Addis Ababa University
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Factors influencing carer's compliance in integrated management child hood illness, Awassa town Southern Ethiopia

By

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List of abbreviation

AAU - Addis Ababa University

AIDS - Acquired Immune Deficiency Syndrome

ARI - Acute Respiratory tract Infection

CI - confidence Interval

DCH - Department of community Health

EP-info 2002: soft ware package ,version 2002

ESHE - Essential service for health in Ethiopia

GV - Gentian Violate

HIV - Human immune deficiency

IMCI - Integrated management of child hood illness

MOH - Ministry of health

NGO - Non Governmental organization

OR - Odds Ratio

ORS - Oral Rehaydration salt

ORT - Oral Rehaydration Therapy

SNNPR - Southern Nation nationalities peoples Region

SPSS - Statistical package for social sciences

TTC - Tetracycline

UNICEF- United nations Children's Fund

WHO - World Health Organization

ABSTRACT

Back ground : Every year about 12 million children die before reaching their fifth birthday .Over 70% of these deaths occur in the developing world, Ethiopia is one of these countries with unacceptably high infant and under five child mortality rate of 96.8 and 141/ 1000 respectively. Acute respiratory infections, diarrhoeal diseases, malaria, measles and malnutrition are the major causes.

Objective : To investigate factors influencing the compliance of carers of under five children receiving IMCI, in Awassa H. centre, Awassa town, SNNPR state, Ethiopia.

Method : A cross sectional survey was conducted from October to June 2006. The study population were all carers of under five children who attended IMCI clinic at Awassa Health centre. The sample size required for this study was determined using the formula for estimating single population proportion and a total of 401 carers were used. Data entry and analysis were conducting using Epi Info 2002 and SPSS.

Result : Health workers explained correctly how to give antibiotic to 274(89.5%) of carers but demonstrated to only 19(6.2%) of carers. 65(21.3%) of carers gave antibiotic correctly. ORS was given correctly by 30(19.8%) of carers and 25(19.1%) of carers were attend follow up. 175(72.9%) of carers said they did not know how to give antibiotic. Concerning safe relief of cough 46(24.5%) of carers used safe remedy. 266(66.3%) of carers provided less fluid or fluid as usually to sick children after visiting the health center.

Discussion : Post secondary education of carers and monthly income more than 1000 birr were significantly associated with compliance to antibiotic and ORS. carers with no formal education were less likely to comply with ORS.. There is a great need to improve the social status of women in order to reduce child hood morbidity and mortality.

Conclusion: High rates of non compliance with antibiotic, ORS and follow up visits were identified. Most carers didn t use safe remedy to relive cough. The majority of carers said that they didn t know how to carry out the recommended action. This is may be due to poor counselling of health worker lack of demonstration of recommended actions and low social status of women.

1. Introduction

Every year about 12 million children die before reaching their fifth birthday. Over 70% of these deaths occur in the developing world, and are due to acute respiratory infections, diarrhoeal diseases, malaria, measles and malnutrition, often in combination.(1)

In the past decade, major progress has been made to reduce childhood morbidity and mortality, through childhood immunization, diarrhoeal disease and acute respiratory tract infection control, nutritional programs and through implementation of other primary health care activities. In spite of such interventions under five morbidity and mortality remain at unacceptably high rates especially in sub-Saharan Africa and south Asia.

A sick child who is brought to a health institution will very often have more than one condition and yet in a busy clinic. most children are identified as having a single diagnosis, where life-threatening symptoms and signs may be missed, due to the absence of appropriate guidelines to assess all possible illnesses of the child.

Integrated management of childhood illness is a strategy to reduce the morbidity and mortality associated with major causes of childhood illness. It was introduced by WHO and UNICEF in 1992.

It focuses on improving care at the first level health facilities where millions of children arrive sick each day. A set of generic guidelines for management of childhood illness was completed in 1996. This guideline material can not be used without substantial adoption according to country specific situation.

The IMCI strategy therefore seeks to reduce under 5 morbidity and mortality by adopting three broad and crosscutting approaches such as improving case management, improving the skills of health workers, improving health system, family and community

practice through education of carers and the community with focuses on health seeking behavior, compliance and care at home.

Ethiopia is one of the developing countries with unacceptably high infant and under 5 mortality rates (96.8 and 140.1, respectively). IMCI was indorsed as a key strategy in 1997, after national consultant training conducted in Addis Ababa. The Southern Nations, Nationalities and Peoples Region (SNNPR) is one of the three regions which FMOH selected for the early implementation of IMCI in 1998.(5)

Information on actual compliance of carers in IMCI is important, since reduction in morbidity and mortality are highly dependant on giving the recommended medication and care appropriately at home and attending for follow up visits.

The main purpose of this study was to assess factors influencing urban carers ' compliance with IMCI in SNNPR, Awasa town, Ethiopia. The results of this study will provide valuable information on carers 'compliance and can help program planner, policy makers and child health providers in the region as well as at national level.

2. LITERATURE REVIEW

2.1 Under 5 year child mortality

More than 10 million children die each year, most from preventable causes and almost all in developing countries. Data from global child death estimates suggest that about 41% of child deaths occur in sub-Saharan Africa and another 34% in south Asia(1). The Ethiopian Demographic and Health Survey estimated the under 5 mortality rate at 166 per 1000 live birth (1,2) approximately. Every year 472,000 children under 5 year die in Ethiopia (19).

Significant variations in mortality exist by socio economic determinates, such as health, education and urban-rural residence. The under 5 mortality rate for the poorest 20% of the population is 32% higher than that for the richest 20%.

The EIP/WHO 2001 report indicated that ARI (23%), diarrhoea (13%), malaria (9%) measles (5%) contributed to case specific proportion of under five mortality world wide (7).

The prediction model which is used to estimate the distribution of cause of death for 42 countries with 90% of all such deaths in 2000, attributed 22% of death to diarrhoea (14-30%), 21% to pneumonia (14-24%), 9% to malaria (6-13%), 1% to measles (1-9%), 3% to AIDS, 33% to neonatal causes (29-30%) and 9% to other causes(1).

The infant and child mortality rates in Guinea are among the highest in the world at 98/1000 and 177/1000 for infant and under 5 Year children, respectively (13). The five most common causes of death are malaria (32%), ARI (25%), diarrhoea (15%), neonatal tetanus (9%) and birth asphyxia (7%) other deaths were attributed to malnutrition,

neonatal infections, meningitis (sepsis) and measles at 6%, 4%, 4% and 2%, respectively (13).

The Ugandan Bureau of Statistic's 2000 report indicated that the Ugandan infant morality rate is 88.4/1000 and the under 5 year mortality rate is 151.5 per 1000. Common causes of death were malaria (15.4%), acute respiratory infection (10.5%),HIV/AIDS (9%) and diarrhoea (6.0%). (3)

In Ethiopia the DHS and MOH data report shows pneumonia (28%), diarrhoea (20%), neonatal condition (sepsis and asphyxia) 25%, malaria (20%), measles (4%) and AIDS (1%), Malnutrition is a major underling cause of death in approximately 57 %.
(19)

2.2 Health service

Ethiopia is one of the first countries in Africa to implement the integrated management of childhood illness (IMCI) as a national program, with support from donor organizations. (2)

Ethiopia endorsed IMCI as a key strategy to reduce childhood mortality and morbidity and to promote child health and development in 1997. (2)

Currently Ethiopia is on expansion phase. Inadequate coordination mechanism, high turn over IMCI trained staff and program managers unfavourable finical regulation for remuneration of resource person, poor follow up after training and integration of follow up with routine supervision, lower awareness by program managers at all levels and lack of coordination and collaboration with relevant programs and harmonization of activities with partner are the main reasons identified for low progress of IMCI in Ethiopia.

Tigray, Southern Nation, Nationalities and Peoples Region (SNNPR) and Addis Ababa were the first three regions selected for the early implementation of IMCI by the FMOH. Currently all regions are implementing IMCI. Out of the 580 districts in the country, 131 (23%) are actively implementing IMCI and out of 564 public hospitals and health centres, 203 (36%) have IMCI trained health workers managing under 5 Year old children (4). In SNNPR, 25% (24/104) of districts reached with the target of 7% (139/1952) of workers trained in IMCI. (5)

2.3 Health worker performance

IMCI reduces missed opportunities, for the early detection and treatment of illnesses that are not the main reason for consulting the health service and can thus escape the notice of health workers, with consequent deterioration and complications (7)

A study conducted in Niger indicated that health workers who attended under 5 year old sick children complied by 33% in assessment, 42% in counselling, and 81% in treatment and the average provider completed only 47% of all observed tasks(8).

The standard time required for counselling of carers is 2.5 minutes per child. In a study conducted in Bangladesh, the health worker's current practice is 0.4 minutes per child (9). Another study conducted in Niger providing performance feedback alone created a significant impact on compliance of health workers to IMCI guidelines which improved from 34% to 55% (10).

A study done on providers 'compliance to IMCI guidelines in Kenya in 1998 indicated that 20% of children were correctly classified, 60% received correct treatment and about 70% of carers were sufficiently counselled (11).

Twelve baseline health surveys conducted in Amhara, Oromia and SNNPR on health workers 'compliance with IMCI guidelines gave mean indices of assessment of 4.3 in Amhara, 3.9 in Oromia and 4.3 in SNNPR. (The integrated index of assessment is an average of the recommended 10 assessment tasks). In the same study, 50% of

pneumonia cases were correctly classified, 60% of malaria cases went undiagnosed, and of those needing antibiotics, 8% were properly prescribed antibiotics (12). Health workers provided little counselling to carer's regarding home treatment, only 17% of carers were advised to give extra fluids and continue feeding, and 12% were counselled on nutrition (12).

2.4 Carers' compliance with recommended actions

Improving drug use is an important part of IMCI implementation because drugs continue to consume a large segment of the household budget. Following the recommended drug- and non-drug management actions in IMCI is effective against the major causes of illness which contribute to childhood mortality, but misuse and overuse contribute to the growing threat of antimicrobial resistant in bacterial pathogenesis (14).

In a study conducted in Uganda on home-based management of fever, 37% of children received appropriate drugs for malaria. The proportion of febrile children who received an appropriate anti malarial ranged from 28% in Kamuli, 37% in Karungu , 40% in Kilmito to 44% in Kiboga (14). A quasi-experimental study conducted in Niger to test the effectiveness of job aid in increasing carers 'adherence to the co-trimoxazole regimen and in improving health worker counselling showed that 90% in the program group and 70% in the control group adhered exactly to the recommended regimen (15).

59 care takers complied with recommended treatment, in a study conducted in Guinea (13). In an interventional study conducted in Ghana on the impact of pre-packaging anti malarial drugs on cost to patients and compliance with treatment by patients, compliance

in the intervention group was 82%, whereas in the control group, compliance was 60.5%. For those prescribed syrup, compliance was 54.3% in the intervention group and 32.5% in the control group. A high proportion of patients in the control group who did not comply said that they did not understand the instruction given or they forgot them. Among noncompliant patients on tablets, 85.5% took less than the required amount of chloroquine, while 59.0% of those on syrup took more than the required amount (16).

In another study conducted in Sudan, 24% of carers did not comply with referral and 36% did not comply with the recommended follow up visits (17).

In Ethiopia research on carers ' compliance with IMCI management is not available. However, a baseline health survey conducted in Amhara, Oromia and SNNPR, on exit interviews to assess the knowledge of carers on recommended treatment and actions revealed that 38% of carers whose child was prescribed anti malarials in Amhara, 33% in Oromia and 39% in SNNPR, knew how to give the treatment. In a similar study, 5% of Amhara carers of children with diarrhoea had correct knowledge on preparing ORS, compared to 44% in Oromia and 40% in SNNPR.(5)

3. Objective

3.1 General objective

To investigate factors influencing the compliance of carers of under five year old children receiving IMCI, in Awassa health centre, Awassa town, SNNPR state, Ethiopia.

3.2 Specific objectives

- To determine the proportion of carers who are compliant with IMCI recommendations for treatment and counselling in the study area.

- To identify factors influencing carers 'compliance in the study area.

- To assess counselling skills of health workers attending IMCI cases in the study area.

4. Methodology

4.1 Study area

This study was conducted in SNNPR, Awassa town. Awassa is the capital city of Sidama zone and the regional state, located 275 kilometers south of Addis Ababa.

.which is administratively divided in to 7 sub cities and 2 rural kebeles, and has a population of 129,109, of which 21,933 are under 5 children. There are 1 referral hospital, 1 health centre, and 3 NGO clinics making potential health coverage 21.1%.

4.2 Study design

A cross-sectional survey was conducted from October -June 2006 to investigate factors influencing carers 'compliance with IMCI treatments and recommendations.

4.3 Source population

All carers of under 5 children who are permanent residents of Awassa town.

4.4 Study subjects

All carers attending under 5 children's clinic to seek treatment for their sick children for IMCI cases, who had IMCI trained health worker managing them.

4.4.1 Inclusion

Carers who brought sick under five children who were identified as IMCI cases and who were attended by IMCI trained health workers.

4.4.2 Exclusion

Carers who attended under five year clinics for EPI, malnutrition and children who required referral or admission, carers whose infant was less than one month of age or whose child was attended by a health worker untrained in IMCI.

4.5 Sample size determination

The sample size required for this study was determined by using the formula for estimating a single population proportion. Since previous data on compliance with treatment and recommendation of IMCI were not available, 50% prevalence was considered. Using 95% confidence interval, 0.05 precision and 10% non-trace rate,

$$n = Z(\alpha/2)^2 \frac{p(1-p)}{d^2}$$

Total sample size of 422 are used for this study population group.

4.6 Data Collection

Data were collected for this study by using two questionnaires:

1. The standard WHO observation checklist to observe counselling and instruction on drug use by health workers at the health centre and
2. A structured questionnaire modified from the standard WHO IMCI exit interview.

The second questionnaire was used to collect data from carers in the household. The observation check list was prepared in English whereas the household questionnaire was

prepared in English and translated into Amharic, the common language of the study subjects. Two IMCI trained nurses collected observation data at the health centre and five IMCI trained nurses collected data from carers in their households. One health officer was assigned as a supervisor. All health workers used for data collection were from other health centres in sidama zone.

