated until nine households with mothers of children (0 - 23 months) had been interviewed. The same process was conducted for each cluster.

There were no villages where two clusters had to be completed. All clusters were completed within their geographically selected villages. In households where there was a mother with two children less than 24 months of age, the mother was interviewed on the care of the younger child. In households with twins, one of the twins was randomly selected for the interview process.

Each survey team, a total of five in all, was made up of one supervisor and 2 - 3 interviewers. One driver had to carry 2 to 3 teams due to the lack of transport. The supervisor was responsible for informing the village administration of the purpose of the survey, introducing the survey team, and for randomly selecting the starting household within the cluster and each subsequent household where interviews were to be conducted. The supervisor was also responsible for observing at least one interview per interviewer per day, for reviewing and correcting errors, and signing each questionnaire for its completeness and accuracy before leaving the cluster area. The interviewers were responsible for following the supervisor's instructions as to which household to interview, confirming that the child qualified within the age limits, obtaining consent from the mother to complete the questionnaire and for conducting the interview and reviewing it for its completeness before handing it over to the supervisor.

The team is to be highly commended for their dedication and effort throughout the week the interviews were conducted. Great distances had to be covered in the rain on rough muddy roads crossing rivers and streams, thus resulting in long days and delays due to problems of being "stuck in the mud". Some teams had to walk significant distances after parking their vehicles in order to reach the village. One team in Sinazongwe district encountered a TBA along the side of the road who was requesting assistance with a complicated delivery in her village. The team put aside their immediate survey activity and went to assess the situation. They found a very tired woman who had been in labor for several hours and signs of fetal distress (meconium fluid). The woman was placed in the back of the 4WD truck and attempts were made to transport her to the nearest health facility for assistance (an hour away). After 15 minutes of travel, her labor progressed with abnormal presentations and the delivery of twins. Both infants came out blue with Apgars of zero and had to be resuscitated. The mother and her infants were brought to the local health facility for further observation.

In Gwembe District, the team was delayed in a village due to inability to get the vehicle out of the mud. While completing the interviews in this village, the team was approached by a mother who had brought her daughter from a village farther out on a very small cart driven by oxen. She explained that her daughter had given birth to an infant three hours earlier but that the placenta was not coming out. As the daughter was placed in the back of the car for an examination, it was observed that she had already lost a significant amount of blood which was continuing to flow out steadily. When the woman was examined, it was quite a shock to see a small blue hand and arm coming out of her vagina. A decision was made to immediately transport her to the health facility (2 hours away with the muddy conditions of the road) where the infant with the abnormal presentation could be delivered. Fifty yards after starting off, the car was stuck in the mud again. Miraculously, the infant turned and came out buttocks first with its legs folded back along the chest followed immediately by a complete placenta. The infant could not be resuscitated. Two liters of orange juice were given to this young mother and some of the team's lunch. The bleeding was brought under control and the one twin who survived was wrapped up warmly (as it was hypothermic) and placed against the mother's body and assisted to breastfeed. An hour later, the car was freed from the mud and the mother and her infant (and accompanying grandmother) were brought to the nearest health facility for observation.

The teams felt very thankful to "be at the right place at the right time" but also were reminded of the vital issue of access and assistance especially for referrals of obstetrical emergencies. One team also encountered a "witch finder" in one of the villages. The chief had called for this individual to come as there had been a lot of child deaths in the village and they were desirous to know the cause. The witch identified the household who was bringing this "curse" upon the village and was paid quite graciously with live stock.

Admst long hours and difficult roads, the survey teams' experience was considered very useful and worthwhile as they collected quality population-based data which greatly assisted with the targeting of interventions during the DIP process.

D. Training of supervisors and interviewers

The Gwembe Valley CSP Management Team selected supervisors and interviewers for training. The supervisors selected were newly hired project staff and MOH health facility/outreach staff serving in the Gwembe and Sinazongwe districts, all of whom will be involved in project activities over the next 4 years. Some of the supervisors and interviewers participated in the EPI survey conducted in the Region in 1993.

The training of the core team took place through e-mail and fax information during the months of October - January and then on site during the first week of February and included the WV-Z operations director, health manager, and CSP project manager. Topics covered included: KPC methodology, objectives and purpose of the survey, preparation for the survey including division of the population for cluster selection, criteria for the selection of supervisors and interviewers, preparation of the questionnaire in coordination with proposed indicators and objectives set in the proposal, translation of the questionnaire, selection of dates for the survey, and logistical requirements for team training and survey implementation.

The first day of the survey training included both the supervisors and interviewers and covered the topics of: purpose and objectives of the Gwembe Valley CSP; purpose and objectives of the KPC survey; rapid KPC survey methodology and choosing of clusters based on villages; household selection; role of the supervisor and interviewer; and review of the questionnaire, explaining the significance of each question and key child survival indicators. The second day, the following topics were discussed: filling in of the questionnaire; determining of child's completed age in months; reading the Road to Health card; obtaining consent; and interviewing principles including issues of confidentiality. Time was given for practice interviews and feedback, and for reviewing and practicing household selection within the cluster.

The third day, the team gathered and reviewed the process of a survey field day from arriving in the village to the completion of the cluster. The teams then gathered their materials and headed out in two groups to two nearby villages to conduct the field test. Each supervisor practiced random selection of the first household and subsequent households following the process of using the next closest door. Each interviewer was observed in conducting an interview at a home with a mother with a child less than 24 months of age and then the questionnaire was reviewed by the supervisor before leaving the village site. At the end of the day, the teams met back together at the training site as a large group to share their experiences and "lessons learned" and problems encountered. There was then a review of the key components of interviewing in preparation for the actual survey. These included: materials needed; cluster sites; cluster and household selection; sample to be interviewed; obtaining consent; filling-in of the questionnaire; review of questionnaires for completeness by the interviewer and supervisor before leaving cluster area; and turning in of questionnaires to survey coordinator for review at the end of each day.

E. Conduct of the Interviews

The survey was conducted over seven days: February 10 - 16, 1997. Thirty survey areas (clusters) were randomly selected using the process described in Section C above and a few changes were made due to issues of inaccessibility related to the flooding of streams and rivers. The survey coordinators (Project manager/WV-Z Health Manager) along with the core team then assigned each team to the various clusters/areas.

The supervisors of each team were responsible for introducing the team and explaining the purpose of the survey to the village administration and then proceeding on to the random selection of the first household and selection of the following households based on the next closest door. The supervisor then guided the team to continue proceeding to the next closest house until ten households with mothers of children (0 - 23 months) had been interviewed. The supervisors observed at least one complete interview by each surveyor each day. Each questionnaire was checked for completeness before the survey team left the survey area, so that in the case of missing or contradictory information the mother could be visited again the same day. Very few difficulties were encountered in determining the child's age as almost all the children had a Road to Health card or some type of identity card indicating the birth date. In five of the interviews, difficulties were encountered in establishing the ages of the mothers / caregivers, who were unable to supply adequate information.

Consent was obtained before initiating the interview which addressed the following issues: the purpose and content of the survey; the mother was not obligated to participate in the survey, and no consequences or biases would arise if she chose not to participate; all information would be confidential and would be used to assist health workers to plan health activities which would better address the needs of the community; she could end the interview at any point; and she should not be alarmed by the interviewer writing down her responses. At the end of the interview, the mother was thanked for her time and the information provided.

F. Method for Data Analysis

The data was analyzed using EPI - INFO 5.1, developed at the Centers for Disease Control (CDC) in Atlanta, and designed specifically for the analysis of health surveys. The program is inexpensive, easy to learn, and "user-friendly". The questionnaire structure was entered into the computer by the KPC Survey trainer/facilitator. The structure was tested using the questionnaires completed on the field test day. Following the third day of interviewing, the trainer/facilitator stayed in from the field to begin entering completed questionnaires. The questionnaires were completely entered by February 18, 1997, two days following the last survey day. No questionnaires needed to be discarded making a total of 270 records for analysis as all children were properly selected according to sample criteria and questionnaires were correctly completed.

The feedback session held with the survey team 6 days (including the weekend) following the completion of the interviews allowed the group in collaboration with the MOH District, Council and Chief leadership to begin to work with the KPC results and their programmatic implications. Frequency distributions for each of the questions and review of the 17 key USAID CS indicators were presented. This six-hour exercise proved very profitable in furthering the district representation and survey team's understanding of child survival interventions and how the HIS can be used to make program decisions and better target interventions. The basic material covered will serve as a basis for the presentations to follow at the various clinic and community sites. Requests were made by the District representatives' to make a presentation at a district health team management planning session as they expressed great appreciation and enthusiasm regarding population based data which is area specific as opposed to the nation as a whole.

Immunization coverage was analyzed for children (12-23 months). By restricting the sample to children of these ages, the percentage of children fully immunized within the first year of life can be estimated. To further explain, a child only three months old has not yet had sufficient time to receive his full course of immunizations, therefore it would not be correct to include this age group. By using the group of children (12-23 months) who should be fully immunized, the assumption can be made that the percentage of children in the project area who receive the full set of immunizations by the age of 12 months is equivalent to the percent of the 12-23 month old children in the sample. Specific age groups of children in the survey were used as indicated in the definitions of key child survival indicators, for example, with exclusive breastfeeding, the introduction of solid foods and the continuation of breastfeeding.

III. RESULTS

Identification Module

Q1. The mean age reported by mothers surveyed was 25 years. Three percent of mothers surveyed (8 out of 259) were under 18 years of age. Eight percent or 21 mothers surveyed were over 35 years. Ages ranged from 15 to 46 years. Fifty-four percent of the mothers were between 19 and 26. Five of the mothers were not able to determine their age. Six of the infants' mothers had died and were being cared for by others including 3 grandmothers, a second wife, a sister and a sister-in-law. The ages of these caregivers ranged from 18 to 55 years.

Q2. 18% (48 out of 270) of children in the survey were under four months of age. 46% (124 out of 270) children in the survey were under the age of one year (children 0-11 months.) 54% (146 out of 270) of the children in the survey were 12-23 months of age. The mean age of children in the survey was 12 months.

AGE	CHILD	Freq	% Cum
0	14	5.2%	5.2%
1	9	3.3%	8.5%
2	14	5.2%	13.7%
3	11	4.1%	17.8%
4	11	4.1%	21.9%
5	9	3.3%	25.2%
6	9	3.3%	28.5%
7	5	1.9%	30.4%
8	10	3.7%	34.1%
9	9	3.3%	37.4%
10	14	5.2%	42.6%
11	9	3.3%	45.9%
12	10	3.7%	49.6%
13	15	5.6%	55.2%
14	14	5.2%	60.4%
15	9	3.3%	63.7%
16	9	3.3%	67.0%
17	12	4.4%	71.5%
18	12	4.4%	75.9%
19	11	4.1%	80.0%

20	12	4.4%	84.4%
21	11	4.1%	88.5%
22	14	5.2%	93.7%
23	17	6.3%	100.0%
Total	270	-----	100.0%

Mother's Education and Occupation Module

Q3. In sum, the literacy rate for women in the area is 42.6%.

Level of Education	% Breakdown
No formal education	68 (25.2%)
Primary does not read	87 (32.2%)
Primary reads	86 (31.9%)
Secondary school	29 (10.7%)

Q4. Income generating activities - 47.8% (129/270) said yes they were doing income generation work and 52.2% (141/270) were not engaging in any income generation activity. Of those who said yes, they said they were doing the following activities:

Income generating Activity	% Breakdown
No income generating work	141 (52.2%)
Hawkers	10 (7.8%)
Handicrafts	19 (14.7%)
Casual laborers / temporary work	4 (3.1%)
Selling vegetables or home-prepared foods	60 (46.5%)
Domestic worker	2 (1.6%)
Shopkeeper	1 (0.8%)
Salaried	1 (0.8%)
Government employee	0
Other (selling local brew, cooking oil, fish, and salt)	43 (33.3%)

Q5. When the mother is away from the child, they are taken care of by the following caretakers:

Details of Caregiver	Percentage Breakdown
Mother takes child with her	89 (33%)
Child's Grandmother	31 (11.5%)
Older Children	76 (28.1%)
Worker/Nanny	0
Neighbors/Friends	21 (7.8%)
Husband/Partner	25 (9.3%)
Other Relatives	32 (11.9%)

Breastfeeding/Nutrition Module

Q6. 86.3% (233) mothers reported they were breastfeeding their child. Of those mothers with children (20-23 months), 31 mothers (57.4%) were still breastfeeding their child (out of 54).

