Monitoring selective components of primary health care: methodology and community assessment of vaccination, diarrhoea, and malaria practices in Conakry, Guinea. ACSI-CCCD team.

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Monitoring selective components of primary health care: methodology and community assessment of vaccination, diarrhoea, and malaria practices in Conakry, Guinea

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The Africa Child Survival Initiative–Combatting Childhood Communicable Diseases (ACSI–CCCD) Project is a primary health care activity that focuses on antenatal care, immunization, diarrhoeal disease control, and malaria control in children under 5 years of age. In order to gauge progress made in the project, a community-based health interview survey to measure simultaneously several prevention and treatment indicators was carried out in 1986 in Conakry, Guinea. A sample of 1415 caretakers and their 2048 children aged under 5 years was visited using a cluster sampling technique. The survey documented the levels of literacy and health education awareness of the caretakers, measured the vaccination coverage levels for children and women of childbearing age, and determined treatment practices for diarrhoea and malaria. Of the 637 women who reported having given birth in the previous 12 months, 96% had visited an antenatal clinic, but only 49% had had two or more doses of tetanus toxoid, and 13% took weekly chemoprophylaxis against malaria.

The vaccination coverage for measles was 16% for children aged 12–23 months. Oral rehydration therapy (ORT) was given to 16% of children with diarrhoea; however, only 43% of those who were administered ORT at home were treated according to standard guidelines. Of children with diarrhoea, 51% were given antidiarrhoeal or antimicrobial drugs by caretakers. Fever was treated at home for 79% of the febrile children, and 43% of those with fever also visited health units. The use of injectable antimalarials and prolonged treatments with chloroquine were common. Combining findings from a population-based community study with an assessment of practices in health facilities can provide reliable information for the implementation and monitoring of selective components of primary health care.

Introduction

Since the International Conference on Primary Health Care at Alma-Ata in 1978, the development of primary health care (PHC) has been a priority strategy in developing countries, and has been heavily promoted by governments and international organizations (*1*). The term selective PHC has been used to specify interventions against specific diseases implemented within the general health services, with the choice of activities being advocated on the basis of disease prevalence, morbidity, mortality, economic toll, and the feasibility of control measures (*2*). Because of the need to assess precisely the effects of primary health care strategies and the costs of the interventions, the development and testing of evaluation methods are needed. While the measure of outcome indicators of PHC programmes is highly desirable (*3*), disease-specific incidence and mortality cannot always be quantified.

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Reprint No. **5029**

Measurements of activity (process) indicators in the community are needed to assess the awareness of community members about local PHC activities and the effectiveness of their participation, and to help design and monitor health education efforts as intervention projects progress. Kroeger has proposed the use of general guidelines to standardize health interview survey methodologies in developing countries (*4*). For immunization and diarrhoeal disease control programmes, household survey procedures to measure coverage have been satisfactorily standardized (*5*).[a] However, there is a need for a systematic survey approach that can measure several process indicators simultaneously for the various components of integrated PHC programmes.[b] Here, we describe a method that can be used to measure simultaneously, in a statistically rigorous way, several treatment and prevention activities in a community. The method is based on the cluster sampling survey technique used to assess interventions against individual diseases and was field tested in 1986. The purposes of the survey were to assess the method at the household level; and to gather baseline information and use the survey results to plan health service delivery, training, and education activities for a selective PHC project.

Background

The Africa Child Survival Initiative—Combatting Childhood Communicable Diseases (ACSI–CCCD) Project is a selective PHC project that aims to reduce the morbidity and mortality of children in 13 African countries by strengthening their national capacities to immunize infants and women of childbearing age; and to provide the following: proper case management, especially provision of oral rehydration therapy (ORT) for children with diarrhoea; appropriate treatment of children with fever or malaria; and malaria chemoprophylaxis to pregnant women.

Conakry, the capital of Guinea, was selected for the study because (1) the ACSI–CCCD project began there in 1986; (2) there was a shortage of baseline data; and (3) by conducting the test in an urban centre, the survey method could be evaluated under close supervision.

[a] *Diarrhoea morbidity, mortality, and treatment practices: household survey manual.* Unpublished document WHO/CDD/SER/86.2.

[b] *Review of primary health care protocols.* Unpublished documents WHO/SHS/PHC/84.1–7.

