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**MADAGASCAR HEALTH FACILITY
ASSESSMENT
Madagascar Ministry of Health and Population
Division of Preventive Medicine
USAID/BASICS**

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John Murray, MD, MPH
Serge Manoncourt, MD, MPH

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ACRONYMS

ARI	acute lower respiratory tract infections
BASICS	Basics Support for Institutionalizing Child Survival Project
BCG	bacillus of Calmette and Guerin (tuberculosis vaccine)
CDD	control of diarrheal diseases
DHS	Demographic and Health Survey
DPT	diphtheria, pertussis, tetanus
EPI	Expanded Programme on Immunization
HFS	health facility survey
HW	health worker
Hx	history
MOH	Ministry of Health
NGO	Nongovernmental Organization
ORS	oral rehydration salts (or solution)
ORT	oral rehydration therapy
SALFA	Lutheran health NGO
SSS	sugar salt solution
TT2	tetanus toxoid (dose 2)
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

EXECUTIVE SUMMARY

A rapid health facility survey was conducted with the MOH in Madagascar between April 15 and May 1, 1996. The facility assessment was designed to collect integrated information on the quality of case management for the common causes of childhood morbidity and mortality in Madagascar. In addition, the survey was designed to collect information on the facility itself, such as the availability of drugs, supplies, materials and clinic organization. The survey was conducted by a team of local health workers who were then responsible for the entry, analysis and interpretation of survey data.

The survey found that a number of critical aspects of case management and supervision are being conducted well by primary health care workers in Madagascar, and that the public health knowledge of both health workers and caretakers is high in some areas. Deficiencies were found in some aspects of case management, including history taking, screening vaccination status, examination of children, and the education of caretakers. In addition, there are gaps in the provision of training and supervision of health workers. Many facilities have adequate materials and supplies, with the most frequent problem identified being an irregular supply of drugs.

Survey data were summarized as ten key indicators which can be used to monitor and evaluate progress over time. It is hoped that this survey has increased the capacity of the MOH to collect, interpret and use survey data to manage and plan public health programs. Survey data will be used to plan the primary health care strategy in Madagascar, including the development of integrated primary health care training and supervision strategies and a review of the drug distribution system.

I. BACKGROUND

Madagascar has a population of approximately 12 million people, with an estimated population growth rate of 3 percent per year. In Madagascar, as in many developing countries, four primary health problems are responsible for the majority of all infant and child morbidity and mortality; pneumonia, diarrhea, malaria and malnutrition (MOH routine surveillance data, 1990). Infant mortality rates in Madagascar between 1988 and 1992 ranged from 75/1000 live births in urban areas to 107/1000 in rural areas. Under five mortality rates between 1988 and 1992 ranged from 152/1000 in urban areas to 196/1000 in rural areas (DHS survey, 1992). The maternal mortality rate has been reported to be between 339/100,000 live births and 570/100,000 live births (MOH facility and hospital-based data, 1989). The total fertility rate is estimated to be 6.1 (DHS survey, 1992).

The national Expanded Program on Immunization (EPI) began in 1978. A national coverage survey, conducted in 1993, revealed that 36 percent of children had received a full course of vaccinations by 1 year of age, with considerable regional variation. Overall, 49 percent of women of childbearing age had received at least TT2. The coverage survey noted high drop-out rates between DPT1 and measles immunizations.

Malnutrition is a major public health problem in Madagascar. It is estimated that 51 percent of all children under 5 are stunted (less than two standard deviations below the mean for height for age), with 24 percent of these children severely stunted (less than three standard deviations below the mean for height for age) (DHS survey, 1992). There is also evidence that the prevalence of iodine and vitamin A deficiency is high in some areas, particularly in the highland provinces (Ministry of Scientific Research/UNICEF, 1989). Exclusive breastfeeding rates are low: it is estimated that of all children born between 1988 and 1992, only 53 percent were exclusively breastfed at the end of the first month of life, a figure which dropped to 22 percent at the end of the first 4 months of life.

The Ministry of Health and Population, in collaboration with the BASICS project, is working in two districts in Madagascar (Antsirabe II and Fianarantsoa II) to improve the health of mothers and children by focusing on the four most important causes of morbidity and mortality. One component of this program is to improve the quality of primary health care provided at health facilities in the focus districts. An integrated health facility survey was planned and conducted in order to develop strategies for improving facility-based care.

II. HEALTH FACILITY ASSESSMENT

A. Objectives of the Survey

The objectives of the health facility assessment were as follows:

1. To determine
 - a) current knowledge and practices of health care workers at outpatient clinics regarding the assessment and management of sick children and women of childbearing age
 - b) the barriers to effective case management practices
 - c) the adequacy of training and supervision of health workers
2. To use information obtained on case management practices, training, supervision and barriers to public health practice to
 - a) prioritize and plan improvements in outpatient health facilities at all levels, including staffing, clinic organization, equipment requirements, drug and material supplies and communication
 - b) improve and develop pre-service and in-service training for health care workers in the outpatient clinic setting
 - c) improve and develop a strategy for supervising and monitoring health worker performance
3. To train national and district-level health care workers in survey techniques, collection and analysis of survey data, and the use of data to improve the quality of case management in outpatient health facilities.

B. Methodology

Sampling

All health facilities in the districts of Antsirabe II and Fianarantsoa II were selected for inclusion in this survey. One health station in Antsirabe II (Bemasonandro) was excluded because it was inaccessible by road. A total of 29 facilities were visited in Fianarantsoa II and 26 facilities in Antsirabe II. All facilities visited in each district are listed in Appendix A.

The sample consisted of all infants and children under five years of age presenting to a health facility during the period of observation whose caretakers described them as having *fever/malaria, cough/difficulty breathing/pneumonia* or *diarrhea*. The total number of infants and children therefore represent clusters brought to the sampled health facilities. The larger number of children observed permits greater statistical precision than when health facilities are used as the unit of measurement.

Survey instruments

The survey instruments were designed to obtain information on key aspects of the knowledge and practices of health care workers and of caretakers leaving the health facility. In addition, information was gathered on the health facility, including the availability of materials and supplies. The survey was designed to assess important aspects of the case management of sick children but did not require that "standard case management" training has been conducted in the past.

Four survey instruments were used at each outpatient health facility:

- a) observation of how a health worker manages the sick child
- b) interview of health personnel regarding knowledge and practices of case management of sick children
- c) exit interview with the caretaker of the child as they leave the health facility
- d) assessment of facilities and supplies

Survey instruments were translated into French and administered in Malagashi, the national language. Questionnaires were field-tested at health stations in advance to check the comprehension of the questions and accuracy of the translation. Copies of the final questionnaires are included in Appendix B.

Field work

Field work was conducted by ten teams (five teams for each district) each comprising a supervisor and two surveyors. In addition, a coordinating team was allocated to each district to supervise all teams in the field. The coordinating teams were also responsible for collecting questionnaires and entering questionnaire data into the EpiInfo database during the survey week. At each health facility, the supervisor was responsible for introducing the team and explaining the purpose of the visit. During the clinic visit, the supervisor identified children meeting the case definition for entry into the survey and gave an identification card to the caretakers of these children to ensure that they were followed in the clinic. In addition, the supervisor conducted the facility equipment and supply review section of the survey. One surveyor was stationed in the

consulting room and conducted the health worker observation component of the survey; at the end of the clinic this surveyor also conducted the health worker interview. The second surveyor conducted exit interviews with caretakers as they left the clinic with their child. The supervisor monitored the performance of the surveyors regularly to ensure that questionnaires were correctly completed; errors or incomplete questionnaires were corrected in the health facility. At the end of the day, the supervisor reviewed all questionnaires for completeness and accuracy. Survey teams are listed in Appendix C.

Training of survey teams was conducted between April 15 and 19, 1996 in Fianarantsoa II. Training included a review of survey methodology and objectives, conduct of the field activities and careful review of the survey instruments. Training involved group activities, role plays and practice sessions at five local outpatient health clinics. Following the field visits, some survey questions were further modified. Field work was conducted between April 22 and 27, 1996. A different health facility was visited on each of the five days available for the survey. At each health facility, survey teams attended the entire clinic session which was usually conducted between 8:00 am and 12:00 midday.

Data analysis

Questionnaire data were coded and then entered into EpiInfo (version 6.0) software by data entry personnel and consultant staff. Data analysis was conducted between April 29 and May 1, 1996, by a local team comprising the director of preventive medicine, the medical directors of the two focus districts, national managers for the CDD, ARI, malaria, nutrition and SALFA programs, local BASICS project staff, and consultant epidemiologists. Descriptive data analysis and key indicators were summarized in tables and graphs and discussed with survey teams. The use of survey information to improve the quality of all health services was discussed, with an emphasis on how each participant would use the information in their own areas. Findings were presented by the survey team to a larger group of representatives from divisions of the MOH and other organizations on May 2, 1996.

III. SURVEY RESULTS

A. General Descriptive Information

A total of 26 health facilities were visited in Antsirabe II and observations conducted on 148 children. A total of 29 facilities were visited in Fianarantsoa II and observations conducted on 193 children. In Antsirabe II, 23 facilities were public and three were private. In Fianarantsoa II, 28 facilities were public and one was private. In Antsirabe II, the distribution of ages of children observed ranged from 0 to 58 months, with a mean of 13 months and a median of 10 months. In Fianarantsoa II, the distribution of ages of children observed ranged from 1 to 59 months with a mean of 15 months and a median of 12 months.

In Antsirabe II, the hours of operation of health facilities visited ranged between 6 and 14 hours, with a mean of 8 hours and in Fianarantsoa II, hours of operation ranged between 6 and 24 hours, with a mean of 9 hours. A total of 20/26 (77%) of facilities in Antsirabe II operated outreach posts and 23/29 (79%) of facilities in Fianarantsoa II operated outreach posts. The range for the number of outreach posts operated was between 0 and 13.

Of all health workers responsible for seeing sick children at the facilities visited in Antsirabe II, 11/26 (42%) were *aide sanitaires*, 9/26 (35%) were *infirmiers*, 3/26 (12%) were doctors and 3/26 (12%) health assistants. Of all health workers responsible for seeing sick children at health facilities visited in Fianarantsoa II, 11/29 (38%) were *infirmiers* and the same number were *aide sanitaires*, 4/29 (14%) were health assistants, 2/29 (7%) were midwives, and 1/29 (3%) was a doctor.

Table 1: Type of health workers seeing sick children in outpatient clinics, by district (Madagascar health facility assessment, 1996)

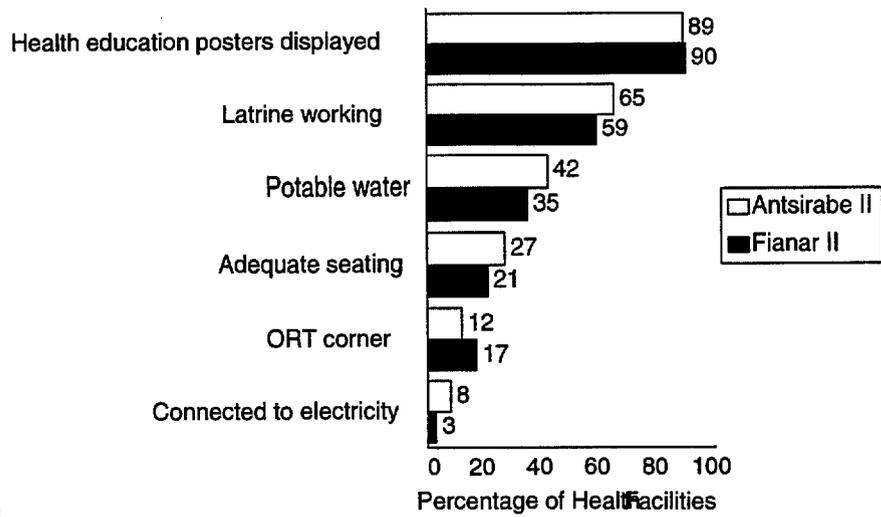
DISTRICT	TYPE OF HEALTH WORKER SEEING SICK CHILDREN					
	Doctor	Infirmier	Aide Sanitaire	Health Assistant	Midwife	TOTAL HWs
Antsirabe II	3	9	11	3	0	26
Fianarantsoa II	1	11	11	4	2	29
TOTAL	4	20	22	7	2	55

Comments: Infirmiers and aide sanitaires were most frequently responsible for seeing sick children in the outpatient setting. This has implications for training; both of these groups should be able to effectively assess, classify and treat the common causes of infant and childhood mortality and morbidity.

B. Facility Equipment, Supplies and Record-Keeping

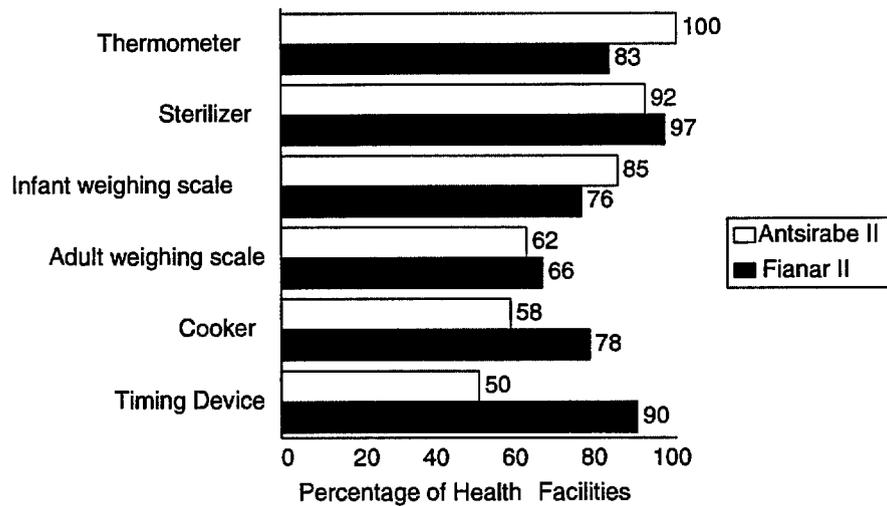
Patient and health worker accommodation and the availability of basic equipment are summarized in Figures 1 and 2 for both Antsirabe II and Fianarantsoa II. In both districts, less than half of all facilities had potable water available, an ORT corner, adequate seating for patients, or were connected to electricity. In Antsirabe II, only half of all facilities had a timing device available (for counting respiratory rates), while 90 percent of facilities in Fianarantsoa II had a timing device.