Q7. Of the 37 mothers who were not breastfeeding their child, 6 (2.2%) caregivers/mothers reported the child had never been breastfed in the past (most likely due to maternal death).

Q8. Initiation of breastfeeding

Breastfeeding Practice	% Breakdown
During first hour	162 (61.4%)
Between 1 - 8 hours	63 (23.9%)
More than 8 hours	22 (8.3%)
Could not remember	17 (6.4%)

Q9. Of the children 0, 1, 2 and 3 months of age (48 children), 42 children (87.5%) were being exclusively breastfed; in other words, they were not being given any of the food/fluid categories listed in question 9 (9.1-9.9).

Of the children 6, 7, 8, 9 and 10 months of age (47 children), 100% or all had been introduced to solid or semisolid foods; in other words, they were being given at least one of the non-fluid categories listed in question 9.

Q10. When mothers were asked what they can do to keep breastfeeding during the baby's first four months of life they answered as follows:

Better Breastfeeding	% Breakdown
Does not know	37 (13.7%)
Breastfeed immediately (give colostrum)	11 (4.1%)
Take care of breasts, nipples	5 (1.9%)
Frequent sucking to stimulate production	15 (5.6%)
Exclusive breastfeeding during first six months	7 (2.6%)
Avoid bottle feeding	1 (.4%)
Relactation	0
Take extra fluid	187 (69.3%)

*70 mothers gave answers in the other category which included: 62 (86.1%) of the mothers mentioned good nutrition; 2 mothers mentioned "salty" foods, and 6 mothers made mention of Busika porridge. (The percent total for this question is greater than 100 as mothers were allowed to give more than one response.)

Introduction of solids. In sum, 60% (163) did not know that mothers should give their children food in addition to breastmilk between four and six months of age.

Introduction of Solids	% Breakdown
Before 4 months	142 (52.6%)
Between 4 - 6 months	81 (30%)
About 6 months	26 (9.6%)
Later than 6 months	7 (2.6%)
Did not Know	14 (5.2%)

Growth Monitoring and Immunization Module

Q11. 87% of the mothers (235) had an immunization card for their child.

68.9% of all children (186) had been weighed in the three months prior to the survey.

Q15. The immunization status for children (12-23 months) is based on the immunization card actually seen by the interviewers. There were 146 children in the survey (12-23 months), and 145 children had an immunization card. The following are coverage figures for BCG, OPV, DPT, and measles:

BCG Status (N=146)

NO BCG	YES BCG
9 (6.2%)	135 (92.5%)

OPV Status (N=146)

OPV 1	OPV 1,2	OPV 1,2,3	Drop Out
137 (93.8%)	134 (97.1%)	129(88.5%)	8 (5.8%)

DPT Status (N=146)

DPT 1	DPT 1,2	DPT 1,2,3	Drop Out
137 (93.8%)	134 (91.7%)	126 (86.3%)	10 (8%)

Measles Status (N=146)

NO MEASLES	YES MEASLES
21 (14.4%)	124 (84.9%)

Fully Immunized Status (BCG + OPV123 + DPT123 + Measles)

Fully Immunized	Not fully Immunized
116 (79.5%)	30 (20.5%)

Q16. In sum, 55% of mothers did not know that a child should receive the measles vaccine at nine months of age.

Measles Immunization	% Breakdown
9 months	87 (32%)
Other than 9 months or didn't know	183 (68%)

Q17. 73 mothers (27.0%) knew that the TT vaccine is given to pregnant women to protect both the mother and newborn against tetanus. Ten mothers (3.7%) said that the TT vaccine is given to protect the woman against tetanus and 18 (6.7%) said that it protects the infant. 128 (47.4%) mothers did not know why the vaccine is given. The remaining mothers gave responses to the "other" category as follows: 137 (45.7%) mothers mentioned the vaccine is given to protect mother and infant against disease; 9 (3%) mothers mentioned to protect the mother against disease; and 20 (6.7%) mothers said the vaccine is given to protect the infant against disease.

Q18. In sum, 68.5% of mothers stated that a pregnant woman needs at least two TT injections to protect the newborn infant from tetanus.

No. of Tetanus Toxoid Injections Required	% Breakdown
One	12 (4.4%)
Two	14 (5.2%)
More than two	171 (63.3%)
None	2 (0.7%)
Did not know	71 (26.3%)

Q19. 180 mothers (60%) had an antenatal card, 199 (39.7%) did not and 1 (.3%) mother reported that she had lost her card.

For those mothers who had health cards, the number of TT injections were recorded as follows:

No. of TT injections on the antenatal card	% Breakdown
One	42 (15.6%)
Two	32 (11.9%)
More than two	140 (51.9%)

*56 (20.7%) of the mothers did not have a health card

Diarrheal Disease Module

Q20. 35.9% (97 of 270) of the mothers surveyed stated that their child had diarrhea within the two weeks prior to the survey.

Q21. Of the 97 children with diarrhea during the two weeks prior to the survey, 85 were still being breastfed.

Breastmilk during Diarrhea	% Breakdown
More breastmilk given	12 (14.1%)
Same as normal	56 (65.9%)
Less than normal	12 (14.1%)
Stopped breastfeeding	5 (5.9%)

Q22. In sum, 38.4% of the 97 children were being given fluids other than breastmilk more or the same amount as usual during the diarrheal episode. Eight of the 97 children (15.2%) were being exclusively breastfed.

Other Fluids given	% Breakdown
More fluids than normal	27 (30.3%)
Same as usual	40 (44.9%)
Less than usual	17 (19.1%)
Stopped giving fluids	5 (5.6%)

Q23. In sum, 31.3% of the children were being given foods more or the same amount as usual and 37.5% gave less food or stopped giving food completely during their child's diarrheal episode. (31.3% of the 112 children had not yet started receiving foods.)

Solids or semi-solids given	% Breakdown
More than usual	18 (20.4%)
Same as usual	44 (50.0%)
Less than usual	16 (18.2%)
Stopped giving food	9 (10.2%)

Q24. Of the 97 children with diarrhea during the two weeks prior to the survey 86 children (88.7%) were given at least one of the ORT categories listed in question 23 (23b-23e).

ORT solutions administered	% Breakdown
ORS sachets	76 (78.4%)
Sugar Salt Solution	3 (0.1%)
Cereal based fluids	5 (5.2%)
Home available fluids	2 (2.1%)

Other treatments given

Anti diarrhea medicine	2 (2.1%)
Herbal medicine	12 (12.4%)
Other	10 (10.3%)

*total is greater than 100%, as some mothers gave more than one treatment.

Q25. Of the 97 mothers of children with diarrhea during the two weeks prior to the survey, 88 (90.7%) sought advice or treatment for their child's diarrhea.

Q26. The following were contacted for advice.

Source of Treatment	% Breakdown
Hospital	6 (6.8%)
Clinic	70 (79.8%)
Pharmacy	0
CHW	7 (8.0%)
Herbalist	5 (5.7%)
Other (grandmother, relatives, friends, etc)	3 (3.4%)

*total is greater than 100%, as some mothers sought treatment from more than one source.

Q27. The signs & symptoms which would cause a mother to seek advice or treatment for her child's diarrhea are as follows.

Signs & Symptoms associated with Diarrhea	% Breakdown
Did not know	24 (8.9%)
Vomiting	7 (7.8%)
Fever	11 (12.6%)
Dehydration	28 (31.9%)
Prolonged duration	31 (34.8%)
Blood or mucous in stools	6 (6.7%)
Loss of appetite	11 (12.6%)
Weakness or tiredness	48 (54.4%)
Other (green or yellow stools, watery d/a, severe d/a)	26 (9.6%)

*total is greater than 100% as mothers were permitted to give more than one answer.

Q28. Important actions to be taken in the event of diarrhea.

Action taken with Diarrhea Cases	% Breakdown
Did not know	17 (6.4%)
Initiate fluids rapidly	16 (5.9%)
More to drink	11 (4.1%)
Smaller frequent feeds	20 (7.4%)
Proper mixing & administration of ORS	161 (59.6%)
Seek medical help at hospital or clinic	124 (45.9%)
Feed more after diarrhea episode to regain weight	1 (0.4%)
Withhold fluids	2 (0.7%)
Withhold foods	2 (0.7%)

*total is greater than 100% as mothers were permitted to give more than one answer.

Q29. When all the mothers were asked what are important actions to take when a child is recovering from diarrhea, 20 mothers (7.4%) said they would give smaller but more frequent feeds, and 18 (20.4%) mothers mentioned having given the child more foods than usual. 161 mothers (59.6%) said administering ORS properly was important, and 17 (6.4%) of the mothers did not know.

Q30. 84 (31.1%) mothers responded positively to the question whether they have a latrine in their homes.

Q31. 196 (72.6%) mothers indicated they source their water supply from protected wells, 67 (24.8%) from rivers, and 7 (2.6%) from a shallow well. 18 (6%) mentioned making hand dug shallow wells and 14 (4.7%) mothers had access to tap water.

Respiratory Illness

Q32. 86 mothers (31.8%) indicated that their child had been ill with a cough or experienced difficulties in breathing in the last two weeks.

Q33. Of the 86 mothers who answered yes to question 32, 53 (19.6%) indicated that their child had experienced rapid or difficult breathing (dyspnea).

Q34. 47 (88.7%) of the 53 mothers indicated above sought medical assistance for their child.

Q35. 38 (80.8%) of the 47 mothers sought assistance from a hospital or clinic, 5 (10.6%) from a CHW, and the other 5 (10.6%) consulted an herbalist, pharmacist or a grandmother.

Q36. Symptoms of ARI - When mothers were asked what signs/symptoms of respiratory

infection would cause them to take a child to a health facility, they responded as follows:

Symptoms of ARI	% Breakdown
Did not know	34 (12.6%)
Fast or Difficult Breathing	45 (16.7%)
Chest Indrawing	36 (13.3%)
Loss of Appetite	13 (4.8%)
Fever	46 (17%)
Cough	124 (45.9%)
Wheezing and other (crying, vomiting, weakness, weight loss, cough with blood)	128 (47.4%)

*total is greater than 100%, as mother were permitted to give more than one response.

Malaria

Q37. 112 (41.5%) of the mothers responded that their child had malaria (fever) in the two weeks prior to the survey.

Q38. 92 (82.1%) of these mothers sought treatment for their child with malaria.

Q39. In seeking malaria treatment, 16.3% went to the hospital, 62% went to the clinic, 14% went to a CHW, 5.4% went to a pharmacy and 5% went to a private doctor, traditional healer or herbalist or other relatives.

Q40-42. 154 (57.1%) of the mothers reported that during their last pregnancy they had been ill with malaria. 89.5% of these women sought treatment from the following places: hospital (17.5%), clinic (70.1%), CHW (9.5%) and the other 3% from a pharmacy or private doctor.

Maternal Care

Q43. When mothers were asked how many ante-natal visits they had during their last pregnancy, they provided the following information:

Ante-Natal visits	% Breakdown
One	11 (4.1%)
Two	25 (9.3%)
Three or More	180 (66.9%)
None	7 (2.6%)

Lost card	46 (17.1%)
-----------	------------

Q44. When asked how soon a woman should see a health professional after she knows she is pregnant the following results were obtained.

First Ante-Natal visit	% Breakdown
First Trimester	187 (69.3%)
Second Trimester	73 (27%)
Did not know	10 (3.7%)

Q45. When asked what signs would indicate the need for referral the following was answered.

Important signs in pregnancy	% Breakdown
Bleeding	112 (41.5%)
Swelling of hands or feet	30 (11.1%)
Headaches	73 (27%)
Vulval sores	8 (3%)
Decreased fetal movement	23 (8.5%)
Urinary problems	5 (1.9%)
Early contractions	114 (42.2%)
Discharge of fluids	41 (15.2%)
Previous C-Section	23 (8.5%)
Other (when ill 5%, fever 6%, backache 2.7%, weakness 3.7%)	89 (33%)

*the total is greater than 100% as mothers were allowed to give more than one answer.

