# BMJ Open Health postservice readiness and use of preventive and curative services for suspected childhood pneumonia in Ethiopia: a cross-sectional study

Amare Tariku , 1,2 Yemane Berhane, Alemayehu Worku, 2,3 Gashaw Andargie Biks,<sup>4</sup> Lars Åke Persson <sup>©</sup>, <sup>5,6</sup> Yemisrach Behailu Okwaraji<sup>5,6</sup>

To cite: Tariku A, Berhane Y, Worku A. et al. Health postservice readiness and use of preventive and curative services for suspected childhood pneumonia in Ethiopia: a crosssectional study. BMJ Open 2022;12:e058055. doi:10.1136/ bmjopen-2021-058055

Prepublication history and additional supplemental material for this paper are available online. To view these files. please visit the journal online (http://dx.doi.org/10.1136/ bmjopen-2021-058055).

Received 05 October 2021 Accepted 08 April 2022

### Check for updates

@ Author(s) (or their employer(s)) 2022. Re-use permitted under CC BY. Published by BMJ.

For numbered affiliations see end of article.

#### **Correspondence to**

Dr. Amare Tariku: amaretariku15@yahoo.com

#### **ABSTRACT**

Objective Pneumonia is the single-leading cause of infectious disease deaths in children under-5. Despite this challenge, the utilisation of preventive and curative child health services remains low in Ethiopia. We investigated the association between health post service readiness and caregivers' awareness of pneumonia services, care-seeking and utilisation of pneumonia-relevant immunisation in four Ethiopian regions.

Design and setting This cross-sectional study was conducted in 52 districts of four regions of Ethiopia from December 2018 to February 2019. The health posts preparedness for sick child care was assessed using the WHO Health Service Availability and Readiness Assessment tool. Multilevel analyses were employed to examine the associations between health post readiness and household-level awareness and utilisation of services.

Participants We included 165 health posts, 274 health extension workers (community health workers) and 4729 caregivers with 5787 children 2-59 months.

Outcome measures Awareness of pneumonia treatment, care-seeking behaviour and coverage of pentavalent-3 immunisation.

Results Only 62.8% of health posts were ready to provide sick child care services. One-quarter of caregivers were aware of pneumonia services, and 56.8% sought an appropriate care provider for suspected pneumonia. Nearly half (49.3%) of children (12-23 months) had received pentavalent-3 immunisation. General health post readiness was not associated with caregivers' awareness of pneumonia treatment (adjusted OR, AOR 0.9, 95% CI 0.7 to 1.1) and utilisation of pentavalent-3 immunisation (AOR=1.2, 95% CI 0.8 to 1.6), but negatively associated with care-seeking for childhood illnesses (AOR=0.6, 95% CI 0.4 to 0.8).

Conclusion We found no association between facility readiness and awareness or utilisation of child health services. There were significant deficiencies in health post preparedness for services. Caregivers had low awareness and utilisation of pneumonia-related services. The results underline the importance of enhancing facility preparedness, providing high-quality care and intensifying demand generation efforts to prevent and treat pneumonia.

#### Strengths and limitations of this study

- ► This is the first study, which assessed the association between first-level healthcare facility readiness for services and caregivers' awareness and utilisation of pneumonia-relevant preventive and curative services in four of the most populous Ethiopian
- Facility preparedness was assessed using the WHO Health Service Availability and Readiness Assessment tool to generate objective and reliable information that is comparable across or within
- We ascertained information on the utilisation of pneumonia-related preventive and curative services with Demographic and Health Surveys methods, assumed to reduce recall bias.
- The study covered pneumonia services and service readiness of health posts in 52 districts of four Ethiopian regions and findings may not be representative of other geographic areas and health system levels.

#### INTRODUCTION

Worldwide, pneumonia is responsible for onefifth of all under-5 deaths. Nearly half (49%) of these deaths occur in four low-income and middle-income countries, including Ethiopia.<sup>2 3</sup> There are effective preventive measures, including immunisation and antibiotics that can prevent or treat most cases of pneumonia. Despite these resources, children in low-income countries continue to suffer and die from pneumonia due to lack of access to or availability of these services.<sup>4</sup>

The WHO and UNICEF introduced the integrated Community Case Management (iCCM) strategy in 2004 to increase access and quality of services for childhood pneumonia, diarrhoea and malaria. Effective implementation of this strategy requires uninterrupted stock of drugs and supplies, trained community health workers, and



community awareness of these services.<sup>5</sup> <sup>6</sup> Nevertheless, studies in low-income countries reveal that less than one-fifth of sick children were brought to relevant health services for suspected pneumonia.<sup>7</sup> <sup>8</sup> This low level of care-seeking has, among other things, been attributed to the poor quality of health services.<sup>9</sup> A majority of facilities in these settings have reportedly not had essential drugs, supplies and trained community health workers.<sup>10–13</sup> The general service readiness index for sick child care has varied between 19% and 69% in reports from sub-Saharan African countries.<sup>11</sup> <sup>13</sup> The readiness has been lower in rural areas and at the lowest primary healthcare level.<sup>14–17</sup> In Ethiopia, earlier reports have shown a lack of iCCM drugs and supplies at health posts.<sup>9</sup> <sup>18</sup>

Inadequate preparedness and low service quality at the primary healthcare level reduce parents' trust and utilisation of health services. 11 19–21 In Ethiopia, the low utilisation of iCCM services was also attributed to absent supervision and refresher training of health extension workers.<sup>22-27</sup> We have earlier shown that a substantial proportion of caregivers were not aware of pneumoniarelated health services and, therefore, less likely to seek care when their children got sick or get their children immunised. 28 29 The low utilisation of iCCM services has also been attributed to the lack of readiness of health posts to care for sick children. 19 30 31 Thus, there are reasons to investigate the primary-level health facility preparedness to provide child health services and whether this is associated with the coverage of pneumonia-related preventive and treatment services. In Ethiopia, under-5 mortality was reported to be 55 per 1000 live births in the 2019 Demographic and Health Survey. Although reduced in recent decades, the persistently high level and continued pneumonia deaths call for intensified efforts to prevent these preventable deaths. 28 32 The Ethiopian Ministry of Health in collaboration with non-governmental organisations implemented a complex community-based intervention labelled Optimising the Health Extension Programme (OHEP) in four of the most populous regions. The OHEP aimed to contribute to reductions in under-5 child mortality through enhancing utilisation of iCCM and community-based newborn care services.<sup>33</sup> This study was part of the evaluation of OHEP intervention. We aimed to examine the association between the health post readiness to serve and caregivers' awareness of pneumonia-related services, care-seeking for sick children, and whether their 12-23 months old children had got three pentavalent vaccinations.

#### **METHODS**

#### Study setting and design

The Ethiopian primary healthcare system typically consists of a primary hospital, a health centre and five satellite health posts. A health post is the lowest service delivery point staffed by two health extension workers serving around 5000 rural residents. Since 2003, Ethiopia has implemented the health extension programme

to achieve universal coverage of primary healthcare for the rural population. This national programme is implemented by health extension workers, and they provide basic promotive, preventive and curative services through outreach and health post-based approaches. In 2010, after a change in policy that allowed the health extension workers to treat child pneumonia, the Ethiopian Ministry of Health and partners initiated the implementation of iCCM of childhood illnesses as part of the health extension programme. Under the iCCM programme, the health extension workers examine, classify and treat pneumonia. <sup>34</sup> <sup>35</sup>

The OHEP intervention had three components, that is, community engagement activities, capacity building of health extension workers and women's development group leaders, and strengthening of the district health services' ownership and accountability of the primary newborn and child health services. The intervention was conducted in 26 intervention districts with 26 comparison districts spread in four regions of Ethiopia, namely Tigray, Amhara, Oromia and Southern Nations, Nationalities and Peoples Regions. The intervention started in 2016 and was completed in 2018. For the evaluation, baseline and end line surveys were performed. This paper reports a secondary analysis of end line cross-sectional data. 33

#### **Participants**

This study included all caregivers and children aged 2–59 months, who resided in 52 study districts. It also includes all health posts with one or two health extension workers per health post serving these families.

#### Sampling

This study was based on secondary analysis of data from the endline survey that was part of the evaluation of the OHEP intervention. Sample size for the end line survey was estimated to measure changes in care-seeking and appropriate treatment for childhood illnesses between intervention and comparison areas at baseline and endline. Assumptions considered for the sample size calculation for the main OHEP evaluation<sup>36</sup> were 80% power to detect differences of 15% for the reported level of care-seeking (55%) and 20% for appropriate treatment for childhood illnesses (47%) at the baseline, design effect of 1.001% and 90% completeness. Accordingly, a sample size of 12 000 households was obtained. With this number of households, 6532 children below the age of 5 years were expected to be reached by the survey, of whom 368 were assumed to have any illnesses and 308 to have suspected pneumonia within 2 weeks before the survey.

The parent study used a sampling frame generated based on the 2007 Ethiopian Central Statistical Agency housing and population survey. Two hundred enumeration areas, that is, clusters, were selected from 52 study districts with probability proportional to size. A two-staged cluster sampling followed by systematic sampling to select 60 representative households from each study cluster. All caregivers of children aged 2–59 months living



in the selected households were interviewed. Moreover, all health posts and one or two health extension workers from each health post serving the population of the study clusters were included.<sup>37</sup>

#### **Data collection**

Data were collected using structured and pre-tested interviewer-administered questionnaires through an electronic data collection software (CSpro survey software). The questionnaires were translated into local languages (Amharic, Tigrigna and Oromiffa) and back-translated into English. They comprised three main modules; household, healthcare provider and health facility modules (see online supplemental files 1–3). Data collectors and supervisors, who had bachelor's degree or above, were trained for 2 weeks on data collection techniques, procedures, quality assurance and ethical considerations of the study. Further detailed information about data collection and quality control is available in the published study protocol. <sup>33</sup>

#### **Outcomes**

The outcomes of this study are caregivers' awareness of pneumonia treatment, care-seeking behaviour and coverage of pentavalent-3 immunisation as defined in the Demographic and Health Surveys.<sup>28</sup> The awareness of availability of pneumonia treatment was calculated as the proportion of caregivers who had heard messages regarding pneumonia treatment. Suspected pneumonia was ascertained by asking the caregiver if the child had cough combined with either fast or difficult breathing due to chest problems within 2 weeks before the survey. Care-seeking was defined as children with suspected pneumonia for whom advice or treatment was sought from an appropriate care provider, that is, either government or private providers. The vaccination status of children aged 12-23 months was primarily assessed by reviewing immunisation cards. When cards were not available at home, the caregivers were requested to report the type of vaccines their children had received. Hence, coverage of pentavalent vaccination was estimated as the proportion of children 12-23 months who had received three doses of pentavalent vaccine.