Figure 1: Patient and Health Worker Accommodation
Fianarantsoa II and Antsirabe II, April 1996



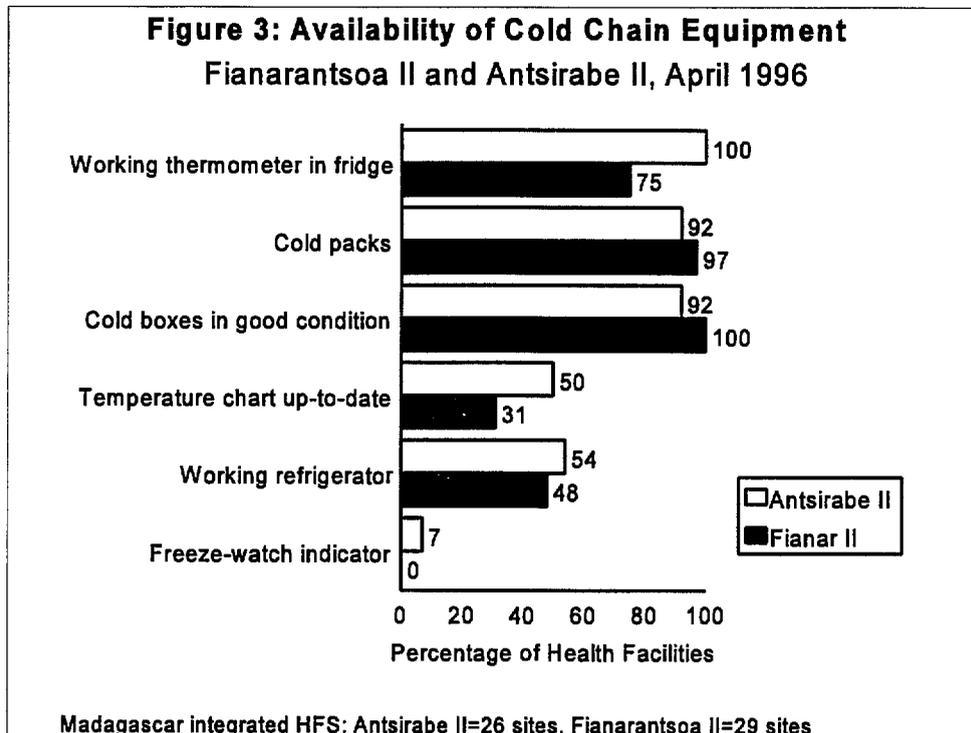
Madagascar Integrated HFS: Antsirabe II=26 sites, Fianarantsoa II=29 sites

Figure 2: Availability of Functional Equipment
Fianarantsoa II and Antsirabe II, April 1996



Madagascar Integrated HFS: Antsirabe II= 26 sites, Fianarantsoa II=29 sites

A refrigerator was available in 16/26 (62%) of facilities in Antsirabe II and 20/29 (69%) of facilities in Fianarantsoa II. The majority of refrigerators in both districts were powered by kerosene. In Antsirabe II, 14/16 (88%) of refrigerators were described as being functional and in Fianarantsoa II, 14/20 (70%) of refrigerators were described as being functional. The condition of cold chain equipment is summarized in Figure 3. An up-to-date temperature chart was present in 13/16 (81%) facilities with a refrigerator in Antsirabe II and in 9/20 (45%) of facilities with a refrigerator in Fianarantsoa II. A cold box was present in 24/26 (92%) of facilities in Antsirabe II and 29/29 (100%) of facilities in Fianarantsoa II.



The proportion of facilities with no stock of medications, disposable needles or syringes on the day of the survey is summarized in Table 2. Expired medications were noted in the stock of 6/26 (23%) of facilities in Antsirabe II and 6/29 (21%) of facilities in Fianarantsoa II.

Of 16 facilities in Antsirabe II with refrigerators, 3/16 (19%) had no polio, DPT or measles vaccines, 4/16 (25%) had no BCG vaccine and 16/16 (100%) had no tetanus vaccine on the day of the survey. No expired vaccines were noted in Antsirabe II. Of 20 facilities in Fianarantsoa II with refrigerators, 7/20 (35%) had no polio, DPT, BCG or tetanus vaccine, and 8/20 (40%) had no measles vaccine on the day of the survey. A total of 5/20 (25%) of facilities had expired vaccines in Fianarantsoa II. The types of expired vaccines were polio, DPT and BCG.

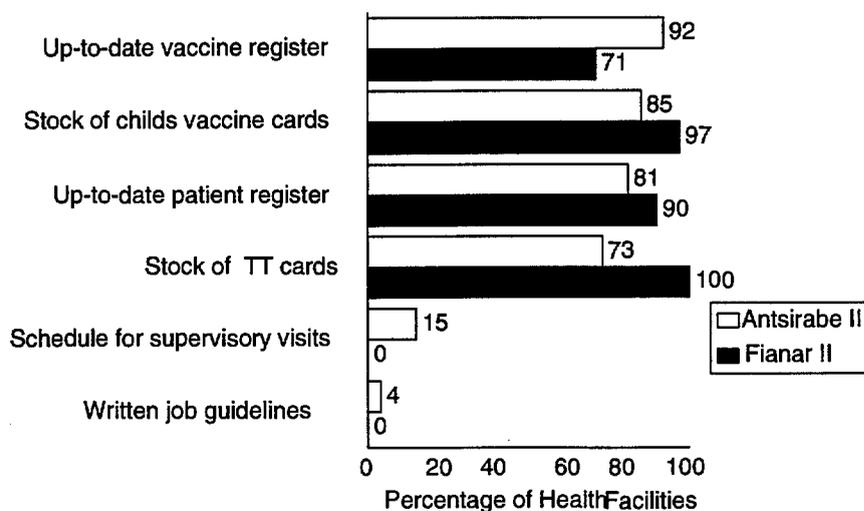
Table 2: Proportion of health facilities with no stock available on the day of the survey (Madagascar health facility assessment, 1996)

STOCK ITEM	Antsirabe II	Fianarantsoa II	TOTAL
Chloroquine tabs	35% (9/26)	62% (18/29)	49% (27/55)
Cotrimoxazole tabs	35% (9/26)	93% (27/29)	65% (36/55)
ORS	46% (12/26)	83% (24/29)	65% (36/55)
Vitamin A	12% (3/26)	83% (24/29)	49% (27/55)
Disposable needles	12% (3/26)	41% (12/29)	27% (15/55)
Syringes	12% (3/26)	41% (12/29)	27% (15/55)

At least one stock-out of essential medications had occurred in the month preceding the survey at 18/26 (69%) of facilities in Antsirabe II and 22/29 (76%) of facilities in Fianarantsoa II. At least one stock-out of necessary cards and forms had occurred in the previous month at 5/26 (19%) of facilities in Antsirabe II and 9/29 (31%) of facilities in Fianarantsoa II. At least one stock-out of needles and syringes had occurred in the month preceding the survey in 2/26 (8%) of facilities in Antsirabe II and 13/29 (45%) of facilities in Fianarantsoa II. Supplies in both Antsirabe II and Fianarantsoa II were most frequently provided by the government store. The most common cause of delayed supplies, according to health workers was a rupture of stock at the central store (Antsirabe II = 16/26 or 62%, Fianarantsoa II = 13/29 or 45%).

Health workers providing child care services had written job guidelines available in 1/26 (4%) of facilities in Antsirabe II and 0/29 (0%) of facilities in Fianarantsoa II. A schedule for supervisory visits was available in 4/26 (15%) of facilities in Antsirabe II and 0/29 (0%) of facilities in Fianarantsoa II. The proportion of facilities conducting basic documentation and record-keeping is summarized in Figure 4.

**Figure 4: Availability of Documentation and Records
Fianarantsoa II and Antsirabe II, April 1996**



Madagascar Integrated HFS: Antsirabe II=26 sites, Fianarantsoa II=29 sites

Comments

Less than half of facilities visited in both districts had potable water available, an ORT corner, adequate seating for patients or were connected to electricity; all of these will potentially impact on the quality of health services provided at health facilities. Most facilities had essential equipment available. A functional refrigerator was present in only 14/26 (54%) of facilities in Antsirabe II and 14/29 (48%) of facilities in Fianarantsoa II, limiting the ability of these facilities to provide regular immunization services. A first step in improving the capacity of facilities to deliver immunization services will be to rehabilitate existing refrigerators and to strengthen the ability of health workers to provide regular refrigerator maintenance. Although an up-to-date temperature chart was present on 81 percent of refrigerators in Antsirabe II, only 45 percent of refrigerators in Fianarantsoa II had an up to date temperature chart and were therefore unable to monitor conditions of vaccine storage. Health worker training and supervision should reinforce the regular use of a temperature chart and an understanding of its importance. Between 12 percent and 46 percent of health facilities visited in Antsirabe II did not have one or more essential supplies on the day of the survey and 69 percent of facilities had experienced at least one stock-out in the previous month. In Fianarantsoa II, between 41 percent and 93 percent of facilities visited did not have one or more essential supplies on the day of the survey and 76 percent had experienced at least one stock-out in the previous month. Delays in the delivery of essential supplies will impact on the quality of case management that can be provided; the delivery system appears to be working less effectively in Fianarantsoa II. There are a number of

points at which the delivery of drug supplies to facilities could be compromised, including the ordering and delivery of drugs to peripheral sites, the maintenance and use of stock inventories, and at the level of the central store. At many health facilities, supplies need to be picked up from a central store by health workers, often lacking the means to do so. An assessment of the mechanisms for delivering drugs and supplies to peripheral sites should be considered.

Most facilities did not have written job guidelines for health workers or a schedule of supervisory visits. The introduction of both should be considered as part of a strategy to improve routine supervision and quality of care.

C. Observation of Sick Children

Of 148 children observed in Antsirabe II, a total of 60 (41%) were described as having fever, 116 (78%) ARI, and 34 (23%) diarrhea. Of 193 children observed in Fianarantsoa II, a total of 98 (51%) were described as having fever, 150 (78%) ARI, and 33 (17%) diarrhea. In Antsirabe II, the number of children described as having both ARI and diarrhea was 13 (9%) and the number of children with all three symptoms was 5 (3%). In Fianarantsoa II, the number of children described as having both ARI and diarrhea was 14 (7%) and the number of children with all three symptoms was 9 (5%).

The median consultation time in both Antsirabe II and Fianarantsoa II was 6 minutes, with a range between 2 and 28 minutes. The histories taken by health workers for children with fever, ARI and diarrhea are summarized in Tables 3 and 4. The majority of health workers in both districts asked questions about the presenting illness and the duration of this illness. Questions to clarify the history of the fever were asked in the majority of cases (87% in Antsirabe II and 86% in Fianarantsoa II). For children with a presenting complaint of ARI, most were asked questions about a history of cough (90% in Antsirabe II and 85% in Fianarantsoa II), while a much smaller proportion were asked about a history of difficulty breathing (24% in Antsirabe II and 12% in Fianarantsoa II). For children with a presenting complaint of diarrhea, most were asked questions to clarify the history of diarrhea (85% in both districts), but were less commonly asked about a history of blood in the stool (44% in Antsirabe II and 58% in Fianarantsoa II). Questions about treatment with western medicines prior to coming to the clinic were asked in almost a quarter of cases (20% in Antsirabe II and 24% in Fianarantsoa II), and questions about the use of traditional medicines prior to the clinic visit were asked less frequently (11% in Antsirabe II and 15% in Fianarantsoa II).

Table 3: History questions asked to the caretakers of sick infants and children by presenting complaint, Antsirabe II (Madagascar health facility assessment, 1996)

HISTORY QUESTIONS	PRESENTING COMPLAINT			
	FEVER N=60	ARI N=116	DIARRHEA N=34	TOTAL
Eating/drinking	37% (22/60)	24% (28/116)	32% (11/34)	32% (48/148)
Breastfeeding	38% (20/52)	42% (42/99)	28% (8/29)	40% (50/126)
Convulsions	10% (6/60)	4% (5/116)	0% (0/34)	7% (10/148)
Change in consciousness	2% (1/60)	2% (2/116)	0% (0/34)	1% (2/148)
Nature of illness	97% (58/60)	97% (112/116)	100% (34/34)	97% (144/148)
Duration of illness	82% (49/60)	78% (91/116)	74% (25/34)	78% (116/148)
Home treatment: traditional	8% (5/60)	6% (7/116)	26% (9/34)	11% (16/148)
Home treatment: western	17% (10/60)	15% (17/116)	41% (14/34)	20% (30/148)
Hx. of fever	87% (52/60)			87% (52/60)
Hx. of coughing		90% (104/116)		90% (104/116)
Difficulty breathing		24% (28/116)		24% (28/116)
Hx. of vomiting			38% (13/34)	38% (13/34)
Hx. of diarrhea			85% (29/34)	85% (29/34)
Blood in stool			44% (15/34)	44% (15/34)

Table 4: History questions asked to the caretakers of sick infants and children by presenting complaint, Fianarantsoa II (Madagascar health facility assessment, 1996)

HISTORY QUESTIONS	PRESENTING COMPLAINT			
	FEVER N=98	ARI N=150	DIARRHEA N=33	TOTAL
Eating/drinking	17% (17/98)	13% (20/150)	27% (9/33)	16% (31/193)
Breastfeeding	17% (13/75)	17% (22/127)	21% (5/24)	17% (27/157)
Convulsions	3% (3/98)	2% (3/150)	0% (0/33)	2% (3/193)
Change in consciousness	4% (4/98)	3% (5/150)	3% (1/33)	3% (5/193)
Nature of illness	87% (85/98)	83% (125/150)	94% (31/33)	85% (164/193)
Duration of illness	71% (70/98)	67% (100/150)	88% (29/33)	67% (130/193)
Home treatment: traditional	13% (13/98)	11% (17/150)	24% (8/33)	15% (28/193)
Home treatment: western	26% (25/98)	18% (27/150)	36% (12/33)	24% (47/193)
Hx. of fever	86% (84/98)			86% (84/98)
Hx. of coughing		85% (128/150)		85% (128/150)
Difficulty breathing		12% (18/150)		12% (18/150)
Hx. of vomiting			39% (13/33)	39% (13/33)
Hx. of diarrhea			85% (28/33)	85% (28/33)
Blood in stool			58% (19/33)	58% (19/33)

The proportion of caretakers of sick children who were asked for the child's vaccination card at the time of the consultation was 130/148 (88%) in Antsirabe II and 127/193 (66%) in Fianarantsoa II. The proportion of caretakers who had the child's vaccination card when asked was 108/130 (83%) in Antsirabe II and 80/127 (63%) in Fianarantsoa II. The actions of health workers for those children with a vaccination card at the time of the sick child visit are summarized in Table 5.