Q46. When asked who tied and cut the cord at the child's delivery the following responses were obtained.

Who tied the cord	% Breakdown
Family member	148 (55%)
Traditional Birth Attendant	31 (11.5%)
Themselves	31 (11.5%)
Hospital midwife/doctor	26 (9.7%)

Clinic midwife/doctor	20 (7.4%)
Other (second wife)	13 (4.8%)

Q47. Twenty-eight (10.4%) mothers said they were pregnant.

Q48. Of the 242 mothers who said they were not pregnant, 48 (19.8%) mothers said they wanted to have a child in the next two years. 194 (80.2%) either did not want to have a child in the next two years or were not sure.

Q49. Of the 194 mothers who either did not want to have a child in the next two years or were undecided, 24 (12%) stated they were using a contraceptive method.

Q50. Among these, 21 (10.8%) were using a modern contraceptive method, mainly the pill.

HIVAIDS Module

Q51. All but one mother had heard of HIV/AIDS. Women had mainly heard from other people (48.3%), health workers (30.5%), or the radio (15.2%.)

Q52. Among the 269 women who had heard about HIV/AIDS, they said that you could contract it by:

HIV/AIDS Transmission

Route of Transmission	% Breakdown
Multiple Partners	263 (97.8%)
Sexual Intercourse	261 (97%)
Sexual Intercourse without a condom	245 (91.1%)
From pregnant women to unborn children	235 (87.4%)
From your husband	228 (84.4%)
Breastmilk	225 (83.6%)
Scarification	200 (74.3%)
Insects	131 (48.5%)
Kissing	83 (30.9%)
Eating together	53 (19.7%)
Handshaking	47 (17.5%)

Other (needles, blood transfusion, toilet, blood)	42 (14%)
---	----------

Q53. About half of the mothers (140) thought that they could personally get HIV/AIDS.

Q54. To protect themselves from HIV/AIDS, 55% said they would have one partner, 23% said they did not know how they could protect themselves, 21.6% said they couldn't do anything, 1.5% mentioned abstinence, and 6% said use condoms.

Q55. 4.1% thought that HIV/AIDS can be cured, 93.3% said there is no cure for AIDS and 2.6% said they did not know if there was a cure.

Community Groups Module

Q56. 113 (41.9%) mothers mentioned the church as being an organization present within their communities; 108 (40%) of the mothers mentioned the women's association; 37 (13.7%) of the mothers mentioned the development committee; 79 (29.3%) of the mothers said they did not know; and 6.7% of the mothers mentioned another institution.

Q57. When the mothers were asked who are the important leaders within their communities, 236 (87.4%) mothers mentioned the headman; 25 (9.3%) mentioned their pastor; 14 (5.2%) said another leader; 6 mentioned their chief and another 3 said the principal.

IV. DISCUSSION AND RECOMMENDATIONS

Age Distribution

Of the mothers surveyed, 3% were under eighteen and only 8% were over 35. These age groups are at greater risk for complications during pregnancy and delivery, and will be a special target group for MCH interventions in the area such as special prenatal and delivery attention and family planning interventions. Most of the mothers were young, with 54% aged 19 to 26. Exactly 50% of the children were 12 months or younger. In the project area girls are encouraged to marry young. Through the project's maternal care and family planning component, child spacing with at least two years between pregnancies and avoiding pregnancies for women under 18 or over 35 during maternal care interventions will be emphasized.

Education/Occupation

Fifty-seven percent of the mothers interviewed could not read, and only 63% of women had attended some primary school. In order to reach all mothers both literate and illiterate, an inductive/participatory educational model including the presentation of poster designs, dramas, and songs will be used to educate mothers regarding preventative health practices. Access to education has greatly improved over the past ten years, but young girls do drop out of school early to marry or to provide care for their younger siblings. There is very limited access to secondary school education for those living in the "Valley."

Two-thirds of the mothers leave their children with someone else when they are doing work outside the home. The majority of mothers leave their children with older sibling (28%) or the grandmother (12%) or other relatives (12%). Forty-six mothers (17.1%) mentioned

leaving their child with their partners, neighbors or friends. Given these findings, it is particularly important to reach older siblings and grandmothers along with mothers for health education activities. To reach these groups, health education will need to be conducted at schools, health facilities and churches as well as in the villages.

Roughly half of the mothers (48%) reported being involved in some type of income generating activity (IGA). The most common activity is selling vegetables or home-prepared foods or selling local brew, cooking oil, fish, and salt. A few mothers were domestic workers, shopkeepers and one was a salaried employee. Mothers gain a little income from the informal sector and are still limited in their ability to pay for health services or buy items such as fruits and vegetables. Presently, there are no other groups in the area carrying out IGAs.

Breastfeeding/Nutrition

WV will promote food security with agriculture and nutrition components through assistance provided from WV Canada. This data provides good baseline data for the development of this WV Canada project. The project will promote exclusive breastfeeding for the first 4 - 6 months of life and will instruct mothers to introduce foods between 4 and 6 months. Mothers will be encouraged to breastfeed their infants immediately after birth and to continue breastfeeding their child until 2 years of age.

Of the 48 infants 0 to 3 months, 87.5% were being exclusively breastfed. Of the 64 children six to ten months of age included in the survey, 100% were being given solid or semi-solid foods. About 60.4% of mothers did not know that children should be introduced to foods other than breastmilk between four and six months of age; of these, most (52.6%) said that they should be introduced to foods before 4 months and about 8% said after 6 months. This issue of the introduction of foods/fluids at 4 - 6 months of age in addition to breastmilk will be a major focus of health education as it appears to be common practice to introduce foods earlier than 4 - 6 months. Exclusive breastfeeding will continue to be encouraged in project area promoting the benefits of early breastfeeding (contraction of uterus, warmth/kangaroo method, stimulation of milk production), importance of colostrum, lactation amenorrhea, diarrhea prevention (as well as for other acute infant illnesses), a significant source of protein in the infants' diet, etc. This messages will be promoted during the prenatal and postpartum period during consults at health centers, during outreach activities, and at the village level through community providers.

According to the survey, 61% of mothers breastfed their child within the first hour after birth, and an additional 24% breastfed between the first eight hours after birth - making a total of 85% of mothers who breastfed their infants within the first 8 hours following the birth of their child. Six children had never been breastfed and these are those who were being cared for by caregivers which included grandmothers and other relatives, as the infants' mothers had died immediately following labor. 86% of the mothers were breastfeeding their child less than two years of age at the time of the survey. Of the 54 children in the 20 - 23 month age group, 57% were still being breastfed. Mothers will be encouraged to continue breastfeeding up to 24 months of age and this message will be joined with the importance of child spacing with at least 2 years between pregnancies to allow the mother to replenish her stores and to properly care for the infant. The current practice is for mothers to immediately wean the infant from the breast if there is an oncoming pregnancy.

It is not clear from the survey the quality and quantity of foods given to the children. The project will work with health providers and CHWs in establishing and promoting key messages related to infant feeding practices which encourage the provision of adequate foods of good nutritional value which are available locally. Emphasis will also be placed on educating mothers regarding the need for additional nutritional food intake, both in terms of quality and quantity during the period when the child is recuperating from an illness. Food security has been an issue in the project area over the past 3 to 4 years due to drought conditions. This year, heavy rains persisted and the harvest was much less than what was hoped for as crops were washed away. WV-Z is committed to addressing the agricultural / food security issues in the project zone and are currently seeking resources to enable this to happen. WV-Z also has women's groups functioning in the project area which have been involved in backyard gardens producing vegetables to supplement the household diet. The potential for using these women's groups for promotion of good infant feeding and household nutritional practices is being evaluated.

Growth Monitoring

Eighty-seven percent of the mothers in the survey had a GM and immunization card for their child. Sixty-nine percent of the children had been weighed in the three months prior to the survey. There appears to be relatively low participation in GM as most mothers only bring their child in when an immunization is to be given or when the child is sick. Rarely will the mothers bring the child in just for a growth monitoring consult. Efforts are needed to reach the children who are not being weighed as well as to address the quality of the growth monitoring as an intervention. These activities will be addressed by the WV Canada Ag/nutrition project with emphasis on counseling and education to be provided to mothers during GM consults.

Immunization

87% of the mothers had an immunization card for their child, and 3.7% of the mothers had lost their child's card. For the 12 - 23 month group, antigen-specific immunization coverage rates for children 12 to 23 months of age based on information from the immunization card were as follows: BCG/83%; DPT123/86%; OPV123/88.5% and Measles/84.9%. The fully immunized coverage rate for children 12 - 23 months of age was 79.5% (includes BCG, DPT123, OPV123 and Measles).

The survey revealed a difference of 8% between DPT-1 and DPT3 in the 12 to 23 month group. Although this level of drop-out is considered quite good, the project will focus on promoting health education messages regarding the immunization schedule and vaccine-preventable diseases and the promotion of a policy whereby health workers take advantage of all opportunities to vaccinate children (reducing missed opportunities). Despite relatively high measles coverage, only 32% of the mothers knew that the measles vaccine should be administered at 9 months of age, so there is need for greater understanding and education regarding the immunization schedule. The objective is for children to complete their immunization schedules before the end of the first year of life. Immunizations in the district are provided daily from the health centers and from the outreach health delivery points on a monthly basis.

Eighty percent of the mothers had possession of an antenatal card where TT vaccines can be

recorded. Based on records from these cards, coverage among mothers for TT2 or more was measured at 63.8%. Five percent of the mothers knew that a pregnant woman needs at least 2 TT injections to protect her newborn against neonatal tetanus. An additional 63% of the mothers stated that more than two injections are needed. About one-third of the mothers knew the reason why a pregnant woman needs to be vaccinated with TT vaccine. The present MOH policy is to vaccinate all WCBAs with five doses to provide protection for a lifetime. The project will promote health messages aimed at increasing the mother's knowledge regarding the need, purpose and number of TT injections required to prevent neonatal tetanus. TT injections for mothers will be provided as a part of EPI services and prenatal consults at health centers and with outreach activities.

Diarrheal Diseases

The key concern for children suffering from diarrhea is fluid loss resulting in dehydration. The project will help establish key health messages and train health workers and mothers regarding the importance of increased fluids and continued feeding during the diarrheal episode and catch-up feeding after the diarrheal episode. 35.6% of the mothers surveyed reported that their child less than 2 years of age had suffered with diarrhea in the 2 week period prior to the survey. Of the children included in the survey who had suffered from diarrhea in the two weeks prior to the survey, 80% were given more or the same amount of breastmilk during the diarrheal episode; 75.2% were given more or the same amount fluids; and 70.4% were given more or the same amount of food. While most mothers (59.6%) said that ORS should be properly mixed and fed during diarrhea and seeking medical help (45.9%) were important actions to take when a child has diarrhea, few mentioned other home available fluids and foods that could be used and only one percent of the mothers interviewed mentioned that a child recovering from diarrhea should receive additional food calories and nutrients. Community promoters and health workers at all levels will be trained to promote messages that emphasize the importance of additional fluids and continued feeding during diarrheal episodes. Also, use of traditional herbs for treatment of diarrhea is also practiced in the project area and focus groups will be conducted to learn more about the use and effect of these herbs during the diarrheal episode.

Eighty-nine percent of the mothers gave ORT to their children during the diarrheal episode. Two percent gave anti-diarrhea medicine and 12.4% gave some kind of herbal medicine. Of the mothers who administered ORT, 3% gave sugar/salt solution; 78% used the ORS sachet to prepare ORT; 5% gave cereal-based fluids and an additional 2% gave other home available fluids. The project will promote health messages through health workers and community promoters for the administration of cereal-based ORT for children suffering from diarrhea, with additional feeding after the diarrheal episode to gain weight. The project will discourage the practice of using medicines (antibiotics and antidiarrheal) to treat diarrhea. ORS sachets will still be promoted and made available at clinic sites and pharmacies.

When mothers were asked what signs would cause them to seek advice for their child suffering from diarrhea, 32% stated signs related to dehydration. Other signs and symptoms mentioned by mothers included, prolonged duration (35%), fever (13%), weakness or tiredness (54%), vomiting (8%), loss of appetite (13%) and blood in the stool (7%). UNICEF's Facts for Life messages state in order of priority the following symptoms as indicators for referral: dehydration, fever, loss of appetite, vomiting, passing several watery stools in one or two

hours, and blood in the stool. The project will promote health messages stressing signs indicating the need for referral, both related to dehydration and other symptoms.