For each household data collector, one guide was assigned. Data collectors and supervisor were given training for 3 days on how to use the questionnaire on interviewing and on observation techniques, privacy, discipline and approach to respondents. A pre-test was carried out on 20 carers at Yirgalem health centre and after pre-testing, comments were included in the questionnaire and experiences were obtained on how to proceed in the final data collection.

4.7 Study variables

Dependent (out come variable)

- Compliance of carers with the recommended IMCI treatment and counselling.

Independent (Determinant) variables

- Socio demographic related factors (age , education, income, sex, occupation).
- Health factors (counselling skills of health workers, trust in health worker)
- Carer ś knowledge
- Perception of child ś health outcome

4.8 Data processing (Data entry and cleaning)

The questionnaires were checked for completeness and consistency by the principal investigator. Totally unfilled and partially-filled questionnaires were excluded from the analysis. Observation checklists filled at the health centre for carers who were not found

at home were also excluded. The investigator entered the coded questionnaire into EPI Info 2002 version statistical package and exported to SPPS version 10 for statistical analysis Inconsistencies were corrected during data entry. Data cleaning was performed by running frequencies of each variable to check for accuracy and inconsistencies.

4.9 Data analysis

The data entry and analysis was conducted using EPI info 2002 and SPSS alternatively as required. Crude and adjusted odds ratios and logistic regression analysis were performed by entering the dependant and independent variable based on the research hypothesis. The significance of association was assessed using 95% confidence interval.

4.10 Ethical issue

Ethical clearance was obtained from AAU. Written consent was also obtained from SNNPR health bureau, Awassa Special zone health desk and informed consent was obtained from each respondent. In order not to Miss Child with sever classification re-examination was done for each child and children with sever classification referred to Hospital.

4.11 Dissemination and utilization of result

The result of this study will be presented to the DCH, as past of MPH thesis. It is also presented locally to regional health bureaus and zonal health desk. Organization working in the area of child survival such as ESHE, WHO, UNICEF and other will be informed to utilize finding for improvement of child health programs. Attempts will be made to present the result in scientific conference and to publish the result of the study on local and/ or international journals.

5. RESULTS

5.1 Socio demographic characteristics

Not all 422 expected carers responded to the questionnaire. Only 401 (95%) of carers responded, with (non-response rate 5%). 411 carers were identified and counselling was observed, 10 carers were not found at home for interview and were not included in the analysis.

The age of observed children ranged from 2 months to 59 months with a mean of 17.3 months, SD 14.45. The age of carers ranged from 15 years to 50 years with a mean of 28.34 years and SD 12.72. The largest percentage 136 (33.9%) comprised age group 20-24, and the majority 74.3% of the carers were literate. Among the literate, 180 (44.9%) had attended elementary to junior secondary school and 117 (29.1%) high school and above. The religion and ethnic composition was 233 (55.1%) Protestant Christian and 115 (28.7%) Wolayita respectively, (Table 1).

Two senior nurses attending sick children had been trained in IMCI 3 years previously and had not received refresher training in IMCI in the last year. Oral or topical drugs were prescribed for 384 (95.8%) children; the majority 305 (79.5%) were prescribed antibiotics, of whom 170 (55.9%) were prescribed amoxicillin. Anti-malaria, Gentian violet and TTC eye ointment were prescribed for 1.2%, 2.24% and 4.73% respectively, but were not included in the detailed analysis due to small numbers. ORS was prescribed for 150 (38.1%).

Table 1 : Socio-demographic characteristics of children and their carers, Awassa town, 2006

Variables	N = 401	percent
Child sex		
Male	214	53.4
Female	187	46.8
Carer's sex		
Male	16	4.00
Female	385	96.8
Carer's age		
15-24	163	40.6
25-34	184	54.6
35-44	35	8.7
44-54	5	1.2
Don't Know	14	3.5
Education		
Illiterate	71	17.7
Read and write	32	8
1-6 Grade	93	23.2
7-8 Grade	87	21.7
9-12 Grade	86	21.7
12^{+}	31	7.7
other	1	0.2
Ethnicity		
Sidama	94	23.4
Wolayita	115	28.7
Amara	79	19.7
Oromo	29	7.2
Gurage	41	10.2
Others	43	10.7
Religion		
Orthodox	132	32.9
Moslem	27	6.7
Protestant	233	58.1
Catholic	9	2.2
Marital status		
Single	16	4.00
Married	331	82.5
Divorced	33	8.2
Widowed	15	3.7
Others	6	1.5
Occupation		
Government employee	53	13.2
Non government employee	14	3.5
Private employee	36	9.00
Merchant	35	8.7
Daily labourer	36	9.00
House wife	200	49.9
Student	16	4.0
Farmer	6	1.5
Other	5	1.2
Income		
<100 birr	150	37.4
101-300 birr	102	25.4
301-500 birr	69	17.2
501-1000 birr	47	11.7
>1000 birr	33	8.2
Number of under 5 year children		
One	305	76.1
Two	86	21.4
Three	10	2.5

5.2 Counselling

The majority (89.5%) of carers were correctly told how to give antibiotic. Only 19 (6.2%), 5 (1.24%) and 2 (0.65%) were shown how to administer, asked checking questions or told to give the first dose of antibiotic at the health centre, respectively. 185 (46.1%) of carers were explained the need for more liquids at home and 169 (42.1%) were instructed to continue feeding or breastfeeding at home (table2). Follow up visits were arranged for 136 (33.9%). The total counselling time ranged from 1 minute to 8 minutes with mean 3.1 minutes and standard deviation 1.42.

Table 2 :Counselling skills of health worker who attended IMCI cases Awassa health centre, 2006

Variable	Number	Percent
Explain correctly how to administer		
Antibiotics	274	89.5
Anti-malaria	2	40
ORS	130	86.7
Paracetamol	58	79.4
TTC eye ointment	13	70.3
Gentian Violet	5	55.5
other	17	14.3
Demonstrate correctly how to administer		
Antibiotics	19	6.20
Anti-malaria	0	0
ORS	2	1.32
Paracetamol	0	0
TTC eye ointment	1	3.70
Gentian Violet	1	11.1
other	2	0.5
Ask checking question about		
Antibiotics	5	1.24
Anti-malaria	1	11.1
ORS	1	0.66
Paracetamol	2	2.74
TTC eye ointment	0	0
Gentian Violet	0	0
Others	2	0.5

Table 2 continued ....

Variable	N=306	Percent
Ask the mother to give or apply first dose		
Antibiotics	2	0.65
Anti-malaria	1	1.1
ORS	1	0.66
Paracetamol	2	2.74
TTC eye ointment	0	0
Gentian Violet	0	0
Other	1	0.3
Explain when to return for follow up visit	136 (N =401)	33.9
Explain the need to give more liquids at home	185	46.1
Explain the need to give more breast feeding at home	176	43.9
Explain the need to continue feeding or breast feeding at home	169	42.1
Ask mother at least one question about her own health	13	3.2
Use IMCI chart booklet or IMCI wall chart at any time during the management the child	175	43.6
Use IMCI recording format at any time during management of child	122	30.4

Table 3 :Signs health worker told the carer to bring the child immediately to health centre, Awassa health centre, 2006

Variable	N=401	Percent
Child not able to drink or Breast feed	21	5.2%
Child becomes sicker	85	21.2%
Child develops a fever	37	9.2
Child has fast breathing	8	2.0
Child has difficulty breathing	22	5.5
Child has blood in stool	35	8.7
Child is drinking poorly	30	7.5

5.3 Care and care seeking

Three hundred eighty eight (92%) of children brought to health centre by their mothers and 16(4%) of children brought by their fathers.

The majority 119 (29.7%) of carers first noticed that the child was sick 2 days before attending the health centre. The number of days ranged from 1 to 15 days with a mean 3.12 days and SD 1.90. Before attending the health centre 101 (25.6%) had treated their child at home, of these 44.6% gave a traditional drug Figure 1). The majority (73.4%) of carers believed that their child was very seriously ill (Table 4). Waiting time before the child was seen by health worker ranged from 5 minutes to 180 minutes with mean 52.2 and standard deviation 40.80.

Table 4 :Travel time to health centre and total time to get child treated by carers , Awassa town , 2006

Time to health center	number	%
<10 minutes	51	12.7
11-20	119	29.7
21-30	80	20
31-40	81	4.5
41-50	27	6.7
51-60	74	18.5
>60 minutes	32	8
Total time health center		
Too long	58	14.5
Long	161	40.1
Good	135	33.7
Short	45	11.2
Don t know	2	0.5

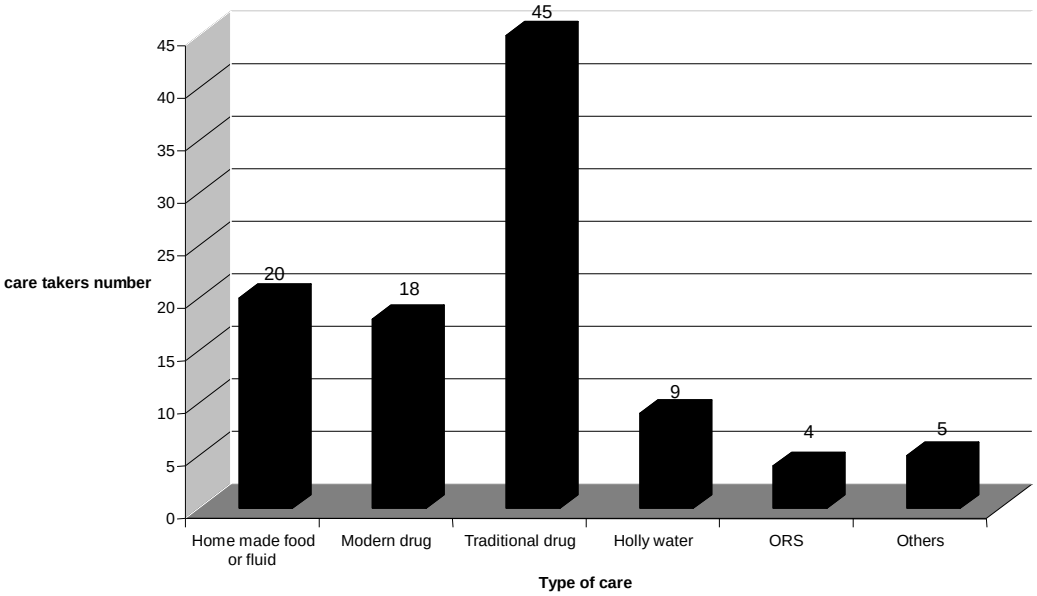

Figure 1 :Type of care to sick child at home before attending health center, Awassa town , 2006

5.4 Treatment

Of 305 carers who received antibiotic for their children, 65 (21.3%) complied with the antibiotic. 68(69.4%) (N=98) of children who are 2 to 12 months old were given correct dose of amoxicillin ,20(20.4%) children were given less than recommended dose and 8(10.25) were given more than recommended dose. Children 13 to 59 months of age (N=72) 3(4.2%) were given correct dose and 69(95.8%) were given less than recommended dose. 66(27.1%) of children given amoxicillin less than three times per day, 113(66.5%) given 3 times per day and 11(6.5%) given more than 3 times per day. 40(69%) (N=58) of children who are 2 to 12 months old were given correct dose of cotri-moxazole ,9(17.5%) children were given less than recommended dose and 9(15.4%) were given more than recommended dose. Children 13 to 59 months of age (N=71) 16(22.5%) were given correct dose and 53(73.3%) were given less than recommended dose. 1(0.8%) of children given cotri-moxazole less than two times per day, 99(76.7%)

given 2 times per day and 29(22.5%) given more than 2 times per day (Table5, 6). The majority (72.9%) of carers said that they didn't know how to give the recommended antibiotic (Table 6). Out of 151 carers whose child received ORS, 30(19.8%) provide ORS correctly to their children. 147 (97.4%) used 1litre water to dilute 1 packet of ORS. 77 (47.7%) of carers gave ORS after each episode of diarrhoea and when the child asked to drink. 55 (36.4%) and 84 (55.6%) of carers used boiled and pipe water to dilute ORS, respectively. Only 54 (35.8%) of carers gave ORS to their child after diarrhoea stopped. (Figure 2)

Table 5: Carer's practise to give amoxicillin at home, Awassa town ,2006

Amoxicillin	Dose		Frequency/day	Total days
	Age of children			
	2-12 months	13-59 months		
Correct	68(69.4%)	3(4.2%)	113(66.5%)	42(24.7%)
Less	20(20.4%)	69(95.8%)	46(27.1%)	67(39.4%)
more	89(10.2%)	0	119(6.5%)	61(35.9%)

Table 6 : Carer's practise to give Cotrimoxazole at home, Awassa town , 2006

Cotrimoxazole	Dose		Frequency/day	Total days
	Age of children			
	2-12 months	13-59 months		
Correct	40(69%)	16(22.5%)	99(76.7%)	39(30.2%)
Less	9(15.5%)	53(73.3%)	1(0.8%)	44(26.4%)
more	9(15.5%)	3(4.2%)	29(22.5%)	56(43.4%)

Table 7 : Compliance of care takers to antibiotic vs. socio demographic variables.(n=305) Awassa, 2006

Socio demographic variable		Compliance of carers to the prescribed antibiotic			
		yes	no	Crude OR(95%CI)	Adjusted OR(95%CI)
Care takers age					
	15-24	28	91	1	1
	25-34	32	110	0.94(0.53,1.68)	0.85(.51,1.9)
	35-44	4	27	0.48(0.15,1.49)	0.44(0.12,1.61)
	45-54	1	4	0.81(0.08,7.57)	0.95(0.08,0.00)
Marital status					
	married	52	205	1	1
	Single/widowed/divorced	13	35	1.41(0.70,2.80)	1.40(0.56,3.48)
Religion					
	Christian	61	222	1	1
	Moslem	4	18	1.2(0.40,3.78)	1.70(0.44,7.24)
Ethnicity					
	Sidama	17	53	1	1
	Wolayita	12	72	0.52(0.29,1.18)	0.77(0.29,2.01)
	Amhara	16	49	0.74(0.26,2.12)	0.91(0.27,3.08)
	oromo	6	12	1.55(0.50,4.78)	1.27(0.33,4.82)
	Gurage	6	25	1.01(0.46,2.23)	1.11(0.43,2.84)
	Others	8	29	1.02(0.33,2.23)	1.00(0.33,3.02)
Occupation					
	House wife	20	126	0.30(0.12,0.74)*	0.33(0.10,1.04)
	Private	10	19	1	1
employee					
	Dally labourer	5	6	1.36(0.11,1.24)	1.18(0.42,4.48)
		15	26	1.01(0.37,2.73)	2.79(0.94,8.21)
Government employee					
	Others	15	41	0.69(0.26,1.82)	0.66(0.20,2.23)
Income					
	<100 birr	14	106	1.63(0.27,1.42)	2.00(0.78,5.13)
	101-300	13	62	1	1
	301-500	12	40	1.43(0.59,3.44)	1.95(0.56,6.80)
	501-1000	11	22	2.38(0.93,6.09)	1.03(0.34,3.08)
	>1000	15	10	7.15(2.63,19.42)*	7.15(2.63,19.42)*

Table 7 continued ……..

		yes	no	Crude OR(95%CI)	Adjusted OR(95%CI)
Education					
	No formal education	10	66	0.59(0.26,1.35)	0.82(0.33,2.02)
	Elementary (1to6)	9	59	0.59(0.27,1.30)	0.84(0.34,2.04)
	Secondary (9to12)	28	110	1	1
	Post secondary (12+)	18	5	14.14(4.83,41.40)*	7.60((2.03,28.34)*
Number of under 5year children at house hold					
	One	55	176	1	1
	Two	9	56	0.51(0.23,1.10)0.08	0.75(0.32,1.77)
	Three	1	8	0.40(0.04,3.26)0.39	0.63(0.30,1.53)
Believe that current illness is serious					
	Yes	53	177	1	1
	No	11	62	0.59(0.29,1.20)0.14	0.84(0.38,1.86)

Result from the above statistical analysis table shows that monthly Income more than 1000 birr OR= 7.15 CI=2.63,19.42)was significantly associated with compliance to antibiotic. Post secondary education (OR=11.97 CI=3.52,40.60) was significantly associated with compliance to antibiotic.