Table 5: Health worker action for children with a vaccination card by district (Madagascar health facility survey, 1996)

HEALTH WORKER ACTION	Antsirabe II	Fianarantsoa II
No action: Up-To-Date	71% (77/108)	41% (33/80)
Same day vaccination	3% (3/108)	13% (10/80)
Referred for vaccination another day	19% (21/108)	29% (23/80)
Not referred for vaccination	6% (7/108)	18% (14/80)

Of those children with no vaccination card, 4/22 (18%) in Antsirabe II and 17/47 (36%) in Fianarantsoa II were asked to return on the next vaccination day. The caretakers of children without vaccination cards were criticized by health workers in 15/22 (68%) of cases in Antsirabe II and 31/47 (66%) of cases in Fianarantsoa II.

The proportion of mothers who were asked for their own TT vaccination card at the time of the consultation for their child was 8/148 (5%) in Antsirabe II and 5/193 (3%) in Fianarantsoa II. The proportion of mothers who had their TT card at the time of the visit was 4/8 (50%) in Antsirabe II and 2/5 (40%) in Fianarantsoa II.

The proportion of infants and children examined by examination area is summarized in Tables 6 and 7.

Table 6: Proportion of children examined, by examination area, Antsirabe II (Madagascar health facility assessment, 1996)

EXAMINATION AREA	PRESENTING COMPLAINT			
	FEVER	ARI	DIARRHEA	TOTAL
Weighed the child	12% (7/60)	16% (18/116)	35% (12/34)	19% (28/148)
Plotted weight/age	14% (1/7)	0% (0/18)	8% (1/12)	7% (2/28)
Observed nutritional state	7% (4/60)	11% (13/116)	21% (7/34)	11% (17/148)
Conjunctival pallor	13% (8/60)	8% (9/116)	6% (2/34)	9% (13/148)
Chest: count respiratory rate	0% (0/60)	2% (2/116)		2% (2/130)
Chest: stethoscope	33% (20/60)	53% (62/116)		50% (65/130)
Ears	8% (5/60)	11% (13/116)		11% (14/130)
Skin turgor			59% (20/34)	59% (20/34)

Table 7: Proportion of children examined by examination area, Fianarantsoa II (Madagascar health facility assessment, 1996)

EXAMINATION AREA	PRESENTING COMPLAINT			
	FEVER	ARI	DIARRHEA	TOTAL
Weighed the child	6% (6/98)	5% (7/150)	9% (3/33)	7% (13/193)
Plotted weight/age	0% (0/6)	18% (2/11)	0% (0/3)	15% (2/13)
Observed nutritional state	2% (2/98)	3% (4/150)	0% (0/33)	3% (5/193)
Conjunctival pallor	13% (13/98)	13% (19/150)	18% (6/33)	15% (28/193)
Chest: count respiratory rate	2% (2/98)	1% (2/150)		2% (3/178)
Chest: stethoscope	32% (31/98)	41% (61/150)		36% (64/178)
Ears	2% (2/98)	6% (9/150)		6% (10/178)
Skin turgor			36% (12/33)	36% (12/33)

Appropriate treatment was defined according to the National Treatment Guidelines and based on the diagnosis made by the health worker. The overall number of children treated appropriately according to the diagnosis made by the health worker was 104/148 (70%) in Antsirabe II and 89/193 (46%) in Fianarantsoa II. Treatment for diarrhea, dysentery, malaria and pneumonia is summarized in Table 8. The majority of cases of malaria and ARI were treated appropriately, while less than half of cases of diarrhea in both districts were treated appropriately.

Table 8: Proportion of cases treated appropriately according to national treatment guidelines, by district (Madagascar health facility survey, 1996)

HEALTH WORKER DIAGNOSIS	ANTSIRABE II	FIANARANTSOA II	TOTAL
Simple diarrhea	46% (12/26)	28% (5/18)	39% (17/44)
Dysentery	0% (0/2)	67% (2/3)	40% (2/5)
Pneumonia	89% (50/56)	74% (48/65)	81% (98/121)
Malaria	100% (11/11)	76% (19/25)	83% (30/36)

Treatment received by the diagnosis made by the health worker is summarized in Table 9. The majority of cases diagnosed with pneumonia and malaria in both districts were treated with

antibiotics and antimalarials respectively. The majority of cases of diarrhea received an oral rehydration fluid. A relatively high proportion of diarrhea cases were given an antibiotic.

Table 9: Treatment given by health workers by diagnostic category, by district (Madagascar health facility survey, 1996)

DIAGNOSIS AND TREATMENT GIVEN	ANTSIRABE II	FIANARANTSOA II	TOTAL
Simple diarrhea: Given ORT	81% (21/26)	78% (14/18)	80% (35/44)
Simple diarrhea: Given antidiarrheal	12% (3/26)	6% (1/18)	9% (4/44)
Simple diarrhea: Given antibiotic	54% (14/26)	33% (6/18)	45% (20/44)
Pneumonia: Given antibiotic	91% (51/56)	83% (54/65)	87% (105/121)
Malaria: Given antimalarial	100% (11/11)	96% (24/25)	97% (35/36)

Health education messages given to caretakers at the time of the interview are summarized by district in Tables 10 and 11. In general, messages to complete the treatment administered and instructions on how to administer this treatment were given in the majority of cases. Other key messages were less consistently given, in particular advice to continue feeding or breastfeeding and to return if the child worsened at home.

Of children for whom ORS or SSS were prescribed, 16/23 (70%) of caretakers in Antsirabe II and 25/29 (86%) of caretakers in Fianarantsoa II were given an explanation on how to prepare it at home. Health workers asked questions to verify the comprehension of how to give ORS or SSS to 4/23 (17%) of caretakers in Antsirabe II and 6/29 (21%) of caretakers in Fianarantsoa II. Demonstrations on how to prepare ORS or SSS were not given in either district.

Table 10: Health education messages given to caretakers by health workers by diagnosis, Antsirabe II (Madagascar health facility assessment, 1996)

MESSAGE GIVEN	HEALTH WORKER DIAGNOSIS			
	MALARIA (N=11)	PNEUMONIA (N=56)	DIARRHEA (N=26)	TOTAL
Complete treatment	64% (7/11)	64% (36/56)	50% (13/26)	60% (51/85)
Continue feeding	55% (6/11)	29% (16/56)	42% (11/26)	34% (29/85)
Continue breastfeeding	22% (2/9)	30% (14/47)	50% (12/24)	33% (24/73)
Return if the child becomes worse	45% (5/11)	23% (13/56)	38% (10/26)	31% (26/85)
How to administer medications	91% (10/11)	100% (56/56)	96% (25/26)	98% (83/85)
Give more fluids than usual			65% (17/26)	65% (17/26)
Give fluids after diarrhea or vomit			42% (11/26)	42% (11/26)
Give antipyretic	36% (4/11)			36% (4/11)
Give tepid bath	0% (0/11)			0% (0/11)

Health workers less frequently gave instructions to caretakers on when to return with their sick children. Of those children diagnosed with malaria, 2/11 (18%) in Antsirabe II and 0/25 (0%) in Fianarantsoa II were told to return if the fever was persistent or elevated. Of those children diagnosed with pneumonia, 0/56 (0%) in Antsirabe II and 0/65 (0%) in Fianarantsoa II were told to return if the child's breathing became rapid or difficult. Of those children diagnosed with diarrhea, 4/26 (15%) in Antsirabe II and 0/18 (0%) were told to return if the child developed blood in the stool.

Health workers asked questions to caretakers to verify that s/he understood how to manage the child at home in 78/148 (53%) of cases in Antsirabe II and 53/193 (27%) of cases in Fianarantsoa II. Caretakers were asked if they had any additional questions in 7/148 (5%) of cases in Antsirabe II and 6/193 (3%) of cases in Fianarantsoa II.

Table 11: Health education messages given to caretakers by health workers by diagnosis, Fianarantsoa II (Madagascar health facility assessment, 1996)

MESSAGE GIVEN	HEALTH WORKER DIAGNOSIS			
	MALARIA (N=25)	PNEUMONIA (N=65)	DIARRHEA (N=18)	TOTAL
Complete treatment	76% (19/25)	60% (39/65)	28% (5/18)	60% (63/105)
Continue feeding	8% (2/25)	3% (2/65)	11% (2/18)	6% (6/105)
Continue breastfeeding	6% (1/18)	6% (3/52)	17% (2/12)	7% (6/82)
Return if the child becomes worse	16% (4/25)	15% (10/65)	11% (2/18)	15% (16/105)
How to administer medications	100% (25/25)	95% (62/65)	100% (18/18)	97% (102/105)
Give more fluids than usual			89% (16/18)	89% (16/18)
Give fluids after diarrhea or vomit			22% (4/18)	22% (4/18)
Give antipyretic	16% (4/25)			16% (4/25)
Give tepid bath	12% (3/25)			12% (3/25)

Comments

The average consultation time for all outpatient visits was six minutes. All training designed to improve the case management practices of health workers should take this into consideration; it is unlikely that health workers will consistently practice strategies which require more than six minutes to complete. A high proportion of all cases in both districts were asked history questions about the presenting illness and the duration of the symptoms which are key to the assessment and classification of sick children. Questions which are considered important for assessing the severity of the illness were asked much less frequently, in particular a history of convulsions, change in consciousness or lethargy, and feeding history. Performance was better for questions which were specific for the presenting complaint, although only a relatively small proportion of cases of diarrhea were asked about a history of blood in the stool or cases of ARI asked about a history of difficult breathing. Improved training could reinforce the importance of each of these areas when assessing all sick children.

A relatively high proportion of caretakers were asked for their child's vaccination card at the time of the sick child visit, with caretakers in Antsirabe II being asked more frequently than those in Fianarantsoa II. A relatively high proportion of caretakers in both districts had their vaccination cards when asked. Of the caretakers with cards, 70 percent in Antsirabe II were up-to-date, while 41 percent in Fianarantsoa II were up-to-date. These data suggest that awareness of the importance of checking the child's vaccination card is relatively high, although a significant number of missed opportunities to vaccinate remain. A very small proportion of mothers were asked for their own TT card at the time of the sick child visit. Vaccinating a child and his or her mother, or referring them for vaccination, at the time of the sick visit is a critical strategy for reducing missed opportunities to vaccinate. Health worker training could stress the importance of this activity; asking for and checking the vaccination card is simple, does not require much time to complete and does not require additional resources. Facilities that do not vaccinate daily should at least ensure that the caretaker understands that s/he should return with the child on the day that vaccinations are given.

A very small proportion of children in both districts had their nutritional status assessed. A low proportion of all children were weighed and plotted on a growth monitoring chart. Very few children were observed for overall nutritional status or had their conjunctivae checked for pallor. A full nutritional assessment is considered to be important for all sick children. For those children with a complaint of ARI, the chest was usually examined with a stethoscope; counting respiratory rate was rarely practiced, although it is the most sensitive diagnostic measure of the severity of lower respiratory tract infections. The ears were rarely examined as a component of an assessment for fever or ARI. Almost two-thirds of children with diarrhea had skin turgor assessed. The importance of a complete nutritional assessment should be emphasized during health worker training and supervision. Counting respiratory rate should be reinforced as a technique for assessing lower respiratory tract infections.

A high proportion of health workers in both districts treated children with pneumonia and malaria appropriately according to their own diagnosis. A lower proportion of cases of simple diarrhea were treated appropriately; although ORT was given frequently, antibiotics and antidiarrheal agents were overused. The assessment and classification of sick children was not validated, so this measure does not necessarily reflect the quality of the diagnosis made. Appropriate treatment for common diseases should be reinforced as part of pre- and in-service training and supervision.

A high proportion of caretakers were told by health workers how to administer the medications/ORT and given instructions on the importance of completing treatment. A much smaller proportion were given information on the importance of continuing feeding or breastfeeding, or of the need to return if the child's condition deteriorated at home. Very few caretakers were given information on the signs of severity at home. All of these messages are considered essential for the management of sick children at home in order to prevent mortality. The high proportion of messages given on the importance of completing a full course of medications is encouraging for the effective management of pneumonia, for which a course of

antibiotics is the primary therapy. A smaller proportion of cases of diarrhea or malaria were given messages on the importance of increasing the fluid intake or of taking an antipyretic agent. This component of case management was least well conducted by health workers, and could also be addressed through strengthened training and supervision. Improving the messages given to caretakers does not require any additional resources and should not require a lot of time if health workers are familiar with the key messages.

D. Interview with the Caretakers of Sick Infants and Children

The time taken by caretakers to reach the health facility in both districts ranged from 1 minute to 15 hours, with a median time of 30 minutes in Antsirabe II and 60 minutes in Fianarantsoa II. The problems faced by caretakers coming to health facilities are summarized in Table 12. Problems were experienced by 15/146 (10%) of caretakers in Antsirabe II and 23/192 (12%) of caretakers in Fianarantsoa II; the most common problem in Antsirabe II was that caretakers had to miss work activities (9/15, 60%) while the most common problem in Fianarantsoa II was that coming to the facility took too much time (19/23, 83%).

Table 12: Problems faced by caretakers coming to health facilities, by district (Madagascar health facility assessment, 1996)

PROBLEM	ANTSIRABE II (N=15)	FIANARANTSOA II (N=23)	TOTAL
Takes too long	13% (2/15)	83% (19/23)	55% (21/38)
Had to find someone to look after children	7% (1/15)	9% (2/23)	8% (3/38)
Had to miss work	60% (9/15)	0% (0/23)	24% (9/38)
No money for transport	20% (3/15)	4% (1/23)	11% (4/38)
Inconvenient hours	0% (0/15)	0% (0/23)	0% (0/38)

Caretakers had taken their child somewhere else for the same illness before coming to the health facility in 14/146 (10%) of cases on Antsirabe II and 34/192 (18%) of cases in Fianarantsoa II. Providers visited are summarized in Table 13. The most frequent providers visited were traditional healers in both districts. The number of days between the onset of the illness and the clinic visit ranged from 0 to 60 days, with a median of three days in both districts.

Table 13: Providers visited by caretakers before the clinic visit for the same illness, by district (Madagascar health facility assessment, 1996)

PROBLEM	ANTSIRABE II (N=14)	FIANARANTSOA II (N=34)	TOTAL
<i>Another government health facility</i>	21% (3/14)	29% (10/34)	27% (13/48)
<i>Private health facility</i>	7% (1/14)	6% (2/34)	6% (3/48)
<i>Traditional healer</i>	50% (7/14)	44% (15/34)	46% (22/48)
<i>Drug seller or pharmacist</i>	21% (3/14)	29% (10/34)	27% (13/48)

Of all children whose caretakers described them as having diarrhea, 14/34 (41%) of caretakers in Antsirabe II and 24/36 (67%) of caretakers in Fianarantsoa II said that they had done something to treat their infant or child at home. Home treatment of diarrhea by district is summarized in Table 14.