In terms of diarrhea prevention in relation to water and sanitation issues, the survey revealed that 31% of the households had a latrine facility. The majority of the mothers (72.6%) obtain their drinking water from a protected source (includes borehole, protected well with handpump and a few had water from the tap), while 24.8% of the mothers were using rivers as their main source of water supply and 2.6% were using hand-dug shallow wells. The project will be involved with delivering health messages regarding the importance of clean drinking water, storage of water with emphasis on covered containers, importance of handwashing and utilization of latrines, but will coordinate with other projects in the area to seek technical assistance in latrine construction and safe water supply. The project will provide for protection of a selected number of wells. One reason for the high number of mothers with access to a protected water source in the area is the work of WV-Z through UNICEF and Korean government funds which have facilitated the placement of protected wells, with water committees established to provide village level maintenance and cost recovery for the hand pumps.

Acute Respiratory Infection

Thirty-two percent of the children in the survey sample had been ill with a cough or had difficulty breathing in the two week period prior to the survey. Twenty percent of these mothers whose children had been ill with a cough reported their child had rapid or difficult breathing and of this group, 85% sought medical treatment. The majority of these mothers (81%) sought treatment from a hospital or clinic, 11% from a CHW, and 11% from a pharmacy, herbalist or grandmother. Seventeen percent of all mothers in the survey indicated that dyspnea would lead them to seek medical treatment for their child. Other symptoms which would lead them to seek assistance included: cough (46%), fever (17%), chest indrawing (13%), loss of appetite (4.8%), wheezing and other symptoms (11.9%) including crying, weight loss, and vomiting.

The project will not have an ARI specific intervention. Some training for SCM of ARI has taken place for health facility workers in the district. The project will continue dialogue with the BASICS Zambia project to ensure that health workers from the two project districts are included in the integrated management of childhood illness (IMCI) course to be conducted in Zambia which includes components of ARI management. The project's promotion of health messages related to good infant/child nutrition and exclusive breastfeeding will contribute to the prevention of ARI.

Malaria Control

The project will include a malaria control intervention, as malaria is one of the main sources of morbidity and mortality for children under five in the project area, accounting for the majority of hospital / health center admissions and reasons for clinical consults. Forty-two percent of the mothers surveyed reported that their child had been ill with malaria in the past two weeks. Among these mothers, 82% sought treatment from the following sources: hospital (16%), clinic (62%), CHW (14%), and pharmacy (5%). A few mothers sought treatment with private doctors, a traditional healer, an herbalist, and a grandmother. Fifty-seven percent of the mothers indicated that they had malaria during their last pregnancy.

Among these mothers, 90% sought treatment for their malaria, with 70% visiting a clinic, 18% a hospital, and the 10% a CHW. Currently, prophylaxis during pregnancy is not provided (MOH policy), but only treatment for acute attacks.

The objective of the project is to ensure prompt careseeking and medical treatment for acute episodes of malaria, particularly for children under five and women during their first pregnancy. Health workers will receive training on appropriate case management of malaria which will be addressed through the integrated management of the child training. Additional access to malaria treatment will be provided through the training and supervision of CHWs from the local health center and from the outreach points, as these community providers are able to provide first line treatment for malaria with chloroquine. Messages of completing treatments to prevent resistance and further complications and prompt careseeking will be promoted. In terms of prevention, IGAs for the sale of impregnated bednets will be established and monitored, especially targeting those villages which are located along the lake.

Maternal Care

Tetanus Toxoid vaccine coverage for mothers surveyed was 63.8% (TT2 or greater). Knowledge regarding the purpose of the TT vaccine was at 27% and the number of injections needed at 69%. Sixty-seven percent of the mothers had made three or more antenatal visits during their last pregnancy, while 3% of the mothers received no antenatal care and 17% had lost their card. Sixty-nine percent of the mothers knew that they should see a health professional for an antenatal consult during the first trimester of their pregnancy. The mothers were also asked about high risk signs that would lead them to seek medical assistance: 42% of mothers said that bleeding would lead them to seek assistance; 9% said decreased fetal movements; 11% said swelling of the hands or feet; 27% mentioned headaches; 42% stated early contractions; 2% urinary problems and 15% discharge of fluids.

Although the percentage of mothers attending prenatal consults is relatively good, their knowledge regarding high risk indicators was poor. This situation should be addressed as many mothers are delivering in their homes with no trained assistant. The project will focus on the quality of antenatal consults being provided, improving health education messages about danger signs emphasizing referral for acute problems, the need for prenatal care and need to develop a birth plan to prepare for a safe and clean delivery. The project will also work with health facility staff, CHWs and TBAs to properly identify pregnant mothers requiring immediate referral.

The largest proportion of deliveries were assisted by family members (55%), while only 17% were assisted by a health professional. TBAs helped with 12% of births and just as many women had no assistance (12%.) The project will need to target the general community, TBAs and health professionals regarding basic messages of safe motherhood and maternal care and the need for quickly identifying and sending on to the health facility those mothers experiencing acute problems. Access for women to deliver at health facilities is still an existing problem because of the difficult terrain in the project area. The referral sites which can provide the essentials of obstetric care are located outside of the project area and require motor transport to reach (110 to 250km away). The project will work with the local health centers and neighborhood committees to establish a village referral transport support system which can be used for obstetrical as well as other medical emergencies.

Family Planning

Seventy-two percent of the mothers interviewed did not want another child in the next two years, or were not sure. Of these, 9.8% were using modern contraception (16 using the pill, 3 condom.)¹ It is interesting to note that these results coincide with the DHS(1992) modern contraceptive use rate of 9%. The project will have a family planning component to address the unmet need (89%) of women who desire no children in the next two years but are not using a modern contraceptive. The current number of available methods and access to sites where these methods are provided is very limited. The project has already participated in initial training with the JSI Family Service Project for training and facilitation skills for CBD initiatives. The project will emphasize the involvement of men in health education and in services related to child spacing.

HIV/AIDS

The project will include an HIV/AIDS intervention, as the rate of infection is extremely high throughout Zambia, with 25% HIV seropositivity being measured among women making prenatal consults. Almost all of the mothers (269 out of 270) interviewed said they had heard of HIV/AIDS. The majority said they had obtained their information from other people (48%) or health workers (31%) and a smaller number (15%) had heard about it from the radio. Ninety-seven percent of mothers knew that HIV/AIDS can be transmitted through sexual intercourse with an infected individual; 98% said you could get it from having multiple partners. Most mothers (87%) also knew that HIV/AIDS can be passed from an infected mother to her fetus. Other commonly mentioned modes of transmission were: from your husband (84%), breastmilk (84%), and scarification (74%). Knowledge regarding transmission was fairly high, but the survey revealed that myths regarding HIV/AIDS transmission are also common. For example, some respondents mentioned insect bites, kissing, eating together, and shaking hands as possible ways to contract HIV/AIDS. About half of the mothers believed they were personally at risk for contracting HIV/AIDS. About 50 percent of the mothers believed they could protect themselves from AIDS by practicing monogamy or abstinence. A significant proportion of the mothers (22%) said they could not do anything to protect themselves as they felt their husbands were unfaithful. Consequently, the project will need to address transmission myths and reach men as well as help women to feel more confident and able to negotiate preventive measures with their partners. The project will work with the District AIDS coordinator to effectively implement HIV/AIDS interventions focusing on the development of AntiAIDS clubs in the schools and the key involvement of men in targeted health education activities. Church leaders, community leaders, and health providers will have joint district workshops to facilitate dialogue, problem solving and awareness raising regarding HIV/AIDS issues for the Gwembe Valley.

Community Groups

In order to obtain information regarding groups recognized by the community as possible avenues for the promotion of child survival interventions, mothers were asked what community groups were active in their villages. 41.9% of the mothers mentioned the church as being an organization present within their communities, while 40% mentioned the women's association, 13.7% mentioned the development committee, and 29.3% said they did not know

of any groups functioning in their communities. It will be important for the project to include church leaders and members of women's associations in key health education and project initiatives to obtain their support and as an avenue to access villagers within the communities especially those targeted as high risk or vulnerable groups for the various interventions.

In order to learn more about "perceived" leaders in the villages, mothers were also asked who the important leaders are within their communities. 87.4% of the mothers mentioned the headman, 9.3% mentioned their pastor, and 5.2% mentioned other types of leaders including the area chief and the school principal. Gaining the collaboration and support of the village headman as well as the local pastors for child survival initiatives will be set as a critical objective for the solid foundation of interventions being initiated.

Changes To Project Objectives/Indicators:

As a result of the community-based data collected for the project area during the baseline KPC survey, the following indicators established in the original proposal submission were altered based on the targeted information provided through the survey exercise:

- a) Seventy percent of infants under 24 months will be breastfed within eight hours after birth. Baseline survey measurement was 85.3%. As a result, this indicator was dropped and focus on breastfeeding was shifted to exclusive breastfeeding. Also, given the resources being made available through the CS project and the number of interventions which must be addressed, the nutrition intervention for the project area will be implemented through a WV Canada ag/nutrition initiative focusing on issues of food security.
- b) Fifteen percent increase in the number of infants between five and nine months of age who are being given solid or semi-solid foods. Baseline survey measurement was 100%, so this indicator is also being dropped and issues of introduction of foods / infant feeding practices will be addressed through the ag / nutrition project.
- c) Fifteen percent increase in the number of children between 20 and 24 months of age who are still breastfeeding and receiving solid/semisolid foods. Baseline measurement was 57.4% and this indicator will be addressed under the ag/nutrition initiative.
- d) 15% increase in the infants / children less than 24 months of age with diarrhea in the past 2 weeks who were treated with ORT (ORS, cereal based, etc.). Baseline survey measurement was 86.6% and the indicator was dropped and an indicator which focuses on increasing fluid volume / intake during the diarrhea episode has been included.
- e) 20% increase in the number of infants/children less than 24 months of age with diarrhea in the past two weeks who received the same amount or more fluids. Baseline measurement was 75% and the adjusted indicator is as follows: 10% increase in number of children with diarrhea in the past 2 weeks who were given the same amount or more fluids other than breastmilk.
- f) 15% increase in children age 4 to 24 months with diarrhea in the past two week who were given the same amount or more food. Baseline measurement was 75.3% and this indicator was dropped, although health messages regarding importance of continued feeding during the diarrhea episode and extra feeding after the episode will be encouraged and promoted.
- g) 15% increase in the number of mothers who sought medical treatment for their child less than 24 months of age with cough and rapid, difficult breathing in the past 2 weeks. Baseline measurement was 84.9% and this indicator was dropped as the project now does not include an ARI component, but the district will be facilitated to participate in the BASICs initiated IMCI training.

- h) 15% increase in the number of mothers who sought medical treatment for their child less than 24 months of age with fever in the past 2 weeks. Baseline survey measurement was 78%, and the indicator has been adjusted to 10% increase in number of mothers who sought medical treatment for their child less than 24 months of age with fever in the past 2 weeks.
- I) 80% of children between 12 - 24 months will be completely immunized against the six vaccine preventable diseases. Baseline survey measurement was 79.5%, and the indicator remains the same in the DIP.
- j) 80% of mothers with children less than 24 months of age will have received two doses of tetanus toxoid vaccine before the birth of their youngest child. Baseline measurement was 63.7% and the indicator is now to aim for 50% coverage of WCBAs for TT5.
- k) 75% of mothers with children less than 24 months of age will have had at least one antenatal visit prior to the birth of their youngest child. Baseline measurement was 80%, and this indicator has been dropped and indicators established which focus on knowledge regarding dangers signs during pregnancy.
- l) 7% increase in the number of mothers of children less than 24 months of age who do not desire another child in the next two years, or who are not sure, who are using a modern contraceptive method. Baseline measurement was 9.8%, with the indicator now stating a 10% increase for a coverage of 20% for modern contraceptive use.
- m) 20% increase in number of mothers of children less than 24 months of age who are able to state at least 2 modes of HIV transmission. Baseline measurement was over 80%, so this indicator has been changed to 40% of mothers knowing means of protection from HIV/AIDS.