#### **Health postreadiness**

The readiness of health posts for sick child care was assessed using the WHO Service Availability and Readiness Assessment tool. 38 Using 23 tracer items, the preparedness of facilities was shown in five domains or indices, that is, basic amenities, basic equipment, standard precaution equipment for infection prevention, diagnostic capacity and essential medicines. The mean availability of items across the four domains of readiness was estimated by assigning equal weight to each of the items, and was expressed as a proportion. Health posts' diagnostic capacity was shown as the proportion of facilities having rapid diagnostic test for malaria. The general service readiness was calculated as the average of percentages depicting mean availability

of tracer items in five indices.<sup>38</sup> The availability of vaccination card at the health posts was also estimated. The number of health extension workers working at the health post and the percentage of these workers trained in iCCM and who had received supportive supervision during 6 months before the survey were also calculated. The health post demand generation activities were recorded as the proportion of health posts showing opening days or that used community forums to deliver maternal and child health education.

#### **Analyses**

The household socioeconomic status was constructed through principal component analysis of household assets, ownership of house, livestock, agricultural land and access to utilities and infrastructures. The factor scores were summed and ranked into quintiles from the poorest to the least poor.

The study linked the household, health facility and care provider information. Our analysis was based on linked samples for outcome variables, that is, caregivers' awareness of pneumonia treatment (n=4934), care-seeking when the child was sick (n=613) and vaccination of 12-23 months old children with a third dose of pentavalent immunisation (n=860). Care-seeking was assessed for all childhood illness episodes, including symptoms of suspected pneumonia as reported by caregivers for the 2 weeks prior to the survey. The effect of clustering on three of the study outcomes was examined by estimating intracluster correlation coefficients (ICC). A multilevel binary logistic regression model was fitted to examine the association between health post readiness and household level awareness, care-seeking and utilisation of three doses of pentavalent vaccinations. We checked for potential household-level confounders. The fitness of the model was checked through Likelihood Ratio Test. Data were analysed using Stata V.14.

#### **Patient and public involvement**

Patients or the public were not involved in the design or conduct or reporting or dissemination plans of this research.

#### **RESULTS**

#### **Characteristics of caregivers and children**

A total of 10 785 households from 181 study clusters, 165 health posts and 274 health extension workers were included in the survey. A total of 4729 eligible caregivers with 5787 children aged 2–59 months were included in the analyses. A majority of the caregivers had no schooling (59.4%) and were currently married (88.6%). About two-thirds (64.0%) of caregivers were able to access the nearest health facility within 30 min of walk from their home (table 1).

#### **Characteristics of health posts and health extension workers**

The median number of households served by the health post was 1181. The majority (85.1%) of the health posts

**Table 1** Sociodemographic characteristics of caregivers and children aged 2–59 months in four regions of Ethiopia, December 2018 to February 2019

Characteristics	Frequency	Percentage
		reiceillaye
Caregivers' characteristics	s (n=4729)	
Age <25	885	18.7
25–29		
30–34	1281 1038	27.1
		18.3
35–39	867	. 5.5
≥40	658	13.9
Marital status	4007	00.0
Currently married	4067	88.6
Unmarried	521	11.4
Education	0010	50.4
No schooling	2810	59.4
Schooling	1919	40.6
No of children under-5		
1	3487	73.7
2	1148	24.3
3+	94	2
Socioeconomic quintiles		
Q1 (poorest)	1024	21.7
Q2	982	20.8
Q3	874	18.5
Q3	895	18.9
Q5 (least poor)	954	20.1
Walking distance from how (n=3918)	usehold to near	est health facility
≤30 min	2507	64
>30 min	1411	36
Child (2-59 months) chara	cteristics (n=57	87)
Sex		
Male	2961	51.2
Female	2826	48.8
Age		
2-11 months	959	16.6
12-23 months	992	17.1
24-35 months	1114	19.3
36-59 months	2722	47

were functionally open for 5 days or more per week. More than  $1/10\ (12.7\%)$  of the health posts were served by only one health extension worker. Most (78.8%) of the health extension workers were trained in the iCCM of childhood illnesses. More than three-fourth (78.8%) had received supportive supervision within 6 months preceding the survey. Three-quarters used community forums or meetings to deliver maternal and child health education within 3 months prior to the survey (table 2).

**Table 2** Characteristics of health posts in four regions of Ethiopia, December 2018 to February 2019

Characteristics	Frequency	Percentage
Health posts catchment are	ea population (n=16	5)
No of households, median (IQR)	1181 (841–1572)	
No of children under 5 years, median (IQR)	780 (493–1065)	
Health extension workers'	characteristics (274)	
No of health extension work	kers per health post	
One	35	12.7
Two	142	51.8
Three and above	97	35.4
Health postopening days p	er week	
1-4 days	41	14.9
5–7 days	233	85.1
Posted health postopening days	54	19.7
Trained for iCCM of childhood illnesses	216	78.8
Received supportive supervision in the last 6 months	216	78.8
Participated in Performance Review and Clinical Mentorship meetings	126	46.0
Used community forums to deliver maternal and child health education	205	74.8

iCCM, integrated Community Case Management.

#### Health postpreparedness to deliver sick child care services

The general service readiness of health posts (n=165) to deliver sick child health services was estimated at 62.8%. Half of the health posts had rapid diagnostic test for malaria, and the mean availability of essential medicines was 66.9%. Relatively higher mean availability (80.1%) of tracer items was shown for basic equipment, while the lowest (48.7%) was for availability of standard precaution items. Very few health posts had all essential medicines and standard precaution equipment. Most of the health posts (84.2%) had vaccination cards (figure 1).

# Awareness of treatment, actual care-seeking and utilisation of preventive immunisation

During the 2 weeks before the survey 704 (12.3%) of the children had any illnesses. Of these, 44 children had symptoms and signs of suspected pneumonia. Only one in five (23.9%) caregivers were aware of the availability of pneumonia treatment services. Healthcare was sought for one-third (36.1%) of children with any illnesses and for 56.8% of children with suspected pneumonia. Almost

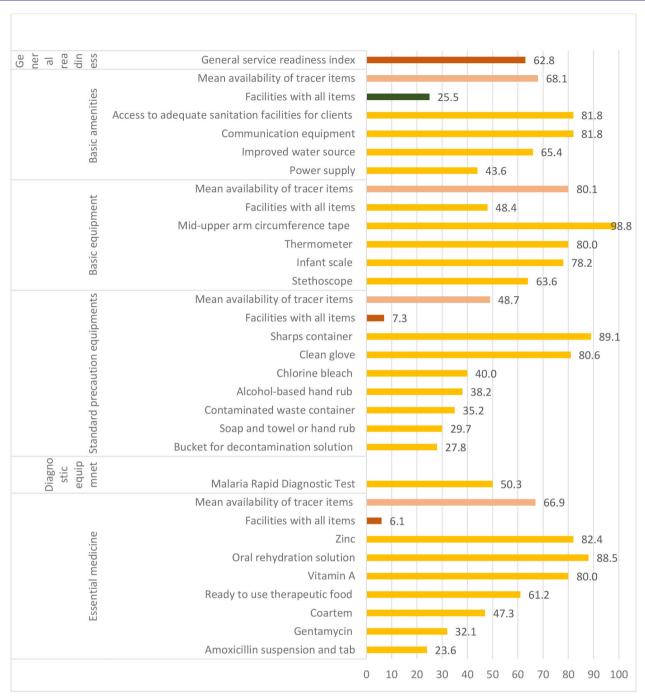


Figure 1 Percentage of health posts (n=165) with drugs and supplies to deliver pneumonia-related and other sick child care services in four regions of Ethiopia, December 2018 to February 2019.

half (49.3%) of children aged 12–23 months had received three doses of pentavalent vaccinations (table 3).

## Association between health postreadiness and awareness and utilisation of pneumonia care

The ICC indicated that the study outcomes, that is, awareness of pneumonia treatment (ICC 0.29, 95% CI 0.24 to 0.36), care-seeking behaviour (ICC 0.16, 95% CI 0.10 to 0.27) and pentavalent vaccination (ICC 0.28, 95% CI 0.20, 0.38) significantly varied with level of clusters. While checking for the household-level confounders, we found that none of the household, caregiver and child

characteristics were associated with the outcomes and main exposure variables, that is, the five health postreadiness indices. But regardless of the statistical screening criteria (p<0.2), analyses were adjusted for maternal age, education and area of residence (intervention-comparison area) variables.

Analyses tested the association of general health post readiness index with study outcomes were adjusted for health extension workers' iCCM training, supportive supervision, participation at performance review and clinical mentorship meeting, home vising, use of

**Table 3** Childhood illness and care utilisation by child demographic characteristics in four regions of Ethiopia, December 2018 to February 2019

Service utilisation	Frequency	Percentage					
Children with any illne	esses						
Yes	704	12.3					
No	5021	87.7					
Childhood illnesses b	y sex (n=704)						
Male	362	51.4					
Female	342	48.6					
Childhood illnesses by age (n=704)							
2-11 months	121	17.2					
12-23 months	147	20.9					
24-35 months	152	21.6					
36-59 months	284	40.3					
Child with suspected	pneumonia						
Yes	44	0.8					
No	5743	99.2					
Child with suspected pneumonia treated with antibiotics (n=44)							
Yes	17	38.6					
No	27	61.4					
Full pentavalent vacc	ination by sex (n=	=489)					
Male	258	52.8					
Female	231	47.2					

community forums, opening days and number of staff at health post, mothers' age, education and area of residence (intervention-comparison area) variables. The adjusted multilevel analyses revealed that general health post readiness was not associated with caregivers' awareness of availability of pneumonia treatment (adjusted OR, AOR 0.9, 95% CI 0.7 to 1.1) or utilisation of pentavalent-3 immunisation (AOR 1.2, 95% CI 0.8 to 1.6). The general health postreadiness was negatively associated with careseeking for childhood illnesses (AOR 0.6, 95% CI 0.4 to 0.8)] (table 4).

As illustrated in table 5, none of the health post readiness indices were associated with caregivers' awareness of availability of pneumonia treatment and care-seeking for childhood illnesses. Only availability of standard precaution equipment for infection prevention was positively associated with utilisation of pentavalent-3 immunisation (AOR 4.5, 95% CI 1.6 to 12.8). Home visiting by the health extension workers was associated with higher odds for caregivers' awareness of availability of pneumonia treatment (AOR 2.9, 95% CI 2.3 to 3.6).

#### DISCUSSION

Overall, this study showed insufficient health post service preparedness and low household awareness and utilisation of preventive and curative services for childhood

**Table 4** General health postreadiness and caregivers' awareness, care-seeking and utilisation of pentavalent-3 immunisation in four regions of Ethiopia, December 2018 to February 2019

	General readin	ess
Awareness and utilisation	Crude OR (95% CI)	Adjusted OR (95% CI)
Awareness of treatment service (N=4934)*	0.9 (0.7 to 1.1)	0.9 (0.7 to 1.1)
Care-seeking (N=613)*	0.7 (0.5 to 0.9)	0.6 (0.4 to 0.8)
Pentavalent-3 (N=860)*	1.2 (0.9 to 1.6)	1.2 (0.8 to 1.6)

<sup>\*</sup>Analyses adjusted for health extension workers' iCCM training, supportive supervision, participation at performance review and clinical mentorship meeting, home vising, use of community forums, opening days and number of staff at health post, mothers' age, education and area of residence. iCCM, integrated Community Case Management.

suspected pneumonia. There was no consistent association between facility preparedness and utilisation of preventive and curative services.