Materials and methods

Sampling

The health practices survey was carried out in June 1986 in Conakry, whose population in 1985 was 729 247 (unpublished census, 1986). The city is divided administratively into three zones and 76 neighbourhoods. The sampling method used was a cluster scheme based on "probability proportionate to size" (*5–7*), taking a neighbourhood as a cluster, and selecting 30 clusters at random.

The target group comprised children under 5 years of age. The sample size was calculated using the formulae for cluster sampling (*8, 9*), making the following assumptions: (1) the incidence of disease in the 2 weeks prior to the survey was $\geqslant 15\%$; (2) after the beginning of the ACSI–CCCD project the survey should be able to detect an increase of $\geqslant 20\%$ in the proportion of children treated according to the project guidelines; (3) $\geqslant 40\%$ of sick children should receive treatment; (4) the power of the study (the probability of correctly rejecting the null hypothesis when it is false) should be 80% and the alpha error (the significance level), 5%; and (5) the maximum "design effect" anticipated should be 4.0. Based on these assumptions, 2040 children (68 per cluster) of less than 5 years of age were needed for the study.

Questionnaire development

The questionnaire was written initially in English, based on a list of more than 30 key indicators. Subsequently, it was field tested in two demonstration clusters in the local language and revised.

Mothers were asked about their education level and vaccination status for tetanus toxoid was confirmed by looking at the antenatal health card; women who had given birth in the previous 12 months were questioned about their use of antenatal care, including malaria chemoprophylaxis. The vaccination status of each child under 5 years of age was assessed using only the information on his or her health card. If a child had had diarrhoea or fever (defined as episodes of these illnesses, as perceived by the caretaker) during the 2-week period prior to the interview, separate questionnaires were completed. Similarly, parents were asked if their child had experienced "severe" illness over this 2-week period. For diarrhoea, severe meant either that recent weight loss had occurred or that the child had had four or more stools over a 24-hour period. Identification of severe malaria was more subjective, and was taken to include the presence of sustained fever during the illness or of an altered state of consciousness.

For those who reported episodes of diarrhoea or

fever, we estimated their rate of use of health services, the delay before treatment, and the categories of treatment received in the facilities; we also gathered detailed information on home treatment practices. Questions were asked on the drugs used and the dosages given. A special set of questions assessed the dose of ORT administered and the recipe used to prepare it.

Survey personnel

Fifteen student nurses, most of whom were mothers, were trained for 7 days on interviewing techniques. The training emphasized role playing, and the student nurses acted, in turn, as interviewers and interviewees to clarify questions; two field exercises were also carried out. Three teams, each consisting of a team leader and three interviewers, were formed on the basis of performance during training, and each team was supervised by an epidemiologist.

Field study

The study clusters were visited by senior investigators at least one day before the survey started. After meeting the local authorities and explaining the objectives of the survey, the geographical limits of the cluster were determined and the first house to be visited was selected randomly. From the first house, the team progressed door-to-door to the next-nearest household. All women absent at the first visit who were reported by neighbours to have children under 5 years of age were revisited before the end of the day. Three visits were made before a missing woman was substituted by one who lived in a contiguous household. The answers on the questionnaires were verified in the field by the team leaders and supervisors.

Data entry and analysis

The answers to the survey questions were coded at the time of the interview, except for information on the preparation and administration of ORT and the dosage of antimalarials. Data were then entered on two microcomputers in Conakry, and initial analyses were carried out using dBase III and Lotus 123 software packages.

Results

It took 15–45 minutes to administer a questionnaire to each mother or caretaker, and every day the interview teams spent 4.5–11.5 hours per cluster in the field (median: 6.75 hours). The survey field work was completed in 10 days, and a total of 1436 female caretakers, essentially all mothers, were surveyed. A total of 108 caretakers were absent at the first visit, and only 21 of these (1.4% of all the mothers) could not be interviewed at the second or third visits.