APPENDICES:

- A. Estimated Budget Costs for Baseline Survey
- B. Map of Survey Area
- C. Population Data
- D. Questionnaires in Tonga and English

APPENDICES

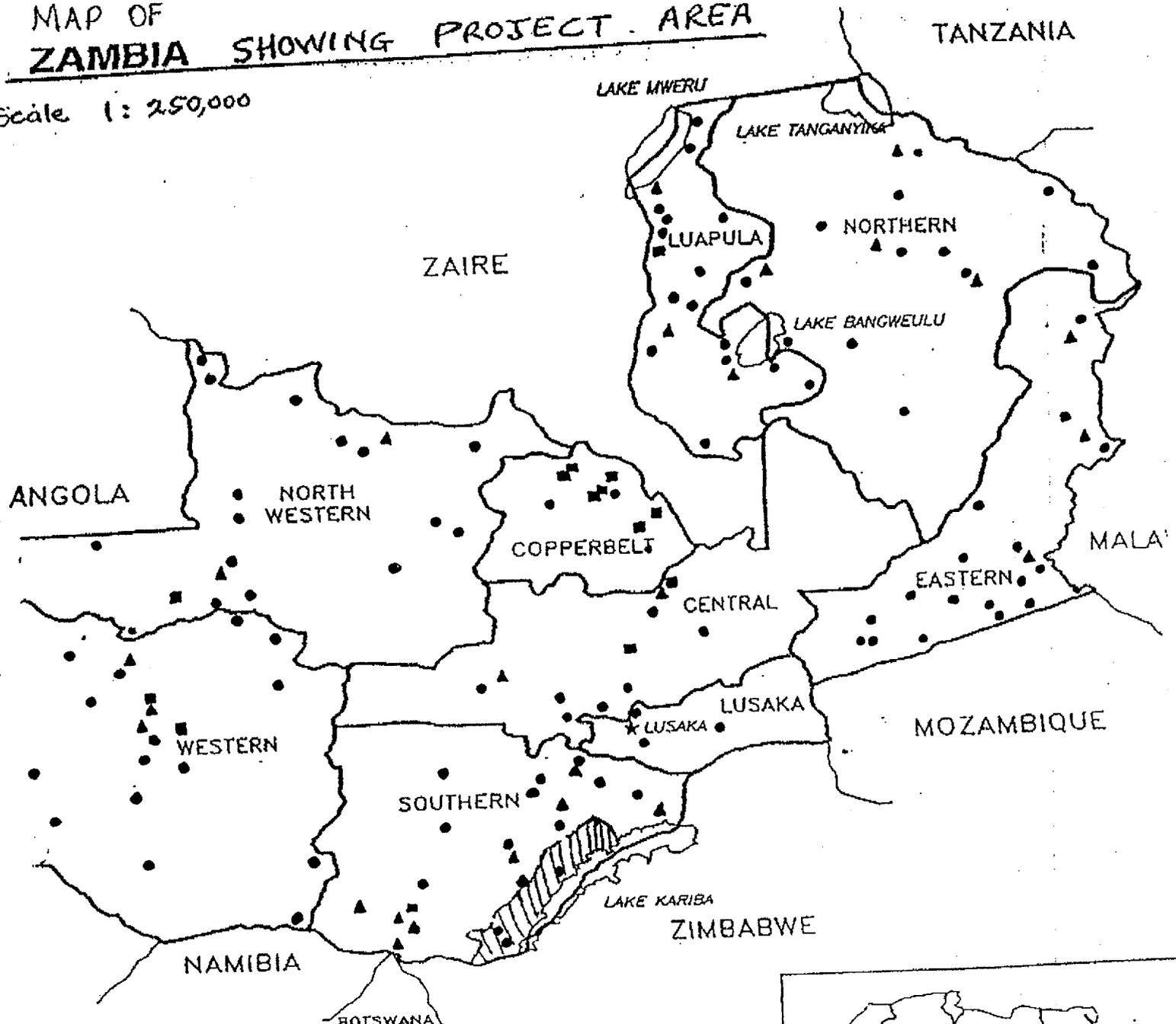
- A. Estimated Budget Costs for Baseline Survey
- B. Map of Survey Area
- C. Population Data
- D. Questionnaires in English
- E. Questionnaires in Tonga

KPC SURVEY EXPENDITURES

DESCRIPTION/ITEM	AMOUNT IN KWACHA
Meals and Accomodations	3,222,530
Fuel/vehicle costs	1,355,668
Stationery	499,340
Total	5,077,538
Total US\$	\$3,966.83

MAP OF ZAMBIA SHOWING PROJECT AREA

Scale 1: 250,000



▨ Project Area

■ Multiple urban CSAs

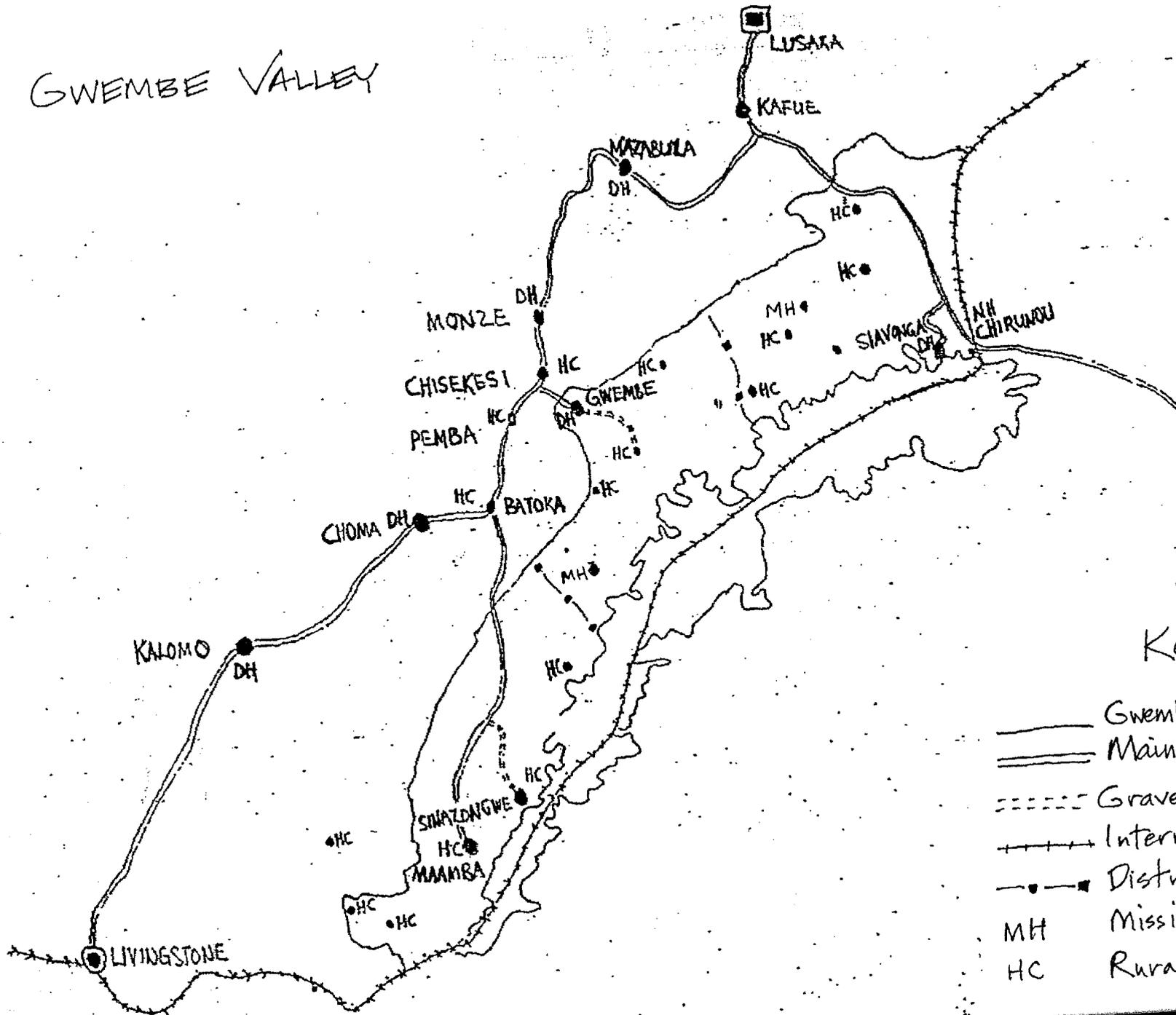
▲ Urban CSA

● Rural CSA

CSA = Census Supervisory Area



GWEMBE VALLEY



Key

- Gwembe Valley boundary
- ==== Main road
- Gravel road
- ++++ International boundary
- District boundary
- MH Mission hospital
- HC Rural Health Center

234

TARGET POPULATION DATA

Current Population within each age group	Number of Potential Beneficiaries
Infants, 0 - 11 months	5,850
Children, 12 - 23 months	4,400
Children, 24 - 59 months	16,060
Females, 15 - 49 years	32,120
Total Potential Beneficiaries per Year	58,430
Total Target Population	146,000

GWEMBE VALLEY CSP BASELINE KPC SURVEY

CLUSTER # _____

HOUSEHOLD # _____

RECORD# _____

**ALL QUESTIONS ARE TO BE ADDRESSED TO THE MOTHER WITH A CHILD
LESS THAN 24 MONTHS OF AGE**

Interview date ___/___/9__

Interviewer _____

Community _____

Supervisor _____

***BEGIN WITH GREETING, INTRODUCTION AND CONSENT FORM**

1. Name and age of the mother

Name _____

Age (years) _____

1.1 Name and age of caregiver (if not the mother) and his/her relationship to the mother.

Name _____

Age (years) _____

Relationship _____

2. Name and age of the child less than 24 months of age

Name _____

Birth date ___/___/___ (dd/mm/yy)

Age in months _____



Mother's Education/Occupation

3. What is the highest level of education passed?

a. none []

b. primary does not read []

c. primary reads []

d. secondary school []

e. secondary school and above, university.. . . . []

4. Do you do any "income generating work"? (multiple answers possible; record all answers)

a. yes. []

b. no. [] (go to 5)

4.1 If yes, what work are you doing?

- a. hawker.....[]
- b. handicraft, weaving, rugs, etc.....[]
- c. temporary work. []
- d. selling vegetables or foods.....[]
- e. domestic work for others (part - time) []
- f. shop keeper []
- g. salaried worker (regular salary) []
- h. government work..... []
- I. other(specify)_____ []

5. Who takes care of (name of child) while you are away from home? (multiple answers possible; record each one)

- a. mother takes child with her.....[]
- b. gogo (grandmother). []
- c. older children.....[]
- d. worker/nanny. []
- e. neighbor/friends..... []
- g. husband/partner..... []
- h. other relatives..... []

Breastfeeding/Nutrition

6. Are you breastfeeding (name of child)?

- a. yes. [] ---> go to 8
- b. no. []

7. Have you ever breast-fed (name of child)?

- a. yes. []
- b. no. [] ---> go to 9

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

- a. during the first hour after delivery []
- b. from 1 to 8 hours after delivery []
- c. more than 8 hours after delivery []
- d. do not remember []

9. 9.1 Are you giving (name of child) cow's milk, goat's milk or tin milk?