### **Strengths and limitations**

With an attempt of narrowing the existing scarcity of evidence, our study examined the association between health post readiness and household-level awareness and utilisation of pneumonia relevant health services in a wider geographic area. Readiness of health posts was measured using the standard WHO Health Service Availability and Readiness Assessment tool. This tool is presumed to generate objective and reliable information that is comparable across or within countries. We pretested and adopted the tool to the local context and to level of care provided at health posts.<sup>38</sup> When vaccination cards were not available at home, children's pentavalent immunisation status was assessed through interviewing the caregivers. Ascertainment of childhood suspected pneumonia and other illnesses was based on the caregivers' 2 weeks reported symptoms prior to the survey. These ascertainment techniques have been used by the Demographic and Health Surveys, but might anyhow be influenced by recall bias.<sup>28</sup> Furthermore, we assessed health post service readiness and pneumonia service utilisation in selected districts of four Ethiopian regions. The findings may not be generalisable to other geographical areas and health system levels.

#### **Health postpreparedness**

This study showed that two-thirds of the health posts were ready to provide sick child care, suggesting that the remaining facilities were not able to deliver such services. More or less similar level of structural preparedness of health posts or primary healthcare facilities for pneumonia and other sick child care were previously reported in Ethiopia and from other low-income and middle-income countries. <sup>10</sup> <sup>39</sup> <sup>40</sup> Furthermore, health posts or health centres of Ethiopia and other low-income

Continued

BMJ Open: first published as 10.1136/bmjopen-2021-058055 on 27 April 2022. Downloaded from http://bmjopen.bmj.com/ on June 21, 2022 by guest. Protected by copyright

4.5 (1.6 to 12.8) Adjusted OR (95% CI) 0.9 (0.6 to 1.8) 0.9 (0.6 to 1.6) 0.8 (0.5 to 1.4) 0.8 (0.4 to 1.6) 1.3 (0.7 to 2.3) 1.1 (0.6 to 2.1) 0.7 (0.4 to 1.4) 1.3 (0.7 to 2.5) 1.4 (0.7 to 2.8) 1.3 (0.8 to 2.2) 1.3 (0.7 to 2.2) 1.4 (0.7 to 2.5) 1.1 (0.5 to 2.2) Health postpreparedness indices associated with caregivers' awareness, care-seeking and utilisation of three doses of pentavalent vaccines in four regions of 0. 0. ₹ ¥ ₹ 0.9 (0.5 to 1.8) 0.9 (0.5 to 1.6) 0.9 (0.6 to 1.8) 2.3 (0.9 to 5.6) Crude OR (95% CI) 0. 1.0 1.0 0. ₹ ₹ ₹ Not vaccinated Pentavalent-3 (N=860) 213 100 414 23 126 145 166 89 369 29 370 306 89 369 337 224 131 Ϋ́ ₹ ₹ Vaccinated 219 204 129 186 350 310 325 98 386 37 108 73 113 9 363 61 362 ¥ ΑĀ ¥ 0.9 (0.6 to 1.5) Adjusted OR (95% CI) 0.7 (0.4 to 1.2) 0.9 (0.5 to 1.4) 0.8 (0.4 to 1.5) 0.7 (0.4 to 1.4) 0.8 (0.5 to 1.5) 0.7 (0.4 to 1.4) 1.5 (0.8 to 2.6) 0.8 (0.3 to 2.1) 0. 0. 0. 0. ₹ ₹ 0.9 (0.5 to 1.5) 0.7 (0.4 to 1.3) 0.7 (0.4 to 1.1) 0.8 (0.5 to 1.3) 0.8 (0.4 to 1.4) 0.8 (0.4 to 1.4) 1.0 (0.6 to 1.6) 1.3 (0.8 to 2.3) 0.6 (0.2 to 1.7) Crude OR (95% CI) Care-seeking (N=613) 1.0 0.1 0. 0. 0. ₹ ¥ seek care 133 270 201 379 24 98 142 163 332 332 139 264 105 298 74 202 71 7 ¥ ₹ Sought care 161 49 93 202 ω 28 9/ 9/ 163 43 2 140 99 9 47 167 4 ¥ Ϋ́ Adjusted OR (95% CI) 1.2 (0.8 to 1.9) 0.7 (0.4 to 1.1) 0.7 (0.4 to 1.2) 1.3 (0.8 to 1.9) 0.9 (0.6 to 1.5) 0.8 (0.5 to 1.4) 1.2 (0.7 to 1.9) 1.9 (0.9 to 4.2) 0.9 (0.5 to 1.4) Awareness of treatment service (N=4934) 0.1 1.0 1.0 0. ¥ ¥ ¥ 0.9 (0.6 to 1.5) 1.3 (0.9 to 1.9) 1.9 (0.9 to 3.9) 0.8 (0.5 to 1.2) 0.9 (0.5 to 1.4) 0.8 (0.5 to 1.3) 1.2 (0.7 to 1.9) 0.8 (0.5 to 1.3) 1.2 (0.8 to 1.8) Crude OR (95% CI) for infection prevention 1.0 0. 1.0 0. 0. 1.0 Ϋ́ Ϋ́ ¥ Health extension workers used community forum Health extension workers received iCCM training December 2018 to February 2019 No of health extension workers per health post Health extension workers received supervision Unaware 1734 200 3173 3555 1355 1375 1003 2752 2867 888 1858 1897 1025 784 2971 582 2021 ¥ ₹ Standard precaution equipment Rapid diagnostic test for malaria 589 226 970 923 256 290 1091 88 582 396 429 No of health postopening days 297 882 354 597 ¥ ₹ Five days and above Less than 5 days Essential medicine Did not received All not available All not available All not available Two and above 3asic equipment No available All available All available Third tercile All available First tercile Available training Ethiopia, Fable 5 One 2 Yes

	١
0	

	Awarene	ss of treatr	Awareness of treatment service (N=4934)	4934)	Care-seeking (N=613)	eking (N	(=613)		Pentavalent-3 (N=860)	3 (N=860)		
						Didn"						
Characteristics	Aware	Unaware	Crude OR Unaware (95% CI)	Adjusted OR (95% CI)	Sought care	seek	Sought seek Crude OR care care (95% CI)	Adjusted OR (95% CI)	Not Crude OI Vaccinated vaccinated (95% CI)	Not vaccinated	Crude OR (95% CI)	Adjusted OR (95% CI)
Received training	A A	NA	Ϋ́	NA	170	329	0.9 (0.5 to 1.6) 0.9 (0.5 to 1.7) NA	0.9 (0.5 to 1.7)	NA	A N	NA	NA
Health extension workers participated at Performance Review and Clinical Mentorship meeting	ers participa	ated at Perfc	ormance Review a	and Clinical Ment	orship me	eting						
No	A A	NA	NA AN	NA AN	123	252	1.0	1.0	232	252	1.0	1.0
Yes	A A	NA	NA	NA	87	151	1.2 (0.8 to 1.9) 1.2 (0.7 to 2.0) 191	1.2 (0.7 to 2.0)	191	185	1.2 (0.7 to 1.9) 0.9 (0.5 to 1.5)	0.9 (0.5 to 1.5)
Home vising												
No	934	3445	-	-	175	357	-	-	372	386	1.0	1.0
Yes	244	309	2.9 (2.4 to 3.7)	2.9 (2.4 to 3.7) 2.9 (2.3 to 3.6)	32	46	1.6 (0.9 to 2.6) 1.5 (0.9 to 2.5)		51	38	1.6 (0.9 to 2.7)	1.6 (0.9 to 2.7) 1.6 (0.9 to 2.7)

ICCM, integrated Community Case Management; NA, not available.

countries were found with low readiness to provide quality care to sick children. According to the Ethiopia health system, a health centre is structured to support and strengthen five health posts within their catchment areas, hence insufficient preparedness of the surveyed health posts could be explained by scarcity of supplies at health centres. The weak linkage and inadequate support from the health centres or the health system could further cause scarcity of drugs and supplies and unpreparedness of staff to serve at health posts. The lack of readiness at health posts could also be related to the donor-dependent nature of supplies and the health extension workers lack of accountability and capacity in supply-chain management. At 43 44

Inadequate readiness of health posts in the study setting and other low-income countries indicates a serious challenge to community case management of pneumonia, particularly in the rural or unreached communities, where a majority of preventable deaths occur.<sup>6 28</sup> Most importantly, only a few of the surveyed health posts had all essential medicines and just half had diagnostic equipment, clearly indicating their limitations in providing effective pneumonia or sick child treatment.<sup>5</sup> <sup>6</sup> Scarcity of essential medicines in Ethiopia and other sub-Saharan African countries results in missed pneumonia treatments at facility level. 13 17 29 Unavailability of rapid diagnostic tests impairs community health workers' ability to differentiate suspected pneumonia from malaria in case of symptom overlap, a common clinical problem in African children. 45-47

### Awareness and utilisation of pneumonia-related health services

Our study revealed low healthcare utilisation for pneumonia-specific preventive and curative services. These levels of service utilisation were lower compared with the reported regional pentavalent-3 immunisation coverage (80%) and care-seeking behaviour (85%) for childhood suspected pneumonia and other illnesses in sub-Saharan African Countries. 48 49 Community awareness of illness and sick child care is a prerequisite for timely utilisation of health services.<sup>50</sup> We found that less than a fifth of caregivers were aware of the availability of pneumonia treatment services, and this might partly explain the observed poor utilisation of pneumonia-related health services in the study setting. 51 52 The reported low care utilisation could also be explained by inadequate readiness or service quality of the primary healthcare facilities for pneumonia-related preventive and treatment services. 39 53 The OHEP evaluation studies have revealed a low quality of sick child care services provided at the primary healthcare facilities, and caregivers of children have also mentioned this as a key barrier to seek care at health posts. 54-56 A study in 22 African countries noted a low level of community trust in public health facilities as an important reason to the low coverage of child vaccination.5



#### Association between health post preparedness and utilisation of preventive immunisation and care-seeking behaviour

Earlier studies have shown a positive association between health facility readiness and utilisation of first-level sick child care. 11 21 We did not find any consistent pattern of relationship between facility readiness indices and utilisation of services. There was a positive association between the availability of standard precaution equipment for infection prevention and utilisation of pentavalent-3 immunisation. However, the general health post readiness had no association with awareness and coverage of pentavalent-3 immunisation, but a negative association with care-seeking for childhood suspected pneumonia and other illnesses. Studies in Haiti and Ethiopia have shown absence of association between readiness of primary healthcare facilities for sick child care and caregivers' utilisation and satisfaction to the respective services. 40 58 The lack of consistent positive association may be linked to the dominating low level of health post preparedness. The community's value to quality of healthcare service is a key driver of their decision to seek care, and this may subserve the lack of consistent association between facility readiness and utilisation of pneumonia services. Irrespective of the readiness of health posts, caregivers' preconceived lack of trust to quality of primary child health services could motivate the use of other facilities with perceived higher service quality.<sup>54</sup> Equipping healthcare facilities with relevant equipment is a prerequisite to enhance the quality of iCCM services.<sup>6</sup> Hence, the reported lack of association of health post readiness with awareness and utilisation of pneumonia treatment services suggests that simply equipping facilities with necessary supplies is not a guarantee to reach the intended level of community awareness and utilisation of health services. Health facility strengthening efforts should go along with implementation of awareness creation and demand generation interventions to increase the community awareness, trust and utilisation of pneumonia related and other child health services.<sup>50</sup> Our previous study showed higher parents' care-seeking for childhood suspected pneumonia among those with improved awareness of treatment service.<sup>59</sup> The current study also illustrated that parents' awareness of pneumonia treatment was higher when health extension workers had visited at home. Home visiting by the community health workers is a vital strategy to promote child health and enhance awareness and utilisation of health services. 50 60 A substudy of the same project also showed that awareness creation and delivery of preventive child health interventions (such as immunisations) were the main components of outreach services delivered by the health extension workers.<sup>54</sup>