Table 8 :Reasons given by carer for not giving antibiotics according to the IMCI recommendation, Awassa town, 2006

Variable	N=240	%
Do not know how to give	175	72.9%
Unable to afford the drug	7	2.9%
Lack of trust in health worker	13	5.4%
The child became sicker	14	5.8%
Child improved	4	1.7%
Fear of side effects	1	0.4%
The drug was shared with other children	5	2.1%
Drug was lost	2	0.8%
other	19	7.9

Table 9 :Compliance of care taker to prescribed ORS Vs socio demographic variable, n=151, Awassa , 2006

Socio demographic variable		Compliance of care takers with ORS			
		yes	no	Crude OR(95%CI)	Adjusted OR(95%CI)
Care taker age					
	15-24	12	43	1	1
	52-34	12	63	0.68(0.28,1.66)0.39	0.88(0.27,2.95)
	35- 44	3	9	1.19(0.27,5.11)0.81	1.53(0.18,12.60)
	45-54	1	1	3.55(0.20,61.62)0.37	2.59(0.46,14.39)
Marital status					
	married	24	104	1	1
	Single/divorced	6	17	1.52(0.54,4.28)	2.84(0.63,12.79)
widowed					
Religion					
	Christian	28	114	1	1
	Moslem	2	7	1.16(0.23,59)0.85	1.42(0.11,17.60)
Ethnicity					
	Sidama	8	29	1	1
	Wolyita	6	44	0.98(0.19,4.94)	0.98(0.19,4.94)
	Amhara	5	20	1.81(0.43,7.59)	4.09(0.51,32.27)
	Oromo	5	11	1.64(0.44,6.14)	1.46(0.24,8.93)
	Gurage	2	8	0.90(0.25,3.17)	0.29(0.13,4.74)
	Other			0.80(0.14,4.50)	1.28(0.14,4.50)
Occupation					
	House wife	7	68	1	1
	Private employee	6	10	5.82(1.62,20.89)*	7.56(1.49,38.21)*
	Daily labourer	2	11	1.76(0.32,9.62)	6.69(0.55,80.53)
	Government	9	11	7.94(2.45,25.74)*	2.59(0.46,14.39)
employee					
	Others	6	21	2.77(0.84,9.17)	3.93(0.74,20.78)
Income					
	<100 birr	8	54	1.14(0.32,4.12)	1.02(0.08,2.83)
	101-300	4	31	1	1
	301-500	5	13	2.98(0.68,12.90)	1.38(0.22,8.76)
	501-1000	5	16	2.42(0.57,10.29)	1.79(0.11,5.33)
	>1000	8	7	8.85(2.07,37.89)	2.05(0.11,7.69)
Education					
	No formal education			0.82(0.01,0.65)*	0.05(0.14,0.73)*
	Elementary (1to6)			0.81(0.29,2.24)	0.89(0.19,4.07
	Secondary (9to12)			1	1
	Post secondary (12+)			8.95(2.09,38.53)*	12.45(1.93,80.05*
Believe current illness was serious					
	Yes	27	98	1	1
	No	3	23	0.47(0.13,1.69)0.25	0.33(0.05,2.00)

Result from above statistical analysis table shows that carers with no formal education are less likely to comply with ORS (OR=0.05 CI=0.14,0.73) where as carers with post secondary education are more likely to comply with ORS.(OR=12.45 CI=1.93,80.05.) carers who are private employee are more likely to comply with ORS.(OR=7.56 CI=1.49,38.21)

The majority (66.9%) of carers said they didn t know how to prepare and give ORS correctly (Table 10).

Out of 131 carers who were followed up at home, only 25 (19.1%) returned to the health centre on the recommended day. 41 did not attend follow up because their child had improved.

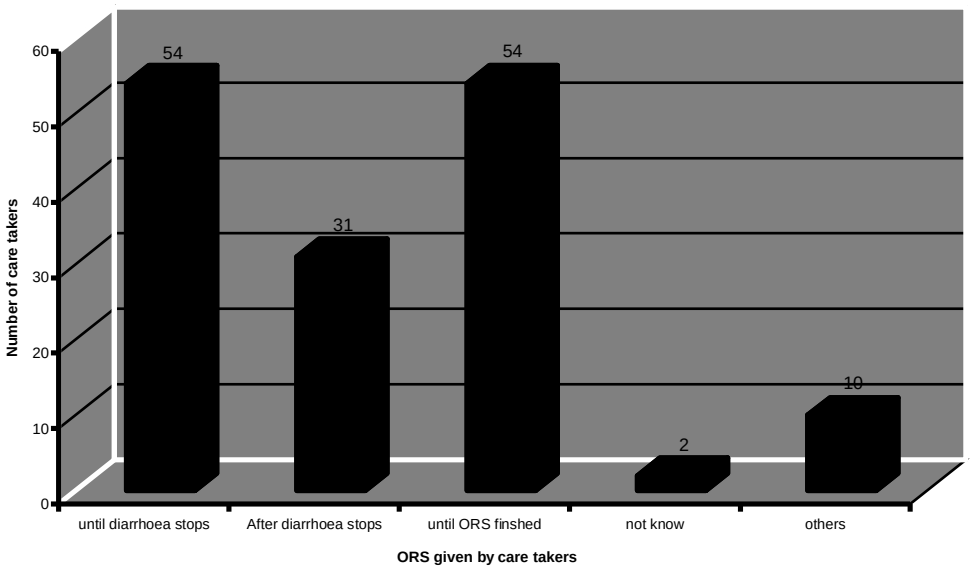

Figure 2: Care takers practice to give ORS for their sick children at home after treatment, Awassa town, 2006.

Table 10: Reasons given by carers for not preparing and giving ORS correctly, Awassa town , 2006

Variable	N=121	%
Do not know how to give	81	66.9%
Unable to afford the drug	6	5.0%
Lack of trust in health worker	8	6.6%
The child became sicker	4	3.3%
Child improved	11	9.1%
Fear of side effects	2	1.7%
other	9	7.4%

Of the 188 children who had cough, 46 (24.5%) carers used a safe remedy to relieve cough and sore throat at home. 85 (45.2%) carers did nothing to relieve cough at home (Figure 3)

The majority of carers 83.1% did not know what to give to relieve cough.

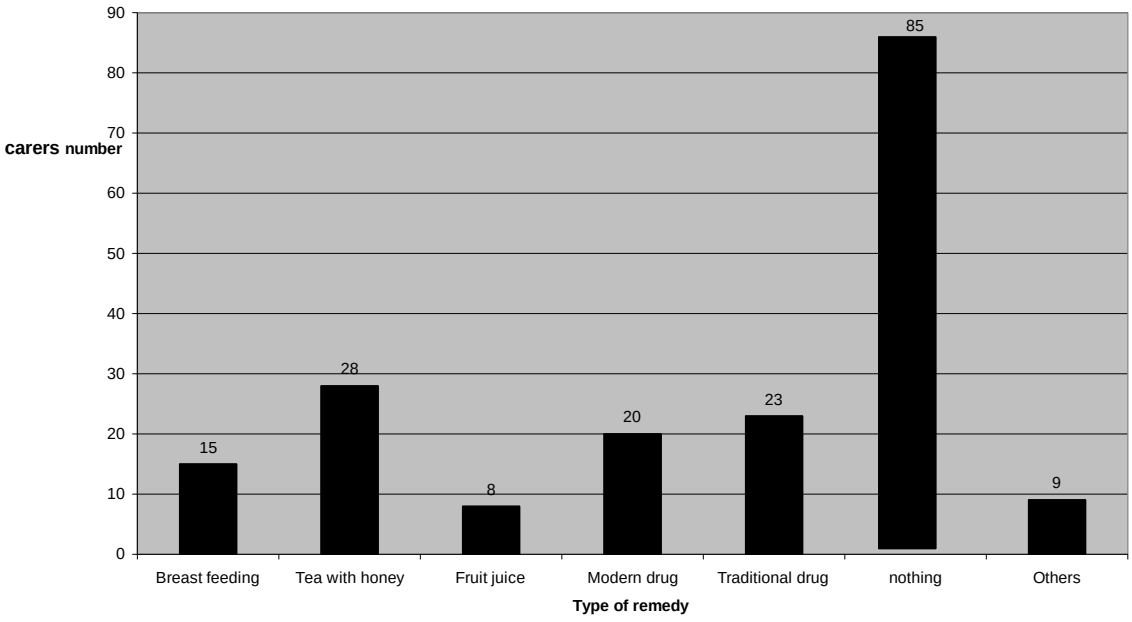

Figure 3: Type of remedy used by carers to relive cough at home, Awassa town,2006

Table 11 :Practice of care taker on how to relief cough at home with safe remedy Vs socio demographic variables (n=108) Awassa, 2006

Socio demographic variable			Knowledge of car taker on how to relief cough	
Variables	yes	no	Crude OR(95%CI)	Adjusted OR(95%CI)
Care taker age				
15-24	24	57	1	1
25-34	17	61	0.66(0.32,1.35)	0.89().36,2.20)
35-44	2	15	0.31(0.06,1.49)	0.40(0.67,2.46)
45-54	1	1	2.37(0.44,39.54)	0.90(0.03,23.62)
Marital status				
married	52	205	1	1
Single/divorced/widowed	13	26	1.83(0.52,2.67)	1.28(0.25,2.39)
Religion				
Christian	42	133	1	1
Moslem	4	9	1.41(0.41,4.86)	1.41(0.23,8.56)
Ethnicity				
Sidama	11	28	1	1
Wolyita	8	52	0.39(0.14,1.08)	0.44(0.12,1.55)
Amhara	12	27	1.09(0.33,3.56)	1.31(0.30,5.74)
Oromo	5	8	1.59(0.42,5.93)	1.07(0.18,6.13)
Gurage	6	14	1.13(0.43,2.99)	1.27(0.34,4.73)
Other	4	13	0.78(0.20,2.93)	0.47(0.08,2.63)
Occupation				
House wife	16	77	1	1
Private employee	4	9	2.13(0.58,7.80)	2.39(0.39,14.39)
Daily labourer	3	16	0.90(0.23,3.46)	0.78(0.63,17.05)
Government employee	12	12	4.81(1.83,12.62)	1.28(0.35,4.64)
0thers			1.89(0.78,4.56)	2.34(0.70,7.77)
Income				
<100 birr	12	6/-1	1.44(0.50,4.13)	1.55(0.45,5.37)
101-300	6	44	1	1
301-500	10	24	3.05(0.98,9.43)	4.05(1.06,15.38)*
501-1000	10	11	6.66(1.99,22.32)*	7.12(1.73,29.17)*
>1000	8	2	29.33(5.00,171.99)*	17.97(2.08,156.24)*
Education				
No formal education	3	43	0.16(0.46,0.57)*	0.16(0.03,0.76)*
Elementary (1to6)	9	37	0.56(0.23,1.34)	0.63(0.22,1.79)
Secondary (9to12)	25	28	1	1
Post secondary (12+)	9	4	5.22(1.46,18.54)*	2.39(0.39,14.39)
Number of under 5 Children at house hold				
One	39	104	1	1
Two	6	33	0.48(0.18,1.24)	0.53(0.17,1.61)
Three	1	5	1.53(0.06,4.71)	1.01(0.93,10.99)
Believe that current illness is serious				
Yes	32	105	1	
No	13	36	1.18(0.56,2.50)0.65	1.46(0.55,3.88)

Results from the above table of statistical analysis show that income from birr 301-500 per month (OR=4.05 CI=1.06, 15.38), 501-1000 per month (OR=4.6, CI =1.60, 13.29) and more than 1000 birr per month (OR=20.33 CI=3.83, 107.73) was significantly

associated with knowledge on how to relieve cough with safe remedy at home. Education, (OR=6.17, CI=1.75, 21.79) and Being house wife (OR=0.16 CI=0.03, 0.76) was significantly associated with lack of knowledge on how to relive cough with safe remedy at home.

Of the 131 carers for whom a health worker recommended a follow up visit, only 25 (19.1%) attended the health centre on the appointment day. 31 (26.37%), 74 (62.7%) and 13 (11.0%) had follow up visit within 2 days, 5 days and more than 5 days, respectively. Of carers who did not attend follow up 41 (39.0%) said because their child had improved, 24 (22.9%) said that they had forgotten the appointment, 10 (9.5%) said that the child's condition had become worse, and 10 (9.5%) said they had no time to attend follow up.