Table 14: Home case management provided by caretakers for children with diarrhea, by district (Madagascar health facility assessment, 1996)

HOME MANAGEMENT STRATEGY	ANTSIRABE II (N=14)	FIANARANTSOA II (N=24)	TOTAL
ORS	21% (3/14)	8% (2/24)	13% (5/38)
Sugar-Salt-Solution	64% (9/14)	17% (4/24)	34% (13/38)
Traditional therapies	14% (2/14)	42% (10/24)	32% (12/38)
Other medicines/drugs	0% (0/14)	33% (8/24)	21% (8/38)

Of all caretakers of children with diarrhea, 28/34 (82%) in Antsirabe II and 23/36 (64%) had previously heard of ORS. Of these caretakers in Antsirabe II, 11/28 (39%) knew correctly why ORS is given to children with diarrhea while 10/28 (36%) believed that it would stop the diarrhea. In Fianarantsoa II, 4/23 (17%) knew correctly why ORS is given to children with diarrhea, while 13/23 (57%) believed that it would stop the diarrhea. The proportion of caretakers who had ever been shown how to prepare ORS in Antsirabe II was 22/34 (65%) and of these 15/22 (68%) had correct knowledge of how to prepare ORS. The proportion of caretakers who had ever been shown how to prepare ORS in Fianarantsoa II was 13/36 (36%) and of these, 8/13 (62%) had correct knowledge of how to prepare ORS.

A total of 36/101 (36%) of caretakers in Antsirabe II who said that their infant or child had fever had done something to treat their child at home while 77/147 (52%) of caretakers in Fianarantsoa II had done so. Home treatment of fever by district is summarized in Table 15. The most frequent home treatment for fever in Antsirabe II and Fianarantsoa II was aspirin/paracetamol (58% and 47% respectively).

Table 15: Home case management provided by caretakers of children with fever, by district (Madagascar health facility assessment, 1996)

HOME MANAGEMENT STRATEGY	ANTSIRABE II (N=36)	FIANARANTSOA II (N=77)	TOTAL
Aspirin/paracetamol	58% (21/36)	47% (36/77)	50% (57/113)
Antimalarial	8% (3/36)	12% (9/77)	11% (12/113)
Antibiotic	6% (2/36)	29% (22/77)	21% (24/113)
Other medicines	8% (3/36)	1% (1/77)	4% (4/113)
Traditional medicine	25% (9/36)	31% (24/77)	29% (33/113)
Removing clothes or cold compresses	3% (1/36)	6% (5/77)	5% (6/113)

A total of 56/124 (45%) of caretakers who said that their infant or child had ARI had done something to treat their child at home in Antsirabe II while 96/166 (58%) of caretakers in Fianarantsoa II had done so. Home case management strategies by district are summarized in Table 16. The most frequent home treatments were the use of traditional medicines (44% overall) and antibiotics (26% overall).

Table 16: Home case management provided by caretakers of children with ARI, by district (Madagascar health facility assessment, 1996)

HOME MANAGEMENT STRATEGY	ANTSIRABE II (N=56)	FIANARANTSOA II (N=96)	TOTAL
Aspirin/paracetamol	2% (1/56)	22% (21/96)	15% (23/152)
Cough syrup	13% (7/56)	7% (7/96)	9% (14/152)
Antibiotic	14% (8/56)	33% (32/96)	26% (40/152)
Rubbing the chest/applying heat	34% (19/56)	10% (10/96)	19% (29/152)
Traditional medicine	46% (26/56)	43% (41/96)	44% (67/152)

The proportion of caretakers with correct knowledge of how to administer the oral medication given to them by the health worker is summarized in Table 17. Caretakers were asked to describe the daily dose and the number of days for which they would give the medicine. To be correct, the amount of each dose, number of times a day that they would give this dose, and the number of days for which they would continue had to be correct according to the national treatment guidelines for each medication. In both districts, caretakers most frequently made errors in describing the administration of antibiotics. The most frequent error for the administration of antibiotics was that caretakers described giving them for periods of less than five days. The most frequent error for the administration of ORS was that caretakers did not know how much to give or how often.

Table 17: Proportion of caretakers with correct knowledge of how to administer oral medications, by medication (Madagascar health facility assessment, 1996)

MEDICATION	CORRECT KNOWLEDGE OF DOSAGE SCHEDULE		
	ANTSIRABE II	FIANARANTSOA II	TOTAL
Chloroquine tab or syrup	25% (4/16)	67% (40/60)	58% (44/76)
Antibiotic tab or syrup	1% (1/67)	6% (7/116)	4% (8/183)
Paracetamol tab or syrup	31% (10/32)	90% (27/30)	60% (37/62)
Aspirin tab	34% (18/53)	89% (85/96)	69% (103/149)
ORS	89% (17/19)	22% (4/18)	57% (21/37)

The proportion of caretakers who knew at least one general and one specific strategy for the management of their child at home was 83/146 (57%) in Antsirabe II and 94/192 (49%) in Fianarantsoa II. General home case management strategies were not illness specific and included continuing to feed or breastfeed, to complete the course of treatment and to bring the child back if they got worse at home. Specific case management strategies were giving ORS or increased fluids for any type for diarrhea; giving an antimalarial, an antipyretic agent or cooling the child for fever; and giving an antibiotic for pneumonia.

In Antsirabe II, 95/146 (65%) of caretakers knew at least two signs of worsening or severe illness in their child at home, while 99/192 (52%) of caretakers in Fianarantsoa II were able to describe at least two signs of worsening or severe illness. The most frequently reported signs of severe illness at home in both districts were high or persistent fever (Antsirabe II: 72/146, 49%; Fianarantsoa II: 96/192, 50%), difficulty breathing (Antsirabe II: 67/146, 46%; Fianarantsoa II: 47/192, 24%) and not eating (Antsirabe II: 55/146, 38%; Fianarantsoa II 50/192, 26%).

In Antsirabe II, 58/146 (40%) of caretakers did not know or were not told when to bring their child back to the health facility. In Fianarantsoa II, 93/192 (48%) of caretakers did not know or were not told when to bring their child back to the health facility. Radio was never listened to by 70/146 (48%) of caretakers in Antsirabe II and 119/192 (62%) of caretakers in Fianarantsoa II. Radio was, however, listened to at least once a week by 46/146 (32%) of caretakers in Antsirabe II and 62/192 (32%) of caretakers in Fianarantsoa II.

Comments

Only about 10 percent of caretakers coming to health facilities had experienced a problem getting to the health facility. The majority of those who had problems in Antsirabe II reported that they were missing normal work activities, while in Fianarantsoa II, the majority of caretakers who reported problems said that the health facility was too far away from where they lived and that it took too long to get there. It is important that health workers and health planners are aware of these factors when planning health education strategies aimed at encouraging people to bring their children to health facilities when they notice danger signs, rather than delaying attendance.

Most caretakers brought their children directly to the health facility when they became ill and within three days of the onset of the illness; this suggests that caretakers are aware of the importance of relatively timely visits to health facilities. Nevertheless, a substantial number of caretakers (10% in Antsirabe II and 18% in Fianarantsoa II) went somewhere else for the same illness before coming to the health facility, most frequently to traditional healers and drug sellers. It may be important to develop health education programs for these two target groups in order to improve the management of children in the community. In Antsirabe II, 41 percent of caretakers reported treating diarrhea at home, while almost 70 percent of caretakers in Fianarantsoa II reported doing so. In Antsirabe II, 85 percent of caretakers gave an oral fluid to children with diarrhea, while only 25 percent of caretakers in Fianarantsoa II gave oral fluids at home. Oral fluids are clearly under-used for the treatment of children with diarrhea at home in Fianarantsoa II. Over 70 percent of caretakers in Fianarantsoa II gave medicines (traditional or non-traditional) to their children with diarrhea which is likely to be an ineffective management strategy. A high proportion of caretakers in both districts had heard of ORS and knowledge of how to prepare ORS was high amongst those who had ever been shown how to prepare it. It is worth noting that a high proportion of caretakers in both districts believed, incorrectly, that ORS would stop their child's diarrhea, a belief which may lead to reduced compliance with therapy at home. All essential aspects of home case management for diarrhea may be reinforced by improving the ability of health workers to better counsel caretakers at the time of the facility visit.

The caretakers of over half of all children with fever in both districts had treated their children at home. In both districts, aspirin or paracetamol was the most frequently used treatment approach, followed by the use of traditional methods. In both districts, chloroquine was infrequently given to children. Antibiotics were given to a relatively high proportion of children with fever in Fianarantsoa II, but were not as frequently used in Antsirabe II. The regular use of antipyretic

agents at home is encouraging. Antibiotics may be overused at home in Fianarantsoa II. The types and usage patterns for traditional medicines should be further investigated.

The caretakers of over half of all children with ARI in both districts had treated their children at home. The most frequently used home treatment strategy was traditional medicines in both districts. Antibiotics were given to a high proportion of children with ARI in Fianarantsoa II, but not in Antsirabe II. The types and usage patterns for traditional medicines should be further investigated.

Knowledge of caretakers on how to give oral medications was worst for antibiotics in both districts, with the majority of caretakers giving short courses. Knowledge of how to give ORS was high in Antsirabe II, but low in Fianarantsoa II. Knowledge of how to give chloroquine was high in Fianarantsoa II and low in Antsirabe II. This measure does not distinguish between errors made because health workers had incorrectly prescribed the medication (providers do not have correct knowledge of the dosage schedule) or because caretakers had not understood correct instructions (providers do not communicate the dosage schedule effectively to caretakers). In either case, there is a need to improve the prescribing practices of health workers to focus on both the correct dosage of commonly used medications and on strategies for communicating these dosages to caretakers.

Over half of the caretakers of sick children in both districts knew how to manage their children correctly at home and understood signs of worsening or severe illness. This is an encouraging finding; these behaviors are critical to reducing mortality from the common childhood diseases. The relatively high level of knowledge of danger signs, coupled with the relatively high proportion of caretakers who come directly to health facilities after the onset of the illness, suggests that a high proportion of caretakers who reach facilities are attending in a timely fashion. Nevertheless, almost half of all caretakers do not have good knowledge of home case management or of when to seek care for their children; improving communication between health workers and their clients is required to further reinforce these principles.

E. Interview with the Health Care Worker

Overall, 20/26 (77%) of health workers in Antsirabe II had a supervisor and 26/29 (90%) of health workers in Fianarantsoa II had a supervisor. Of those health workers with supervisors, 16/20 (80%) in Antsirabe II and 19/26 (73%) in Fianarantsoa II had received at least one supervisory visit over the 6 months preceding the survey. Of those health workers who had supervisors, 11/20 (55%) in Antsirabe II and 22/26 (85%) in Fianarantsoa II had received some type of feedback from the last supervisory visit. The most frequent form of feedback provided by supervisors was written or oral reports which had been provided at the time of the last supervisory visit by 6/20 (30%) of supervisors in Antsirabe II and 10/26 (38%) of supervisors in Fianarantsoa II. Of those health workers receiving supervision, the most frequent activities provided by supervisors to keep health workers' skills up-to-date were monthly meetings

(Antsirabe II: 16/20, 80%; and Fianarantsoa II: 26/26, 100%). Table 18 summarizes what supervisors had done at the time of the last supervisory visit.

Table 18: Supervisors' activities at the time of the last supervisory visit, by district (Madagascar health facility assessment, 1996)

ACTION	ANTSIRABE II	FIANARANTSOA II	TOTAL
Delivered supplies	50% (10/20)	29% (7/24)	39% (17/44)
Observed vaccination session	50% (10/20)	38% (9/24)	43% (19/44)
Discussed problems with medicines and supplies	40% (8/20)	50% (12/24)	45% (20/44)
Viewed reports	20% (4/20)	17% (4/24)	18% (8/44)
Gave HWs information	10% (2/20)	29% (7/24)	20% (9/44)
Observed case management practices	0% (0/20)	0% (0/24)	0% (0/44)
Talked to patients	5% (1/20)	0% (0/24)	2% (1/44)

All health workers reported using the information that they obtained from routine reports. The most frequent uses for routine report information in both districts were for epidemiological surveillance and for planning. The proportion of health workers reporting that they had received feedback from routine reports was 14/26 (54%) in Antsirabe II and 23/29 (79%) in Fianarantsoa II.

The most common problems reported by health workers when doing their job are summarized in Table 19. The most frequently reported problem was a lack of supplies or stock.

Table 19: Most common problems faced by health workers, by district (Madagascar health facility assessment, 1996)

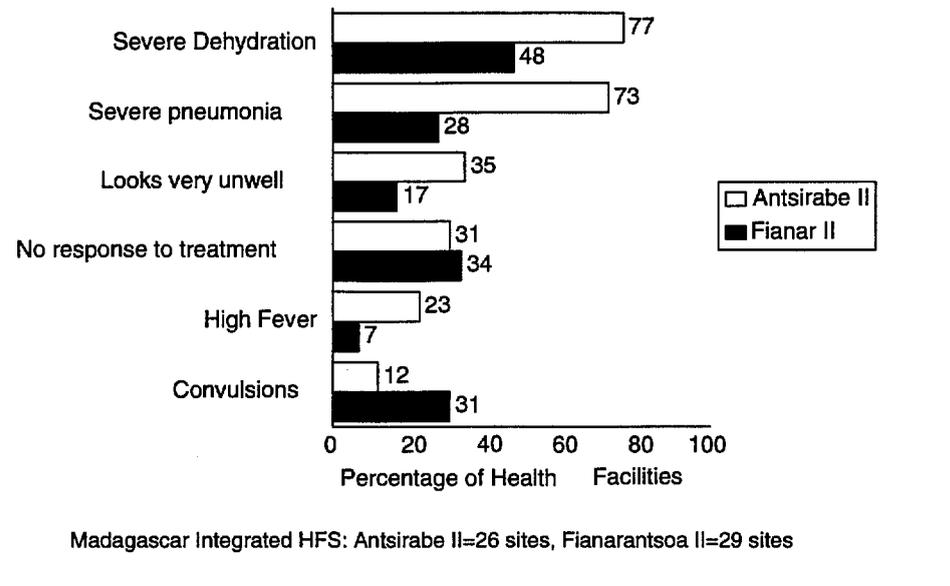
PROBLEM	ANTSIRABE II	FIANARANTSOA II	TOTAL
Lack of training	27% (7/26)	7% (2/29)	16% (9/55)
Mothers don't come to clinic	4% (1/26)	3% (1/29)	4% (2/55)
Lack personnel or time	62% (16/26)	59% (17/29)	60% (33/55)
Lack of supplies or stock	73% (19/26)	86% (25/29)	80% (44/55)
Lack of supervision	8% (2/26)	3% (1/29)	5% (3/55)
Difficult population	19% (5/26)	17% (5/29)	18% (10/55)
Lack of transport	58% (15/26)	34% (10/29)	45% (25/55)
Lack of motivation	38% (10/26)	21% (6/29)	29% (16/55)
Poor environment and living conditions	58% (15/26)	28% (8/29)	42% (23/55)

The proportion of health workers responsible for seeing sick children who had received at least one training in the previous 12 months in was 25/26 (96%) in Antsirabe II and 22/29 (76%) in Fianarantsoa II. The number of training sessions that had been received ranged from 0 to 4 in both districts. The most frequently received type of training in both districts was nutrition (Antsirabe II: 23/25, 92%; and Fianarantsoa II: 19/22, 86%). Of all the last training courses received by health workers, clinical practice had been included in 8/25 (32%) of training courses in Antsirabe II and 5/22 (23%) of training courses in Fianarantsoa II.