# Relation of findings with already published OHEP evaluation

This study was part of the end line evaluation of the OHEP intervention. The findings showed sizeable gaps in structural readiness of health posts for sick child care. Results of our published baseline study also illustrated the

scarcity of essential drugs and other supplies at the health posts.<sup>29</sup> Substudies of the same project investigated quality of sick child care, showing low clinical performance of the health extension workers to identify and treat childhood suspected pneumonia and other illnesses. 55 56 A qualitative study noted lack of caregivers' trust in the health extension workers' clinical competency to manage sick children and a low availability of essential drugs, diagnostics and other supplies at health posts. The low quality of sick child care at health posts is a barrier to use these services.54

#### CONCLUSIONS

This study has shown a low health post readiness for services, and low household awareness and utilisation of pneumonia-relevant preventive and curative services. Parents' awareness and utilisation of pneumonia-specific preventive and curative services were not consistently associated with the health post readiness. The results underline the critical importance of intensifying the health extension workers' awareness creation and demand generation efforts in each kebele (the lowest administrative unit in Ethiopia). Enhancing the coverage of home visiting and other awareness creation activities are crucial to boost community awareness and utilisation of pneumonia and other sick child care services. Our findings also underline the pivotal role of improving the availability and quality of pneumonia and other sick child care services to ensure optimal uptake of the services. It is imperative that the district health offices strengthen the linkages within the primary healthcare units to increase the availability of essential medicines and readiness of the health posts for sick child care. The office should also optimise the availability of essential medicines and supplies at health centres that are the suppliers to the satellite health posts. Improving the coverage of regular supportive supervision, performance reviews and clinical mentorship could also help to timely identify and solve gaps in the availability of drug and other supplies at health posts. Community awareness creation and demand generation efforts should simultaneously be accompanied with health facility strengthening strategies.

#### **Author affiliations**

<sup>1</sup>Department of Human Nutrition, Institute of Public Health, College of Medicine and Health Sciences, University of Gondar, Gondar, Amhara Region, Ethiopia <sup>2</sup>Department of Epidemiology and Biostatistics and Department of Reproductive

Health and Population, Addis Continental Institute of Public Health, Addis Ababa,

<sup>3</sup>School of Public Health, Addis Ababa University, Addis Ababa, Ethiopia <sup>4</sup>Department of Health System and Policy, Institute of Public Health, College of Medicine and Health Sciences, University of Gondar, Gondar, Ethiopia

<sup>5</sup>London School of Hygiene and Tropical Medicine, London, UK

<sup>6</sup>Ethiopian Public Health Institute, Addis Ababa, Ethiopia

Acknowledgements We would like to forward our deepest gratitude to the study participants. Our special thanks to field assistants involved in the data collection

Contributors AT, LP, YB, YBO, AW and GAB contributed to the conceptualisation of the study. AT analysed and interpreted the data and drafted the manuscript. LP, YB,



YBO, AW and GAB contributed to analysis and writing of the paper. All authors have read and approved the final manuscript. YBO is the guarantor of the work.

**Funding** The study was funded by a grant from the Bill & Melinda Gates Foundation (grant INV-009691) to the London School of Hygiene & Tropical Medicine

**Disclaimer** The funder had no role in data collection, analysis or interpretation of results

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval The original study was approved by the Ethical Review Boards of the Ethiopian Public Health Institute (protocol number SERO-012-8-2016), the London School of Hygiene & Tropical Medicine (protocol number 11235), and the University of Gondar (V/P/RCS/05/559/2019). A written informed consent was obtained from each household respondent, caregiver of the index child and the health workers.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available on reasonable request. The data for this manuscript were primarily collected by the Ethiopian Public Health Institute and London School of Hygiene & Tropical Medicine. Interested researchers may contact the focal person, YBO through email: Yemisrach.Okwaraji@lshtm.ac.uk. All requests will be reviewed by this committee and if granted, data will be shared without any identifiers.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution 4.0 Unported (CC BY 4.0) license, which permits others to copy, redistribute, remix, transform and build upon this work for any purpose, provided the original work is properly cited, a link to the licence is given, and indication of whether changes were made. See: https://creativecommons.org/licenses/by/4.0/.

#### **ORCID** iDs

Amare Tariku http://orcid.org/0000-0002-4939-3701 Lars Åke Persson http://orcid.org/0000-0003-0710-7954

#### **REFERENCES**

- 1 Liu L, Johnson HL, Cousens S, et al. Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000. Lancet 2012;379:2151–61.
- 2 United Nations Inter-agency Group for Child Mortality Estimation (UN IGME). 'Levels & Trends in Child Mortality: Report 2020, Estimates developed by the United Nations Inter-agency Group for Child Mortality Estimation'. New York: United Nations Children's Fund, 2020
- 3 McAllister DA, Liu L, Shi T, et al. Global, regional, and national estimates of pneumonia morbidity and mortality in children younger than 5 years between 2000 and 2015: a systematic analysis. Lancet Glob Health 2019;7:e47–57.
- 4 Bhutta ZA, Das JK, Walker N, et al. Interventions to address deaths from childhood pneumonia and diarrhoea equitably: what works and at what cost? *Lancet* 2013;381:1417–29.
- 5 World Health Organization. Management of pneumonia in community settings: World Health Organization, Department of Child and Adolescent Health and ... 2004.
- 6 World Health Organization. WHO/UNICEF joint statement integrated community case management (iCCM): an equity-focused strategy to improve access to essential treatment services for children. Geneva and New York. 2012.
- 7 Geldsetzer P, Williams TC, Kirolos A, et al. The recognition of and care seeking behaviour for childhood illness in developing countries: a systematic review. PLoS One 2014;9:e93427.

- 8 Adedokun ST, Yaya S. Factors influencing mothers' health care seeking behaviour for their children: evidence from 31 countries in sub-Saharan Africa. BMC Health Serv Res 2020;20:842.
- 9 Macarayan EK, Gage AD, Doubova SV, et al. Assessment of quality of primary care with facility surveys: a descriptive analysis in ten low-income and middle-income countries. Lancet Glob Health 2018;6:e1176–85.
- 10 Acharya K B J, Tuladhar S. Client satisfaction and quality of curative services for sick children in Nepal. DHS further analysis reports No. 114. Rockville, Maryland, USA: ICF, 2018.
- 11 Liu L, Leslie HH, Joshua M, et al. Exploring the association between sick child healthcare utilisation and health facility quality in Malawi: a cross-sectional study. BMJ Open 2019;9:e029631.
- 12 Shawon MSR, Adhikary G, Ali MW, et al. General service and child immunization-specific readiness assessment of healthcare facilities in two selected divisions in Bangladesh. BMC Health Serv Res 2018:18:39.
- 13 Taylor C, Linn A, Wang W, et al. Examination of malaria service utilization and service provision: an analysis of DHS and spa data from Malawi, Senegal, and Tanzania. Malar J 2019;18:258.
- 14 Blanas DA, Ndiaye Y, Nichols K, et al. Barriers to community case management of malaria in Saraya, Senegal: training, and supplychains. Malar J 2013;12:95.
- 15 Masters SH, Burstein R, DeCenso B, et al. Pharmaceutical availability across levels of care: evidence from facility surveys in Ghana, Kenya, and Uganda. PLoS One 2014;9:e114762.
- 16 Ssempiira J, Kasirye I, Kissa J, et al. Measuring health facility readiness and its effects on severe malaria outcomes in Uganda. Sci Rep 2018;8:17928.
- 17 Bagonza J, Rutebemberwa E, Eckmanns T. What influences availability of medicines for the community management of childhood illnesses in central Uganda? implications for scaling up the integrated community case management programme. *BMC Public Health* 2015;15:1–8.
- 18 International EPHIEFMoHI. Ethiopia service provision assessment plus survey, 2014.
- 19 Shaw B, Amouzou A, Miller NP, et al. Determinants of utilization of health extension workers in the context of scale-up of integrated community case management of childhood illnesses in Ethiopia. Am J Trop Med Hyg 2015;93:636–47.
- 20 Anselmi L, Lagarde M, Hanson K. Health service availability and health seeking behaviour in resource poor settings: evidence from Mozambique. *Health Econ Rev* 2015;5:26.
- 21 Kuwawenaruwa A, Wyss K, Wiedenmayer K, et al. The effects of medicines availability and stock-outs on household's utilization of healthcare services in Dodoma region, Tanzania. Health Policy Plan 2020;35:323–33.
- 22 Kok MC, Kea AZ, Datiko DG, et al. A qualitative assessment of health extension workers' relationships with the community and health sector in Ethiopia: opportunities for enhancing maternal health performance. Hum Resour Health 2015;13:80.
- 23 Befekadu A, Yitayal M. Knowledge and practice of health extension workers on drug provision for childhood illness in West Gojjam, Amhara, Northwest Ethiopia. BMC Public Health 2020;20:1–10.
- 24 Miller NP, Amouzou A, Tafesse M, et al. Integrated community case management of childhood illness in Ethiopia: implementation strength and quality of care. Am J Trop Med Hyg 2014;91:424–34.
- 25 Tilahun H, Fekadu B, Abdisa H, et al. Ethiopia's health extension workers use of work time on duty: time and motion study. Health Policy Plan 2017;32:320–8.
- 26 Datiko DG, Bunte EM, Birrie GB. Community participation and maternal health service utilization: lessons from the health extension programme in rural southern Ethiopia. *Journal of Global Health Reports* 2019;3.
- 27 Mangham-Jefferies L, Mathewos B, Russell J, et al. How do health extension workers in Ethiopia allocate their time? Hum Resour Health 2014;12:61
- 28 Central Statistical Agency [Ethiopia] and ICF International. Ethiopia demographic and health survey 2016. Addis Ababa, Ethiopia and Calverton, Maryland, USA: Central Statistical Agency and ICF International, 2017.
- 29 Tariku A, Okwaraji YB, Worku A. Prevention and treatment of suspected pneumonia in Ethiopian under-five children from household to primary care. Acta Paediatrica 2020.
- 30 Berhanu A, Alemayehu M, Daka K, Kassa Daka WB, et al. Utilization of integrated community case management of childhood illnesses at health posts in southern Ethiopia. Pediatric Health Med Ther 2020:11:459.
- 31 Ethiopian Public Health Institute. World Health organization. Ethiopia service availability and readiness assessment 2016 summary report, 2016.