Interviews were completed on 1415 (98.5%) of the women who cared for 2046 under-5-year-old children (average number of children per woman interviewed, 1.5; range, 1–4). A total of 304 (14.9%) children under 5 years of age had a history of diarrhoea in the 2 weeks prior to the survey (95% confidence interval (CI), 13.0–16.7%; design effect (DE), 1.5) and interviews were completed for 302 (99.3%) of these children. The caretakers reported that 485 (23.7%) children under 5 years of age had had at least one febrile episode in the 2-weeks preceding the survey (95% CI, 20.6–26.8%; DE, 2.7), and information was collected for 482 (99.4%) of them. Episodes of both diarrhoea and fever were reported in the same 2-week recall period for 156 children (7.6%), and for 114 (73.1%) of these children the caretakers considered that these signs were caused by the same illness.

Characteristics of the caretakers

Of the women who were interviewed, 70% listened to the radio and 88% of these (62% of all the women) said they had listened to the weekly radio health programme at least once (Table 1).

Of the 1388 women who reported taking their sick children to health facilities (98% of the respondents), 778 (56%) said they had to travel less than 1 hour to their usual facility. Furthermore, of the 21 health facilities that were mentioned as the usual source of health care, the two large tertiary care hospitals were the first and third most popular, being used by 25% and 11%, respectively, of caretakers. A breakdown of the antenatal care obtained by the 637 mothers (45% of the total) who reported giving birth during the 12-month period prior to the survey is shown in Table 2. Coverage with only tetanus toxoid

Table 1: **Education level and media-receptiveness of the 1415 caretakers interviewed during the health practices survey, Conakry, Guinea, June 1986**

Characteristic	% of caretakers
Reported listening to the radio	70 (66,74)[a]
Listened to the radio health programme at least once	62 (58,62)
Watched the television health programme at least once	47 (41,53)
Passed a reading test[b]	27 (22,32)

[a] Figures in parentheses are the 95% confidence intervals.

[b] Those who could read brief health education messages in French or in one of the three national languages.

Table 2: **Pattern of use of antenatal care by the 637 women who reported giving birth in the 12 months prior to the health practices survey, Conakry, Guinea, June 1986**

Pattern of use	% of pregnant women
⩾1 antenatal visit	96 (88,100)[a]
Possessed an antenatal card	65 (57,72)
Received 1 dose of tetanus toxoid	11 (7,14)
Received ⩾2 doses of tetanus toxoid	49 (43,56)
Took weekly chemoprophylaxis against malaria during pregnancy	13 (8,17)
Reported at least one severe febrile episode during pregnancy	36 (31,41)
Reported malaria episodes that were treated	25 (21,30)
Gave birth in a health facility	86 (78,95)

[a] Figures in parentheses are the 95% confidence intervals.

Table 3: **Vaccination coverage among under-5-year-olds determined in the health practices survey, Conakry, Guinea, June 1986**

Features	% of children aged: 12–23 months (n=368)	24–59 months (n=1072)
Had a vaccination card	34 (27,40)[a]	21 (16,25)
Received BCG	20 (13,26)	7 (5,9)
Received DPT1[b]	23 (16,29)	12 (9,14)
Received DPT2	11 (7,16)	5 (3,7)
Received DPT3	8 (4,11)	3 (2,5)
Received OPV1[c]	20 (14,25)	11 (8,13)
Received OPV2	11 (7,16)	5 (3,7)
Received OPV3	7 (4,10)	4 (2,5)
Received measles vaccine	16 (11,21)	13 (8,18)
Fully vaccinated	4 (1,7)	2 (1,3)

[a] Figures in parentheses are the 95% confidence intervals.

[b] DPT1, DPT2, DPT3 = 1st, 2nd, and 3rd dose, respectively, of diphtheria–pertussis–tetanus vaccine.

[c] OPV1, OPV2, OPV3 = 1st, 2nd, and 3rd dose, respectively, of oral poliovaccine.

was adequate (⩾ 2 injections) for 49% of mothers; however, malaria chemoprophylaxis had been taken by only 13% of pregnant women.

Vaccination coverage

Documentary evidence of the date of birth of 1122 of the children (55%) was available; the age in years was given for an additional 318 children between 12 and 59 months old. Only 22% of under-5-year-old children had health cards. The vaccination coverage for each antigen by age group is shown in Table 3. In all age categories, for all antigens, the coverage was less than 25% with the lowest coverage being for children over 2 years of age. Although coverage for measles vaccination was comparable in the 12–23-month-old and 24–59-month-old groups, the older children had not been vaccinated at the optimal age; only 25 (28%) of 90 children aged 36–59 months who had been vaccinated against measles had received the vaccine between the ages of 9 and 35 months, as recommended for measles prevention in Guinea.