Table 12 : Compliance of care taker to the recommended follow up visit Vs socio demographic variable, Awassa town, 2006

Socio demographic variable	Compliance of care takers with recommended follow up visit			
Variable	yes	no	Crude OR(95%CI)	Adjusted OR(95%CI)
Care takers age				
15-24	11	41	1	1
25-34	12	48	0.93(0.37,2.33)	0.81(0.53,9.16)
35-44	2	12	0.62(0.12,3.19)	0.86(0.18,29.76)
44-54	0	1	0.00(0.00,1.0)	0.00(0.00,9.51)
Marital status				
Married	19	82	1	1
Single/divorced/widowed	6	24	1.07(0.38,3.00)	1.01(0.18,5.57)
Religion				
Christian	25	99	1	1
Moslem	0	7	0.00(0.00,3.00)	0.00(0.00,1.23)
Ethnicity				
Sidama	4	25	1	1
Wolyita	4	31	0.80(0.18,3.55)	0.52(0.05,5.17)
Amhara	7	21	0.52(0.05,5.17)	0.72(0.10,89.07)
Oromo	4	7	3.57(0.70,18.04)	2.80(0.32,24.11)
Gurage	1	12	2.08(0.53,8.10)	7.74(0.90,66.65)
Other	5	10	3.12(0.69,14.08)	26.48(1.48,182.97)
Occupation				
House wife	8	62	1	1
Private employee	2	9	1.72(0.31,9.42)	1.26(0.39,5.87)
Dally labourer	1	6	1.29(0.13,12.15)	10.81(0.46,254.43)
Government employee	4	10	3.10(0.78,12.24)	2.33(0.02,5.62)
Other	10	19	4.07(1.41,11.80)	7.44(1.11,49.65)
Income				
<100 birr	5	36	0.97(0.23,3.96)	0.46(0.07,3.02)
101-300	4	28	1	1
301-500	3	20	1.05(0.21,5.21)	1.74(0.10,5.48)
501-1000	4	16	1.75(0.38,7.96)	1.51(0.02,5.48)
>1000	9	6	10.50(2.41,45.72)	2.63(0.19,35.53)
Education				
No formal education	3	31	0.28(0.07,1.07)	0.09(0.01,0.86)*
Elementary (1to6)	0	27	0.00(0.00,6.20)	0.00(0.00,1.70)
Secondary (9to12)	14	41	1	1
Post secondary (12+)	8	7	3.34(1.02,10.91)*	3.75(0.37,37.41)
Number of under 5 children at home				
One	23	7	1	1
Two	2	28	0.23(0.05,1.06)0.06	0.28(0.03,2.44)
Three	0	2	0.00(0.00,1.0)0.96	0.35(0.00,4.75)
Believe that current illness is serous				
yes	23	81	1	1
No	2	25	0.28(0.06,1.27)0.10	0.39(0.49,3.12)

Results from the above statistical table shows that carers with no formal education are less likely to comply with recommended follow up visit (OR=0.09 CI=0.01, 0.86)

The majority of carers (66.3%). provided fluids less often or as often as usual to sick child after visiting the health centre visit. 113 (28.2%) provided more fluids as recommended. The reasons given by carers for giving less fluids were: unable to suck 60 (22.5%); child did not want to suck 58 (21.7%); and did not know importance of giving more fluid 71 (26.6%). (Figure 4) and table (13)

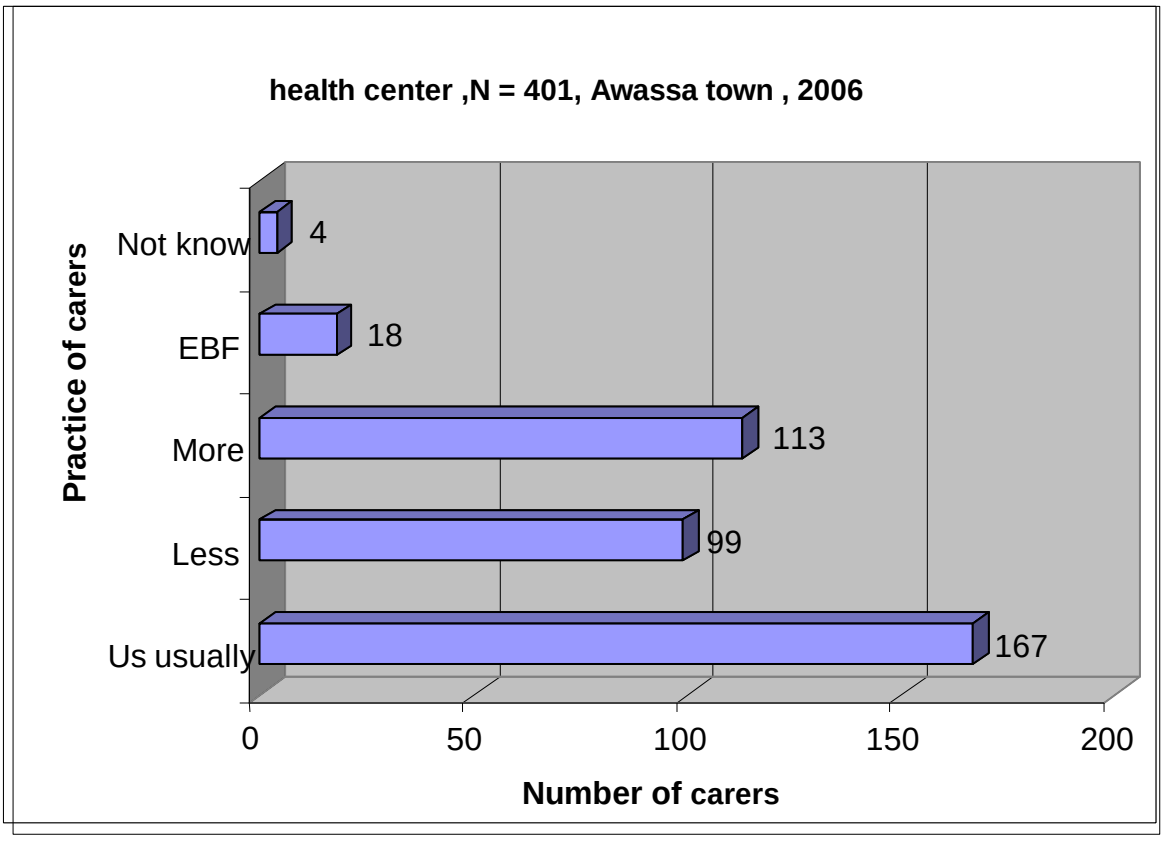

Figure 4: Practice of carer's to give fluid at home after visited health centre,Awassa,2006.

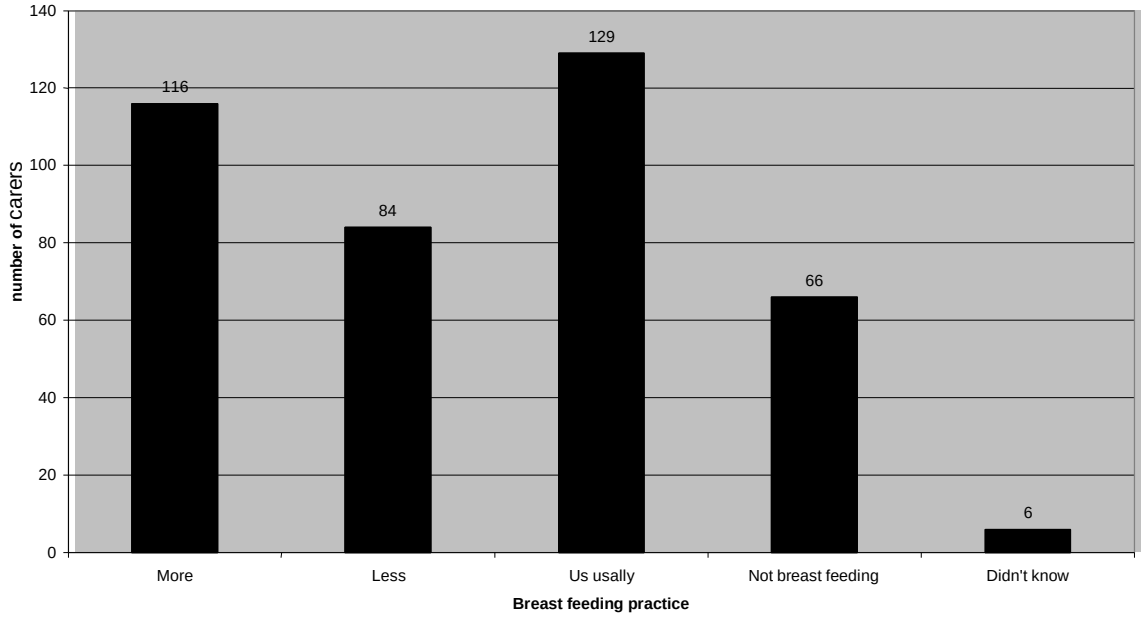

Figure 5: Care takers breast feeding practice for sick child after health centre visit, Awassa town, 2006.

Out of 116 (28.9) carers provided more breast feeding after they visited the health centre, whereas the majority (53.1%) of carers breast fed as usual or less than usual. 73 (34.3%) mentioned that they did not know the importance of increasing breast feeding to the sick child. Figure (5) and table (14)

Table 13: Reason of carers for providing fluid less or as usual to their sick children, Awassa town 2006

Reasons	Number	Percent
Unable to drink	60	22.5
Not want to drink	58	21.7
Fear of worsen illness	13	4.9
Not know importance	71	26.6
Health worker did not tell to do so	43	16.1
Did not know	1	0.4
Other	21	7.9

Table 14 : Reasons for carers providing less breast feeding or normal breast feeding to their sick child Awassa town 2006

Reasons	Number	%
Unable to suck	31	14.6
Not want to suck	43	20.2
Fear of worsening illness	5	2.3
Did know importance	73	34.3
Health worker did not tell to do so	42	19.7
Did not know	1	0.5
others	18	8.5

Majority of care takers 224(55.9%) said they take the child immediately to health centre when the child has fever. 178(44.4%) of care takers said when the child becomes sicker, few care takers 49(12.2) said when the child has blood in the stool. (Table 15)

Table 15 : Knowledge of carers about when to take child back to health center. Awassa town, 2006

Variable	Number	Percent
Child not able to drink or breast feed	125	31.3
Child becomes sicker	178	44.4
Child develops a fever	224	55.9
Child has fast breathing	22	5.5
Child has difficulty breathing	55	13.7
Child has blood in stool	49	12.2
Child is drinking poorly	84	20.9
Other	1	0.2

6. Discussion

Many (49.9%) of carers were housewives, and 150 (37.4%) had a monthly income less than 100 birr. This shows that the low social status of women can affect the care they provide to their children and compliance to the recommended treatment advice.

Post secondary education of carers and monthly income more than 1000 birr were significantly associated with compliance with antibiotics indicating that better education and higher income influence carers 'practice in providing better care for their children.

Concerning Ors dilution at home majority of care takers 97% used one litre to dilute one bag ORS. However over all compliance to ORS was 19.8%. This is may be due to lack of ORT corner in the health centre and most of carers were not demonstrated how to dilute and administer ORS. Thus due attention should be given to improve this condition in order to reduce child mortality from diarrhoea.

A quasi-experimental study conducted in Niger to test the effectiveness of job aid in increasing carers ' adherence with co-trimoxazole showed that 90% of carers in the program group and 70% in the control group adhered to the recommended regimen (15). The findings of the present study on compliance of carers with antibiotics are much lower than the control group in Niger.

The majority of carers (73.4%) said that they didn't know how to give the recommended antibiotic. A study conducted in Ghana identified similar reasons, a high proportion of carers said that they did not understand the instructions given or they forgot them(16).

Concerning carer knowledge on how to relieve cough at home, only 46 (24.5%) relieved cough correctly with a safe remedy. 23 (12.2%) carers used traditional drugs and 85 (45.2%) didn't know how to relieve cough correctly. The majority (83.1%) said they

didn t know what to give to relieve cough, therefore there is a need to educate carers on how to relieve cough with safe remedies at home.

In this study, health workers correctly prescribed antibiotic to 139 (45.9%) children. One study conducted in Amhara, Oromia and SNNPR indicated that of those needing antibiotic, 8% were properly prescribed antibiotic.(5)

In study conducted in Botswana primary health care unit, Health workers provided little counselling to carers regarding home treatment. 17% of carers were advised to give extra fluid and continue feeding during illness (18). This study shows an improvement in that 46.1% of carers were counselled on giving extra fluids, and 43.9% continued feeding at home. However, health workers demonstrated to, asked checking questions of, or administered first doses of antibiotic and ORS in very few cases.

In this study 44.6% of carers gave a traditional drug to their child, and 17.8% a modern drug. This practice needs urgent attention in order to avoid danger to children due to un prescribed drugs, over dosage and harmful effects of traditional drugs.

In this study, health workers explained to 185 (46.1%) carers the importance of giving more liquids at home for sick children, however only 113 (28.2%) provided more fluids as recommended. Even though there was no statistically significant association, the quality of counselling should be improved because 71 (26.6%) of those carers who did not provide more fluid said they didn t know the importance of giving more fluid to the sick child. Similarly, health workers explained the need for more breast feeding at home for sick children to 176 (43.9%) carers. However 116 (28.9%) carers provided more breast at home and many (34.3%) of those who didn t provide more breast feeding said they didn t know its importance.

In a study conducted in Bangladesh, the average time for counselling of carers was 2.5 minutes per child. In this study, the average time for counselling was 3.1 minutes, which is better than recommended standard time.(9). How ever the recommended average counselling time is not adequate to counsel carer's appropriately according to the IMCI recommendation for counselling.

In this study, 85 (21.2%) carers were told by health workers to bring the child immediately should the child become sicker 37 (9.2%), develop fever 35 (8.7%), develop blood in the stool or fast breathing (2.0%). This may be due to under use of the IMCI chart booklet or chart by the health workers.

In this study, the majority (92%) of children were brought to the health centre by their mothers, and only 13 (3.2%) by their fathers. This indicates a smaller involvement of males in giving care to sick children.

Waiting time identified in this study ranged from 5 minutes to 180 minute and majority of carer's felt it as too long. Usually all children were treated from 8:30 to 12:30 in the morning and in the afternoon there were no sick children attending health centre. Thus appropriate Scheduling and using afternoon hours for treating sick children will avoid long waiting time and may be provide more counselling time for each child.