- 32 Deribew A, Tessema GA, Deribe K, et al. Trends, causes, and risk factors of mortality among children under 5 in Ethiopia, 1990-2013: findings from the global burden of disease study 2013. Popul Health Metr 2016;14:42.
- 33 Berhanu D, Okwaraji YB, Belayneh AB, et al. Protocol for the evaluation of a complex intervention aiming at increased utilisation of primary child health services in Ethiopia: a before and after study in intervention and comparison areas. BMC Health Serv Res 2020;20:1–12.
- 34 Ministry of Health. Realizing universal health coverage through primary health care: a roadmap for optimizing the Ethiopian health extension program 2020 – 2035. Addis Ababa, Ethiopia: Ministry of Health. 2020.
- 35 Wang, Huihui, Roman Tesfaye, Gandham N. V. Ramana, Chala Tesfaye Chekagn. 2016. Ethiopia health Externsion program: an institutionalized community approach for universal health coverage. world bank studies. Washington, DC: world bank. 10.1596/978-1-4648-0815-9. license: creative commons attribution CC BY3.0 IGO.
- 36 Berhanu D, Okwaraji YB, Defar A, et al. Does a complex intervention targeting communities, health facilities and district health managers increase the utilisation of community-based child health services? A before and after study in intervention and comparison areas of Ethiopia. BMJ Open 2020;10:e040868.
- 37 Schellenberg J, LÅ P, Defar A. Endline evaluation of improved integrated community case management and community-based newborn care in Ethiopia: Ethiopian Public Health Institute & London School of Hygien and Tropical Medicine 2018.
- 38 Organization WH. Service availability and readiness assessment (SARA): an annual monitoring system for service delivery: reference manual. World Health Organization, 2013.
- 39 Hailemariam S, Gebeyehu Y, Loha E, et al. Inadequate management of pneumonia among children in South Ethiopia: findings from descriptive study. BMC Health Serv Res 2019;19:426.
- 40 Gage AD, Leslie HH, Bitton A. Does quality influence utilization of primary health care? Evidence from Haiti. *Global Health* 2018;14:1–9.
- 41 de Sousa A, Tiedje KE, Recht J, et al. Community case management of childhood illnesses: policy and implementation in countdown to 2015 countries. Bull World Health Organ 2012;90:183–90.
- 42 Assefa Y, Gelaw YA, Hill PS. Community health extension program of Ethiopia, 2003–2018: successes and challenges toward universal coverage for primary healthcare services. *Global Health* 2019:15:1–11.
- 43 Chandani Y, Noel M, Pomeroy A, et al. Factors affecting availability of essential medicines among community health workers in Ethiopia, Malawi, and Rwanda: solving the last mile puzzle. Am J Trop Med Hyg 2012;87:120.
- 44 Ademe BW, Tebeje B, Molla A. Availability and utilization of medical devices in Jimma zone hospitals, Southwest Ethiopia: a case study. BMC Health Serv Res 2016;16:1–10.
- 45 Ukwaja KN, Aina OB, Talabi AA. Clinical overlap between malaria and pneumonia: can malaria rapid diagnostic test play a role? J Infect Dev Ctries 2011;5:199–203.

- 46 Kyabayinze DJ, Asiimwe C, Nakanjako D. Use of RDTs to improve malaria diagnosis and fever case management at primary health care facilities in Uganda. *Malar J* 2010;9:1–10.
- 47 Yeboah-Antwi K, Pilingana P, Macleod WB, et al. Community case management of fever due to malaria and pneumonia in children under five in Zambia: a cluster randomized controlled trial. PLoS Med 2010;7:e1000340.
- 48 Ahinkorah BO, Budu E, Seidu A-A, et al. Barriers to healthcare access and healthcare seeking for childhood illnesses among childbearing women in sub-Saharan Africa: a multilevel modelling of demographic and health surveys. PLoS One 2021;16:e0244395.
- 49 Fenta SM, Biresaw HB, Fentaw KD, et al. Determinants of full childhood immunization among children aged 12-23 months in sub-Saharan Africa: a multilevel analysis using demographic and health survey data. Trop Med Health 2021;49:29.
- 50 Miller NP, Bagheri Ardestani F, Wong H, et al. Barriers to the utilization of community-based child and newborn health services in Ethiopia: a scoping review. Health Policy Plan 2021;36:1187-1196.
- 51 Sadruddin S, Khan IUH, Bari A, *et al*. Effect of community mobilization on appropriate care seeking for pneumonia in Haripur, Pakistan. *J Glob Health* 2015;5:010405.
- 52 Noordam AC, Sharkey AB, Hinssen P, et al. Association between caregivers' knowledge and care seeking behaviour for children with symptoms of pneumonia in six sub-Saharan African countries. BMC Health Serv Res 2017;17:107.
- 53 Tadesse T, Gelaw B, Haile Y. Immunization service availability and readiness in primary health care in pastoral and semi-pastoral CGPP Ethiopia implementation districts. *Ethiopian Journal of Health Development* 2019;33.
- 54 Defar A, Alemu K, Tigabu Z, et al. Caregivers' and health extension workers' perceptions and experiences of outreach management of childhood illnesses in Ethiopia: a qualitative study. Int J Environ Res Public Health 2021;18:3816.
- 55 Daka DW, Wordofa MA, Woldie M, et al. Quality of clinical assessment and management of sick children by health extension workers in four regions of Ethiopia: a cross-sectional survey. PLoS One 2020;15:e0239361.
- 56 Getachew T, Mekonnen S, Yitayal M. Health Extension Workers' diagnostic accurac y for common childhood illnesses in four regions of Ethiopia: a cross-sectional study. Acta Pædiatrica 2019.
- 57 Stoop N, Hirvonen K, Maystadt J-F. Institutional mistrust and child vaccination coverage in Africa. *BMJ Glob Health* 2021;6:e004595.
- 58 Getachew T, Abebe SM, Yitayal M, et al. Assessing the quality of care in sick child services at health facilities in Ethiopia. BMC Health Serv Res 2020;20:1–12.
- 59 Tariku A, Berhane Y, Worku A. Household wealth and utilization of preventive and treatment services for suspected childhood pneumonia in Ethiopia. Submitted for publication at PLOS ONE 2021.
- 60 Tripathi A, Kabra SK, Sachdev HPS, et al. Home visits by community health workers to improve identification of serious illness and care seeking in newborns and young infants from low- and middle-income countries. J Perinatol 2016;36 Suppl 1:S74–82.

# Dagu End line Household Survey 2018

### Module 1 - Household

Secti	on 1.1: Household identifiers		
100h	Date (dd/mm/yyyy)	//	
101h	Region		
102h	Zone		
103h	Woreda		
105h	Kebele		
106h	Gote		
107h	Cluster Code		
108h	Household Code		
109h	Unique household ID (cluster / household code)	/	
110h	GPS Latitude	DEG MIN SEC	
111h	GPS Longitude	DEG MIN SEC	
113h	Elevation		
114h	Interviewer initials		
115h	Interviewer: Have you read him/her the consent form?	1=Yes 2=No-one is available	If the answer is No, fill the revisit form
116h	Interviewer: Does the respondent agree?	1=Yes 2=No. END INTERVIEW	If No Why? State the reason.
112h	Name of household head		1
117h	What is the ethnic group of the household head?	01=Agew       11=Konta         02=Amhara       12=Ale         03=Konso       13=Oromo         04=Burji       15=Tigray         05=Kore       17=Other, Specify         06=Gedeo       08=Derashe	

Household Listing with Household Head: Now I would like to ask you about people who are residents of this house. By resident, I mean everyone who has been present for the last 3 months and who normally eat together. Start with head of the household and older people, then children from oldest to youngest.

No. of Family members: Including yourself how many family members do you have?

118h_1	118h_2	118h_3	118h_4	118h_5	118h_E	118h_6	118h_7	118h_8	118h_9	118h_10-1	18h_15	
Unique ID	NAME	RELATIONSHIP	SEX	AGE	Eligible	DATE OF	MARITAL	RELIGION	EDUCATION	ELIGIBILITY	,	
						BIRTH	STATUS					
		What is the relationship	Is [Name]	How old		What is	For all born	For all:	How many	CHECK:	CHECK:	CHECK:
		of [Name] to the	male or	is		[Name]	after 1966:	What religion	years of formal	Is the	Is the	If the household
		household head?	female?	[Name]?		date of	Is [name]	is [name]?	education have	person a	person a	has a child
						birth?	married?		they	woman	child	under 5 years, is
		01=Head	1=Male	If less				1=Orthodox	completed?	13-49	under 5	this person the
		02=Wife or husband	2=Female	than 1		dd/mm/yyyy	1=Currently	3=Protestant		years?	years?	primary
		03=Son or daughter		year write			married	4=Muslim	Enter number of	From 1969		caregiver?
		04=In-law		in 0			2= In a union	8=Other	formal years of	to 2005	1=Yes	
		05=Grandchild					3=Not married		education	(Eth: 1961- 1997)	2=No	1=Yes
		06=Parent					or in a union		completed	1997) 1=Yes		2=No
		08=Brother or sister					4=Divorced			2=No		
		09=Niece or nephew					5=Widowed			Z-INO		
		10=Adopted/stepchild					6=N/A					
		11=Other relative										
		12=Not related										
		99=Don't know										
01						//	_	_		_	_	
02						//	_	_		_	_	_
03						//	_	_		_	_	_
04			_				_	_		_	_	_
05		_					_	_			_	_
06		_	_				_	_			_	_
07			_				_	_			_	_
08								_			_	_
09							_	_			_	_

Section	Section 1.2: Characteristics of house and assets					
119h	What is the main material of the roof? Select one	1 = Thatch/grass or leaves 2 = Iron sheets 8 = Otherspecify	_			
120h	What is the main material of the walls? Select one	2 = Natural materials cane, wood, mud 4 = Stone with mud 5 = Stone with cement/bricks 8 = Other	_			
121h	What is the main floor material? Select one	1 = Natural floor (earth/sand/dung) 2 = Rudimentary floor (wood/palm/bamboo) 3 = Finished floor (polished wood, cement, carpet) 8 = Other	_			
122h	What kind of toilet facilities does your household have?	1= No facility/bush/field 2= Pit toilet/latrine 3= Ventilated improved pit latrine 8=Other	_			
123h	What is the main source of drinking water for members of your household?  Do Not read list	1=Piped water into dwelling 2=Piped water into compound 3=Public tap 4=Borehole in compound 6=Water from protected spring 8=Surface water (river/dam/lake etc) 9=Hand pump 10=Unprotected spring 88=Other	_			
124h	Do you do anything to the water to make it safer to drink?	1 = Yes 2 = No (SKIP TO 126) 3 = Don't know (SKIP TO 126)	_			
125h	If Yes, what is the main thing you do?  Do Not read list	1 = Let it stand and settle 2 = Strain through a cloth 3 = Use water filter (ceramic/sand/composite/etc) 4 = Boil 5 = Solar disinfection 6 = Add bleach/chlorine 8 = Other				
126h	What type of fuel does your household mainly use for cooking? Select one	1=Electricity 4=Charcoal 5=Firewood/straw 6=Dung 8=Other	_			
127h	Is the house connected to electricity?	1=Yes 2=No	_			
In total, h	ow many the following ite	ems owned by residents of this household? Enter number of items	(zero if None)			
128h	How many Wrist watc	h?				
129h	How many <b>Gold (in gr</b> a	ams)?				
130h	How many <b>kerosene l</b> a	amp/pressure lamps?				