- a. yes []
- b. no []

9.2 Are you giving (name of child) soft foods such as porridge?

- a. yes []
- b. no []

- 9.3 Are you giving (name of child) water, tea or vwipa to drink?
 a. yes []
 b. no []
- 9.4 Are you giving (name of child) (mango, gauvas, oranges, wild fruits) fruits?
 a. yes []
 b. no []
- 9.5 Are you giving (name of child) weet potatoes or pumpkin?
 a. yes []
 b. no []
- 9.6 Are you giving (name of child) dark green leafy vegetables, such as spinach, pumpkin leaves or wild spinach?
 a. yes []
 b. no []
- 9.7 Are you giving (name of child) meat, chicken or fish?
 a. yes []
 b. no []
- 9.8. Are you giving (name of child) peanuts, soya, peanut butter or beans?
 a. yes []
 b. no []
- 9.9 Are you giving (name of child) eggs or sour milk?
 a. yes []
 b. no []
- 9.10 Are you adding sugar to (name of child)'s meals?
 a. yes []
 b. no []
- 9.11 Are you adding magarine, peanut butter or oil to (name of child)'s meals?
 a. yes []
 b. no []
- 9.12 Are you adding iodized salt to (table salt/refined)(name of child)'s meals?
 a. yes []
 b. no []

- 9.13 Are you adding dark green leafy vegetables, such as spinach, to (name of child)'s food?
- a. yes []
 - b. no []

10. What can a mother do in the baby's first four months of life 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. care of breasts, nipples []
 - d. frequent sucking to stimulate production []
 - e. exclusive breastfeeding during the first six months []
 - f. avoid bottle feeding of baby []
 - g. relactation (if had to stop, mother can resume breastfeeding again) []
 - h. take extra fluid []
 - i. other (specify) _____ []

11. When **should** a mother start adding foods to breastfeeding?
- a. start adding earlier than 4 months of age []
 - b. start adding between 4-6 months of age []
 - c. start adding about 6 months of age []
 - d. start adding later than 6 months of age []
 - e. doesn't know []

Growth Monitoring

12. Does (name of child) have a Road to Health card?
- a. yes. [] (must see card)
 - b. no. [] --> go to 14
 - c. lost card. [] --> go to 14

13. Look at the growth monitoring card of the child, and record the following information: has the child been weighed in the last three months?
- a. yes []
 - b. no []

Immunizations

14. Has (name of child) ever received any immunizations?
- a. yes []
 - b. no []

15. Look at the vaccination card and record the dates of all the immunizations in the space below:

BCG 1st -- / -- / -- BCG scar Yes ___ No ___ (check inner left arm)

Polio 1st -- / -- / --

2nd -- / -- / --

3rd -- / -- / --

Booster _____ / _____

DPT 1st -- / -- / --

2nd -- / -- / --

3rd -- / -- / --

Booster _____ / _____

Measles ___ / ___

16. At what age should (name of child) receive the first measles vaccine?

a. specify in months [___ / ___]

b. doesn't know []

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

a. to protect both mother/newborn against tetanus []

b. to protect only the woman against tetanus []

c. to protect only the newborn against tetanus []

d. doesn't know []

e. other []

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

a. one []

b. two []

c. more than two []

d. none []

e. doesn't know []

19. Look at the maternal or TT card and record how many TT vaccine doses the mother received before the birth of her youngest child?

a. One.....[]

b. Two.....[]

c. More than two.....[]

d. No card.....[]

Diarrheal Diseases

20. Has (name of child) had diarrhea (three watery stools in a day & night) during the last two weeks?

a. yes. []

b. no. [] --> go to 27

c. doesn't know.....[] go to 27

21. During (name of child)'s diarrhea did you breast-feed (READ choices 1-5 to the mother)
- a. more than usual? []
 - b. same as usual? []
 - c. less than usual? []
 - d. stopped completely. []
 - e. child not breastfed []
22. During (name of child)'s diarrhea, did you provide (name of child) with fluids other than breast-milk (READ choices 1-5 to the mother)
- a. more than usual? []
 - b. same as usual? []
 - c. less than usual? []
 - d. stopped completely? []
 - e. exclusively breastfeeding? []
23. During (name of child)'s diarrhea, did you continue to provide (name of child) with solid/semisolid foods.....(READ choices 1-5 to the mother)
- a. more than usual? []
 - b. same as usual? []
 - c. less than usual? []
 - d. stopped completely? []
 - e. exclusively breastfeeding []
24. When (name of child) had diarrhea, what treatments, if any, was given?
(multiple answers possible; record all answers)
- a. nothing []
 - b. ORS sachet (from the clinic). []
 - c. sugar-salt solution (home prepared) []
 - d. rice, liquid porridge or Oral rehydration treatment. []
 - e. other home available fluids e.g tea, maize drink []
 - f. anti-diarrhea medicine or from chemist []
 - g. herbal medicines or enemas. []
 - h. other specify _____ []
25. When (name of child) had diarrhea, did you seek advice or treatment for the diarrhea?
- a. yes. []
 - b. no. [] --> go to 27

26. From whom did you seek advice or treatment for the diarrhea of (name of child)?
(multiple answers possible; record each answer)

- a. hospital. []
- b. health center/clinic/mobile clinic. []
- c. private doctor. []
- d. pharmacy (chemist). []
- e. community health worker []
- f. witchdoctor/traditional healer. []
- g. herbalist/traditional healer. []
- h. grandmother []
- i. relatives & friends []
- j. other (specify) _____ []

27. What signs/symptoms would cause you to seek advice or treatment for (name of the child)'s diarrhea? (multiple answers possible; record all answers) do not read answers.

- a. doesn't know []
- b. vomiting []
- c. fever []
- d. dry mouth, sunken eyes, sunken fontanelle, decreased urine output (dehydration) []
- e. diarrhea of prolonged duration (at least 14 days) []
- f. blood and/or mucous in stool []
- g. loss of appetite []
- h. weakness or tiredness []
- i. other (specify) _____ []

28. What are important actions you should take if (name of child) has diarrhea?
(multiple answers possible; record all answers)do not read answers.

- a. doesn't know []
- b. initiate fluids rapidly []
- c. give the child more to drink than usual []
- d. give the child smaller more frequent feeds []
- e. proper mixing and administration of Oral rehydration solution []
- f. take child to the hospital/health clinic []
- g. feed more after diarrhea episode so that child can re-gain weight []
- h. withhold fluids []
- i. withhold foods []
- j. other (specify) _____ []

29. 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. other (specify) _____ []

42

30. Do you have a latrine at home ?
- a. yes.....[]
- b. no.....[]

31. Where do you collect your water from?
- a. protected well []
- b. river []
- c. dam []
- d. shallow well []
- e. spring []
- f. Rain water []
- g. other []

Respiratory Illness

32. Has (name of child) been ill with cough or difficult breathing in the last two weeks?
- a. yes. []
- b. no. [] ---> go to 36
33. Did (name of child) experience rapid (fast) and difficult breathing (dyspnea) when ill?
- a. yes []
- b. no [] ---> go to 36
- c. doesn't know. [] ---> go to 36
34. Did you seek treatment when (name of child) was ill with these respiratory problems?
- a. yes. []
- b. no [] ---> go to 36
35. From whom did you seek treatment for (name of child) when ill with rapid and difficult breathing?
(multiple answers possible; record all answers)
- a. hospital. []
- b. health center/clinic/mobile clinic. []
- c. private doctor. []
- d. pharmacy (chemist). []
- e. community health worker []
- f. witchdoctor/traditional healer. []
- g. herbalist/traditional healer. []
- h. grandmother []
- i. relatives & friends []
- j. other (specify) _____ []

43

36. What are the signs/symptoms of respiratory infection that would cause you to take (name of child) to a health facility? (Multiple answers possible; record all answers) do not read answers.)

- a. doesn't know []
- b. fast or difficult breathing []
- c. chest indrawing []
- d. loss of appetite []
- e. fever []
- f. cough []
- g. groaning []
- h. wheezing or noisy breathing []
- i. other (specify) _____ []

MALARIA

37. Did your child suffer with malaria (fever) in the two week period prior to the survey?

- A. Yes.....[]
- b. No.....[] Go to 40

38. Did you seek treatment for your child's malaria?

- a. Yes.....[]
- b. No.....[] Go to 40

39. Where did you seek treatment for your child's malaria?

- a. hospital.[]
- b. health center/clinic/mobile clinic.[]
- c. private doctor.[]
- d. pharmacy (chemist).[]
- e. community health worker[]
- f. witchdoctor/traditional healer.[]
- g. herbalist/traditional healer.[]
- h. grandmother []
- i. relatives & friends[]
- j. other (specify) _____ []

40. Do you suffer with malaria during your last pregnancy?

- A. Yes.....[]
- b. No.....[] go to 43

41. Do you receive treatment for malaria during your last pregnancy?

- A. Yes.....[]
- b. No.....[] go to 43

42. From where did you seek treatment for your malaria during your last pregnancy?
- a. hospital. []
 - b. health center/clinic/mobile clinic. []
 - c. private doctor. []
 - d. pharmacy (chemist). []
 - e. community health worker []
 - f. witchdoctor/traditional healer. []
 - g. herbalist/traditional healer. []
 - h. grandmother []
 - i. relatives & friends []
 - j. other (specify) _____ []

MATERNAL CARE

43. How many ante-natal visits did you have during your last pregnancy?(look at antenatal card)
- a. one []
 - b. two []
 - c. three or more []
 - d. none. []
 - e. Lost card []

44. When should a pregnant woman first vist a health worker during her pregnancy? (PROBE FOR MONTHS)
- a. first trimester, 1-3 months. []
 - b. middle of pregnancy, 4-6 months. []
 - c. last trimester, 7-9 months []
 - d. no need to see health worker []
 - e. doesn't know []

45. What are the danger signs that would cause you to go to the clinic or hospital, during pregnancy? Multiple answers possible; Record all answers
- a. spotting with blood or bleeding []
 - b. swelling hands & face []
 - c. headaches []
 - d. vulval sores or discharge []
 - e. decreased fetal movement []
 - f. urine problems []
 - g. early contractions []
 - h. previous caesarian section or abortion []
 - i. discharge of any fluid other than urine. (rupture membrane). []
 - j. other (specify) _____ []

45

46. At the delivery of (name of child), who tied and cut the cord?
- a. yourself
 - b. family member
 - c. traditional birth attendant
 - d. hospital midwife/ doctor
 - e. clinic midwife/doctor
 - f. other (specify) _____

47. Are you pregnant now?
- a. yes --> go to 51
 - b. no
 - c. doesn't know

48. Do you want to have another child in the next two years?
- a. yes --> go to 51
 - b. no.
 - c. doesn't know

49. Are you or your husband/partner currently using any method to avoid/postpone getting pregnant?
- a. yes.
 - b. no --> go to 51

50. What is the main method you or your husband/partner are using now to avoid/postpone getting pregnant?
- a. tubal ligation or vasectomy
 - b. injections
 - c. pill
 - d. IUCD (loop)
 - e. condom.
 - f. lactational amenorrhea method (exclusive breast-feeding).
 - g. rhythm / natural method
 - h. abstinence.
 - i. coitus interruptus/withdrawal.
 - j. external sex.
 - k. cord around the waist.
 - l. other(specify) _____

HIV/AIDS

51. Have you heard of HIV/AIDS?
- a. Yes
 - b. No.

If yes from where and/or whom _____

52. In which of the following ways can you contract HIV/AIDS ?

- a. Kissing
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]
- b. Handshaking
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]
- c. Sexual intercourse
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]
- d. Sexual intercourse without a condom
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]
- e. From pregnant mothers to unborn children
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]
- f. Breastmilk
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]
- g. Multiple partners
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]
- h. From your husband
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]
- i. Eating together
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]
- j. Insects
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]

- k. Scarification
 - i. yes.....[]
 - ii. no.....[]
 - iii. doesn` t know.....[]

l. Other specify _____ []

- 53. Do you think that you personally can get HIV/AIDS ?
 - a. yes.....[]
 - b. no.....[]
 - c. doesn` t know.....[]

54. What can you do to protect yourself from getting HIV/AIDS?

- 55. Do you think HIV/AIDS can be cured ?
 - a. yes.....[]
 - b. no.....[]
 - c. doesn` t know.....[]

COMMUNITY GROUPS

- 56. List the organizations that are in your community. (do not read answers)
 - a. church..... []
 - b. women`s group. []
 - c. development committee. []
 - d. Others. []
 - e. doesn`t know. []

- 57. Who are the important leaders in your community? Do not read answers.
 - a. headman. []
 - b. pastor. []
 - c. principal. []
 - d. chief. []
 - e. other (specify _____) []
 - f. doesn`t know..... []

**** END OF QUESTIONNAIRE ****

48

GWEMBE VALLEY WV CSP QUESTIONAIRE

1. Cluster # _____ 2. House # _____ 3. Record # _____

Eeyi mibuzyo yeeleede Kubuzigwa kuli bamakaintu bajisi bana bali amyezi yakuzyalwa itana kusika makumi yobile ayone.

Buzuba Bwamibuzyo eeyi:...../.../9...