Moreover carers who had monthly income more than 501 birr had significantly associated with knowledge on how to relieve cough with safe remedy at home and carers with no formal education were less likely to relieve cough Therefore there is a great need to empower carers especially women.

Another study conducted in Sudan indicates that 36% of carers did not comply with the recommended follow up visit, and high school or higher education was significantly associated with compliance.(17) In this study carers with no formal education were less

likely to comply with recommended follow up visits. However, at 80.9%, non compliance in this study was much higher than the study mentioned above.

In a previous study most carers (87%) said that the reason for not taking the child was that the children was better, while 22 (5%) said they had forgotten to take the child and a few carers were not satisfied with the initial visit (17). In this study there were some similar findings: 41(38.7%) carers said the child was better, 24 (22.6%) said they had forgotten to take the child, two carers said they did not trust the health worker, 10 said the child had become sicker and 11 said they had no time

Counselling was given on the signs that require a child to be brought back for immediate attention. During counselling, health workers explained that the child should be brought back if he or she was not able to drink21(5.2%), became sicker85(21.2%), developed a fever (37(9.2%), had blood in stool35(8.7%), had difficulty breathing22(5.5%) and drinking poorly30(7.5%). However knowledge of carers about these signs was greater than information given during counselling, child unable to drink or breast feed 125(35.3%) child sicker 178(44.4%) child develops fever 224(55.9%) child has blood in stool 49 (12.2%) child has difficult breathing 55(13.7%) and child is drink poorly 84(20.9%)). This may be due to the general knowledge of carers about illness in children.

7. Conclusion

Health workers explained correctly to the majority of carers how to give antibiotic, but demonstrated, asked checking question or gave first dose of antibiotic for very few carers. Antibiotics were not correctly prescribed for the majority of children, and most of the caretakers were not counselled about the need to give more liquids and more breast feeding for sick children at home.

The health workers who attended sick children were trained in IMCI three years previously and had not received any refresher training in IMCI in the past year.

The knowledge of carers about when to bring children back to the health centre was more than the number of carers who received counselling on it by health workers.

High rates of non compliance with antibiotics and ORS were identified. As income and educational level increased compliance also improved. The reason given by the majority of carers for non compliance was that they didn't know how to give the prescribed drug. Low compliance with follow up visit was also identified as associated with educational level of carers. IMCI guidelines recommend a follow up visit for all sick children, but in this study, improvement in the child's condition was identified as a main reason not to attend for follow up.

The practice of most carers regarding relief of cough with a safe remedy at home was not as IMCI recommendations. The majority of carers used nothing, used traditional drugs or un prescribed modern drugs. Most of the carers said that they didn t know how to carry out the recommended action.

Educational status, income, counselling skill of health worker and type of occupation were identified as factors influencing compliance with recommended treatment and advice according to the IMCI guidelines.

8. Strength and Limitation

8.1 Strengths

1. This thesis tried to asses carers ' compliance with IMCI treatment and recommendation, which hadn t been conducted by other researchers in Ethiopia. Thus it can contribute valuable information for organizations involved in implementing IMCI.

2. In attempt to keep the validity and reliability: a pre-testing was done and appropriate analysis was employed.

3. To ensure ethical issue children were re-examined by principal investigator and supervisor and children who required immediate referral but missed by health workers were identified and referred.

4. Logistic regression was done to control the possible factors in order to asses relative effect of independent variable.

8.2 Limitations

1. There was no adequate literature to compare the findings of this study.

2. Data collection takes long time beyond the work plan and data was collected by nurses these factors made this study expensive.

3. Adequate data was not obtained on compliance with anti malaria , tetracycline eye ointment and gentian violet to include them in analysis. Thus farther investigation is required in this area.

9. Recommendations

1. Refresher training should be provided for IMCI trained health workers to enhance the skill and motivation of health workers. Emphasis should be given to demonstrating, asking checking questions and giving the first dose of a drug at the health facility. During training, the importance of follow up and relief of cough with a safe remedy should also be given due attention.

2. In service training should also required to back up high turn over of trained health workers.

3. IMCI wall charts and booklet should be made available and placed in suitable sites to make them easily usable by health workers.

4. Efforts should be made to establish functional ORT corner.

5. Regular supportive supervision should be planed and conducted by health centre management, zonal health departments and regional health bureau.

6. Efforts should be made to shorten waiting times.

7. Health workers in the health centre pharmacy should receive orientation (training) on how to instruct carers to use drugs.

8. Community health workers or health promoters should be reoriented and motivated to create awareness on care-seeking and danger signs among carers.

9. All stakeholders should make strong efforts to implement community IMCI.

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ANNEX I : Observation check list

Registration no __ __ __ __

ADDIS ABABA UNIVERISITY
Research Project
MPH thesis on
Factors influencing care takers compliance with IMCI

Enrolment card

Date __ __ __ __ Arrival time __ __ __ __

AM PM

Childs name_____ Childs ID No __ __ __ __

Age _____(in Months) Sex _____
(1) Male (2) Female

Childs weight _____ Kg
Childs birth Date __ __ __ __ __ __ __ __
DD MM Y Y Y Y

Hello,

I am

_____

_____

_____, from AAU, I am here with my colleagues to do study about children with common ill ness . Members our team would like to observe the consultation between you and health worker about your sick child. After five days other members of our team would like to ask you some question about the condition of your child at your home. Please be assured that the information will be confidential and you may choice to stop your participation at any time or refrain from answering any question. If you decide not to participate, your care here will not be affected.

At this time do you want to ask me any thing about this study ?

Do I have your agreement to participate _____ (yes or no)

Signature _____

Questionnaire no __ __ __ __

ADDIS ABABA UNIVERISITY
Research Project
MPH thesis on
Factors influencing care takers compliance with IMCI

OBSERVATION CHECK LIST

Date __ __ __ __ Arrival time __ __ __ __ AM PM Childs name_____ Childs ID No __ __ __ __ Age _____(in Months) Sex _____ (1) Male (2) Female Childs birth Date __ __ __ __ __ __ __ __ DD MM Y Y Y Y	
006. Health worker type 1. medical doctor 2. Health officer 3.Senior nurse 4 Junior nurse 5. other specify_____	☐
007. Did you recived refresher trainning in the last one year? 1.Yes 2.No	☐
008 .Where were have you been trained in IMCI 1. pre service 2. In service	☐
009 .When have you been trained in IMCI ? Before 1. less than 1 year 2. 1 year 3. 2 year 4. 3 year 5. 4 year 6. more than 4 year	☐

Beginning time of observation

Time __ __ __ __

Interuption time one __ __ __ __ Resuming time one __ __ __ __
Interuption time two __ __ __ __ Resuming time two __ __ __ __

Questionnaire no __ __ __

1. Treatment Module

101 . Does the health worker prescribe any oral/topical treatment ?
1. Yes
2.NO → skip Q 205

102. Record all oral treatment

a. antidiarrheal	1. yes 2.no	a._____
b.metrinidazole tablet or suryp	1. yes 2.no	b._____
c.chloroquene tablet or suryp	1. yes 2.no	c._____
d. Sulfadoxine-Pyrimethamine	1. yes 2.no	d._____
e. paracetamole	1. yes 2.no	e._____
f. Aspirn	1. yes 2.no	f._____
g. cotrimoxazole tablet or suryp	1. yes 2.no	g._____
h. amoxicillin tablet or suryp	1. yes 2.no	h._____
i. naldixic acid	1. yes 2.no	i._____
j. tetracyclline eye ointement	1. yes 2.no	j._____
k. ORS	1. yes 2.no	k._____

103. Does the health worker prescribe antibiotic
1. Yes
2.NO skip to Q 105

104. If antibiotic prescribe , record what health worker says: (check presicription)
a. name_____2nd antibiotic
b. formulation _____
c. amount each time_____
d. number of times per day____
e. total days _____
f.. name_____
g.. formulation _____
h. amount each time_____
i. . number of times per day____
j. total days _____

105. Does the health worker prescribe antimalaria
1. Yes
2.NO skip to Q 107

106. If antimalaria prescribed , record what health worker says:
a. name_____2nd antimalaria
b. formulation _____
c. amount each time_____
d. number of times per day____
e. total days _____
f. name_____
g. formulation _____
h. amount each time_____
i. . number of times per day____
j. total days _____

107. Does the health worker prescribe ORS
1. Yes
2.NO skip to Q 109

108. If the health worker prescribe ORS, does any health worker adminster ORS at facility ?
1. Yes
2.NO
99. does not apply - no ORS prescribed

Questionnaire no __ __ __ __

109Does the health worker prescribe Tetracycline eye ointment 1. yes 2. no …… skip to 111	☐
110. If Tetracycline eye ointment prescribed , record what health says: a. amount each time_____ b. number of times per day____ c. total days _____	☐
111. Does the health worker prescribe Gention violet 1. yes 2. no …… skip to 201	☐
112. If Gention violet prescribe , record what the health worker says: a. amount each time_____ b. number of times per day____ c. total days _____	☐

2. Counselling model

201. Does the health worker (Dispensary) explain correctly how to administer oral/topical treatment?

a. antibiotic	1) yes 2) no 99) does not apply	a._____
b. anti-malaria	1) yes 2) no 99) does not apply	b._____
c. ORS	1) yes 2) no 99) does not apply	c._____
d. paracetamole	1) yes 2) no 99) does not apply	d._____
e. TTC eye oint	1) yes 2) no 99) does not apply	e._____
f. G.V	1.yes 2) no 99) does not apply	f._____
g . other specify_____	1) yes 2) no 99) does not apply	g._____

202. Does the health worker (Dispensary) demonstrate correctly how to administer oral/topical treatment?

a. antibiotic	1) yes 2) no 99) does not apply	a._____
b. anti-malaria	1) yes 2) no 99) does not apply	b._____
c. ORS	1) yes 2) no 99) does not apply	c._____
d. paracetamole	1) yes 2) no 99) does not apply	d._____
e. TTC eye oint	1) yes 2) no 99) does not apply	e._____
f. G.V	1.yes 2) no 99) does not apply	f._____
g . other specify_____	1) yes 2) no 99) does not apply	g._____

203. Does the health worker (Dispensary) ask checking question to very care takers comprehension of how to administer oral/topical treatment?

a. antibiotic	1) yes 2) no 99) does not apply	a._____
b. anti-malaria	1) yes 2) no 99) does not apply	b._____
c. ORS	1) yes 2) no 99) does not apply	c._____
d. paracetamole	1) yes 2) no 99) does not apply	d._____
e. TTC eye oint	1) yes 2) no 99) does not apply	e._____
f. G.V	1.yes 2) no 99) does not apply	f._____
g . other specify_____	1) yes 2) no 99) does not apply	g._____

204. Does the health worker give or ask the mother to give or apply the first dose of oral/topical treatment?

a. antibiotic	1) yes 2) no 99) does not apply	a._____
b. anti-malaria	1) yes 2) no 99) does not apply	b._____
c. ORS	1) yes 2) no 99) does not apply	c._____
d. paracetamole	1) yes 2) no 99) does not apply	d._____
e. TTC eye oint_____	1) yes 2) no 99) does not apply	e._____
f. G.V	1.yes 2) no 99) does not apply	f._____
g. other specify_____	1) yes 2) no 99) does not apply	g._____

205. Does the health worker explain when to return for follow up visit? ☐

1. Yes
2.No ⟶ skip to 208

206. In how many days does the health worker ask the care taker to come back? _____ days

207. Does the health worker explain the need to give more liquids at home? ☐

1. Yes
2.No

208. Does the health worker explain the need to give more breast feeding at home? 1. Yes 2.No	☐
209. Does the health worker explain the need to continue feeding or breast feeding at home? 1. Yes 2.No	☐
210. Does the health worker tell the care taker to bring the child immediately for the following signs? more than one answer possible a. child is not able to drink or breast feed 1. yes 2.no b. child become sicker 1. yes 2. no c. child develops fever 1. yes 2. no d. child develops fast breathing 1. yes 2. no e. child develops difficult breathing 1. yes 2. no f. child develops blood in the stool 1. yes 2. no g. child drinking poorly 1. yes 2. no h. other, specify 1. yes 2. no	a._____ b._____ c._____ d._____ e._____ f._____ g._____ h._____
211. If the care taker who brought the child to clinic is the mother, did the health worker ask at least one question about the mothers health (ask her own health ,access to family planning or vaccination status)? 1. Yes 2.No 88. not applicable (if it is not the mother)	☐
212. Did the health worker use IMCI chart book let and/or IMCI wall chart at any time during the management of the child? 1. yes 2. no	☐
213. Did the health worker use the IMCI recording format at any time during the management of the child? 1. yes 2. no	☐

Check the time of observation as the care taker leaves : __ __ ___ __
calculate the total time of counseling _____(minutes)

ANNEX II : House Hold questionnaire

Questionnaire no_____

PART 2. Respondent back ground

301. Name of care taker (same care taker attended health centre) _____	
302. Sex of care taker 1. male 2. female	☐
303. age of care taker	
304.Religion 1. orthodox 3.protestant 2. Moslem 4. Catholic 00 . others	☐
305. Ethnicity 1. Sidama 2.Wolaita 3. Amahara 4. Oromo 5- Gurage 00. Others Specify	☐
306. Marital status 1. Single 2.Maried 3. Divorced 4. Widowed 00. Others Specify	☐
307. Educational status of Care taker 1. illiterate 2. read and write 3. primary school 4. Secondary school 5. High school 6. Graduate 00. other specify	☐
308.Educational status of Child's father 1. illiterate 2. read and write 3. primary school 4. Secondary school 5. High school 6. Graduate 00. others specify	☐

Questionnaire no_____

309. Occupation 1. Government employee 2. Non government employee 3- Private employee 4. merchant 5. Farmer 6. daily Labourer 7. House wife 8. Student 00. others Specify _____	☐
310. What is your family monthly income 1. Less than 100 birr 2. 101 - 300 birr 3. 301- 500 birr 4. 501 - 1000 birr 5. more than 1000 birr	☐
311. Availability of latrine 1. yes 2. no	☐
312. Number of under five children 1. one 2. two 3. three 4. four 5. more than four	☐
313. What is relation Ship of care taker to the sick child 1.Mother 2. Father 3. Co-mother 4. Grand mother 5. Grand father 6. other specify_____	☐