131h	How many Solar lamp?						
132h	How many beds?						
134h	How many Mobile phone?						
137h	How many Radio?						
138h	How many TV?						
142h	Do you own this house?	1 = Yes 2 = No					
143h	Does any member of the household own any agricultural land?	1 = Yes 2 = No	SKIP TO 145	_			
144h	How many hectares of agricultural land do members of this household own?	Il land do members (If less than 1, Enter in decimals (example 0.5)					
145h	Does this household own any livestock, herds, other farm animals, or poultry?	_					
	For each: Enter number. If None						
1.4Ch	How many of the following animals does this household own?						
146h	How many chickens?						
147h	How many goats?						
148h	How many sheep?						
149h	How many donkeys?						
150h	How many horses?						
153h	How many milk cows?						
154h	How many ox (bulls)?						
155h	At any time in the past 12 months, has anyone come into your house to spray the interior walls of your dwelling against mosquitoes?		1=Yes 2=No <b>SKIP TO 158</b> 9=Don't know <b>SKIP TO 158</b>	_			
156h	indoor residual spraying (IRS) 8=6		1=IRS 8=Other 9=Don't know	_			
157h	How many months ago was the sprayed?		If less than one month write 00. If don't know write 99	_			
158h	How many mosquito nets does have?	your household	Write total number Count those in use plus those Not in use. If don't know write 9 If "0" SKIP TO MODULE 2	_			

		protection from malaria			
Write toto	al number of count those in	n use plus those Not in use (If don't know wr	Net #1	Net #2	Net #3
159h	Interviewer: Is the Net 1 observed?	1=Yes 2=No	_	_	_
160h	How many months ago did your household obtain the mosquito Net1?	Estimate the number of months ago each net was obtained. If don't know 99	_	_	_
161h	Where did your household get the mosquito Net1 from?	1=Gov. hospital or health centre 2=Private hospital or health centre 3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know	_	_	_
162h	What kind of Net 1 is it?	1= Long-lasting net SKIP TO 166 2=Factory net 8=Other 9=Don't know	_	_	_
163h	When you got Net 1 was it already treated with an insecticide to kill or repel mosquitos?	1=Yes 2=No 9=Don't know	_	_	_
164h	Did anyone sleep under the mosquito Net 1 last night?	1=Yes 2=No If 2 or 9 then, SKIP TO 166 9=Don't know	_	_	_
165h	Who slept under	(record the Person ID from household	Enter Pe	rson ID	
	any of the nets last night?	listing)			
159h 2	Interviewer: Is the Net 2observed?	1=Yes 2=No			
160h 2	How many months ago did your household obtain the mosquito Net2	Estimate the number of months ago each net was obtained. If don't know 99			
161h 2	Where did your household get the mosquito Net2 from?	1=Gov. hospital or health centre 2=Private hospital or health centre 3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know	_	_	_
162 h2	What kind of Net 2 is it?	1= Long-lasting net SKIP TO 166 2=Factory net 8=Other 9=Don't know		_	_
163h 2	When you got Net 2 was it already treated with an insecticide to kill or repel mosquitos?	1=Yes 2=No 9=Don't know	_	_	_
164h 2	Did anyone sleep	1=Yes			

Net 2 last night?  9-Don't know  (Record the Person ID from household listing)  Interviewer: Is the Net 3 observed  159h 3 Net 3 observed  160h 3 How many months ago did your household obtain the mosquito Net3?  161h 3 Where did your household get the mosquito Net3 from?  162h 3 What kind of Net 3 is it?  162h 3 What kind of Net 3 last night?  163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night  165h 3 Who slept under this mosquito Net 3 last night		under the mosquito	2=No If 2 or 9 then, SKIP TO 166			
Interviewer: Is the Net 3 observed  159h 3 Interviewer: Is the Net 3 observed  160h 3 How many months ago did your household obtain the mosquito Net3?  161h 3 Where did your household get the mosquito Net3 from?  162h 3 What kind of Net 3 is it?  162h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 Who slept under the mosquito Net 3 popon't know  165h 3 Who slept under this mosquito Net 3 Who slept under the mosquito Net 3 Sepon't know  165h 3 Who slept under this mosquito Net 3 Who slept under the mosquito Net 3 Who slept under this mosquito Net 3 Who slept under this mosquito Net 3 Who slept under the mosquito Net 3 Who slept under this mosquito Net 3 Who slept under the mosquito Net 3 Who slept under the mosquito Net 3 Who slept under the mosquito Net 3 Who slept under this mosquito Net 3 Who slept under the mosquito Net 3 Who slept under this mosquito Net 3 Meritane Setticate of the slept under the mosquito Net 3 Who slept under the mosquito Net 3 Who slept under this mosquito Net 3 Meritane Setticate of mos		Net 2 last night?	9=Don't know			
Interviewer: Is the Net 3 observed 2=No	165h 2	Who slept under	l '	Enter Per	son ID	
159h 3 Net 3 observed 2=No		any of nets	listing)			
159h 3 Net 3 observed 2=No						
159h 3 Net 3 observed 2=No						
160h 3 How many months ago did your household obtain the mosquito Net3?  161h 3 Where did your household get the mosquito Net3 from?  162h 3 What kind of Net 3 is it?  162h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  163h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 Who slept under the mosquito Net 3 listing)  165h 3 Who slept under this mosquito Net 3 listing)  Estimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained. If don't know 99  Lestimate the number of months ago each net was obtained.		Interviewer: Is the				
ago did your household obtain the mosquito Net3?  161h 3 Where did your household get the mosquito Net3 from?  1=Gov. hospital or health centre 2=Private hospital or health centre 3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know  162h 3 What kind of Net 3 is it?  1=Gov. hospital or health centre 2=Private hospital or health centre 3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1=Yes 2=No 9=Don't know  1=Yes 2=No 1=Yes 1=Yes 2=No 1=Yes 1	159h 3	Net 3 observed	2=No	_	_	
ago did your household obtain the mosquito Net3?  161h 3 Where did your household get the mosquito Net3 from?  1=Gov. hospital or health centre 2=Private hospital or health centre 3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know  162h 3 What kind of Net 3 is it?  1=Gov. hospital or health centre 2=Private hospital or health centre 3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1=Yes 2=No 9=Don't know  1=Yes 2=No 1=Yes 1=Yes 2=No 1=Yes 1						
household obtain the mosquito Net3?  161h 3 Where did your household get the mosquito Net3 from?  162h 3 What kind of Net 3 is it?  162h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under this mosquito Net 3 Who slept under this mosquito Net 3 listing)  165h 3 Who slept under this mosquito Net 3 listing)  165h 3 Who slept under this mosquito Net 3 listing)  165h 3 Where did your algov. hospital or health centre algebra and the subtraction in the mosquito and the mosquito algov. hospital or health centre algebra a	160h 3	,		_	_	
the mosquito Net3?  161h 3 Where did your household get the mosquito Net3 from?  162h 3 What kind of Net 3 is it?  162h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under this mosquito Net 3 Who slept under this mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 last night?  165h 3 Where did your health centre		· ·	each net was obtained. If don't know 99			
161h 3 Where did your household get the mosquito Net3 from?  1=Gov. hospital or health centre 2=Private hospital or health centre 3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know  162h 3 What kind of Net 3 is it?  162h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 listing)  1=Gov. hospital or health centre 2=Private hospital or health centre 3=Private hospital or health centre 3=Private hospital or health centre 3=Private hospital or health centre 3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know						
household get the mosquito Net3 from?  2=Private hospital or health centre 3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 Who slept under this mosquito Net 3 I=Yes are in the centre and insertion in the centre and in the centre and insertion in the centre and insertion in the centre and insertion in the centre and in the centre and in the						
mosquito Net3 from?  3=HEW/HDA 5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know  162h 3 What kind of Net 3 is it?  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3    3=HEW/HDA   5=Bought from shop/open market   7=Mass campaign   8=Other   9=Don't know	161h 3		I	_	_	
from?  5=Bought from shop/open market 7=Mass campaign 8=Other 9=Don't know  162h 3 What kind of Net 3 is it?  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 Who slept under this mosquito Net 3    S=Bought from shop/open market   7=Mass campaign   S=Other   S=Don't know		mosquito Net3				
7=Mass campaign 8=Other 9=Don't know  162h 3 What kind of Net 3 is it?  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 listing)  7=Mass campaign 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Yes 2=No 9=Don't know  1= Yes 2=No 1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=No 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=No 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=No 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=No 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=No 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=No 1= Long-lasting net (SKIP TO 166) 2=Long-lasting net (						
8=Other 9=Don't know  162h 3 What kind of Net 3 is it?  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 listing)  8=Other 9=Don't know  1= Long-lasting net (SKIP TO 166) 2=Factory net 8=Other 9=Don't know  1= Yes 2=No 9=Don't know  1= Yes 2=No 1= Ye						
162h 3 What kind of Net 3 is it?  1 = Long-lasting net (SKIP TO 166) 2 = Factory net 8 = Other 9 = Don't know  163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 listing)  1 = Long-lasting net (SKIP TO 166) 2 = Factory net 8 = Other 9 = Don't know  1 = Yes 2 = No 9 = Don't know  1 = Yes 2 = No 2 = Yes 2 = No 3 = Yes 2 = Yes 2 = Yes 3 = Yes 2 = Yes 3 = Yes 4 = Yes 2 = Yes 2 = Yes 3 = Yes 4						
is it?  2=Factory net 8=Other 9=Don't know  163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3  2=Factory net 8=Other 9=Don't know  1=Yes 2=No 9=Don't know  1=Yes 2=No If 2 or 9 then, SKIP TO 166 9=Don't know  Enter Person ID  Isting)			9=Don't know			
8=Other 9=Don't know  163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3  1 = Yes 2 = No 9 = Don't know  1 = Yes 2 = No 1 =	162h 3	What kind of Net 3				
9=Don't know  163h 3 When you got Net 3		is it?				
163h 3 When you got Net 3 was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 listing)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
was it already treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 listing)  2=No 9=Don't know  1=Yes 2=No If 2 or 9 then, SKIP TO 166 9=Don't know  [Fitter Person ID]  [Isting]  [Enter Person ID]	163h 3	When you got Net 3				
treated with an insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 listing)  9=Don't know  1=Yes 2=No If 2 or 9 then, SKIP TO 166 9=Don't know  [record the Person ID from household listing]  Enter Person ID  [Isting]	103113			_		_
insecticide to kill or repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 Did anyone sleep under the mosquito Net 3 Did anyone sleep and the mosquito Selection of the Person ID from household should be supported by the person ID from household should be supp		,	9=Don't know			
repel mosquitos?  164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 last nosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 last night?						
164h 3 Did anyone sleep under the mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 last night?  165h 3 Who slept under this mosquito Net 3 listing)  165h 3 Enter Person ID						
under the mosquito Net 3 last night?  2=No If 2 or 9 then, SKIP TO 166 9=Don't know  165h 3 Who slept under this mosquito Net 3    Isting   Isting	164h 3	<u> </u>	1=Yes			
Net 3 last night?  9=Don't know  165h 3 Who slept under this mosquito Net 3 Vertical listing)  9=Don't know  (record the Person ID from household listing)  Enter Person ID	20 0		2=No If 2 or 9 then, SKIP TO 166			
165h 3 Who slept under this mosquito Net 3 (record the Person ID from household listing)  Enter Person ID  Listing			9=Don't know			
this mosquito Net 3   listing)	165h 3		(record the Person ID from household	Enter Per	son ID	1
·						
		·				