The proportion of health workers with correct knowledge of the infant/child vaccination schedule was 19/26 (73%) in Antsirabe II and 20/29 (69%) in Fianarantsoa II. Over 85 percent of all health workers in both districts knew correctly the target groups for TT vaccine. The number of clinic vaccination days in both districts ranged from zero to five, with a mean of two days. The number of antenatal clinic days in both districts ranged from one to four, with a mean of two.

The number of facilities conducting vaccinations in Antsirabe II was 12/26 (46%) and in Fianarantsoa II was 21/29 (72%). The majority of these facilities in both districts were vaccinating 1 day a week (Antsirabe II: 8/12, 67%; Fianarantsoa II: 11/21, 52%) or two days a week (Antsirabe II: 4/12, 33%; Fianarantsoa II: 7/21, 33%). Only one facility in both districts reported conducting vaccination sessions five days a week. All facilities in Fianarantsoa II and 85 percent of facilities in Antsirabe II conducted antenatal clinics. Over 95 percent of facilities in both districts conducted clinics one or two days a week.

Figure 5: Health Worker Knowledge of When to Refer A Sick Child
 Fianarantsoa II and Antsirabe II, April 1996



The proportion of health workers knowing at least two signs of when to refer a sick child to hospital was 23/26 (88%) in Antsirabe II and 17/29 (59%) in Fianarantsoa II. Figure 5 summarizes the reasons for referral given by health workers. In Antsirabe II, 20/26 (77%) health workers had wanted to refer a sick child in the past, but had been unable to do so and in Fianarantsoa II, 14/29 (48%) of health workers had been unable to refer a child in the past. The reasons for being unable to refer sick children are summarized in Table 20. The most frequent reasons for non-referral in both districts were that families had no money to pay for transportation or care and that they refused to go to a referral center.

Table 20: Reasons given by health workers for being unable to refer sick children in the past, by district (Madagascar health facility assessment, 1996)

REASON GIVEN	ANTSIRABE II	FIANARANTSOA II	TOTAL
Hospital too far	5% (1/20)	7% (1/14)	6% (2/34)
Parents refused to go	55% (11/20)	57% (8/14)	56% (19/34)
No transport available	0% (0/20)	29% (4/14)	12% (4/34)
Parents had no money for transport or care	75% (15/20)	93% (13/14)	82% (28/34)
No one to look after other children at home	20% (4/20)	0% (0/14)	12% (4/34)

All health workers interviewed in both districts believed that they had a role in communicating with the caretakers of sick children. Health workers' self-described roles in communicating with caretakers are summarized in Table 21. The communication tasks most frequently given were to advise caretakers on home care of the child and to give messages on the prevention of illness.

Table 21: Health workers' self-reported roles in communicating with caretakers, by district (Madagascar health facility assessment, 1996)

ROLE GIVEN	ANTSIRABE II	FIANARANTSOA II	TOTAL
Give signs of severe or worsening illness at home	23% (6/26)	17% (5/29)	20% (11/55)
Advise on home treatment	73% (19/26)	72% (21/29)	73% (40/55)
Describe how to give medications	65% (17/26)	38% (11/29)	51% (28/55)
Advise on the prevention of illnesses	77% (20/26)	79% (23/29)	78% (43/55)
Explain when to return for the next visit	38% (10/26)	41% (12/29)	40% (22/55)
Ensure that caretakers have understood how to manage their child	19% (5/26)	7% (2/29)	24% (7/29)

Comments

Most health workers in both districts had a supervisor who had visited at least once in the previous 6 months. More than half of all health workers had received feedback from their supervisors. Very few supervisors had observed clinical practice or talked to patients at the time of their last visit. It is encouraging that so many health workers have a supervisor and that supervisory visits are occurring. The quality of the supervision provided is unlikely to be ideal, since quality of care is not regularly assessed. Establishing regular supervisory practices is difficult in many countries and getting supervisors to the facilities is often the most difficult step; in Madagascar this had already been accomplished in the majority of health facilities visited. A systematic approach to supervisory activities, including the use of standard supervisory checklists, a schedule of supervisory visits and strategies for providing feedback and education to health workers, is required.

All health workers reported that they submitted routine reports and used the data from routine reports in some way. It has already been noted that disease and vaccination registers are also generally complete. Timely completion of reports is encouraging and suggests that there is a basis for a functional health information system. The interpretation, reporting and dissemination of routine information will need to be addressed as the health information system is further developed.

The most frequently reported problems by health workers were a lack of drugs and supplies, lack of time and personnel, and a lack of transportation. Transportation shortages may be associated with the lack of drugs and supplies, since health workers often have to pick up supplies themselves. It is possible that the lack of personnel and time to accomplish all tasks may be addressed by investigating the organization of clinics and methods for improving the efficiency with which essential tasks are done.

The majority of health workers had received training in the 12 months prior to the survey. The majority of this training was in the area of nutrition. Very little training had been received in the area of standard case management of the most important causes of childhood morbidity and mortality. Most of the training received did not involve any clinical practice, which is essential for both teaching and sustaining new skills. Regular training in this area, as well as supervision, is important for introducing and maintaining new skills. A clear in-service training strategy is required. The quality of the training will be affected by other peripheral constraints to practice such as the consultation time available. As previously mentioned, this survey has identified a number of areas where training in simple skills could improve the quality of case management for sick children.

Health worker knowledge of the vaccination schedules of mothers and children was found to be relatively high. Health workers were familiar with the concept that a woman coming to the clinic with her child is a possible target for TT vaccination, although the case management observation revealed that very few health workers checked the vaccination status of women at the time of the

sick child visit. Improving health worker knowledge of target groups for vaccinations is an important step towards reducing missed opportunities to vaccinate. Most facilities gave vaccinations or conducted antenatal clinics on one or two days of the week only. Providing these services each day is considered desirable to reduce missed opportunities to vaccinate or provide antenatal care. There are a number of reasons why these services may not be conducted every day including staff shortages, lack of clinic space, and misconceptions about the time or logistics involved. In some clinics, it may be possible to reorganize service delivery using existing resources and this should be investigated where possible.

A high proportion of health workers knew at least two signs of severity that would prompt them to refer a sick infant or child to hospital, with a higher proportion of health workers in Antsirabe II having this knowledge than in Fianarantsoa II. At least half of all health workers in both districts had been unable, however, to refer a sick infant or child; most common reasons given for non-referral were that parents refused to refer their children or because parents did not have enough money to pay for transportation or further medical care. The barriers to the effective referral of sick children will need to be further investigated in order to develop strategies for addressing these barriers.

All health workers described themselves as having a role in communicating with caretakers, most frequently in the areas of home case management and prevention of childhood diseases. It is clear from the observations of case management, however, that many key aspects of home case management of sick children are not adequately addressed by health workers. Key messages and strategies for communicating these messages need to be further developed and health workers need to be trained in the routine use of communication strategies.

IV. KEY INDICATORS

Results from the facility assessment have been summarized as key indicators. These key indicators can be used to monitor and evaluate progress over time and are designed to measure information on key programmatic areas.

- 1) Proportion of health workers who had been trained in a child health topic in the previous 12 months.

Antsirabe II = **25/26** (96%)

Fianarantsoa II = **22/29** (76%)

- 2) Proportion of facilities that have received at least one supervisory visit in the last 6 months

Antsirabe II = **16/26** (62%)

Fianarantsoa II = **19/29** (66%)

- 10) Proportion of cases who should have received an immunization, according to the vaccination schedule, and received it the day of the visit

Antsirabe II = 3/31 (10%)

Fianarantsoa II = 10/47 (21%)

V. DISCUSSION AND RECOMMENDATIONS

- 1) Proportion of health workers who had been trained in a child health topic in the previous 12 months.

Training had been received by a high proportion of health staff responsible for seeing sick children in both districts. Training was largely limited to a single area (nutrition) and did not usually involve clinical practice. In-service training is important for both introducing and sustaining new skills. Health worker knowledge of the EPI calendar for infants and children and the TT vaccination schedule was high. In the area of case management, health workers generally did not check for symptoms of severe illness, ask for the mother's vaccination card, assess nutritional status, or count the respiratory rate when indicated. Health education messages on the home management of children were not systematically given. Practice in all of these areas could be improved with simple training and supervision strategies, without the expenditure of additional resources. When designing a training strategy, all of the other factors which influence the sustainability of these practices should be considered, such as the average consultation time, the availability of drugs and supplies, the frequency of vaccination clinics, the staffing of the clinic, and barriers to the referral of very sick children. Some of these factors may need to be addressed in order for training to be effective. Others may be overcome by improving awareness of them as potential barriers and developing strategies for their management as a component of training. A mechanism for providing ongoing supervision should be considered in tandem with training activities.

Recommendations

- a) Conduct a planning workshop with representatives of the MOH, both centrally and from the focus districts, to develop a district-level in-service training strategy which includes the identification of individuals responsible for scheduling and conducting training at each level of the health delivery system, the development of training materials and a budget for all activities. Survey data could be used to develop materials.
- b) Consider using survey data to assist with the planning of pre-service medical education programs, in particular those components which focus on case management practices and the barriers to effective case management practices.

2) Proportion of facilities that have received at least one supervisory visit in the last six months

In both districts, the majority of health facilities visited had received at least one supervisory visit in the previous six months. It is encouraging that supervisory visits are being made. The quality of the feedback given to health workers and the activities undertaken to keep health workers up-to-date remain uncertain. Supervisors rarely observed case management practices, for example, or spoke to caretakers as they left the clinic. Supervision can be strengthened by training supervisors to evaluate facilities systematically using a supervisory checklist and by training them to provide feedback and educate health workers at the time of the supervisory visit. Supervisors should be educated in identification of possible barriers to effective case management and trained in strategies for overcoming these barriers. Regular supervision is critical to maintaining skills at the clinic level.

Recommendations

- a) Conduct a planning workshop with representatives of the MOH both centrally and from district areas to develop a district-level strategy for supervising integrated facility services which includes the identification of individuals responsible for conducting supervision, the development of a strategy for training supervisors and the development of supervisory training materials. Survey data could be used to develop these materials.

3) Proportion of facilities with up-to-date immunization and patient registers

Most facilities visited in both districts had an up-to-date patient and immunization register available. All facilities must be encouraged to maintain complete registers. In general, the high completion rates are encouraging, and will form the basis of a functional health information system. Developing the health information system to allow the timely collection and analysis of routine information is a priority. The organization, distribution, interpretation and use of this information by peripheral health workers will need to be addressed. Use of routine information at the clinic level should ultimately be a component of routine training.

Recommendations

- a) Reinforce the importance of completing registers, collecting routine data and submitting routine reports as a component of health worker in-service and pre-service training.

4) Proportion of facilities with essential medications always available in the previous month

Essential medications had been available at all times in the 30 days preceding the survey in only one-quarter of facilities in both districts. In addition, between 49 percent and 65 percent of facilities had no stock of essential medications available on the day of the survey. Drug availability in public facilities is important for ensuring that health workers can provide quality case management. At many facilities, the lack of adequate transportation prevented the delivery and collection of supplies in a timely fashion. Developing skills for the management of stock inventories at health clinics should be a component of routine pre- and in-service training. It may be possible to manage existing stocks of essential medications by improving prescribing practices and reducing the inappropriate use of antibiotics and other medications. The national system for ordering, storing and distributing drugs to peripheral sites may break down at a number of levels and should be evaluated routinely to identify areas that may not be functioning effectively.

Recommendations

- a) Consider conducting a review of the existing drug management and distribution system as well as the drug management practices of health workers in order to identify areas that are not functioning effectively and to develop strategies for resolving problems. The drug management components of pre- and in-service training and supervision for health workers should then be reviewed.

5) Proportion of children with pneumonia, malaria and diarrhea treated appropriately according to the diagnosis made by the health worker

The principal case management problem noted in both districts was inappropriate use of antibiotics and antidiarrheals for the treatment of simple diarrhea. It is encouraging that for most cases of ARI, malaria and simple diarrhea, treatment was consistent with national treatment guidelines. It is important to note that this survey did not attempt to validate the clinical diagnosis made by the health worker. We were therefore unable to measure whether the diagnosis and treatment by health workers were appropriate for each child. As standard case management training is conducted, it will be worth evaluating the validity of health worker diagnoses as a component of health facility assessments. Information on treatment practices based on the health worker diagnosis can, however, be used to guide pre- and in-service case management training.

There is evidence that health workers may not be regularly using an integrated or combined approach to the assessment of sick children. The majority of health workers did not ask all core history questions to caretakers, did not check the vaccination cards of mothers, did not examine all key areas for every child, and did not provide health education for mothers regarding the management of her child at home. Improved training and supervision of health workers should re-enforce the importance of these aspects of the assessment of sick children.

Recommendations

- a) Conduct a planning workshop with representatives of the MOH, both centrally and from districts, to develop a national in-service training strategy that includes the identification of individuals responsible for scheduling and conducting training at each level of the health delivery system. During this workshop, strategies for strengthening pre- and in-service case management training should be discussed as well as how survey information can be integrated into training curricula. In addition, planning for improved supervisory training should use information on case management practices to design the supervisory checklists.
 - b) Work with local health workers to present survey findings and prioritize those aspects of case management that can be addressed immediately. Develop supervision and training strategies based on the needs and priorities of health workers.
- 6) Proportion of caretakers with correct knowledge of at least one general and one specific message for the management of their child in the home

About half of all caretakers in both districts understood how to manage their child at home. This means that half of all caretakers could *not* say what they would do to manage their child at home. The proportion of caretakers who had been given messages by health workers ranged from 6 percent to 97 percent, with messages most frequently given in the area of how to give medications. Improving the management of sick children in the home is a critical step in reducing infant and childhood mortality and morbidity. There are two broad reasons why caretakers may not be receiving messages regarding the management of their children in the home. Firstly, health workers may be giving messages, but not transmitting the messages effectively in a form that can be understood by caretakers; health workers are often not trained in techniques for presenting messages in a simple fashion that is clear and understandable to caretakers. Secondly, health workers may not be giving health education messages at all because of time pressures in the clinic, lack of materials, lack of knowledge or lack of regular supervision. The communication of key health education messages should be a routine component of all case management. Strategies for improving the training and supervision of health workers in this area should be investigated.