Part 3. Health Service

401. How long ago did it take you to get to the Health centre? in minutes minutes 99- does not know	_____
402. How long did you wait to have your child seen in your last visit to the Health centre? minutes in minutes 99-does not know	_____
403. How do you feel about the time you had wait to get your child treated in your last visit to Health centre 1.Too Long 3. Acceptable 2.Long 4. Short 5. Doesn't know	☐
404. How much money did you spent to get your child treated 1. Transportation _____ 2. Treatment _____ _____ (Including) - Card - Medication - Laboratory Total - Please add up the Total _____	Total birr

questionnaire no_____

PART 4- Care and Care seeking

501. How long did you first notice that child was sick? - < Hours to 1 Day= 1 day(in days)	_____ days
502. Did you do any thing at home to child before seeking help? 1. Yes 2. No- Skip to ques 404 3. Don't know- Skip to ques 404	☐
503. What did you do at home? 1. Gave home remedies, specify_____ 2. Gave medicine, specify _____ 3. Gave ORS 4. Holy water 5. Other- Specify_____	☐
504. During the present Illness did you believe that child was very seriously ill ? 1. Yes 2. No 3. Don't know	☐
505. Who was child's usual care taker? 1. Mother 2. Father 3. Co-Mother 4. Grand mother 5. Grand father 6. Aunt 7. Uncle 8. Other Male specify_____ 9. Other female specify_____	☐
506. Is usually care takers are present at the interview time 1. Yes 2. No 3. Other , Specify_____	☐
507. If mother is not present at the interview ask is child's mother still alive ? 1. Yes 2. No 99. Does not know	☐

Questionnaire no_____

PART 5 - Treatment

601 Did the Health worker gave you or prescribed any oral/to pical medicine for < child's> at heath facility during last visit to health center 1. Yes 2. No 99. Does not know	☐
602. Were antibiotic prescribed or given 1. Yes 2. No-skip to Q 515	☐

603.If antibiotic prescribed , record from observation check list before going to house hold
a. name_____2nd antibiotic a. name_____

604. How much did you gave to the < child> each time ?
First ant ibiotic _____

605 How many times did you gave to the child each day?
First ant ibiotic
_____ times

606. For how many days did you gave to the child ?
First ant ibiotic
_____ days

607. How much did you gave to the < child> each time ?
2nd antibiotic
_____

608. How many times did you give to the child each day?
2nd antibiotic
_____ times

609. For how many days did you gave to the child ?
2nd antibiotic
_____ days

Questionnaire no_____

610. Check the response to Question 604, 605, 606, and If 2nd antibiotic prescribed check response to 607,608,609 and if it is not acording to IMCI recommendation * ask the mother the reason, for not giving according to recommendation don't prompt 1. Do not know how to give 2. Unable to afford to buy a drug 3. Lack of trust in health worker 4. The child became more sick 5. The child was improved before finishing the drug 6. Fear of side effect 7. Shared the drug to another child 8. Drug was lost 9. Others , specify_____	☐
611. Where anti- malaria prescribed or given? 3. Yes 4. No-skip to Q 528	☐
612. If anti- malaria prescribed , record from observation check list before going to house hold a. name_____2nd antibiotic a. name_____	
613. How much did you gave to the < child> each time ?	_____
614. How many times did you gave to the child each day?	_____ times
615. For how many days did you gave to the child ?	_____ days
616. Ask if there is remaining drug 1. Yes 2. No -	☐
617. How much did you gave to the < child> each time ?	_____
618. How many times did you give to the child each day?	_____ times
619. For how many days did you gave to the child ? days	_____
620. Ask if there is remaining drug from 2nd anti- malaria 3. Yes 4. No -	☐

Questionnaire no_____

621. Check the response to Question 613,614,615, and If 2nd anti- malaria prescribed check response to 617,618,619 and if it is not acording toIMCI recommendation and if there is remaining dose of prescribed drug *ask the mother the reason, for not giving according to recommendation don't prompt 1.Do not know how to give 2.Unable to afford to buy a drug 3.Lack of trust in health worker 4.The child became more sick 5.The child was improved before finishing the drug 6.Fear of side effect 7.Shared the drug to another child 8.Drug was lost 9.Others , specify_____	☐
622. were ORS prescribed or given to child 1. Yes 2. No - Skip to Q 535	☐
623. How much water to mix with one ORS packet ? -please estimate and write in litters (1/2 ,, 3/4 ,1,2,3 litters) litres	☐ in
624. How did you gave ORS to child? 1. One times a day 2. two times a day 3. four time a day 4. more than 4 times a day 5. after each episode of diarrhoea 6. when the child ask to drink 7. Others, specify_____	☐
625. What type of water did you used to mix ORS ? 1. boiled after cooling 2. Tap water 3. un boiled well water 4. un boiled lake water 5. other specify	☐

Questionnaire no_____

626. How much ORS did you gave to <child> each time 1. as child tolerate 2. 1cup 3. 2 cup 4. 3 cup 5. 4 cup 6. other specify _____	☐
627. For how long did you gave ORS to <child> 1. Until diarrhoea stops 2. until ORS at hand finished 3. Others specify -------- 4. I don't know	☐
628. If ORS not prepared or given correctly ask ,the reason : 1.Do not know how to prepare 2.Unable to afford to by ORS 3.Lack of trust in health worker 4.The child became more sick (unable to drink) 5.The child was improved before finishing ORS 6.Fear of side effect 7.Shared ORS to another child 8.ORS was lost 9. ORS out of use 00.Others , specify_____	☐
629. Did the health worker prescribed Tetracycline eye ointment ? 1. yes 2. no⟶ skip to Q 540	☐
630. If yes, how many times did you apply to the child's eye in a day ? 1. one time 2. two times 3. three times 4. more than three times 5. other specify _____	☐
631. For how many days did you applied to the child's eye ? 1. until the drug is finished 2. until the redness of eye gone 3. others, specify …….	☐

questionnaire no_____

632. What did you do before Appling eye ointment ? a. Wash hands 1- Mentioned 2- not Mentioned b. use clean cloths and water to wipe away pus. 1- Mentioned 2- not Mentioned c. other , specify …. 1- Mentioned 2- not Mentioned	a._____ b._____ c._____
633. If the answers for Q 630,631,632 are not correct ask the care taker for non compliance ? 1.Do not know how to apply 2.Unable to afford to by the drug 3.Lack of trust in health worker 4.The child became more sick 5.The child was improved before finishing drug 6.Fear of side effect 7.Shared drug to another child 8.drug was lost 9.Others , specify_____	☐
634.Did the health worker prescribed Gentian violet for mouth ulcer ? 1. yes 2. no⟶ skip to Q 544	☐
635. If yes how did you applied ? a. Wash hands 1- Mentioned 2- not Mentioned b. wash the child's mouth with clean soft cloth wrapped around the finger and wet with salt water. 1- Mentioned 2- not Mentioned c. other , specify …. 1- Mentioned 2- not Mentioned	a. _____ b._____ c. _____
636. How many times did you apply ? 1. one time 2. two times 3. three times 4. more than three times 5. other specify _____	☐
637. If the answers for Q 540,541 are not correct ask the care taker for non compliance ? 1.Do not know how to apply 2.Unable to afford to by the drug 3.Lack of trust in health worker 4.The child became more sick 5.The child was improved before finishing drug 6.Fear of side effect 7.Shared drug to another child 8.drug was lost 9.Others , specify_____	☐

questionnaire no_____

638. Did the health worker recommended drying the by wicking? 1. yes 2. no⟶ skip to	☐
639. If yes , how did you do wicking the ear? 1. role clean absorbent cloth or soft, strong tissue paper in to a wick? 1- Mentioned 2- not Mentioned 2. remove when it becomes wet 1- Mentioned 2- not Mentioned 3. replace the wick with a clean one until the ear is dry. 1- Mentioned 2- not Mentioned	a._____ b._____ c._____
640. If the answer for Q 639 is not correct ask the care taker for non compliance ? 1.Do not know how to apply 2.Lack of trust in health worker 3.The child became more sick 4.The child was improved before finishing drug 5.Fear of damaging the ear 6. not have clean cloth or soft 7. Applied other drug. 8.Others , specify_____	☐
641. Has the child had cough? 1- yes 2- no	
642. What did you used to relief cough? 1. Exclusive breast feeding for 1-6 month 2. tea with honey 3. fruit juice 4.cough syrup 5. traditional drug 6. other , specify	☐
643. The answer for Q642 is other than 1,2,3 ask the care taker for non compliance ? 1. Don't know what to give 2. Lack of trust in health worker 3. Don't have tea 4. Don't have honey 5. don't have fruit or not now how to prepare 6. Don't have money. 7. Other specify	☐

Questionnaire no_____

644.Did the health worker gave you specific day when to came back for follow up ? 1. yes 2. No------Skip 553	☐
645.In how many days, did health worker told you to came back for follow up ? 1. 2 days 2. 5 days 3. more than 5 days .	☐
646.Did you went back to health facility on appointment day 1. Yes --- skip to 553 2. No	☐
647. If no, what was the reason that you didn't return to health facility on appointment day 1. I forgot 2. Child was improved 3. Child condition became worse 4. I started traditional medicine 5. I have no time 6. I have no money 7. I have no trust on health workers 8. others , specify…….	☐
648. Some time children's condition may worsen and they should be taken immediately to a health facility. What types of symptoms would cause you to take your child to health facility right away Do not prompt a. Child not able to drunk or Breast feed 1- Mentioned 2- not Mentioned b. Child becomes sicker 1- Mentioned 2- not Mentioned c. Child develops a fever 1- Mentioned 2- not Mentioned d. Child has fast breathing 1- Mentioned 2- not Mentioned e. Child has difficult breathing /pneumonia 1- Mentioned 2- not Mentioned f. Child has blow in stool 1- Mentioned 2- not Mentioned g. Child is drinking poorly 1- Mentioned 2- not Mentioned h. Other, specify…… 1- Mentioned 2- not Mentioned	a._____ b._____ c._____ d._____ e._____ f._____ g._____ h._____

questionnaire no_____

649. How did you fed your sick child after you returned form Health centre 1. as usually 2. More liquids than usually.. skip to Q 3. less liquids than usually 99. don't know	☐
650.If the answer for Q ---- is other than no 2 ask the mother why she gave liquid as usually or less 1) child was unable to drink 2) child was not willing to drink 3) fear of worsen the illness 4) Do not know the importance 5) health worker did not advice 6) Other specify……. 99. do not know	☐
651. If the child is breast feeding, ask How did the mother breast feed the child after visited health centre 1) breast feeding more than usually - skip to 2) breast feeding less than usually 99) do not know - skip to	☐
652. If the answer for Q 555 is no 2 ask, why she Breast feed the child us than usually 1. child was unable to drink 2. child refuse to suck 3. fear of worsen illness 4. Don't know the importance of breast feeding during illness 5. Other ----- specify 99. don't know	☐

End of the questionnaire, Thank the caretaker , and feed back on importance of complying to recommended treatment and care.

ANNEX 2b : Amharic version of house hold questionnaire

l †«é^ †lm ¤}ßY^p £ L LTf¦ ¼~r ÝZ¯Œr
lpd~¯ £CÑ~r CŒN~ £N\ºå JŒN~ NŒY †µG·Eøsv l^~sv(£†]«µé• t) p·mY
L D~t'å¿~ ‹GD}N NŒ¿¦qt'å¿ EM'i £pš¶¯ gE L º ¨ i
£gEL º ¨ i †iWlé e¼Y _____ _____/_____/_____

ŒÙG 1 LPTq" L T±•v

pe	¼¦h	£ L ªn	'ª ¼¦h ¨œEEå
301	£pº¦f"('å) ^N º î~ »lé¦ JÑ}å¿ ¦]ŠLv"(L'å) \'å LD¿ †Elr?		
302	£pº¦fÑq	'¿ ---------- 1 \îr ---------- 2	
303	(¦EÔ'å¿ Gªr"¿ \é¦ŠnU) ^ M¦" ^¿r }lY?	Lœµlå _____ †F'åiN ---------- 88	
304	A¨M r• N¿ }'å?	‰Ys®Œ^ ---------- 1 ^^FN ---------- 2 ÝZp^q¿r---------- 3 ‹ sEéŒ ---------- 4 EîF ‹E ¨·EÌ___00	
305	nHîY\n• N¿ }'å?	\é«M---------- 1 'F¨q---------- 2 †MW ---------- 3 ‰ZO ---------- 4 µåWµî ========== 5 EîF ‹E ¨·EÌ __00	
306	†Aå¿ ¦E•r £¶nu Aå}q N¿ ¨L^FG?	†·ns £M¦'åi----- 1 ¦µm ---------- 2 £p×q---------- 3 mG(M¦^r) £Oplr(£Opvlr- 4 EîF ‹E ¨µEÎ___00	
307	£rNCYr Aå}¦q• N¿ ¨L^FG?	LÑÙ~ M¿ln †GvGN __1 LÑÙ~ M¿ln ^vFEAå ____2 Š1-6 ŒÙG_____ 3 Š7-8 ŒÙG_____ 4 9-12 ŒÙG _____5 Š12 lF¨_____ 6 EîF ‹E ¨µEÎ ___00	
308	£G¯• £ _____ †mr £rNCYr Aå}¦q N¿ ¨L^FG?	LÑÙ~ M¿ln †GvGN _____1 LÑÙ~ M¿ln ^vFEAå _____2 Š1-6 ŒÙG_____ 3 Š7-8 ŒÙG_____ 4 9-12 ŒÙG_____ 5 Š12 lF¨_____ 6 EîF ‹E ¨µEÎ ___00	
309	RW• N¿ }'å?	£L¿·^r pd»V _ 1 L¿·^q"¦GD} Y³r pd»V £·G Y³r pd»V _____ 3 }¶¬ _____ 4 µlX _____ 5 £d¿ PWpƒ _____ 6 £lîr ^Llîr _____ 7 pMV _____ 8 EîF ‹E ¨µEÎ ____00	
310	£lîp^n• 'YA"µlé \¿r }'å?	Š100 nY lqv__ 1 101-300 nY_____ 2 301-500nY _____ 3 501 1000 nY _____ 4 Š1000 nY lF¨ ____5	
311	b¿r lîr †E•r ?	†" _____ 1 £E„N_____ 2	
312	^Y^• lîr Š5–Lr lqv ~ M¦	†¿ _____1	