### Module 2 – Woman aged 13-49 years

Secti	on 2.1: Identification and conse	nt of e	eligible women	
166h	Name of women			
167h	Woman ID			
168h	Is it possible to interview the woman?	1=Yes 2=No	SKIP TO 170	_
169h	If No, why Not possible to interview the woman?	2=Sick 3=Othe	elled away er ently Not present	_
170h	Interviewer: Have you read her the consent form?	1=Yes 2= No		_
171h	Does she give her consent to be interviewed?	1=Yes 2=No	SKIP TO 179	_
Thank y army (V	ou for agreeing to participate in this interview. I VDA)	would lik	e to first ask you about your involven	nent in the women development
172h	Do you participate in WDA?	1=Yes 2=No	SKIP TO 175	_
173h	Are you a 1 to 5 WDA leader?	1=Yes 2=No		_
174h	Are you a 1 to 30 WDA team leader?	1=Yes 2=No		_

Secti	Section 2.2: Pregnancy history					
175h	Are you pregnant Now?	1=Yes				
		2=No		_		
		8=Unsure				
176h	Have you ever been pregnant before?	1 = Yes				
	riave you ever been pregnant before:	2 = No	(End Interview)	_		
177h	Have you ever given birth to a child?	1 = Yes				
	Thate you ever given birth to a child.	2 = No		_		
178h	How many children have you given birth	Enter number				
	to in total?	Litter namber		-		
I under	stand that it is not easy to talk about children	who have died,	or pregnancies that did not e	nd up not in live birth, but		
it is imp	portant that you tell us about all of them, so th	at the governm	nent can develop programs to	improve children's health.		
179h	Have you ever had a pregnancy that's lost	1=Yes				
	before full term?	2=No	SKIP TO 181	_		
180h	How many pregnancies have you had that	Enter number				
	did Not end in a live birth?	Enter number		_		
Now wo	ould like to ask about the information regarding pre	gnancies beginn	ing of 2009 (Ethiopian calendar).			
181h	Were you pregnant at the time of 2009 or	1 = Yes				
	any time afterwards?	2 = No	(End interview)	_		

Now I would like to record your births since 2009 (Ethiopian Calendar), whether still alive or not, starting with THE MOST RECENT ONE. Record twins and triplets on separate lines.

No\_of\_Preg. How many times were you pregnant at the time of 2009 or any time afterwards?

Is your younger child 2 or under2 years of age?

167h	181h_a	181h_b	181h_c	181h_d	181h_e	181h_f	181h_g	181h_h	181h_i
Woman	Pregnancy	Outcome of	Baby's name	Date of birth/	Born as a	Sex	Still alive?	If still alive, how old	If the child died, when
ID	ID	pregnancy		Pregnancy ended	twin?			in months?	did s/he die?
		1=Live birth	Enter "Not	Enter 01 for day if	1 = Yes	1=Male	1=Yes	If less than 28 days	Enter 01 for day if Not
		2=Baby born dead,	given" if Not	Not known.	2 = No	2=Female	2=No	enter number of days	known.
		Skip to 181	given a name	Probe for months/	3=Don't know	3=Don't know			Probe for months/years if
		3=Lost before full-		years if Not known					Not known
		term <b>Skip to 181</b>							
	1	_	_	DD/MM/ YYYY	_	_		DD/MM	DD/MM/ YYYY
	2	_	_	DD/MM/ YYYY	_	_	_	DD/MM	DD/MM/ YYYY
	3	_	_	DD/MM/ YYYY	_	_		DD/MM	DD/MM/ YYYY
	4	_	_	DD/MM/ YYYY	_		_	DD/MM	DD/MM/ YYYY
	5	_	_	DD/MM/ YYYY	_	_	_	DD/MM	DD/MM/ YYYY
	6	_	_	DD/MM/ YYYY	_	_	_	DD/MM	DD/MM/ YYYY

vow i wai	nt to talk to you about the last birth you had that ended in [DATE], with t	the birth of INAME}	
182h	Do you have a family health card with information about that	1=Yes	
10211	pregnancy and birth?	2=No SKIP TO 184	
183h	May I see your family health card?	1=Yes	_
		2=No because it isn't at home	
184h	M/hon prognant with [NIANAE] did you receive any core during	3=No, refused permission 1=Yes	
18411	When pregnant with [NAME], did you receive any care during pregnancy? (Probe: by care I mean any care from HEW, HW,	2=No SKIP TO 236	
	nurses, midwives or doctors, clinics)	2	
185h_a	Where did you go for pregnancy care?	1=Yes	
10511_0	At home	2=No	
185h_b	Where did you go for pregnancy care?	1=Yes	
10311_0	At Health Post	2=No	_
185h_c	Where did you go for pregnancy care?	1=Yes	
	At Health Centre	2=No	
185h_d	Where did you go for pregnancy care?	1=Yes	
_	At Hospital	2=No	
185h_e	Where did you go for pregnancy care?	1=Yes	
-	Other	2=No	_
	For women who received pregnancy care at a hospital, h	ealth center or health post	
186h	How many times did you attend the hospital for pregnancy	Enter the number of times	
	(antenatal) care for that pregnancy?	If the answer is "0" Skip to 190	
188h	How old was your pregnancy at the first visit?	Record No. of weeks. If don't know 99. Record	
		from FHC/ANC appointment card if available	
190h	How many times did you attend the health center for	Enter the number of times If the answer is "0" Skip to 194	_
4021-	pregnancy (antenatal) care for that pregnancy?		
192h	How old was your pregnancy at the first visit?	Record No. of weeks. If don't know 99. Record from FHC/ANC appointment card if available	_
194h	How many times did you attend the health post for	Enter the number of times	
13	pregnancy (antenatal) care for that pregnancy?	If the answer is "0" Skip to 199	_
196h	How old was your pregnancy at the first visit?	Record No. of weeks. If don't know 99. Record	
		from FHC/ANC appointment card if available	
	For women who receive pregnancy care at home		
199h	How many times <u>did the HEW visit you</u> at home for	Enter number of times	
	pregnancy care that pregnancy?	If answer is "0" Skip to 201	
200h	How old was your pregnancy at the first HEW visit?	Record No. of weeks. If don't know 99. Record	_
	Now I want to ask you about the pregnancy care you rec	from FHC/ANC appointment card if available	h(a)
2011		1=Yes	DIE)
201h	Was your weight measured?		_
2021-	In which location was this same for Cost was still 12	2=No SKIP TO 203  1=Home by HEW	
202h	In which location was this service first provided?	2=Health Post	
		3=Health Centre	
		4=Hospital	
		8=Other	
202h	Was your height measured?	1=Yes	
203h	Was your height measured?	2=No SKIP TO 205	-
204h	In which location was this service first provided?	1=Home by HEW	
204h	in which location was this service first provided?	2=Health Post	
		3=Health Centre	
		J-riculti Cellife	I

		4=Hospital		
		8=Other		
205h	Did you receive information about breastfeeding?	1=Yes		
		2=No	SKIP TO 207	
206h	In which location was this service first provided?	1=Home by WDA		
		2=Home by HEW		
		3=Health post		
		4=Health center		_
		5=Hospital		
		8=Other		
207h	Was your blood pressure measured?	1=Yes		
	(Probe: when a strap was put around your upper arm and a	2=No	SKIP TO 209	
	measure taken).			
208h	In which location was this service first provided?	1=Home by HEW		
20011	in which location was this service hist provided.	2=Health post		
		3=Health center		
		4=hospital		_
		8=other		
209h	Did you give a urine sample for a test?	1=Yes		
20311	Bid you give a drine sample for a test.	2=No	SKIP TO 211	_
2106	In which leasting was this coming against all			
210h	In which location was this service provided?	1=Home by HEW 2=Health post		
		3=Health center		
				_
		4=Hospital 8=other		
2445	Did you sive bleed for any best for any billion	1=Yes		
211h	Did you give blood for any test for syphilis?	1=Yes 2=No	SKIP TO 213	<u> </u>
2421-	to which be estimated the source of the document of the docume		3KIP 10 213	
212h	In which location was this service provided?	1=Home by HEW 2=Health Post		
		3=Health Centre		
				_
		4=Hospital 8=Other		
213h	Did you receive iron felete tablets or iron surum?	1=Yes		
21311	Did you receive iron folate tablets or iron syrup?	2=No	SKIP TO 216	<u> </u>
21.45	In which I costion was this comics are ideal?	1=Home by HEW	3KIP 10 210	
214h	In which location was this service provided?	2=Health post		-
		3=Health Centre		
		4=Hospital		
		8=other		
24.51-	For how many days did you take the tablets or surve?	Enter number of days		
		Litter Hulliber of days		
215h	For how many days did you take the tablets or syrup?	Enter 999 if Not known		
		Enter 999 if Not known 1=Yes		
215h 216h	Were you given an injection in the arm to prevent the baby	1=Yes	SKIP TO 222	<u> </u>
216h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?		SKIP TO 222	
216h 217h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  If Yes: How many times did you get a tetanus injection?	1=Yes 2=No Write number of times	SKIP TO 222	
216h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  If Yes: How many times did you get a tetanus injection?  If less than 2 times: At any time before this pregnancy did	1=Yes 2=No Write number of times 1=Yes		
216h 217h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  If Yes: How many times did you get a tetanus injection?	1=Yes 2=No Write number of times	SKIP TO 222 SKIP TO 221	
216h 217h 218h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  If Yes: How many times did you get a tetanus injection?  If less than 2 times: At any time before this pregnancy did you receive any tetanus injections?	1=Yes 2=No Write number of times 1=Yes		
216h 217h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  If Yes: How many times did you get a tetanus injection?  If less than 2 times: At any time before this pregnancy did	1=Yes 2=No Write number of times 1=Yes 2=No		
216h 217h 218h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  If Yes: How many times did you get a tetanus injection?  If less than 2 times: At any time before this pregnancy did you receive any tetanus injections?	1=Yes 2=No Write number of times 1=Yes 2=No 1=Home by HEW		
216h 217h 218h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  If Yes: How many times did you get a tetanus injection?  If less than 2 times: At any time before this pregnancy did you receive any tetanus injections?	1=Yes 2=No Write number of times 1=Yes 2=No  1=Home by HEW 2=Health post 3=Health Centre		
216h 217h 218h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  If Yes: How many times did you get a tetanus injection?  If less than 2 times: At any time before this pregnancy did you receive any tetanus injections?	1=Yes 2=No Write number of times 1=Yes 2=No  1=Home by HEW 2=Health post		
216h 217h 218h	Were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?  If Yes: How many times did you get a tetanus injection?  If less than 2 times: At any time before this pregnancy did you receive any tetanus injections?	1=Yes 2=No Write number of times 1=Yes 2=No  1=Home by HEW 2=Health post 3=Health Centre 4=Hospital		