Recommendations

- a) Conduct a review of the health education and communication components of health worker pre- and in-service training courses. Strengthen and develop training and supervision strategies to improve health education and communication. Integrate these strategies into existing training and supervision.

7) Proportion of caretakers who know at least two signs of when to seek care for their child

Over 50 percent of caretakers in both districts knew at least two signs of when to seek care for their child if they became unwell at home. The high level of caretaker knowledge regarding signs of severity is encouraging. The clinical observation indicated that health workers infrequently instruct caretakers on the signs of worsening or severe illness at the time of the clinic visit and this area of counseling could be strengthened. It is likely that caretakers are receiving this information from a variety of channels. Parents who recognize when their child is severely ill are more likely to seek care for their child in a timely fashion.

Recommendations

- a) Ensure that health education and communication components of health worker pre- and in-service training reinforce and improve care-seeking knowledge and behaviors.

8) Proportion of children with diarrhea whose caretakers have correct knowledge of how to prepare ORS at home

In both districts, a relatively small proportion of caretakers of children with diarrhea had correct knowledge of how to prepare ORS at home. ORS was rarely used at home prior to coming to the health facility, although the rates of home usage of SSS were slightly higher. It was noted that a high proportion of health workers gave an explanation on the preparation of ORS for caretakers at the time of the interview; instructions on the preparation and administration of ORS are not being given effectively. Many of the caretakers of children with diarrhea said that they believed that ORS would stop their child's diarrhea, a misconception that can sometimes lead to poor compliance. It should be remembered that the survey measures the knowledge of only a small subgroup of caretakers who attend health facilities. It is likely that a relatively high proportion of caretakers never reach health facilities in Madagascar and that knowledge and use of ORS in this group is even lower. It is worth further investigating possible barriers to the use of ORS in the household; appropriate home available fluids may be more appropriate for households with limited access to a supply of ORS or without the means to purchase it. SSS is used relatively frequently, but is not currently recommended as a home available fluid by the WHO because of problems with mixing solutions which are too high in salt or sugar. The continued recommendation of SSS should be evaluated and the possible use of other home fluids considered.

Recommendations

- a) Ensure that health education and communication components of health worker pre- and in-service training reinforce and improve the preparation and use of ORS as well as other appropriate home fluids at the household level.

- b) Reevaluate the recommendation of SSS and identify other appropriate home fluids for use at home.

9) Proportion of health workers with correct knowledge of at least two signs of when to refer a child to hospital

A high proportion of all health workers knew at least two signs of when to refer a child to hospital, with knowledge being higher in Antsirabe II than Fianarantsoa II. In addition, a high proportion of health workers had experienced difficulties referring a child when necessary in the past. The referral of severely ill children to hospital is a critical component of a primary health care strategy designed to reduce infant and child mortality. The barriers to effective referral need to be assessed, and health workers given skills to assist them to overcome these barriers. Possible barriers may include a lack of awareness of danger signs by health workers, distance to hospitals and difficulties finding adequate transportation, and a reluctance to transport infants and children who are very unwell.

Recommendations

- a) Consider evaluating barriers to referral at peripheral health facilities and develop strategies for overcoming these barriers in collaboration with local health staff. Supervision and training approaches should reinforce the importance of referral for severely ill children and discuss strategies for addressing barriers to referral.

10) Proportion of cases who should have received an immunization, according to the vaccination schedule, and received it the day of the visit

A low proportion (10%-20%) of infants and children needing vaccinations were given vaccinations on the day of the sick child visit. This measure is calculated using only those children whose caretakers are asked for the vaccination card and who have it on the day of the visit. A high proportion of infants and children did not have their vaccination status checked at all. It is likely that missed opportunities to vaccinate is an important problem. Checking the vaccination status of every child and mother is a relatively simple, quick and inexpensive clinical action. Improved health worker practice in this area should encourage more mothers to bring their cards with them to every visit. Vaccination of those infants and children who need vaccines on the day of the visit is ideal in order to eliminate missed opportunities to vaccinate. If this is not possible, then caretakers should at least be referred to the next vaccination session and the importance of this next visit should be strongly reinforced. The current barriers to regular assessment of the vaccination status of children and their mothers should be investigated, as well as the barriers to the provision of daily vaccination sessions.

Recommendations

- a) Consider evaluating barriers to avoiding missed opportunities to vaccinate at peripheral health facilities and develop strategies for overcoming these barriers in collaboration with local health staff. Supervision and training approaches should reinforce the importance of referral for severely ill children and discuss strategies for addressing barriers to referral.

APPENDIXES

APPENDIX A
HEALTH FACILITIES VISITED BY DISTRICT

APPENDIX A1: HEALTH FACILITIES VISITED IN ANTSIRABE II

Alakamisy Ambohimaha
Ambano
Ambatomena
Ambohibary-Iray-Tsy
Ambohmiarivo
Andranomanelatra
Antanamalaza
Antanambao
Antsoantany
Avarabohitra
Belazao
Fanjakamandroso
Farihitsara
Ihasy
Kianjasoa-Antsimonda
Mahaimandry
Manandona
Mandrosohasina
Mangarano
Marofangady
Masinilocharano
Morodrano-Trafonomby
Sahanivotry
Soamiakatra
Soanindraviny

APPENDIX A2: HEALTH FACILITIES VISITED IN FIANARANTSOA II

Alakamisy Ambohimaha
Alakamisy Itenina
Alatsinainy Ialamari
Ambalalamay
Ambalamahasoa
Ambalamidera II
Ambatovaky
Ambondrona
Andoharanomaitso
Andranolava II
Andranovorivato
Androy
Asabotsy Moralina
Benangana
Fandrandava
Fanjakana
Isorana Alkamisy
Ivoamba
Mahasoabe
Mahatsinjony
Mahazoarivo
Morafeno
Nasandratrony
Soatanana
Talata Ampano
Tsimaitohasoia ialats
Vinanitelo
Vohimarina
Vohitrafeno afovoany

APPENDIX B
SURVEY INSTRUMENTS

APPENDIX B: SURVEY INSTRUMENTS

**REPUBLIQUE DE MADAGASCAR
MINISTERE DE LA SANTE PUBLIQUE ET DE LA POPULATION
DIRECTION DE LA MEDECINE PREVENTIVE
BASICS/USAID**

**Enquête auprès des Etablissements de Santé
sur la Prise en charge de l'enfant malade**

1. OBSERVATION DU PERSONNEL DE SANTE A LA CONSULTATION

Fivondronana/District: _____	Date: ____/____/____
Numéro de l'enquêteur: ____	
Etablissement de Santé: Nom: _____	Type: [] CSBI [] CSBII
Statut: [] Public [] Privé	
Agent de Santé: Type: _____	Numéro: ____
Enfant: Age en mois: ____	Numéro d'identification de l'enfant: ____

Notez l'heure du début de l'enquête maintenant; Heure _____ Min _____

1. Quels sont les motifs de consultation évoqués par la mère? (Cocher toutes les réponses)

- ____ Fièvre ____ Toux/Pneumonie/Difficulté respiratoire
- ____ Diarrhée/Vomissement ____ Autre (Spécifiez) _____

Est-ce que les informations suivantes concernant l'enfant sont disponibles pour le personnel de santé, au moment de la consultation ? (déterminées par lui ou par quelqu'un d'autre avant la consultation et inscrites sur le dossier de l'enfant)

- | | | |
|--------------------------------------|-----|-----|
| 2. Carnet de santé / Carte infantile | Oui | Non |
| 3. Age en interrogeant la mère | Oui | Non |
| 4. Poids | Oui | Non |
| 5. Température: Par thermomètre | Oui | Non |
| En touchant l'enfant | Oui | Non |
| 6. Fréquence respiratoire | Oui | Non |

Interrogatoire: Est-ce que le personnel de santé pose des questions à propos de:

7.	L'enfant mange ou boit normalement	Oui	Non
8.	L'allaitement	N/A	Non
9.	L'alimentation quotidienne de l'enfant	Oui	Non
10.	Les convulsions	Oui	Non
11.	Des changements de l'état de conscience / enfant somnolent	Oui	Non
12.	Des clarifications au sujet de la maladie	Oui	Non
13.	Le début / la durée de la maladie	Oui	Non

Toutes les questions 7 à 13 posées?	Oui	Non
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14.	Les antécédents de fièvre	Oui	Non
15.	Les antécédents de vomissements	Oui	Non
16.	Les antécédents de diarrhée	Oui	Non
17.	Le nombre de selles des dernières 24 heures	Oui	Non
18.	La présence de sang dans les selles	Oui	Non
19.	La toux	Oui	Non
20.	Les difficultés respiratoires	Oui	Non
21.	les antécédents de rougeole	Oui	Non
22.	Les antécédents de traitement à domicile, avec:		
	Tisane / Médecine traditionnelle	Oui	Non
	Médecine occidentale	Oui	Non

Est-ce que le personnel de santé détermine:

23.	La statut vaccinal de l'enfant ? (soit en demandant, soit en cherchant dans le dossier) Si NON, passez à la question 24	Oui	Non
	Si OUI, est-ce que l'enfant a sa carte?	Oui	Non

Si l'enfant a sa carte: Est-ce que l'enfant éligible est référé pour vaccination ?

_____Aujourd'hui _____Un autre jour _____Non référé _____A jour

Si l'enfant N'A PAS sa carte de vaccination, est-ce que l'agent de santé:

Critique la mère	Oui	Non
Ne vaccine pas et demande à la mère de revenir avec la carte	Oui	Non
Refuse de vacciner l'enfant	Oui	Non
Vaccine l'enfant et donne une autre carte	Oui	Non
Vaccine l'enfant et ne donne pas de nouvelle carte	Oui	Non
Vaccine l'enfant et dit à la mère de rapporter la carte la prochaine fois	Oui	Non

Est-ce que le personnel de santé demande:

24. La carte de vaccination de la mère	Oui	Non	
<u>Si NON, passez à la question 25</u>			
<u>Si OUI, la mère a-t-elle sa carte ?</u>	Oui	Non	
<u>Si la mère a sa carte: Est-elle référée pour vaccination?</u>			
_____ Aujourd'hui	_____ Un autre jour	_____ Non référé	_____ A jour

Si la mère N'A PAS sa carte, est-ce que l'agent de santé:

Demande à la mère le nombre de doses reçues de TT?	Oui	Non
Demande à la mère de revenir avec sa carte?	Oui	Non
Refuse de vacciner la mère?	Oui	Non
Vaccine la mère et donne une autre carte?	Oui	Non
Vaccine la mère et ne donne pas de nouvelle carte?	Oui	Non
Vaccine la mère et lui dit d'apporter sa carte la prochaine fois?	Oui	Non

Examen clinique

Durant l'examen de l'enfant, est-ce que le personnel de santé examine:

25. Les conduits auditifs	Oui	Non
26. Le thorax: - en comptant la fréquence respiratoire	Oui	Non
- en auscultant	Oui	Non
27. Le pli cutané	Oui	Non
28. La paleur (conjonctivale ou palmaire)	Oui	Non
29. L'oedème pré-tibial	Oui	Non

30.	Le pli cutané	Oui	Non
31.	La paleur conjonctivale	Oui	Non

Tous les gestes clés de l'examen pratiqués? (Q. 26 à 31)	Oui	Non
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Diagnostic et traitement

Le diagnostic du personnel de santé est-il:

32.	Diarrhée / Gastro-entérite	Oui	Non
33.	Déshydratation	Oui	Non
	Si OUI, est-elle <input type="checkbox"/> Légère <input type="checkbox"/> Grave <input type="checkbox"/> Non précisée		
34.	Dysenterie / Diarrhée sanglante	Oui	Non
35.	Grippe / Rhume / Allergie	Oui	Non
36.	Pneumonie	Oui	Non
37.	Paludisme	Oui	Non
38.	Fièvre d'autre origine	Oui	Non
39.	Rougeole	Oui	Non
40.	Malnutrition	Oui	Non
41.	Autre	Oui	Non
42.	Ne fait pas de diagnostic	Oui	Non

**Qu'est-ce que le personnel de santé administre ou prescrit à l'enfant?
(Cochez toutes les réponses mentionnées)**

	Administre	Prescrit
43.	Chloroquine injection	<input type="checkbox"/>
44.	Chloroquine comprimés/syrop	<input type="checkbox"/>
45.	Aspirine/Paracetamol/Acetaminophène	<input type="checkbox"/>
46.	Baigner l'enfant/compresses froides	<input type="checkbox"/>
47.	Antibiotique injection	<input type="checkbox"/>
48.	Antibiotique comprimés/syrop	<input type="checkbox"/>
49.	Vitamine A ou autres vitamines	<input type="checkbox"/>
50.	SRO / Solution de réhydratation domestique	<input type="checkbox"/>

51.	Antidiarrhéique/Antispasmodique	___	___
52.	Métronidazole comprimés/syrop	___	___
53.	Pas de traitement	___	___

Est-ce que le traitement est approprié pour le diagnostic fait?	Oui	Non
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Cas de diarrhée traité avec un antibiotique?	N/A	Oui	Non
Cas de dysenterie traité avec un antibiotique inapproprié?	N/A	Oui	Non
Cas de paludisme traité avec un médicament inapproprié?	N/A	Oui	Non
Cas d'IRA traité avec un médicament inapproprié?	N/A	Oui	Non

Est-ce que le personnel de santé:

54.	Explique comment administrer les médicaments oraux?	Oui	Non	
55.	Fait la démonstration comment administrer les médicaments oraux?	Oui	Non	
56.	Pose des questions pour vérifier la compréhension comment administrer?	Oui	Non	
57.	Explique à la mère quand revenir pour le suivi de l'enfant?	Oui	Non	
58.	Dit à la mère de ramener l'enfant pour les symptômes suivants?			
	L'enfant ne boit pas ou très peu	Oui	Non	
	L'enfant n'est pas capable d'allaiter	N/A	Oui	Non
	L'état de l'enfant s'aggrave	Oui	Non	
	L'enfant a une fièvre élevée	Oui	Non	
	L'enfant respire très rapidement ou difficilement	Oui	Non	
	L'enfant a du sang dans les selles	Oui	Non	

Au moins deux messages de la Q. 58 cochés OUI?	Oui	Non
---	------------	------------

59.	Est-ce que l'agent de santé pose une question ouverte pour vérifier si la mère a bien compris quand revenir avec l'enfant?	Oui	Non
-----	--	-----	-----

Si du SRO été donné ou prescrit, est-ce que le personnel de santé:

60.	<u>Explique</u> comment préparer le SRO	Oui	Non
61.	<u>Fait la démonstration</u> comment préparer le SRO	Oui	Non
62.	Demande à la mère de faire la démonstration comment préparer le SRO	Oui	Non

Est-ce que le personnel de santé:

- | | | | |
|-----|---|-----|-----|
| 63. | Pose des questions à la mère pour voir si elle a bien compris | Oui | Non |
| 64. | Demande à la mère si elle a des questions | Oui | Non |
| 65. | Critique la mère ou montre son mécontentement | Oui | Non |
| 66. | Adresse la mère aux séances d'éducation pour la santé | Oui | Non |

NOTER L'HEURE AU MOMENT OU LA MERE S'EN VA

HEURE: _____

DUREE DE L'INTERVIEW: _____ minutes

FIN DE L'OBSERVATION DU PERSONNEL DE SANTE

A la fin de la consultation de l'enfant: si le personnel de santé:

- soit n'a pas dit verbalement le diagnostic qu'il faisait pour l'enfant,
- soit n'a pas mentionné ce qu'il recherchait dans le dossier de l'enfant (par ex. statut vaccinal)

l'enquêteur doit le lui demander et compléter ce formulaire AVANT l'enfant suivant.