Diarrhoea treatment practices

Of the 302 episodes of diarrhoea for which complete interview data were available, 55 (18%) had begun during the 48 hours prior to the survey. The highest incidence was among 6–23-month-olds, and 28% of such children had had diarrhoea during the 2 weeks prior to the survey. A total of 187 children (62%) were breast-fed and for only 13% of these children was breast-feeding discontinued when their episode of diarrhoea began. If the daily number of stools is taken as the standard, the severity of diarrhoea perceived by the caretaker had a sensitivity of 68%, a specificity of 92%, and a positive predictive value of 90%. Table 4 shows the places where diarrhoea was treated, according to the perceived severity of the episode.

Altogether, 37% (95% CI, 21–53%) of sick children were taken to a health worker. The caretakers treated 64% (95% CI, 38–89%) of the children at home, and 50% of these children were also treated at a health facility. Treatment at a health facility or at home was more frequent for the severe episodes. After controlling for the severity of the episode, children who were treated at home were more likely to have been taken to a health worker than those who were not (Mantel-Haenszel χ^2 test = 29.9, one degree of freedom, $P<0.001$).

Fig. 1 shows schematically the different treatment practices that the children received for diarrhoea episodes reported in the survey. Presentation at a health facility usually followed home treatment and was prompt; for example, 75% (84/112) of those who took their child to a health worker did so during the first 48 hours after the onset of diarrhoea. However, only 19% (21/112) of the children who were seen by a health worker (7% of all children with diarrhoea) received ORT, while the caretakers of 30% of the children who came to the clinic (11% of all children with diarrhoea) were advised to administer ORT at home. Almost 80% (154/193) of children treated at home (51% of all children with diarrhoea) were given antimicrobial drugs, with or without antidiarrhoeal drugs; sugar–salt solution (SSS) or

Table 4: **Distributions of the place of treatment for children with diarrhoea or with fever, health practices survey, Conakry, Guinea, June 1986**

	No. of children					
	Total	Not treated	Health facility	Home	Both health facility and home	*P* value[a]
Severe diarrhoea[b]	117	26 (22.2)[c]	4 (3.4)	33 (28.2)	54 (46.2)	<0.001
Non-severe diarrhoea	185	67 (36.2)	13 (7.0)	64 (34.6)	41 (22.2)	<0.001
Total diarrhoea	302	93 (30.8)	17 (5.6)	97 (32.1)	95 (31.5)	
Severe fever[b]	192	20 (10.4)	12 (6.3)	69 (35.9)	91 (47.4)	<0.001
Non-severe fever	290	58 (20.0)	9 (3.1)	127 (43.8)	96 (33.1)	<0.001
Total fever	482	78 (16.2)	21 (4.4)	196 (40.7)	187 (38.8)	

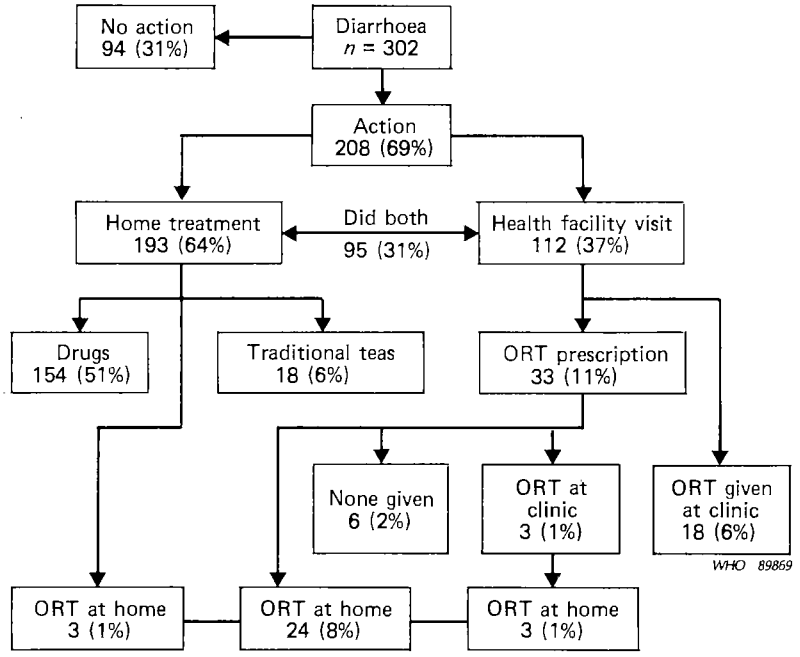
[a] As determined in a stratified analysis of treatment in a health facility versus treatment at home.