Zina lyaubuzya:_____

Busena:_____

Zina Lyamusololi:_____

* Kutalika Abupanduluzi...

1. Izina Lyaubuzigwa:_____

(Myaka yakuzyalwa):.....

1.1 Zina lyaulanga mwana wenu amyaka njajisi alimwi ambomucitene anguwe nobanyina?

Zina:.....

Myaka yakuhalwa:.....

Mbobaswengene abanyina mwana:.....

2. Izina lyamwana amyaka njajisi yakuzyalwa utanakwanisha myezi makuni obile ayone

Izina:.....

Myaka yakuzyalwa:.....

Buzuba Amwaka wakuzyalwa:.....

LWIIYO LUJISI BANYINA MWANA/MULIMO NGOBACITA

3. Mwakalekela munzi cikolo?

a. Kunyina.....[]

b. Ndakagolela Mupulayimali pele tandicizyi kubala.....[]

c. Ndakagolela Mupulayimali pele ndilicizyi kubala.....[]

d. Ndakasika Kusekondali[]

e. Ndakasika kusekondali akwiindilizya (UNZA) College....[]

4. Hena Kuli ncomucita kuti munjane mali akuligwasha?

a. Inzya.....[]

b. Peepe.....[](go to 5)

4.1 Na inzya mulimo nzi ngomucita?

(*bwiinguzi bweelede bulembwe boonse)

- a. Kuya bwenda muminzi kusambala zintu zyandeene.....[]
- b. Kusuma Tusani twamuhuno, zisuwo, mamaati azimwi.....[]
- c. Kubelekela.....[]
- d. Kuliisha zisyu zyaandeene-andeene-answi.....[]
- e. Kubelekela Kubantu.....[]
- f. Kuulisha Mucintoolo.....[]
- g. Kubeleka ncito yakuhola amwezi.....[]
- h. Ulabeleka mumulimo wafulumende.....[]
- i. Ncinto iiliyoonse(Kamupandulula) nchomucita.....[]

5. Ino nguni umulangila mwana nywebo nomutako?(*Kamulemba bwinguzi bupegwa)

- a. Ndilamutoolezya mwana.....[]
- b. Bakaapanyina.....[]
- c. Bapati Bakwe.....[]
- d. Mubelesi.....[]
- e. Basimukobonyina/benzinyina.....[]
- f. Baswaabo(Bawisi).....[]
- g. Bamukowa.....[]

KUNYOSYA MWANA/AZYAKULYA MWANA

6. Sena mulamunyosya mwana wenu?

- a. Inzya.....[]
(na inzya kamuvwiila mubuzyo wa no. 8)
- b. Peepe.....[]

7. Sena Kuli nomwakamunyonsezye mwana wenu?

- a. Inzya.....[]
- b. Peepe.....[]
(na peepe kamuvwiila mubuzyo wa no. 9)

8. Ciindi nomwakatumbuka kwakayinda mayoola na mazuba ongaye kuti mutalike kumunyoshya mwana wenu?

- a. Kakwiindide oola lyomwe.....[]
- b. Kakwiindide akati kaola lyomwe amaola yosanwe ayatatu kuzwa kutumbuka.....[]
- c. Kakwiindide maola yosanwe ayatatu (lusele) kuzwa kutumbuka.....[]
- d. Tandikozyi kuyeeya.....[]

9)9.1 Sena mwanawenu mulamupa mukupa wan'gombe, wampongo olo wamucigabba?

- a. Inzya.....[]
- b. Peepe.....[]

9.2 Sena mulamupa zyakulya mbuli ceele azimwi zyubauba mwana?

- a. Inzya.....[]
- b. Peepe.....[]

9.3 Hena mulamupa ti mwana wenu, meenda na cibwantu abusika (vwipa) mazowe?

- a. Inzya.....[]
- b. Peepe.....[]

9.4 Hena mulamupa michelo mbuli (maolongi, magwaba, mango, mbuli yanusokwe) ayimwi michelo isiyene yakulya mwana?

- a. Inzya.....[]
- b. Peepe.....[]

9.5 Hena mulamupa mwana wenu mbuli zipusi cimwali azimwi?

- a. Inzya.....[]
- b. Peepe.....[]

9.6 Nsena mulamusanina mwana wenu azisyu mbuli bbonko, cimowa, luungu, azimwi zisyu zisiyene?

- a. Inzya.....[]
- b. Peepe.....[]

9.7 Hena Mulamupa mwana wenu kulya nyama, nkuku nswi/na kapenta?

- a. Inzya.....[]
- b. Peepe.....[]

9.8 Sena Mulamusanina mwana zisyu zibikidwe buntele, soya, coonde na nyabo?

- a. Inzya.....[]
- b. Peepe.....[]

9.9 Sena Mulamupa mwana kulya mayi(maji) na mabisi?

- a. Inzya.....[]
- b. Peepe.....[]

9.10 Hena mulabika sukela(sugar) muli cakulya camwana wenu mbuli ceele?

- a. Inzya.....[]
- b. Peepe.....[]

9.11 Hena Mulamubikila mwana mafuta, olo buntele mulicakulya?

- a. Inzya.....[]
- b. Peepe.....[]

9.12 Hena mulabika munyo/sautu mulicakulya camwana wenu?

- a. Inzya.....[]
- b. Peepe.....[]

9.13 Hena Mulasanganya zisyu mbuli sipanachi alimwi azimwi zisyu kulizyakulya zyamwana wenu?

- a. Inzya.....[]
- b. Peepe.....[]

10. Ino ninzi ncomwelede kucita banyina mwana kuzwa mwana azyalwa kusikila wasisya mwezyi cisambomwi kutegwa mujane mukupa munji munkolo? (bwinguzi boonse bulembwe)

- a. Tandizyi.....[]
- b. Nkotalika kunyosya mwana mbwatumbukilwa.....[]
- c. Kubona kuti nkolo atunonso zyilasalala lyoonse.....[]
- d. Kunyosha ciindi aciindi kutegwa mukupa kuuzwa kapati munkolo.....[]
- e. Kumunyosha mwana lyoonse kunkolo buyo kakunyina kumupa zyimbi zyakunywa[]
- f. Tamweleede kuhibila kumupa mukupa wamucigabba mwana wenu.....[]
- g. Olo na mwana walilekede kunyonka kwamazuba mwelede kumunyosya alimwi kakunyina kuyoowa.....[]
- h. Mwelede Kunywa meenda kapati alimwi azintu zimwi zyamulolo.....[]
- i. Azimwi-kamwaamba.....[]

11. Ino nciindi nzi mumyezi yamwana banyina nobayeledde kutalika kupa mwana wabo zyakulya zimbi kunze akunyonka kwalo?

- a. Mwana kataninga sisya myezi yone.....[]
- b. Mwana nasisya akati kumywezi yone olo cisambomwi.....[]
- c. Mwana nasisya amyezi cisambomwi.....[]
- d. Mwana nayinda amwezi cisambomwi.....[]
- e. Tandizyi.....[]

CIPOMO CAMWANA

12. Hena mwana wenu ulijisi cipepa cakucipimo?

- a. Inzya.....[] (na inzya a mulange cipepa cakucipimo)
- b. Peepe.....[] na peepe kamulanga no. 14
- c. Cakasoweka.....[] kamulanga no. 14

13. Kamucilanga cipepa cakucipimo camwana akubona namwana wakalitoledwe kucipimo mummyezi yotatwe yayinda.

- a. Inzya.....[]
- b. Peepe.....[]

MANYELETI AKUKWABILILA BANA

14. Hena mwana uliyasidwe kale nyeleti iili yoonse ya kukwabilila bana?

- a. Inzya.....[]
- b. Peepe.....[]

15. Mucilange cipepa cacipimo camwana akulemba mumitwe ilansi.

BCG 1st _____/_____ BCG scar: inzya[] peepe[]

Polio 1st _____/_____

Polio 2nd _____/_____

Polio 3rd _____/_____

Polio Booster _____/_____

Measles _____/_____
(Chifumu)

DPT 1st _____/_____

DPT 2nd _____/_____

DPT 3rd _____/_____

DPT Booster _____/_____

16. Mwana weledle kuyaswa nyeleti yacifumu nakwanya myezi yongaye?

- a. Balizyi mwezi.....[]
- b. Tandizyi.....[]

17. Hena inga mwatwambila mutumbu ncayasi lwa nyeleti namitide?

- a. Kukwabilila banyina amwana kubulwazi bwanku gauyana.....[]
- b. Kukwabilila banyina kubulwazi kugaanyana.....[]
- c. Kukwabilila mwana ulimwida kubulwazi bwamafwa.....[]
- d. Tandizyi.....[]
- e. Bupanduluzi buliboonse bumbi.....[]

18. Manyeleti ongaye ngayeledede kuyaswa mukaintu umitile kutegwa akwabilile mwana ulimwida kubulwazi kugaanyana?

- a. Yomwe.....[]
- b. Obile.....[]
- c. Kwiinda aliyobile.....[]
- d. Kunyina.....[]
- e. Tandizyi.....[]

19. Kamulanga TT kadi akadi yacipimo canada akulemba nyeleti zya TT zyakayaswa matumbu mwana kata ninga zyalwa.

- a. Yomwe.....[]
- b. Yobile.....[]
- c. Kwiinda zyobile.....[]
- d. Kunyina/ kunyina kida.....[]

BULWAZI BWAKUSOOMONA

20. Hena mwana wenu wakaambuka meendenda kusika zyiindi zyoatatwe abuzuba munsondo zyobile zyainda?

- a. Inzya.....[]
- b. Peepe.....[] Kamulanga no. 27
- c. Tandizyi.....[] Kamulanga no. 27

21. Muciindi nasoomona mwana wenu hena mulamunyosha?

- a. Ndilayindilizya kumunyosha kwiinda mbwanyonka lyoonse.....[]
- b. Ndilamunyonsya mbuli mbwanyonka lyoonse.....[]
- c. Inga ndatalika kumunyonsya ashoonto kwiinda mbwanyonka lyoonse[]
- d. Inga ndamulesha kunyonka.....[]
- e. Tanyonki - wakaleka.....[]

22. Muciindi mwana wenu nasoomona hena mulamupa zintu zyakunywa mbuli zyamulolo kunze akumunyosha?

- a. Ndilamupa kwiindiliha mbwemupa lyoonse.....[]
- b. Ndamupa mbwenya mbwemupa lyoonse.....[]
- c. Inga ndamupa asyoonto kwiinda mbwemupa lyoonse.....[]
- d. Inga ndaleka kumupa cakulya cili coonse.....[]
- e. Inga unyonka biyo.....[]

23. Nsena mwana wenu nasoomona mulamupa zyakulya zisiyenesiyene?

- a. Ndilamupa kwiinda mbwemupa lyoonse.....[]
- b. Ndilamupa mbubwena mbondimupa lyoonse.....[]
- c. Ndilamupa asyoonto kwiinda mbwemupa lyoonse.....[]
- d. Inga ndaleka kumupa cakulya cili coonse.....[]
- e. Inga unyonka biyo.....[]

24. Mwakalikumusilishya musamu nzi ciindi mwana wenu nakali kusoomona/olo nasoomona?

- a. Kunyina.....[]
- b. ORS (Manzi amoyo).....[]
- c. Meenda akulipangila a sukela(sugar) a sauti.....[]
- d. Ceele olo manzi amoyo.....[]

- e. Zimwi zyakunywanywa mbuli munkoyo, busiika.....[]
- f. Musamu wakulehya kusoomona wamucintoolo.....[]
- g. Musamu wakulehya kusoomona wacintu cisiya.....[]
- h. Kufumbwa nzila njobakabelesha kusilisya mwana wabo(kabapandulula)..[]

25. Hena Mwakalomba kugwasigwa mwana wenu nakalikusoomona?

- a. Inzya.....[]
- b. Peepe.....[] Kumulanga no. 27

26. Nkulibani nkomwakalomba kugwasigwa kusola kuponya bulwazi bwakusoomona kwamwana wenu?

- a. Kacibbadela cipati.....[]
- b. Kacibbadela kaniini.....[]
- c. Kupulayiveti dokota.....[]
- d. Kucintoolo camisamu.....[]
- e. Kubasilisi bamumunzi bakayiisigwa kupa misamu.....[]
- f. Kubang'anga.....[]
- g. Kubasilisi bacintu cisiya.....[]
- h. Bakaapa/banene.....[]
- i. Bamukowa/benzuma.....[]
- j. Kamupandulula na kulinzila zimbi zjobakabelesya kusilishya mwana wabo.
_____ []