REPUBLIQUE DE MADAGASCAR
MINISTERE DE LA SANTE PUBLIQUE ET DE LA POPULATION
DIRECTION DE LA MEDECINE PREVENTIVE
BASICS/USAID

Enquête auprès des Etablissements de Santé
sur la Prise en charge de l'enfant malade

2. INTERVIEW DE LA MERE A LA SORTIE DE LA CONSULTATION

Fivondronana/District: _____	Date: ____/____/____
Numéro de l'enquêteur: _____	
Etablissement de Santé: Nom: _____	Type: [] CSBI [] CSBII
Statut: [] Public [] Privé	
Agent de Santé: Type: _____	Numéro: _____
Enfant: Age en mois: _____	Numéro d'identification de l'enfant: _____

Saluez la mère ou l'accompagnant et dites lui que vous voudriez lui poser quelques questions à propos de sa visite d'aujourd'hui dans l'établissement de santé.

1. Vous venez de quelle type de localité ?

_____ Ville _____ Village _____ Hameau

2. Quel moyen de transport avez-vous utilisé pour venir ici aujourd'hui ?

_____ A pied _____ A dos d'animaux _____ Taxi _____ Bus
_____ Voiture privée _____ Autre (Spécifiez) _____

3; Combien de temps avez-vous mis pour venir ici aujourd'hui? _____ (minutes)

4. Avez-vous eu des problèmes pour venir ici aujourd'hui ? Oui Non

Si Oui, quel était le problème principal ? (Cochez une seule réponse)

_____ Cela prend trop longtemps pour venir ici
_____ A été obligée de trouver quelqu'un pour garder les enfants à la maison
_____ A été obligée de manquer son travail
_____ Pas d'argent
_____ Les heures d'ouverture de l'institution de santé ne sont pas pratiques
_____ Autre (Spécifiez) _____

5. Avez-vous conduit votre enfant se faire soigner ailleurs avant de venir dans cet établissement de santé ? Oui Non

Si OUI, où l'avez-vous amené ? (Cochez toutes les réponses)

- Une autre institution de santé L'hôpital Clinique privée (cabinet)
 Guérisseur traditionnel Pharmacie/vendeur de médicaments
 Agent de santé communautaire Autre (Spécifiez) _____

6. Depuis combien de jours votre enfant est-il tombé malade ?
 Le même jour Nombre de jours Ne sait pas

7. **EST-CE QUE L'ENFANT A LA DIARRHÉE ?** Oui Non

Si NON, passez à la question 12

Si OUI:

8. Avez-vous fait quelque chose pour traiter la diarrhée à la maison ? Oui Non

Si OUI, qu'avez-vous fait ? (Cochez toutes les réponses)

- A donné du SRO / Solution domestique de réhydratation
 A donné tisane / médecine traditionnelle
 Autre traitement (Spécifiez) _____

9. Avez-vous déjà entendu parler du SRO pour la diarrhée ? Oui Non

Si NON, passez à la question 12

Si OUI: Pourquoi donne-t-on du SRO aux enfants qui ont la diarrhée ? (Cochez toutes les réponses)

- Pour prévenir la déshydratation (remplacer l'eau perdue)
 Pour arrêter la diarrhée
 Autre (Spécifiez) _____
 Ne sait pas

10. Vous a-t-on déjà montré comment préparer le SRO? Oui Non

Si NON, passez à la question 12

11. Comment préparez-vous le SRO?

- Correct (mélanger un litre d'eau avec un sachet de sels de réhydratation)
 Incorrect
 Ne sait pas

12. EST-CE QUE L'ENFANT A LA FIEVRE Oui Non

Si NON, passez à la question 14

Si OUI:

13. Avez-vous fait quelque chose pour traiter la fièvre à la maison ? Oui Non

Si OUI: Qu'avez-vous fait ? (Cochez toutes les réponses)

A donné du aspirine/paracetamol/acétaminophène

A donné chloroquine / autre anti-paludéen

A donné des antibiotiques

A baigné l'enfant

A donné une tisane / médecine traditionnelle

A retiré les vêtements de l'enfant

Autre (Spécifiez) _____

14. EST-CE QUE L'ENFANT A:
LA TOUX ou DES DIFFICULTES RESPIRATOIRES ou LA PNEUMONIE ? Oui Non

Si NON, passez à la question 17

Si OUI:

15. Avez-vous fait quelque chose pour traiter l'enfant à la maison ? Oui Non
Si OUI: Qu'avez-vous fait ? (Cochez toutes les réponses)

A donné du paracetamol

A donné de l'aspirine

A donné des antibiotiques

A donné un syrop contre la toux

A donné une tisane / médecine traditionnelle

A fait une friction

Autre (Spécifiez) _____

16. Est-ce que le personnel de santé vous a donné ou prescrit des médicaments aujourd'hui ? Oui Non

Si NON, passez à la question 17

Si OUI, remplissez le tableau de la page suivante:

Pour chacun des médicaments **ORAUX** que la mère mentionne, remplissez le tableau de la page suivante en posant les questions ci-dessous:

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QUELLE QUANTITE de comprimés/gélules ou cuillerées allez-vous donner à l'enfant à chaque prise ?

COMBIEN DE FOIS PAR JOUR allez-vous donner cette prise à l'enfant ?

PENDANT COMBIEN DE JOURS allez-vous donner ce traitement à l'enfant ?

Si la mère ou l'accompagnant ne sait pas/ne se souvient pas, écrivez NSP (Ne sait pas) dans la case correspondante.

Médicament	Quantité de cpés / prise	Nombre de fois / jour	Nombre de jours
Chloroquine cpé/sirop			
Antibiotique cpé/sirop			
Paracetamol cpé/sirop			
Aspirine cpés/sirop			
ORS / Sol. domestique			
Anti-diarrhéique			
Syrop contre la toux			
Vitamines cpés/sirop			

La mère ou l'accompagnant sait correctement (quelle quantité de cpés, combien de fois par jour, pendant combien de jours) pour TOUS les médicaments prescrits? **Oui** **Non**

L'enfant a: Diarrhée Fièvre/paludisme IRA

17. Qu'allez-vous faire pour l'enfant quand vous serez revenue à la maison? (Cochez toutes les réponses)

Général	Diarrhée	Fièvre/paludisme	IRA
<input type="checkbox"/> Continuer alimenter/ allaier l'enfant	<input type="checkbox"/> Donner SRO	<input type="checkbox"/> Donner anti-paludéen	<input type="checkbox"/> Donner AB
<input type="checkbox"/> Terminer complètement le traitement	<input type="checkbox"/> Donner plus de liquides	<input type="checkbox"/> Donner paracetamol/	
<input type="checkbox"/> Ramener l'enfant s'il ne s'améliore pas ou s'aggrave	<input type="checkbox"/> Donner à boire après chaque selle/vomissement	<input type="checkbox"/> Donner un bain tiède	

La mère/accompagnant connaît au moins 1 signe général et 1 signe spécifique de la prise en charge à domicile? **Oui** **Non**

18. Votre enfant a-t-il déjà reçu une vaccination? **Oui** **Non**

19. Comment ou par qui avez-vous appris où et quand venir pour la vaccination ? (Cochez toutes les réponses)

Médecin/Infirmière/Sage-femme Agent de santé communautaire
 Volontaire communautaire Radio

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Posters / Affiches Télévision
 Voisin(e) / Ami(e) Séance d'éducation sanitaire
 Autre (Spécifiez) _____

20. Ou amenez-vous généralement votre enfant pour la vaccination ? (**Cochez toutes les réponses**)

Dans cet établissement Dans un autre établissement de santé
 Clinique mobile Jamais vacciné auparavant

21. Savez-vous contre quelles maladies les vaccins peuvent vous protéger vous-même ou votre enfant ? (**Cochez toutes les réponses**)

Ne sait pas Rougeole
 Diphtérie Tuberculose
 Tétanos Polio
 Coqueluche Autre (Spécifiez) _____

22. Est-ce que le personnel de santé vous a parlé des effets secondaires éventuels qui peuvent survenir après une vaccination ? Oui Non

Si OUI: que vous a-t-on dit ? (**Cocher toutes les réponses**)

Fièvre
 Douleur au point d'injection
 Irritabilité
 Oedeme/Gonflement
 Autre (Spécifiez) _____

23. Est-ce que vous ou votre enfant êtes déjà venu pour vaccination dans cet établissement et êtes reparti sans avoir été vacciné pour quelque que raison que ce soit ? Oui Non

Si OUI: quelle était la raison ? (**Cocher toutes les réponses**)

Séance de vaccination supprimée
 Séance de vaccination terminée avant l'arrivée de la mère
 Pas de séance de vaccination le jour de la visite
 Enfant était malade

___ Rupture de stock de vaccins ou d'équipements de vaccination

___ Pas assez de personnel pour faire la vaccination

___ Institution fermée

___ Autre (Spécifiez) _____

24. Combien de visites de vaccination un enfant a-t-il besoin pendant sa première année pour terminer complètement la série de vaccination?

___ Correct

___ Incorrect

___ Ne sait pas

25. Quand reviendrez-vous avec l'enfant à l'établissement de santé ?
(Cochez toutes les réponses)

___ Jours

___ Ne sait pas

___ Pas besoin de revenir

___ Revenir pour la vaccination suivante

___ La mère sait quand revenir

___ La mère ne sait pas quand revenir

___ Revenir si l'état de santé de l'enfant s'aggrave à la maison

26. Comment saurez-vous si l'état de l'enfant s'aggrave à la maison ? (Cochez toutes les réponses)

___ Fièvre apparaît ou ne disparaît pas

___ Vomissements commencent ou continuent

___ Enfant incapable de manger

___ Enfant incapable de boire

___ Diarrhée continue

___ Enfant fait des convulsions

___ Enfant a le thorax qui s'enfonce en respirant

___ Enfant a des difficultés à respirer

___ Autre: (Spécifiez) _____

La mère connaît au moins 2 signes de gravité à la maison?	Oui	Non
--	------------	------------

27. Avez-vous la carte de vaccination de l'enfant ?

Oui

Non

Si la mère a la carte, regardez les dates de TOUS LES VACCINS ADMINISTRES, depuis la naissance jusqu'à aujourd'hui et remplissez le tableau ci-dessous.

Date de naissance: ___/___/___/

ET

Age: ___ mois

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VACCINS			
BCG	Reçu	Oui	Non
Polio-O (naissance)	Reçu	Oui	Non
DTP-1	Reçu	Oui	Non
Polio-1	Reçu	Oui	Non
DTP-2	Reçu	Oui	Non
Polio-2	Reçu	Oui	Non
DTP-3	Reçu	Oui	Non
Polio-3	Reçu	Oui	Non
Rougeole	Reçu	Oui	Non

Statut vaccinal de l'enfant à jour?		Oui	Non
Enfant a reçu une vaccination aujourd'hui ?	N/A (à jour)	Oui	Non

28. Est-ce que vous avez votre carte de vaccination avec vous aujourd'hui ?

Oui Non Perdue Jamais reçue A la maison

Si OUI, recopiez, dans le tableau ci-dessous, les vaccinations anti-tétaniques reçues par la mère.

VACCINS			
TT-1	Reçu	Oui	Non
TT-2	Reçu	Oui	Non
TT-3	Reçu	Oui	Non
TT-4	Reçu	Oui	Non
TT-5	Reçu	Oui	Non

Statut vaccinal (TT) de la mère à jour ?		Oui	Non
--	--	-----	-----

29. Est-ce que vous avez reçu un vaccin anti-tétanique ?

Aujourd'hui

Référée pour vaccination un autre jour

N'a pas reçu ou n'a pas été référée pour vaccination anti-tétanique

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30. Quand écoutez-vous la radio ? (Cochez toutes les réponses, SUGGEREZ LES REPONSES)

____ Tous les jours

____ Au moins une fois par semaine

____ Une fois toutes les 2 semaines

____ Une fois par mois

____ Moins d'une fois par mois

____ N'écoute jamais

31. Combien avez-vous dû payer aujourd'hui ? _____

32. Avez-vous dû emprunter de l'argent pour payer les services reçus aujourd'hui ? Oui Non

FIN DE L'INTERVIEW

Remerciez la femme pour avoir répondu à vos questions et demandez lui si elle a des questions à vous poser.

Vérifiez qu'elle sait:

- comment préparer le Sérum oral pour un enfant avec la diarrhée,

- quand revenir pour la prochaine vaccination,

- comment donner les médicaments prescrits

- quand revenir si l'état de santé de l'enfant s'aggrave

et corriger éventuellement les lacunes ou les erreurs de la mère.

**REPUBLIQUE DE MADAGASCAR
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 BASICS/USAID**

**Enquête auprès des Etablissements de Santé
 sur la Prise en charge de l'enfant malade**

3. INTERVIEW DU PERSONNEL DE SANTE

Fivondronana/District: _____	Date: ___/___/___
Numéro de l'enquêteur: _____	
Etablissement de Santé:	
Nom: _____	Type: [] CSBI [] CSBII
Statut: Public [] Privé []	

Présentez-vous au personnel de santé. Dites-lui que vous voudriez lui poser quelques questions générales à propos du centre de santé et ensuite quelques questions sur son travail.

1. Quelles sont les heures ouvrables régulières de consultation de cet établissement de santé ?
 ouverture _____ fermeture _____ **Nombre d'heures ouvrables** _____
2. Combien de postes de stratégie avancée sont rattachés à cet établissement ? _____
3. Combien de fois par mois est visité chaque poste ? _____
4. Faites-vous payer pour les services que vous procurez dans cet établissement? Oui Non
Si OUI, combien pour chaque type de service?