[b] As perceived by the caretakers.

[c] Figures in parentheses are percentages.

oral rehydration salts (ORS) were given only to 16% (30/193) of those treated at home (10% of all children), and traditional teas to 6%. Two-thirds of the SSS and ORS solutions administered at home had been properly prepared; however, only 40% of the children with diarrhoea who were treated with SSS and ORS were given sufficient quantities to prevent or correct dehydration. Only 13 children (4% of all children with diarrhoea and 43% of those who were given SSS or ORS at home) were treated according

Fig. 1. **Treatment scheme for children with diarrhoea, health practices survey, Conakry, Guinea, June 1986. ORT = oral rehydration therapy.**



to guidelines for the management of diarrhoea.[c,d] In addition, only 3 (17%) of the 18 children who were given traditional tea remedies received amounts greater than a teacupful. Finally, only 18% of 292 caretakers, when asked during the survey, knew about ORS and were able to recognize one of the UNICEF packets.

Fever treatment practices

Of the 482 episodes of fever, 59 (12%) had begun in the 48 hours prior to the survey. The highest rate (43%) was among 6–23-month-olds, and 40% (192/482) of episodes were perceived by caretakers as severe. In only 20% of cases was the fever ascribed to malaria by the caretaker, and two-thirds of such cases were perceived as severe. Altogether, 43% (95% CI, 34–52%) of febrile children were taken to a health worker.

The distribution of places of treatment for children with fever, by its severity, is shown in Table 4. Home treatment was reported for 79% (95% CI, 68–91%) of febrile children and 39% (187/482) also attended a health facility. Treatment at both home and at a health facility was more frequent for episodes that were perceived as severe by the caretaker (Mantel-Haenszel χ^2 test = 22.4, one degree of freedom, $P < 0.001$). Fig. 2 shows schematically the fever treatment practices at home, at a health facility, or at both of these places. For caretakers who took children to a health worker, 74% (154/208) did so within 48 hours of the onset of fever. Of the children treated at home, 59% (227/383) (47% of all febrile children) received an oral antimalarial drug and 36%, an antipyretic. Overall, 14% (67/482) of children received an injection during their febrile episode, and all but eight of these injections were administered at a health facility. Injections represented 63% of all treatments given at health facilities. Oral antimalarials were given in clinics to 252 (52%) of the children. Of the 171 children who had completed treatment at the time of the interview, 109 (64%) had received antimalarial drugs for 4 days or more (median treatment time, 4 days; range, 1–20 days). Altogether, only 36% of the children who completed treatment had received drugs for 3 days, the schedule recommended by WHO.

[c] *Oral rehydration therapy for treatment of diarrhoea in the home.* Unpublished document WHO/CDD/SER/86.9.

[d] *A decision process for establishing policy on fluids for home therapy of diarrhoea.* Unpublished document WHO/CDD/SER/87.10.