	¦Ft ’å ^¿r JÑ~r †Eå ?	AåEr_____ 2 S^r _____3 †Wr _____4 Š†Wr IF¨ _____5	
313	ˆY^• ECÑ}å ¦E•r œN ~ N¿ }’å ?	ˆ~r_____ 1 †mr _____2 †]«µé_____ 3 i L †¦r(\îr)__ 4 i L †¦r(’¿)__5 EîF ‹E ¨µEÎ____00	

ŒÙG 2 ºî~ †µG·Eør

401	ˆY^• ŠšéC ’ª ºî~ »Ié¦ EL T^ N¿ ¦CG µéšî ¨ ’^«èIqG? (Iªfg ¨ÑÙ)	ªfg_____ 1 †F’åiN _____88	
402	mAå}(_____¿ EM]ŠN ºî~ »Ié¦ £B«è µéšî G³• IAŠéN ˆ^Šéq¨ T^ N¿ ¦CG µéšî ºIe? IªdgN ¨ÑÙ	ªfg_____ 1 †F’åiN _____88	
403	IdªN _____ ¿(£G°¿ ^N) EM]ŠN ºî~ »Ié¦ \éB«è †]ŒL’å EL¾T^ £’\ªn•r¿ µéšî ˆ¿¬r ¦¤qG ?	I»N T¡N_____ 1 T¡N }’å_____ 2 ¼U }’å_____ 3 †ÃY }’å_____ 4 †F’åiN _____88	
404	IdªN _____¿ EM]ŠN N¿ ¦CG µ¿šn †’ºå?	ErW¿^ÞYr _____ ECŒN~(‹Y L A}¦r FnWsV¿ ¾NZ) _____ ªNT“ ¨ÍÕ_____ EîF ‹E ¨µEÎ ___ _____00	

ŒÙG 3 ICLN µéšî JŒN~~ JŒN~ Lar

501	G³• L¯LV¦ LqLLå¿ ‹’e ŠN¿ ¦CG µéšî IyF ECŒN~ ’\«èr? (Šªfg•v ˆ^Š 1 \—r ˆ¿ªt¿ d¿ ¨ Lšµn)	_____ d¿	
502	EG³• CŒN~ ’¨N LÙrHî ÙE¶ ŠLB IÖr Iîr ’å^¼ ¦ªTµåEr }µY †E ?	†• _____1 £EN _____ 2 †F’åiN_____ 88	LG\å 2 ~ 88 ŠD} ’ª ¼¦h 504 ¨EÕ
503	†•¿ ŠD} IIîr ’å^¼ N¿ —¨}r ˆ¿Œn‹Iî †ªTµåEr ?	Iîr £pš¶¯ N·n ’¨N Ô]b \ºår_____ 1 šL~”¦ L y}¦r \ºår_____ 2 mCF”¦ L y}¦r \ºår__3 ºIG \ºår _____ 4 ‰ †Y †î^ \ºår __ 5 EîF ‹E ¨µEÎ____ 00	
504	G³• I†Aå}å JLLå µéšî JLLå I»N †ªµƒ }’å nE’å \·p’å }IY ?	†”_____ 1 †¨ªEN _____ 2 †F’åiN _____88	
505	£G° ”~ †]«µé M}’å ?	ˆ~r _____ 1 †mr _____ 2 EîF †]«µé_____ 3 \îr †¦r_____ 4 ’¿ †¦r _____5 †Œ^r _____ 6 †¸r _____ 7 EîF ‹E ¨µEÒ_____ 00	
506	£G° ”~ †]«µé IgE Lº¨e ’ir pµ„p”G?	†• _____ 1 £EåN _____ 2 EîF ‹E ¨µEÎ _____ 00	
507	IgE Lº¨e ’ir £G° ˆ~r ‹Gpµ,¦£G° ˆ~r IJ¨’r L Wt’å º¨d’å ¦T¶·ºå	IJ¨’r †Eå _____1 Op”G _____2 EîF ‹E ¨µEÎ _____ 3	

601	ldªN_____¿ ECŒN~ ºî~ »lé¦ £'\«èr µéšî ºî~ mEL å¦'å l†Ù £M¦\¼ '¨N £Mídm L y}¦r †šš Eør '¨^ \¼•r }lY ?	†" _____1 †¨ªEN _____2 †F'åiN_____88	L G\å 2 ~ 88 ŠD} 'a ¼¦h 643 ¨EÕ
602	L G\å †•¿ ŠD} ÐT p"\é¦¿ L y}¦r q Er }lY ?	'†" _____1 †¨ªEN _____2 †F'åiN _____88	L G\å 2†~ 88 ŠD} 'a ¼¦h 613 œEEå
603	ÐT p"\é¦¿ L y}¦r q £M¦ŠpEår LT±•v ŠD} ºî~ »lé¦ ŠpMF'å £JÑ}å iÒ F¨ ¨µGl¼ <u>£L¯LV¦ ÐT p"\é¦¿</u> ^N _____	<u>AåEpƒ ÐT p"\é¦¿</u> ^N _____	
604	ŠL¯LV¦'å ÐT p"\é¦¿ L y}¦r †¿¬ \é\ºår N¿ ¦CG ¨\ºåqG	_____	
605	ŠL¯LV¦'å ÐT p"\é¦¿ L y}¦r ld¿ ^¿r µéšî \ºår	_____µéšî	
606	ŠL¯LV¦'å ÐT p"\é¦¿ L y}¦r E^¿r d¿ \ºår	_____ d¿	
607	ŠAåEpƒ'å ÐT p"\é¦¿ L y}¦r †¿¬ \é\ºår N¿ ¦CG ¨\ºåqG	_____	
608	ŠAåEpƒ'å ÐT p"\é¦¿ L y}¦r ld¿ ^¿r µéšî \ºår	_____µéšî	
609	ŠAåEpƒ'å ÐT p"\é¦¿ L y}¦r E^¿r d¿ \ºår	_____ d¿	
610	E¼¦h e¼Y 604 605 ~ 606 AåEpƒ ÐT p"\é¦¿ q ŠD} E¼¦h e¼Y 607 608 609 L G^ l†î¨ †N \î †¨ L LV¦ L \Tr ‹GD}~ £pšš L y}¦r ‹E EN¿ L y}¦r lqšš'å L \Tr ^¿«G\ºå ¨º£e	^¿¬r ^¿ªM¦\¼ ^EMF'l _____ 1 L y}¦p¿ L·›r ^Fgp„ _____2 mšš'å mELå¦ ^N}r ^EîE„ _____3 G² l»N ^£qLL ^EL»_____ 4 L y}¦p¿]¨¾Y^ G² ^EpaE'å_ 5 L y}¦p ¸±}r †E'å n¤ ^F\Šå___ 6 L y}¦p¿ EEîEøv G´v ^E\º'å__ 7 L y}¦p ^Eº×n„ _____ 8 L y}¦p ^EplF`n„_____9 EîF ‹E ¨µEÎ _____ 00	
611	ÐT 'm L y}¦r q }lY	†• _____1 †¨ªEN_____ 2 †F'ådN_____88	L G\å 2†~ 88 ŠD} 626œEEå
612	ÐT 'm L y}¦r q £M¦ŠpEår LT±•v ŠD} ºî~ »lé¦ ŠpMF'å £JÑ}å iÒ F ¨ ¨µGl¼ <u>£L¯LV¦ ÐT 'm</u> ^N _____	<u>AåEpƒ ÐT 'm</u> ^N _____	
613	ŠL¯LV¦'å ÐT 'mL y}¦r †¿¬ \é\ºår N¿ ¦CG ¨\ºåqG	_____	
614	ŠL¯LV¦'å ÐT 'm L y}¦r ld¿ ^¿r µéšî \ºår	_____µéšî	
615	ŠL¯LV¦'å ÐT 'm L y}¦r E^¿r d¿ \ºår	_____ d¿	
616	ŠL¯LV¦'å ÐT 'm L y}¦r £dT L y}¦r †E	†" _____1 †¨ªEN _____2 †F'åiN_____88	2 ÐT 622

617	ŠA¼Ep ƒ '¼ ÐT 'm L y}¼r †¿¬ \é\ º¼r N¿ ¦CG ¨\ º¼qG	_____	
618	ŠA¼Ep ƒ '¼ ÐT 'm L y}¼r Id¿ ^¿r µéšî \ º¼r	_____µéšî	
619	ŠA¼Ep ƒ '¼ ÐT 'm L y}¼r E^¿r d¿ \ º¼r	_____ d¿	
620	ŠA¼Ep ƒ '¼ ÐT 'm L y}¼r £dT L y}¼r †E	†" _____1 †¨ªEN _____2 †F'¼iN_____88	
621	E¼¦h e¼Y 613 614 ~ 615A¼Ep ƒ ÐT p"\é¦¿ q ŠD} E¼¦h e¼Y 617 618 619 LG^ Š†î¨ †N \î †¨ L LV¦ L\Tr ‹GD} EN¿ L y}¼r Iqšš'¼ L\Tr ^¿«G\ º¼ ¨ º£e	^¿¬r ^¿ªM¦\¼ ^EMF'i_____ 1 L y}¼p¿ L·›r ^Fgp„ _____ 2 mšš'¼ mEL¼¦ ^N}r ^EîE„ _____3 G² I»N ^£q L L ^EL» _____4 L y}¼p¿]¨¾Y^ G² ^EpaE'¼_ 5 L y}¼p¦ ¸±¦}r †E'¼ n¤ ^F\Š¼ ___6 L y}¼p¿ EEîEøv G´v ^E\º'¼__ 7 L y}¼p¦ ^Eº×n„ ^EpIF`n„___ 8 EîF ‹E ¨µEÎ _____00	
622	EG³• J¨'r † ¿ ¿¼T }µY q Er }IY	†•_____ 1 †¨ªEN _____ 2 †F'¼iN _____ 88	L G\¼ 2 ^~ 88 ŠD} 'ª 629 œEE¼
623	†¿«è¿ ŠTºîr £J¨'r † ¿ ¿¼T }µY IN¿ ¦CG '¼A Iº º¼Ir	_____ †F'¼iN _____88	
624	EG³• J¨'r † ¿ ¿¼T }µY IN¿ IN¿ ¦CG µéšî(A¼¦q) \ º¼r	Id¿ 1 µéšî_____1 Id¿ 2 µéšî _____ 2 Id¿ 3 µéšî _____ 3 Id¿ 4 µéšî _____ 4 m^dLº'¼ e¼Y_____ 5 JÑ}¼ ELºqr Iº£d e¼Y _____6 EîF ‹E ¨µEÎ _____00	
625	J¨'r † ¿ ¿¼T }µU¿ IN¿ †¨}r '¼A Iº I º¼r	ÔGs £dšdš '¼A _____1 £m¿mº '¼A _____2 ¦GÔF £µ¼ ¹ '¼A _____3 ¦GÔF £A¨i '¼A _____4 EîF ‹E ¨µEÎ _____00	
626	I^¦¿«è µéšî N¿ ¦CG £J¨'r † ¿ ¿¼T }µU¿ \ º¼r	JÑ}¼ £uE'¼¿ ¦CG_____ 1 †¿ \é}¦ _____ 2 A¼Er \é}¦ _____ 3 _\r \é}¦ _____4 †Wr \é}¦ _____5 _____ 88 EîF ‹E ¨µEÎ _____00	
627	£J¨'r † ¿ ¿¼T }µU¿ EN¿ ¦CG µéšî \ º¼r	piM¼ ^^Šé¦jN _____1 piM¼ Šj L IyN _____2 £p\º„ ^\éŠé¦Gi _____3 EîF ‹E ¨µEÎ_____00 †F'¼iN _____88	
628	£J¨'r † ¿ ¿¼T }µY I¿ÎC '¼A IrŒŒEƒ Lº¿ ‹GpIºIº~ IrŒŒG ‹Gp\º EN¿ ^¿ªD} NŒ¿¦p¿ ¨º¨e	^¿¬r ^¿ªM¦\¼ ^EMF'i_____ 1 L y}¼p¿ L·›r ^Fgp„ _____ 2 mšš'¼ mEL¼¦ ^N}r ^EîE„_____ 3 G² I»N ^£q L L ^EL» _____ 4 L y}¼p¿]¨¾Y^ G² ^EpaE'¼_ 5 L y}¼p¦ ¸±¦}r †E'¼ n¤ ^F\Š¼ ___6 L y}¼p¿ EEîEøv G´v ^E\º'¼ __7 L y}¼p¦ ^Eº×n„ _____ 8 L y}¼p¦ ^EpIF`n„_____ 9 EîF ‹E ¨µEÎ _____00	
629	I†A¼¦¼ £ CŒN~ ºî~ »lé¦ IB«èIr µéšî £ºî~ mEL¼¦'¼ p¦rW]¨ŒG¿ £—¨¿ imr † }IY	†" _____1 †¨ªEN _____2 †F'¼iN _____88	LG\¼ 2 ^~ 88 ŠD} 'ª ¼¦h 634 ¨œEE¼