Service	Coût
Consultation de l'enfant malade	
Consultation post-natale (enfant sain)	
Consultation pré-natale	
Vaccination	
Planning famulial	
Education pour la santé	

5. Comment vous approvisionnez-vous en médicaments / matériel ?
 _____ Livrés à l'établissement _____ A partir d'un dépôt central

6. Quelle est la cause la plus fréquente de retard en approvisionnement en médicaments / matériel ?
- Problème de transport/carburant Difficultés administratives
 Personnel insuffisant Rupture de stock à la source d'approvisionnement
 Autre (Spécifiez) _____
7. Quel est votre catégorie professionnelle ?
- Médecin Infirmière
 Auxiliaire Sage-femme
 Autre (Spécifiez) _____
8. Disposez-vous d'une description écrite des tâches que vous devez faire ? Oui Non
- Si OUI, puis-je les voir ? Disponibles Non disponibles
9. Avez-vous un superviseur ? Oui Non
- SI PAS DE SUPERVISEUR, passez à la question 15**
10. Avez-vous un plan/calendrier qui prévoit les visites de votre superviseur ? Oui Non
11. Combien de visites de supervision avez-vous reçu:
- Au cours des 6 derniers mois ? _____ (nombre de visites)
- Au cours des 12 derniers mois ? _____ (nombre de visites)
- Le superviseur travaille ici et voit le personnel de santé quotidiennement _____
12. Qu'est-ce que votre superviseur a fait lors de sa dernière visite ? (Cochez toutes les réponses)
- Observé les techniques de vaccination
 Observé la prise en charge d'un enfant
 Consulté les rapports préparés par le personnel de santé
 Donné au personnel de santé une mise à jour sur des informations sanitaires récentes
 Discuté des problèmes d'approvisionnement en médicaments et matériels
 Autre (Spécifiez) _____
13. Avez-vous reçu une rétro-information de la dernière visite de supervision ? Oui Non
- Si OUI, sous quelle forme ? Rapport écrit
 Rapport oral
 Autre (Spécifiez) _____
14. Qu'est-ce que votre superviseur fait pour maintenir vos compétences à jour ? (Cochez toutes réponses)
- Rien Ateliers/séminaires Sessions de formation
 Rétro-information Envoi de documents
 Autre (Spécifiez) _____

15. Devez-vous fournir des rapports tels que nombre de patients vus, nombre de doses de vaccins administrées, etc. ? Oui Non

Si NON, passez à la question 18

Si OUI, demandez quel TYPE de rapports, leur PERIODICITE, puis demandez à voir les rapports et voyez s'ils sont à jour.

Type de rapport	Combien de fois par an	Rapports à jour	
_____	_____	Oui	Non
_____	_____	Oui	Non
_____	_____	Oui	Non
_____	_____	Oui	Non

16. Comment utilisez-vous les informations contenues dans ces rapports pour vous aider dans votre travail ?
(Cochez toutes les réponses)

- | | |
|---|--|
| <input type="checkbox"/> Commandes médicaments/matériel | <input type="checkbox"/> Evaluer les priorités / planification |
| <input type="checkbox"/> Surveillance épidémiologique | <input type="checkbox"/> Sensibiliser la communauté/personnel |
| <input type="checkbox"/> N'utilise pas l'information | <input type="checkbox"/> Ne sait pas |
| <input type="checkbox"/> Autre (Spécifiez) _____ | |

17. Quel type de rétro-information recevez-vous des rapports expédiés?

- | | | |
|--|---|--|
| <input type="checkbox"/> Aucune | <input type="checkbox"/> Discussion orale | <input type="checkbox"/> Rapport écrit |
| <input type="checkbox"/> Autre (Spécifiez) _____ | | |

18. Quels sont les problèmes les plus difficiles que vous rencontrez dans votre travail ?
(Cochez toutes les réponses)

- Manque de formation
- Les mères n'amènent pas leurs enfants à l'établissement de santé
- Manque de personnel / Manque de temps
- Manque d'équipements et/ou de stock (médicaments / matériel)
- Manque de supervision/encadrement
- Manque de rétro-information sur la performance
- Transport inadéquat
- Autre (Spécifiez) _____

19. Avez-vous discuté ces problèmes avec votre superviseur ? Oui Non

- L'enfant semble très gravement atteint
- L'enfant a une fièvre très élevée
- L'enfant vomit tout
- L'enfant a une déshydratation grave
- L'enfant a une pneumonie sévère
- L'enfant a une malnutrition/anémie sévère
- Autre (Spécifiez) _____

L'agent de santé connaît au moins 3 signes de gravité pour référer à l'hôpital?	Oui	Non
---	-----	-----

25. Vous est-il déjà arrivé de vouloir référer un enfant à l'hôpital mais de ne pas pouvoir le faire ? Oui Non

Si OUI, pour quelle(s) raison(s) n'avez-vous pas pu référer l'enfant ? (Cochez toutes les réponses)

- Hôpital trop loin
- Pas de moyen de transport disponible
- Pas de carburant disponible
- La mère / les parents ont refusé d'aller à l'hôpital
- Les parents n'avaient pas d'argent
- Autre (Spécifiez) _____

26. Combien de sessions de formation avez-vous reçu au cours des 12 derniers mois ? _____
Si PAS de formation reçue, passez à la question 29

27. Quel en a été le(s) thème(s) ? _____

28. Est-ce qu'il y avait une période de pratique clinique lors de votre dernière formation ? Oui Non

29. Comment voyez-vous votre rôle de communication aux mères quand elles viennent avec leur enfant à l'établissement ? **(Cochez toutes les réponses)**

- Informer sur les signes de gravité à surveiller
- Informer sur quoi faire à domicile
- Informer comment donner les médicaments à domicile
- Découvrir ce que la mère a fait à domicile et quels sont les symptômes de l'enfant
- Informer sur la prévention des maladies
- Dire aux mères quand il faut revenir à l'établissement de santé
- S'assurer que les mères ont bien compris quoi faire à domicile
- Avoir des discussions en groupe
- Autre (Spécifiez) _____

30. Qu'est-ce qui vous empêche d'avoir un rôle de communication avec les mères quand elles viennent avec leur enfant à l'établissement de santé ? (Cochez toutes les réponses)

- Ce n'est pas vraiment mon rôle
- Quelqu'un d'autre fait cela
- Manque de temps
- Je ne sais pas comment faire
- Les mères n'écoutent / ne comprennent pas ce que l'on dit
- Je n'ai aucun matériel d'éducation
- Ce n'est pas important
- Autre (Spécifiez) _____

FIN DE L'INTERVIEW DU PERSONNEL DE SANTE

Remerciez l'agent de santé pour sa coopération et répondez aux questions qu'il ou elle peut avoir à propos des recommandations correctes sur les vaccinations ou sur la prise en charge globale des enfants.



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4. EQUIPEMENT, MATERIEL ET APPROVISIONNEMENT

Fivondronana/District: _____	Date: ____/____/____
Numéro de l'enquêteur: ____	
Etablissement de Santé:	
Nom: _____	Type: [] CSBI [] CSBII
Statut: Public [] Privé []	

Statut de l'établissement sanitaire: _____Public _____Privé
_____Mission _____ONG
_____Autre (Spécifiez) _____

Environnement du personnel de santé et du patient

- | | | |
|---|-----|-----|
| 1. Y a-t-il assez de sièges dans la salle de consultation ? | Oui | Non |
| 2. Y a-t-il un bureau/table pour le personnel de santé ? | Oui | Non |
| 3. Y a-t-il de l'eau potable ? | Oui | Non |
| 4. Y a-t-il des toilettes ou une latrine ? | Oui | Non |
| Si OUI: Ferment-elles à clé (ou verrou) ? | Oui | Non |
| Sont-elles accessibles ? | Oui | Non |
| Sont-elles propres ? | Oui | Non |
| Sont-elles fonctionnelles ? | Oui | Non |
| 5. Est-ce que le personnel de santé saluent les patients quand ils rentrent ? | Oui | Non |
| 6. Y a-t-il des posters d'information sanitaire affichés ? | Oui | Non |
| Si OUI: Sont-ils rédigés en langue locale ? | Oui | Non |
| 7. Y a-t-il un coin pour la TRO qui est utilisé ? | Oui | Non |

Equipement et matériel

Est-ce que les équipements et matériels suivants existent dans l'établissement:

- | | | | |
|-----|---|-----|-----|
| 8. | Thermomètre | Oui | Non |
| 9. | Otoscope | Oui | Non |
| 10. | Balance | Oui | Non |
| | - En état de fonctionner ? | Oui | Non |
| 11. | Pendule avec trotteuse ou minuteur en état de fonctionner | Oui | Non |
| 12. | Un autoclave | Oui | Non |
| | En état de fonctionner ? | Oui | Non |
| 13. | Un réchaud | Oui | Non |
| | En état de fonctionner ? | Oui | Non |
| 14. | Ustensiles de mesure et de mélange | Oui | Non |
| 15. | Bols et cuillers | Oui | Non |
| 16. | Un réfrigérateur | Oui | Non |

Si NON, passez à la question 17

Type: Electrique Kérosène Gaz Propane Solaire

Etat: Bon Moyen Mauvais Non fonctionnel

Thermomètre intérieur ou extérieur (porte) ? Oui Non Temp. __

Fiche de contrôle journalier de température ? Oui Non

Si OUI: Au cours du mois précédent:

- La fiche de contrôle de température est-elle à jour ? Oui Non

- Nombre de jours où température supérieure à 8°C jours

- Nombre de jours où température inférieure à 0°C jours

17. Accumulateurs de froid ? Oui Non

18. Glacière / thermos pour vaccins Oui Non

- Etat: Bon Moyen Mauvais Non fonctionnel

19. Y a-t-il du matériel de communication disponible ? Oui Non

Type de matériel	Quantité	Thème principal/message
Flipchart		
Posters		
Cartes de conseil		
Pamphlets		
Autre (spécifiez) _____		

Registres et Documents

Est-ce que les documents suivants sont présents dans l'établissement ?

20. Registre de vaccination Oui Non
 Si OUI, est-il à jour ? Oui Non
21. Un stock de cartes de vaccination PEV Oui Non
22. Un stock de cartes de vaccination Tétanos Toxoïde (TT) Oui Non
23. Formulaires de maladies à déclaration obligatoire Oui Non
24. Registre/cahier de consultation Oui Non
 Si OUI, est-il à jour ? Oui Non
25. Nombre de patients vus le mois dernier _____
26. Moyenne de patients vus par jour _____
27. Feuille de pointage journalier de vaccination Oui Non
28. Rupture de stock au cours du dernier mois ? Oui Non
 Si OUI:

Item	Nombre de ruptures de stock / 30 derniers jours
Vaccins	
Seringues/aiguilles	
SRO	
Médicaments	
Cartes/formulaires	

Les médicaments suivants existent-ils en stock ?

(Vérifiez les dates d'expiration)

	Médicament	Disponible		Disponible	
		Oui	Non	Oui	Non
29.	Pour pneumonie:_____	Oui	Non	_____	_____
30.	Pour Shigelle:_____	Oui	Non	_____	_____
31.	Pour cholera:_____	Oui	Non	_____	_____
32.	Pour paludisme:_____	Oui	Non	_____	_____
33.	Quinine IM	Oui	Non		
34.	Benzyl-penicilline IM	Oui	Non		
35.	Chloramphenicol IM	Oui	Non		
36.	Paracetamol	Oui	Non		
37.	Tétracycline pommade ophtalm.	Oui	Non		
38.	Violet de gentiane	Oui	Non		
39.	Fer	Oui	Non		
40.	Vitamine A	Oui	Non		
41.	Mébéndazole	Oui	Non		
42.	Eau stérile pour injection	Oui	Non		
43.	SRO	Oui	Non		
44.	Solution IV pour deshydratation grave	Oui	Non		
45.	Aiguilles	Oui	Non		
46.	Seringues	Oui	Non		

Les vaccins suivants sont-ils en stock ?

47.	BCG	Oui	Non
48.	Polio oral	Oui	Non
49.	DTC	Oui	Non
50.	Rougeole	Oui	Non
51.	Tétanos Toxoïde (TT)	Oui	Non

52. Y a-t-il des médicaments périmés dans l'établissement ? Oui Non

Si OUI: Lesquels ? _____

53. Y a-t-il des vaccins périmés dans le réfrigérateur ? Oui Non

Si OUI: Lesquels ? _____

54. Y a-t-il des flacons congelés de DTC ou de TT dans le réfrigérateur ? Oui Non

Management des médicaments et autres matériel

55. Les médicaments et matériel sont-ils rangés dans un placard fermant à clé ? Oui Non

56. Y a-t-il un stock de carte pour les médicaments essentiels ? Oui Non

57. Les médicaments et les SRO sont-ils stockés dans un endroit frais et sec ? Oui Non

FIN DU QUESTIONNAIRE EQUIPEMENT ET MATERIEL

APPENDIX C
LIST OF SURVEY TEAMS

APPENDIX C: LIST OF SURVEY TEAMS

1. Dr. Mary CARNELL
2. Dr. Serge MANONCOURT
3. Dr. John MURRAY
4. Dr. Etienne FENO
5. Dr. Odon ANDRIANARISOA
6. Dr. Marie-Jeanne ANDRIAMANGA
7. Dr. Robertine RAHELIMALALA
8. Dr. Emelie RAZAIARISOA
9. Dr. Tahina RANDRIAMIRE
10. Dr. Sylvestre RANAIVOHAJAINA
11. Dr. Josée SAHONDRA HARISOA
12. Dr. Fernande RAZAIMAMPIONONA
13. Dr. Simon RAKOTONIRINA
14. Dr. Rodin RAFALIMANANA
15. Mme. Claudine RALJAONA
16. Dr. Andrimanantena RAKOTOARIVONY
17. Dr. Noël Marcellin RAJAONARIVO
18. Dr. Claire RAHARINORO
19. Mme. Amélie TATAVE
20. Dr. Jean-C. RAZAFINDRAZAKA
21. Dr. Josoia Samson RALAIVAO
22. Dr. Davod RANDRIAMIZAKA
23. Dr. Jean MELINY
24. Dr. Marius RAZAFINDRAVALO
25. M. André RAZAFINJATO
26. Mme. Lala RAHARINIVO
27. Mme. Monique HO WAI KEN
28. Mme. Julienne RAVAONANDRASANA
29. Dr. Johanes RAZAFIMANANTSOA
30. Dr. Berthine ANDRIANAVALONA
31. Mme. Berthine RAZAINJAFY
32. M. Bernard RAJAONARIVELO
33. Mme. Chantal RAVAONASOLO