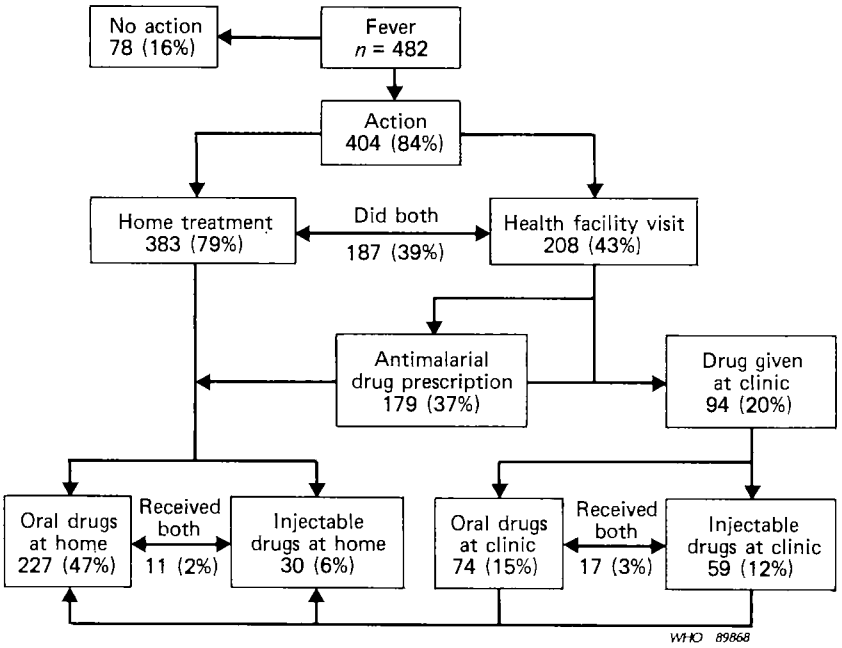
Discussion

The methods used in the survey provided an initial evaluation of antenatal care and three components of PHC activities in Guinea. The sample size was large enough to give confidence intervals that were sufficiently narrow for statistical comparisons in follow-up studies. Furthermore, several indicators were measured simultaneously. The incidences of diarrhoea and fever had to be estimated and at least two summary indicators (use of health services and home treatment) were determined for each condition. Children experienced about three episodes of diarrhoea and six episodes of fever annually. For a multipurpose survey designed to measure changes over time, in general larger samples are needed than for a point prevalence assessment of practices related to a single disease or for vaccine coverage surveys. Both the low design effect measured and the low proportion of children who received treatment indicate that a smaller sample size could be used in follow-up surveys in Conakry if it is assumed that correct treatment practices will increase in the meantime by at least 20%.

Selection bias was anticipated as a possible problem in the survey; however, there were no statistical differences between the sociodemographic characteristics of the 87 women who were absent at the first visit, but interviewed later, and the incidence of disease and health care received by their children when compared with the 1328 caretakers who were available at the first visit. The 26 children with diarrhoea whose caretakers were interviewed later were taken to a health worker as frequently as those whose caretakers were interviewed at the first visit. The latter children received significantly fewer drugs and more traditional teas at home ($P < 0.01$). The 29 febrile children of caretakers who were interviewed later were taken to a health worker and received oral antimalarials at home as frequently as those whose caretakers were interviewed at the first visit. It is therefore probable that our results would not have been biased unduly had no return visits to initially empty houses been made.

Information bias is always a potential problem in community-based cross-sectional surveys (*10*). For example, caretakers might overreport episodes if they believe that the interviewers can provide them with some additional curative services; also, underreporting might occur if parents sense that the steps they took on their children's behalf are not in accord with that expected by the interviewers. Any illness that was not treated, or treated by traditional means, is less likely to be reported to interviewers. Hence, our estimate of the rate of utilization of health services could be artificially high. A subsample of caretakers

Fig. 2. **Treatment scheme for children with fever, health practices survey, Conakry, Guinea, June 1986.**



was not reinterviewed by independent observers during the survey. It should be noted that reinterviewing individuals in a health survey in Kenya led to a significant drop in reported morbidity over time, and a variation of 25–30% in answers on health practices (*11*).

There is a shortage of data on the optimal recall period for health interview surveys in developing countries (*10*). The 2-week recall period that we used in the present study seems reasonable, since it covered one recent health event, although the details of treatment could have been obscured had parents visited multiple health providers or had several medicines been received (*12*). Interviewer bias is likely to have been low in our study because of the rigorous training given, which focused on the administering of questionnaires in the three main national languages, and because of the close supervision that was maintained.

Several confounding variables were considered in the analysis of maternal practices. The severity of the episode of diarrhoea or fever was an important determinant of the action taken, despite the subjective nature of the term "severe". For the stratified analysis (Table 4), we used the mother's perception of severe diarrhoea, rather than the number of stools, since the ACSI–CCCD project is directed at assuring prompt treatment initiated by caretakers. Age was less likely to confound the results, except that the most frequent and severe episodes of diarrhoea or fever occurred before children had reached 2 years of age. The level of the caretaker's literacy and the family size had no bearing on any event or practice surveyed.