630	†"¿ ŠD} p rW]¨ŒG¿ £–¨¿ imp¿ G° –¨¿ '¼\¼ ld¿ ^¿r µéšî †ªTµåEr	†¿ µéšî ---------- 1 AåEr µéšî ---------- 2 _^r µéšî ---------- 3 Š_^r µéšî IF¨---------- 4 EîF ‹E ¨µEÎ ---------- 00	
631	p rW]¨ŒG¿ £–¨¿ imp¿ G° –¨¿ '¼^¼ EN¿ ¦CG d¿ †ªTµåEr	£–¨¿ imp ^^Šé¦Gi---------- 1 £–¨¿ ---------- 2 EîF ‹E ¨µEÎ---------- 00	
632	p pW]¨ŒG¿ £–¨¿ imp¿ G° –¨¿ '¼^¼ Š L ¾ L Y• lÖr N¿ †ªTµå	p º= p º i]◊G †G= †Gp º d\N †²¿ q º nŠå„---------- 1p º 2†G ¿ÎC ¾YYi~ 'åA I L ºdN Š—¨}å F¨ L ·E¿ ºTŠåEr------1p º 2†G EîF ‹E ¨µEÎ ---------- 00	
633	E¼¦h e¼Y 432 433 ^~ 434 £\º'å L G^ rŒŒG ‹GD} IrŒŒG L y}p¿ ¦Gp ºd Lå Ir¿ NŒ¿¦r ¨º¨e	^¿¬r ^¿ªM¦ ^EMF'i-------- 1 L y}p¿ L·›r ^Fgp„-------- 2 mšš'å mE Lå¦ ^N}r ^EîE„-------- 3 G² l»N ^£q L L ^E L »--------- 4 L y}p¿]¨¾Y^ G² ^EpaE'å--- 5 L y}p ¸±}r †E'å n¤ ^F\Šå ----6 L y}p¿ EEîEøv G´v ^E\º'å--- 7 L y}p ^Eº×n„ ^EpIF`n„------ 8 EîF ‹E ¨µEÎ---------- 00	
634	l†Aå}å E CŒN~ ºî~ »lé¦ \éB«è £ºî~ mE Lå¦'å EG° £†Ù e^G ²¿b}¦ à¤Gr † Er }lY	†" ---------- 1 †¨ªEN ---------- 2 †F'ådL N---------- 00	L G\å 2 ^~ 88 ŠD} 'a ¼¦h e¼Y 638 ¨ŠŠåEr
635	†"¿ ŠD} ²¿b¿ à¤Eøp¿ lG° £†Ù e^G	p º =p º i]◊G †G= †Gp º d\N ^²¿ q º nŠå ----------1 p º 2 †G ¨°¿ †Ù ¿ÎC~ E^F] ¾Yi † Yµé l¾'å 'åA † º nŠår---1 p º 2 †G EîF ‹E ¨µEÎ---------- 00	
636	²¿b¿ m¤\ép¿ ld¿ ^¿r µéšî †ªTµåEr	†¿ µéšî ----------1 AåEr µéšî ---------- 2 _^r µéšî ---------- 3 Š_^r µéšî IF¨---------- 4 EîF ‹E ¨µEÎ---------- 00	
637	E¼¦h e¼Y 437~ 438 lp\º'å L G^ rŒŒG ‹GD} IrŒŒG ²¿b¿ à¤Eép¿ ¦G¾ LUIr NŒ¿¦r ¨º£e	^¿¬r ^¿ª ^EMF'i---------- 1 L y}p¿ L·›r ^Fgp„ ---------- 2 mšš'å mE Lå¦ ^N}r ^EîE„---------- 3 G² l»N ^£q L L ^E L »---------- 4 L y}p¿]¨¾Y^ G² ^EpaE'å-- 5 L y}p ¸±}r †E'å n¤ ^F\Šå------ 6 L y}p¿ EEîEøv G´v ^E å--- 7 L y}p ^Eº×n„ ^EpIF`n„------ 8 EîF ‹E ¨µEÎ ----------00	
638	l†Aå}å E JŒN~ºî~»lé¦lB«èlr µéšî £ºî~mE Lå¦ £G³•´ZI L NµEå NŒ¿¦r´Z'å¿^¿«é¦ªYeEr(l'åŒ¿·) † }lY	†" ---------- 1 †¨ªEN---------- 2 †F'ådN---------- 88	L G\å 2 ^~ 88 ŠD} 'a e¼Y 641 ¨ŠŠåEr
639	†"¿ ŠD} £G°¿ ´Z ^¿¬r †ªTeEr	p º= p º i]◊G †G= †Gp º d\N L Nº¼ £M¦vG ^^ ¾Yi º¿ŠY ¦E £b¿r lîr 'Tdr lM¦L·E'å ´Z '¼^¼ †ªTŠåEr l»N \éT¼n †'»Aår---------- -- 1p º 2†G ´Z'å ^^ŠéªYi T^ ¿ÎC ¾Yi I L E'¼ †ªTŠåEr--------- 1p º 2†G EîF ‹E ¨µEÎ ----------00	
640	E¼¦h e¼Y 639 £p\º'å L G^ rŒŒG ‹GD} EN¿ lqšš'å L\Tr IrŒŒG ^¿«ªTµå ¨º£e	^¿¬r ^¿ªM¦ªYi ^EMF'i--------- 1 mšš'å mE Lå¦ ^N}r ^EîE„--------- 2 G² l»N ^£q L L ^E L »--------- 3 G¯ ¨¸«G n¤ ^F\Šå ----- 4 EîF ‹E ¨µEÎ ---------- 00	
641	G³•]G }lTlr	†" ---------- 1 †ªEN---------- 2	1 644

642	G³ •]G Š}ITIr]E¿ EM^qµ^ N¿ †ªTµå	£ºîr 'pr nu \ºAår (Š1 6'Y JÑ¿) ---------- 1 a¨ IMY † Yµî \ºAår---------- 2 £ÙWÙX ÃMh \ºAår---------- 3 šL~"¦ £]G L y}¦r \ºAår------ 4 mCF"¦ £]G L y}¦r \ºAår-------- 5 EîF ‹E ¨µEÎ---------- 00	
643	E¼¦h e¼Y 642 £p\º LG^ 1: 2 '¨N 3 ‹GD} £qšš'å £]G M^qµa EN¿ ^¿«Gpºd Lå ¨º£e	N¿ ^¿ªM¦\¼ †F'åiN---------- 1 Eºî~ mELå¦'å F¨ ^N}r £E„N 2 a¨ ^EîE„---------- 3 MY ^FE„ ---------- 4 ÙWÙX ^EîE„---------- 5 ^¿¬r ^¿ªM¦š¶³ ^EMF'åi------ 6 µ¿šn ^EEî„---------- 7 EîF ‹E ¨µEÎ ---------- 00	
644	I†Aå}å E JLN ºî~ »lé¦IB«èIr µéšî £ºî~ mELå¦'å EG³• £CŒN~ ŒrrG 'ª ºî~ »lé¦'å ^¿«éLE\å dºZ \¼sr }IY	†" ---------- 1 †¨ªEN---------- 2 †F'åiN ---------- 88	LG\å 2 ^~ 88 ŠD} 'a ¼¦h 648 ¨œEE
645	IdºY• d¿ 'ª ºî~ »lé¦'å pLG\'å Bª'å }IY	†• ---------- 1 †¨ªEN---------- 2	LG\å 1 e¼Y ŠD} 'a h648 ¨œEEå
646	LG\å †" ŠD} Š^¿r d¿ IyF ^¿«éLE\å }µY'år	AåEr d¿---------- 1 †N^r d¿---------- 2 Š†N^r d¿ IF¨---------- 3	
647	LG\å †¨ªEN ŠD} EN¿ IdºZ d¿ 'ª ºî~ »lé¦ ^¿«GB«è ¨º¨e	dºZ'å¿ ^ET]Aår---------- 1 G° ^EpaE'å---------- 2 G° ^Em\Ir---------- 3 mCF"¦ L y}¦r ^E¯LYŠå---------- 4 µéšî ^F»Aå---------- 5 µ¿šn ^F»Aå---------- 6 Iºî~ mELå¦'å ^N}r ^EEîE„------ 7 EîF ‹E ¨µEÎ---------- 00	
648	£G´v ºî~ Aå}¦q †^µé ¨D¿~ I†^t‹◊¨ 'a ºî~ Y³r L'å\ £M¦ Ymt'å µéšî †E ^Y^• G´v F¨ N¿ †¨}r £JLN N }'å I†^t‹◊¨ 'a ºî~ Y³r • NYÁ'å †¨}In • EîF^ ^¦Eå †¼nd'å ¨º¨e	ºår L¼mr '¨N Lº»r \é¦iqt'å---------- 1pº 2†G I»N ŠqLLå---------- 1pº 2†G rŠå]r \é Wt'å---------- 1pº 2†G r¿×t'å \éT¼n---------- 1pº 2†G Lp¿Ô^ \é¦iqt'å------- 1pº 2†G \µWt'å '^¼ ªN \é Y 1pº 2†G Lº»r \é¦iqt'å--------- 1pº 2†G EîF ‹E ¨µEÎ---------- 00	
649	G³•¿ †]ŒL'å Šºî~ »lé¦'å ŠpLE\å IyF Ô]b N¿ ¦CG \ºår	^¿ªlÖp---------- 1 lÖr ŠM¦\º' £IEºå---------- 2 lÖr ŠM¦\º'å ¦}\---------- 3 †F'åiN ---------- 88	LG\å 2 d¼Y ŠD} 'a ¼¦h 651 ¨œEEå
650	E¼¦h e¼Y 648 LG\å 2 e¼Y ‹GD} EN¿ ŠlÖp ¦}\ '¨N ^¿ªd O ^¿ª\ºå ¨º¨e	G° Lºqr ^FGuE---------- 1 G° Lº»r ^FGÔEµå---------- 2 JLLå ¨n^IqG n¤ ^EÔWAå---- 3 ¼iL¿ ^FF'Šå---------- 4 ºî~ mELå¦'å ^FG}µT„---------- 5 †F'åiN---------- 88 EîF ‹E ¨µEÎ---------- 00	
651	G° ºår £M¦ºm ŠD} G³•¿ †]ŒL'å Šºî~ »lé¦ ŠpLE\å IyF ºår ^¿¬r †ºlår	ŠlÖp £IEº †ºmAår---------- 1 ŠlÖp ¦}\ †ºmAår---------- 2 ^¿ªlÖp †ºmAår---------- 3 †F'åiN---------- 88	LG\å 1 d¼Y ŠD} ¼¦h

652	E¼¦h 651 L G\å Š1 e¼Y EîF ŠD} EN¿ ˆ¿ªlÖp ' ¨N ŠlÖp ¦}\ ˆ¿«ºlår ¨º¨e	JÑ}å L¼mr ^Fgp'å---------- 1 JÑ}å L¼mr ˆNlé ^FE---------- 2 ºår L¼mr JLL¿ ¨n^lqG n¤ ^F\nŠå---------- 3 lJLN µéšî ºår £M¼mr¿ ¼iN ^FF'Šå---------- 4 ºî~ mEL¦'å ^FG}µT¿---------- 5 EîF ¨µEÎ ---------- 00 †F'åiN---------- 88	

¼¦h

v l¼¦h'å L ¾Ta LF`¦¿LFa¿ ¦L^·}å

v EJÑ~r £qššFt'å L y}¦r l†·mlå L\ºr¿ £p\º'¿ NŒY lrŒŒG Lp·lU¿ ^FE'å¼iN †nWYp'å ¨¿µU

ANNEX 3: Operational Definitions

Operational Definitions

1. The care taker to be compliant to Pneumonia treatment , the following drugs should be given by care takers ,according to their respective dose, no of times per day and total days and carry out advice on how to relief cough.

(Taken from IMCI guide line)

A. . Cotri-moxozole and Amoxicillin

	Cotrimoxazole (trimethoprine + Sulfamethoxazole Give two times daily for 5 days.			Amoxicillin Give Three times daily for 5 days	
Age or weight	Adult tab 80mg trimethoprine 400 mg Sulfamethoxazole	Pediatric tab 20 mg trimethoprine 100mg Sulfamethoxazol	Syrup 20 mg trimethoprine 100mg Sulfamethoxazole per 5ml	tablet 250mg per5ml	syrup 125mg
2 months - 12 months(4-10kg)	1/2	2	5.0ml	1/2 5ml	
12 months - 5 years(10-19kg)	1	3	7.5ml	1 10ml	

Ø Sooth the throat, relive the cough, with a safe remedy.

1. Breast milk for exclusive breast feed infant.
2. home made fluid, tea with honey or fruit juice.

2**. The care taker to be compliant to diarrhea treatment, the following drugs and advice should be provided by care takers, according to their respective dose, no of times per day and total days.**

(Taken from IMCI guide line)

No dehydration and some dehydration

- **<u>Some dehydration</u>** – include children only who took ORS for 4 hours at heath center

Ø Give extra fluid

. Up to two years – 50 to 100ml after each loose stool

. 2 years or more – 100 – 200ml after each loose stool

. Ø continue feeding

. Ø follow up in 5 days

- **Dysentery**

A) Antibiotic

1. Contri-moxazole the same does, time in a day and total days as in pneumonia treatment

2. Nalidix acid – 250mg tablet 4 times daily for 5 days.

2 months to 4 months – ¼tab

4 months to 12 months – ½tab

12 months to 5 years – 1 tab

B) follow – up in 2 day

3 . The care taker to be compliant to malaria treatment, the following drugs should be given by care takers, according to their respective dose, no of times per day and total days.

(Taken from IMCI guide line)

Chloroquine Give for 3 days										Sulfadoxine Pyrimetamine give single dose at clinic
Age or weight	Tablet 150 mg base			Tablet 100 mg base			syrup (50mg base per 5 ml)			Tablets 500mg Sulfadoxine +25 mgPyrimetamine
	day 1	day 2	day 3	day 1	day 2	day 3	day1	day 2	day 3	
2m- 12 m(4-10kg)	1/2	1/2	1/2	1	1	1/2	7.5ml	7.5ml	5.0ml	1/2
12m-3 years (10-14 kg)	1	1	1/2	1/2	1/2	1/2	15.0ml	15.0ml	5.0ml	1
3 y- 5 years(14-19kg)	11/2	11/2	11/2	2	2	1				1

Ø Follow up in 2 days

Parcetamol _- should be give every 6 hours until pain is gone.

	Tablet 100mg	Tablet 500mg
2,-3 years	1	½
3y – 5 years	1 ½	½

4 . The care taker to be compliant to measles treatment, the following drugs should be applied by care takers, according to their respective dose, no of times per day and total days and recommended care.

(Taken from IMCI guide line)

A.TTC Eye ointment

- Wash hands.

.-Use clean cloth and water to wipe away pus.

.-Apply TTC Eye Ointment in both Eye 3 times daily.

Treat until redness is gone.

B. Gentian Violet

- wash hands

-wash the child's mouth with clean soft clothes wrapped around the finger and wet with salt water

.- paint the mouth with gentian violet

. -treat the mouth ulcer twice daily

5. Compliance with advice how to dry the ear by wicking

. Using clean absorbent cloths or soft or strong tissue paper

. Removing the wick when wet

. Continuing similar procedure until the ear is dry.

DECLARATION

I the undersigned , declare that this is my original work,, has never been presented in this or any other University and all the source materials used for thesis has been duly acknowledged.

Name Endalkachew Demeke

Signature _____

Place Addis Ababa

Date of submission _____20 . 07. 06_____

The thesis has been submitted with my approval as University advisor.

Name _____

Signature _____

Date of submission 20 . 07. 06