27. Zintu nzi zyinga zya mupa kuti muyande kugwasigwa?

- a. Tandizyi.....[]
- b. Kuluka.....[]
- c. Kupya mubili.....[]
- d. Kuyuma mukanwa, kubbila meso, kuti chindintilo cabbila mukati, kutasuba suba []
- e. Kusoomona kwa ciindi cilamfu (nsondo zyobile).....[]
- f. Kuti kakulitondezya bulowa olo maminamina mumambukwa amwana.[]
- g. Kuti kaka kulya mwana.....[]
- h. Kuteteeta olo kuboneka kukatala mwana.....[]
- i. Azimwi(kabapandulula)_____ []

28. Ncinzi ncomwelede kucita ciindi mwana nasoomona?

- a. Tandizyi.....[]
- b. Nkufwaambana kumupa zintu zyamulolo.....[]
- c. Kwiindilizya kumupa zyakunywanywa kwiinda mbwemupa lyoonse.[]
- d. Kujibilizya kumupa twakulyalya.....[]
- e. Kumupa maanzi amoyo muzindi zyelede-- akupa manzi amoyo (ORS) []
- f. Nkumutola kucipatela olo kukililiki.....[]



- g. Nkuleka kumusanina kabotu mwana wenunaleka kusomoona kutegwa abwedezye mubili wakwe.....[]
- h. Nkuleka kumupa zyamulolo.....[]
- i. Nkuleka kumupa cakulya.....[]
- j. Kamupandula zimwi zynomucita kumwana.....[]
29. Ncinzi nobanyina mwana ncomwelede kucita mwana wenu naleka kusoomona?
- a. Tandizyi.....[]
- b. Kwindilizya kumupa twakulyalya mwana.....[]
- c. Zimwi nzymucita (kamupandulula).....[]
30. Hena mulijisi cimbuzi an'ganda yenu?
- a. Inzya.....[]
- b. Peepe.....[]
31. Ino muteka kulimeenda?
- a. Mumugodi.....[]
- b. Kumulonga.....[]
- c. Kudamu.....[]
- d. Kucikala.....[]
- e. Kasensa Katakwabilidwe.....[]
- f. Meenda amvula.....[]
- g. Kumbi(Kamupandulula).....[]

MALWAZI AMUCAMBA

32. Hena mwana kuli nakacisidwe kukosola na kufundilila mucamba?
- a. Inzya.....[]
- b. Peepe.....[]Kamulanga no. 36
33. Hena mwana nakacisidwe wakali kuyeeka kufwaambana a kufundilila akutayeeka kabotu?
- a. Inzya.....[]
- b. Peepe.....[]Kamulanga no. 36
- c. Tandizyi.....[]Kamulanga no. 36
34. Hena mwakalomba lugwashyo nomwakabona mwana wenu apenzi eeli?
- a. Inzya.....[]
- b. Peepe.....[]Kamulanga no. 36
35. Nkukuli Nkomwakamusilisa mwana wenu nakali kufundilila akutaweeka kabotu?
- a. Kacibbadela cipati.....[]
- b. Kacibbadela kaniini.....[]

- c. Kupulayiveti dokota.....[]
- d. Kucintoolo camisamu.....[]
- e. Kubasilisi bamumunzi bakayiisigwa kupa misamu.....[]
- f. Kubang'anga.....[]
- g. Kubasilisi bacintu cisiya.....[]
- h. Bakaapa/banene.....[]
- i. Bamukowa/benzuma.....[]
- j. Kamupandulula na kulinzila zimbi zyobakabelesya kusilishya mwana wabo.
_____ []

36. Ncinzi cinga camupa kuti mulombe kugwasigwa kubasilisi kuti mwana kakola?
- a. Tandizyi.....[]
 - b. Kufwambaana olo kukakilwa kuyeeka.....[]
 - c. Kukwelelela kuyeeka.....[]
 - d. Kutayanda ulya.....[]
 - e. Kupyamba mubili.....[]
 - f. Kukosola.....[]
 - g. Kufooma kuyoya.....[]
 - h. Kufundilila.....[]
 - i. Zimbi(kamupandulula).....[]

BULWAZI BWANTUNTU MAANZI (MALARIA)

37. Hena mwana wanu waka lisisidwe ntuntumaanzi(malaria) nsondo zyobile ziyayinda?
- a. Inzya.....[]
 - b. Peepe.....[]Kamulanga no. 40
38. Hena mwakalomba kugwasigwa kusilika mwana?
- a. Inzya.....[]
 - b. Peepe.....[]Kamulanga no. 40
39. Nkukuli nkumwakalomba lugwasho?
- a. Kacibbadela cipati.....[]
 - b. Kacibbadela kaniini.....[]
 - c. Kupulayiveti dokota.....[]
 - d. Kucintoolo camisamu.....[]
 - e. Kubasilisi bamumunzi bakayiisigwa kupa misamu.....[]
 - f. Kubang'anga.....[]
 - g. Kubasilisi bacintu cisiya.....[]
 - h. Bakaapa/banene.....[]

- i. Bamukowa/benzuma.....[]
- j. Kamupandulula na kulinzila zimbi zyobakabelesya kusilishya mwana wabo.
_____ []

40. Ada lyakucaalizya hena mwaka ciswa ntuntumaanzi(malaria)?

- a. Inzya.....[]
- b. Peepe.....[]kamulanga no. 43

41. Namwakaciswa hena mwakasilikwa?

- a. Inzya.....[]
- b. Peepe.....[]Kamulanga no. 43

42. Nkukuli nkumwacasilikilwa?

- a. Kacibbadela cipati.....[]
- b. Kacibbadela kaniini.....[]
- c. Kupulayiveti dokota.....[]
- d. Kucintoolo camisamu.....[]
- e. Kubasilisi bamumunzi bakayiisigwa kupa misamu.....[]
- f. Kubang'anga.....[]
- g. Kubasilisi bacintu cisiya.....[]
- h. Bakaapa/banene.....[]
- i. Bamukowa/benzuma.....[]
- j. Kamupandulula na kulinzila zimbi zyobakabelesya kusilishya mwana wabo.
_____ []

KUCIPIMO KWAMADA

43. Nziindi zyoungaye zyoumwakainkide kucipimo nomwakali mitide? (Kamulanga a cipepa cacipimo)

- a. Ciindi comwe.....[]
- b. Ziindi zyobile.....[]
- c. Ziindi zyotatwe olo kwiindilizya.....[]
- d. Kunyina.....[]
- e. Cakasoweka.....[]

44. Mukaintu umitile welede kutalika lili kuya kucipimo?

- a. Kali amwezi na yotatwe.....[]
- b. Mwezi ili yone na cisambomwi.....[]
- c. Nasisya seveni na nayini mywezi.....[]
- d. Tacikwe makani na kutayinka kucipimo olo kubona musilisi.[]

e. Tandizyi.....[]

45. Zintu nzi wanomitile zyinga zyakucita kuti uyande kubona musilisi na kuya kucibbadela?
(bwiinguzi boonse bulembwe)

- a. Kuti ndabona bulowa kuzwa kubukaintu.....[]
- b. Kuti Ndatalika kuzimba mumanza na kumeso.....[]
- c. Kuciswa mutwe.....[]
- d. Kuzwa zilonda na ndiza busina na meenda kubukaintu.....[]
- e. Kuti mwana katanyanyali.....[]
- f. Kutasuba kabotu.....[]
- g. Kumyonga mbuli muntu uyanda kutumbuka.....[]
- h. Kusowa/kupandulwa akutumbuka ciindi camaana.....[]
- i. Kuzwa meenda na kupwayika nsuwa.....[]
- j. Zimwi (Kamupandulula).....[]

46. Nomwakatumbuka mwana wenu nguni wakaanga akutenda -kakombo-kombo?

- a. Ndemwini.....[]
- b. Wamukowa.....[]
- c. Batumbusha mummunzi.....[]
- d. Utumbusya wakucipatela na dokotela.....[]
- e. Utumbusya kukiliniki na dokotela.....[]
- f. Bamwi (kamupandulula).....[]

47. Hena Mulimitile kwaciindi cino?

- a. Inzya.....[]Kamulanga No.51
- b. Peepe.....[]
- c. Tandizyi.....[]

48. Hena Mulayanda kubaa mwana mummyaka yobile iboola?

- a. Inzya.....[]Kamulanga No. 51
- b. Peepe.....[]
- c. Tandizyi.....[]

49. Hena Nywebo abalumi benu kulinzila njomubelesha kuti mutamiti?

- a. Inzya.....[]
- b. Peepe.....[]Kamulanga No. 51

50. Ninzila nzi njomubelesya abalumi benu kuti mutamiti?

- a. Kwanga luzyalo kucibbadela.....[]
- b. Kuyaswa nyeleti.....[]
- c. Kunywa mapilusi akulahyala.....[]

- d. Kwaanga cihalilo(Kubikwa katambo mucihalila)/loop.....[]
- e. Kusama malabba(Makondomu).....[]
- f. Kunyosya kapati.....[]
- g. Kucilila mwezi akucinca kwamubili.....[]
- h. Kuliimya(kutaswangana amwalumi).....[]
- i. Kuzwisha mulombwana kuti atasubili mukati.....[]
- j. Kuswangana atala (mumabelo).....[]
- k. Nkaanga ntambo zyamusamu mucibuno zyakulesya kumita[]
- l. Zimbi nzila zyamubelesya(kamupandulula) []

BULWAZI BWA SIKALILEKE

51. Hena mwakabumvwa kale bulwazi kwasikalileke AIDS?

- a. Inzya.....[]
- b. Peepe.....[]

Namwakabumvwa: mwakakumvwida kuli ni_____

52. Ninzila nzi zinga zyamucita kuti muciswe bulwazi bwa sikalileke/AIDS?

a. Kumyontana

- i. Inzya.....[]
- ii. Peepe.....[]
- iii. Tandiziyi.....[]

b. Kwazyanya mumaanza

- i. Inzya.....[]
- ii. Peepe.....[]
- iii. Tandiziyi.....[]

c. Kuswaangana amulombwana(konana)

- i. Inzya.....[]
- ii. Peepe.....[]
- iii. Tandiziyi.....[]

d. Koonana amulombwana katasamine cilabba (kondomu)

- i. Inzya.....[]
- ii. Peepe.....[]
- iii. Tandiziyi.....[]

e. Kwiinda Kumutumbu kuyambukila kumwana ulimwida.

- i. Inzya.....[]
- ii. Peepe.....[]
- iii. Tandiziyi.....[]

- f. Mumukupa wamunkolo
 I. Inzya.....[]
 ii. Peepe.....[]
 iii. Tandizyi.....[]
- g. Kuswaangana (koonana) abasankwa/basimbi banji
 I. Inzya.....[]
 ii. Peepe.....[]
 iii. Tandizyi.....[]
- h. Kuzwa kumwalumi wenu / mukaintu wenu
 I. Inzya.....[]
 ii. Peepe.....[]
 iii. Tandizyi.....[]
- i. Kulya antoomwe
 I. Inzya.....[]
 ii. Peepe.....[]
 iii. Tandizyi.....[]
- j. Kuzwa kutuuka
 I. Inzya.....[]
 ii. Peepe.....[]
 iii. Tandizyi.....[]
- k. Kwiinda Mukuyasaulwa nsimbo/nembo
 I. Inzya.....[]
 ii. Peepe.....[]
 iii. Tandizyi.....[]

Nzila zyimbi zyoumuzyi kamupandulula_____

53. Hena Mukuyeeya kwenu mulizi kuti inga mwabujata bulwazi oobu?

- a. Inzya.....[]
 b. Peepe.....[]
 c. Tandizyi.....[]

54. Ncinzi ncomunga mwacita kutegwa mutaciswi bulwazi oobu kwasikalileke/AIDs?
 Kabapandulula_____

55. Hena muyeya kuti bulwazi kwasikalileke inga kwasilikwa?

- a. Inzya.....[]