Data were analysed in the field on microcomputers over 2 weeks, and the preliminary results were made available as soon as possible to national authorities. Excluding the expenditure on consultants and computers, the overall local cost of the study was US$ 3800, including US$ 1600 for the salaries of local personnel and daily stipends. This represents 0.4% of the total budget of the ACSI–CCCD primary health care project in Guinea. A similar survey in rural zones of the country where the ACSI–CCCD project is being implemented would probably cost an additional US$ 5000, mainly for per diem allowances and travel associated with the expected doubling of field work time. This type of evaluation represents an effective managerial investment to quantitate programme progress rapidly.

Low immunization coverage was associated with poor targeting of vaccination efforts, particularly with measles vaccine, and the coverage was substantially less than that found in previous vaccination coverage surveys where parental histories only were used. In our study, parental histories were not

employed, in conformity with the WHO evaluation strategy, since parents could confuse the different vaccines, could report any injection as a vaccination, or might wish to please the interviewer by stating falsely that their child had been vaccinated. Several patients without vaccination cards stated that their children had received some injections, indicating that coverage may have been higher; however, recall of specific agents received was almost always imprecise. Retention of health records, including vaccination cards, by parents is very important.

Use of ORT was uncommon and administration of drugs for diarrhoea was the practice most commonly reported. The low rate of ORT use was not essentially different from the overall rate of ORS use, which was estimated in 1986 to be 7% for the WHO African Region, while access to ORS did not exceed 30% in the region (*13*). Although the rate of use of health services was relatively high, this did not result in greater use of ORT, which was not prepared according to WHO recommendations and was given in very small quantities, as if it were a proprietary medicine. Some positive steps have been taken to promote proper use of ORT in Guinea since the survey was carried out, including the opening of training and demonstration units in the major city hospitals in Conakry. Also, the ORT was not prepared in the field and the sodium and carbohydrate concentrations of the solutions were not determined; such determinations could, however, be performed on a subsample in future surveys (*14*).

The frequency of fever episodes reported may be a minimum estimate since the survey was carried out in June 1986 at the beginning of the rainy season, when the rate of malaria transmission is at its lowest. Indeed, the prevalence of parasitaemia among 1776 of the children surveyed was 5.1% (J. G. Breman, personal communication, 1986), which confirmed this. We are unable to explain why in only 20% of reported febrile episodes was the fever ascribed to malaria. It is possible that the low transmission season and the widespread use of antimalarial drugs, reflected by the low rate of parasitaemia, contributed to this perception. No epidemics of any other febrile diseases occurred, and we did not probe the caretakers' perceptions of the relationship between fever and malaria. Excessive use of injections, a potentially dangerous practice (*15*), was reported. In addition, the chloroquine regimens were too prolonged, which led to excessive dosages. Such practices have been documented in many parts of Africa (*16*). As a result, cost-effective treatment regimens for uncomplicated episodes of fever or malaria should be drawn up, and referral plans for standard therapy failures should be developed and promoted at the community and the health facility levels. Plans to achieve this have been developed in Conakry since the survey was carried out, and health education efforts have emphasized the proper length of treatment and dosage, recognizing that prompt use of health services and choice of the correct drug was occurring.

To supplement the information gathered in this community survey, a health facility survey involving reviews of records and interviews of clinic attendees and health workers would be useful, but requires different methods. The combination of the results of both surveys would be the ideal approach to describing completely the practices that are targeted by PHC programmes (*17*).

Acknowledgements

This study was funded, in part, by the United States Agency for International Development, Africa Child Survival Initiative—Combatting Childhood Communicable Diseases Project (698–0421).

We thank Dr S. Diallo, Coordinator, Combatting Childhood Communicable Diseases (CCCD) Project, Ministry of Health, Guinea, and Ms D. Gersky, Technical Officer, CCCD, Guinea. The assistance of Dr C. Gantin (WHO Representative), and Mr I. Hopwood (UNICEF), is acknowledged, and Dr D. Brogan (Emory University) and Ms S. Arpin (Centres for Disease Control) are thanked for their help in the statistical analysis of the data. Use of trade names is for identification only and does not imply endorsement by the authors or their agencies. The formulae used to determine sample sizes and the list of indicators measured are available upon request from the authors.

Résumé

Surveillance de certaines composantes des soins de santé primaires: méthodologie et évaluation des pratiques de vaccination et de lutte antidiarrhéique et antipaludique à Conakry (Guinée)

On peut juger de l'efficacité des programmes de soins de santé primaires (SSP) en mesurant des indicateurs d'activité et des indicateurs de maladie (indicateurs de résultat). Des techniques existent pour évaleur chaque intervention prise isolément, mais il reste à mettre au point des méthodes capables d'évaleur l'exécution et les résultats d'interventions multiples, de façon à pouvoir mieux surveiller, par des actions unifiées, le déroulement des programmes intégrés de soins de santé primaires. L'Initiative pour la survie de

l'enfant en Afrique et la lutte contre les maladies infantiles transmissibles (ACSI-CCCD) est un project sélectif de soins de santé primaires qui met l'accent sur les soins anténatals, la vaccination, la lutte contre les maladies diarrhéiques et la lutte antipaludique chez les enfants de moins de cinq ans.

Dans le cadre de ce projet, une méthode d'enquête par questionnaire sur les pratiques sanitaires dans la communauté a éte mise au point pour mesurer simultanément plusieurs indicateurs d'activité et elle a été testée sur le terrain en juin 1986 à Conakry, en Guinée. L'équipe chargée de l'enquête a rencontré et interrogé 1415 femmes, mères de 2048 enfants de moins de cinq ans. La technique d'échantillonnage par grappes a été utilisée pour recueillir des informations de base nécessaires à l'élaboration des stratégies d'éducation et de formation et à l'évaluation permanente du projet. L'enquête a permis d'observer les caractéristiques des mères et de déterminer le taux de couverture vaccinale des enfants et des femmes en âge de procréer. Des informations détaillées ont été recueillies sur les pratiques suivies par les femmes dont les enfants avaient souffert de diarrhée ou de fièvre au cours des deux semaines précédant l'entretien. Sur les 637 femmes qui ont déclaré avoir donné naissance à un enfant au cours des 12 mois précédents, 96% s'étaient rendues dans une clinique de soins anténatals, mais 49% seulement avaient reçu deux doses ou plus d'anatoxine tétanique et 13% avaient suivi un traitement chimioprophylactique hebdomadaire contre le paludisme.

La couverture vaccinale était faible, puisque seulement 15% (intervalle de confiance [CI] à 95%: 11–21%) des enfants âgés de 12 à 23 mois avaient été vaccinés contre la rougeole et 4% (CI 95%: 2–5%) avaient reçu trois doses de vaccin antipoliomyélitique.

Parmi les enfants atteints de diarrhée, 16% ont reçu un traitement de réhydratation orale (TRO); toutefois, lorsque ce traitement a été administré à domicile, les directives établies en la matière n'ont été respectées que dans 43% des cas. Des antidiarrhéiques ou des antimicrobiens ont été administrés à 51% des enfants atteints de diarrhée. Pour 79% des enfants fiévreux, le traitement à domicile a été rapide et fréquent, et 43% ont été conduits à un centre de santé. On a constaté de nombreux cas d'utilisation excessive d'antipaludiques injectables et de traitement prolongé à la chloroquine. L'idée que les mères se faisaient de la gravité des épisodes diarrhéiques ou fébriles constituait une variable confondante dont il a été tenu compte dans l'analyse. Les résultats de cette enquête ont permis de mieux définir les stratégies du projet ACSI-CCCD à Conakry.

L'article passe en revue plusieurs facteurs susceptibles de limiter l'utilité des enquêtes sur les pratiques sanitaires. Un échantillon important de population a été choisi pour pouvoir mesurer simultanément plusieurs indicateurs et pour faciliter les comparaisons avec les résultats d'enquêtes ultérieures. Le coût de l'étude et les moyens logistiques mis en œuvre ne paraissent pas excessifs: dix jours d'enquête sur le terrain, deux semaines pour la saisie des données et leur analyse à l'aide de deux micro-ordinateurs, et US$ 3800 pour les dépenses locales, ce qui représente 0,4% du budget total de l'ACSI-CCCD en Guinée. Le biais de sélection dû à l'absence de réponse a été jugé négligeable. Le biais introduit par les enquêteurs et la nature des réponses a été réduit au minimum en fixant à deux semaines la période sur laquelle portaient les questions et en apportant beaucoup de soin à la formation et à la supervision des enquêteurs.

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