2021	T. 1111	T 4 11 1 14/54		I
223h	In which location was this service first provided?	1=Home by WDA		
		2=Home by HEW		
		3=Health post		
		4=Health Centre		
		5=Hospital		
		8=other		
224h	Did you receive STI testing?	1=Yes		
		2=No	SKIP TO 226	
225h	In which location was this service provided?	1=Health Centre		_
		2=Hospital		
		8=Other		
226h	Did you receive any STI treatment?	1=Yes		
		2=No	SKIP TO 228	_
227h	In which location was this service provided?	1=Health center		
		2=Hospital		
		8=Other		
228h	Did you receive information on nutrition?	1=Yes		
		2=No	SKIP TO 230	_
229h	In which location was this service first provided?	1=Home by WDA		
		2=Home by HEW		
		3=Health post		
		4=Health Centre		_
		5=Hospital		
		8=Other		
230h	Did you receive information on pregnancy danger signs?	1=Yes		
23011	bid you receive information on pregnancy danger signs:	2=No	SKIP TO 232	_
231h	In which location was this convice first provided?	1=Home by WDA	JKII 10 232	
23111	In which location was this service first provided?	2=Home by HEW		
		3=Health post		
		4=Health Centre		_
		5=Hospital		
2221		8=Other		
232h	Were you advised on birth preparedness and complication	1=Yes	0///D <b>TO</b> 000	
	readiness? Probe: for finances, for help during delivery, for	2=No	SKIP TO 236	_
233h	transport, for emergencies?	1=Home by WDA		
233N	In which location was this service first provided?	2=Home by HEW		
		-		_
		3=Health post		
		4=Health Centre		
		5=Hospital		
		8=Other		
234h	Was your birth preparedness and complication readiness	1=Yes	0///D <b>TO</b> 000	
	plan recorded?	2=No	SKIP TO 236	
235h	In which location was this service provided?	1=Home by WDA		
		2=Home by HEW		
		3=Health post		
		4=Health Centre		
		5=Hospital		
		8=Other		
Do Not i	read out list, prompt, 'anything else' record 1=Yes for all that apply			•
236h	Can you tell me what are problems in pregnancy might need	1=Yes		
23011		2= No		-
	medical treatment? Severe headache	_		
237h	Can you tell me what are problems in pregnancy might need	1=Yes		

		_	
	medical treatment? Blurry vision	2= No	
238h	Can you tell me what are problems in pregnancy might need	1=Yes	
	medical treatment?	2= No	
	Reduced or absent fetal movement		
239h	Can you tell me what are problems in pregnancy might need	1=Yes	
	medical treatment? High blood pressure	2= No	
240h	Can you tell me what are problems in pregnancy might need	1=Yes	
	medical treatment?	2= No	
	Edema of the face/hands (i.e. swelling)		_
241h	Can you tell me what are problems in pregnancy might need	1=Yes	
	medical treatment? <b>Convulsions</b>	2= No	_
242h	Can you tell me what are problems in pregnancy might need	1=Yes	
	medical treatment?	2= No	
	Excessive vaginal bleeding		
243h	Can you tell me what are problems in pregnancy might need	1=Yes	
24311	medical treatment?	2= No	
	Severe lower abdominal pain		_
244h	Can you tell me what are problems in pregnancy might need	1=Yes	
24411	medical treatment? <b>Fever</b>	2= No	
245h	Can you tell me what are problems in pregnancy might need	1=Yes	
24511	medical treatment? <b>Anemia</b>	2= No	_
2466			
246h	Can you tell me what are problems in pregnancy might need	Specify	_
	medical treatment? <b>Other</b>		
247h	Were you told where to go if you had any complications?	1=Yes	1
24/11	were you told where to go if you had any complications:	2= No SKIP TO 249	_
		5 15 2.15	
248h	If Yes, where were you told to go?	1= Health post	
		2= Health Centre	
		3= Hospital	_
		8=Other (specify)	
2.401		9=Don't know	
249h	During your last pregnancy did you make any preparations	1=Yes 2= No <b>SKIP TO 260</b>	_
	for your delivery? Probe: for finances, for help during delivery,	2- NO SKIF 10 200	
Da Nat	transport, emergencies?		
	read out list, prompt, 'anything else' record 1=Yes for all that apply	4. V.	
250h	What preparations did you make for the delivery?	1=Yes 2= No	_
	Financial		
251h	What preparations did you make for the delivery?	1=Yes	
	Transport	2= No	
252h	What preparations did you make for the delivery?	1=Yes	_
	Food	2= No	
253h	What preparations did you make for the delivery?	1=Yes	_
	Identification of birth attendant	2= No	
254h	What preparations did you make for the delivery?	1=Yes	_
	Identification of facility	2= No	
255h	-		
	What preparations did you make for the delivery?	1=Yes	_
	-	1=Yes 2= No	
256h	What preparations did you make for the delivery?		_
	What preparations did you make for the delivery? Clean clothes	2= No	_ _

	Cover to deliver on		
257h	What preparations did you make for the delivery?	1=Yes	
	Gloves	2= No	
258h	What preparations did you make for the delivery?	1=Yes	
	Cotton gauze	2= No	
259h	What preparations did you make for the delivery?	Specify	_
	Other		

Section	on 2.4 Delivery for last birth		
260h	Who assisted with the delivery?	1=Doctor	
	,	2=Nurse/Midwife	
		3=Health Extension Worker	
		4=Traditional Birth Attendant	
		5=Relative/friend	_
		6=No-one SKIP TO 263	
		8= Other (specify)	
261h	When you gave birth, did the person assisting you wear	1=Yes	
	gloves during delivery?	2= No	
		9=Don't know	_
262h	When you gave birth, did the person assisting you wash her	1=Yes	
	hands before the delivery?	2= No	
		9=Don't know	_
263h	Where did you give birth?	1=Home SKIP TO 266	
		2=Health post	
		3=Health Centre	_
		4=Hospital	
		8=Other	
264h	If health post/health centre/hospital: After giving birth, for	Enter number of days, enter 0 if she left on the	_
	how many days did you stay at the health post/health	same day as delivery	
	Centre/hospital in total?		
265h	Was [NAME] delivered by caesarean, that is, did they cut your	1=Yes	_
	belly open to take the baby out?	2= No	
	Re	ad out the list	
266h	During the delivery of [NAME] did you experience any of the	1=Yes	_
	following? Heavy bleeding	2= No	
267h	During the delivery of [NAME] did you experience any of the	1=Yes	_
	following? Labour more than 12 hours	2= No	
268h	During the delivery of [NAME] did you experience any of the	1=Yes	_
	following? Loss of consciousness	2= No	
269h	During the delivery of [NAME] did you experience any of the	1=Yes	_
	following? Premature labour	2= No	
270h	During the delivery of [NAME] did you experience any of the	1=Yes	_
	following? Foul discharge	2= No	
271h	During the delivery of [NAME] did you experience any of the	1=Yes	_
	following? Baby in abnormal position	2= No	
272h	During delivery were you advised to go to a different facility	1=Yes	1_
	for specialist care (if home birth to a health post/health	2= No <b>SKIP TO 275</b>	
	center/hospital, if health post/facility to a hospital/different		

	facility)?		
273h	If Yes: Did you go to that different facility to get the	1=Yes	
	specialist care (referral)?	2= No <b>SKIP TO 275</b>	
274h	If Yes: What transport did you take to get there?	1=Own transport	
	and the state of t	2=Public transport	
		3=Hired transport	
		4=District/ambulance	_
		5=Traditional ambulance (Qareza/cart)	
		6=Motor Bike/Bajaj	
		7=Walked	
		8=Other (specify)	
275h	Did anyone check on your health after the delivery?	1=Yes	
		2= No <b>SKIP TO 288</b>	
276h	How many times did anyone check on your health in the first	Write number. If don't know 99.	
	month after delivery?		
277h	How long after delivery did the first check take place?	Record number of days if same day as delivery	
	, , , , , , , , , , , , , , , , , , , ,	enter 0. If don't know 99.	_
270h	Who shocked an your hoolth for the first time often you gave	1=Doctor/Health Officer	
278h	Who checked on your health for the first time after you gave	2=Nurse/Midwife/Health Officer	_
	birth to [NAME]? (Probe for most qualified person)	3=Health Extension Worker	
		4=Traditional birth attendant	
		8=Other (specify)	
279h	Where did this check take place?	1=Home	
27311	Where did this check take place:	2=Health post	_
		3=Health center	
		4=Hospital	
		8=Other (specify)	
280h	If her health was checked at least twice (see Q above): How	Record number of days. If don't know 99.	
	long after delivery did the second check take place?		
Do Not red	ad out list, prompt, 'anything else' record 1=Yes for all that apply		
281h	During any of the health checks what was done to check on	1=Yes	
	your health? <b>Examined body</b>	2= No	_
282h	During any of the health checks what was done to check on	1=Yes	
20211		2= No	_
2001	your health? Checked breasts		
283h	During any of the health checks what was done to check on	1=Yes	_
	your health? Checked for heavy bleeding	2= No	
284h	During any of the health checks what was done to check on	1=Yes	_
	your health? Counselled on danger signs	2= No	
285h	During any of the health checks what was done to check on	1=Yes	
	your health? Counselled on family planning	2= No	
286h	During any of the health checks what was done to check on	1=Yes	
20011	your health? Counselled on nutrition	2= No	
207h	•	1=Yes	
287h	During any of the health checks what was done to check on	2= No	_
	your health? Referred to a health facility		
287h_n	During any of the health checks what was done to check on	1=Yes	_
	your health? None from the list	2= No	

Sectio	n 2.5: Newborn Care		
Now I hav	e some questions about what happened to [NAME] at ti	he birth and immediately after.	
288h	Can I see a card recording information about the birth? (use the card to verify all information if possible)	1=Yes 2=No	_
289h	Was [NAME] weighed at birth?	1=Yes 2=No <b>SKIP TO 291</b>	
290h	If Yes, how much did [NAME] weigh at birth? (use the weight recorded on the card if possible)	Weight in grams e.g. if the weight was 1.9 kilograms enter 1900, If don't know 9999.	_
291h	Did [NAME] have any difficulty breathing/crying at birth?	1=Yes 2=No <b>SKIP TO 293</b>	
292h_a	Did anyone do <b>Rubbing</b> to [NAME] immediately after birth?	1= Yes 2= No 9 = Don't know	_
292h_b	Did anyone do <b>Stimulating</b> to [NAME] immediately after birth?	1= Yes 2= No 9 = Don't know	_
292h_c	Did anyone do <b>Mouth-to-mouth</b> to [NAME] immediately after birth?	1= Yes 2= No 9= Don't know	_
292h_d	Did anyone do <b>Resuscitation</b> to [NAME] immediately after birth?	1= Yes 2= No 99 = Don't know	_
292h_e	Did anyone do <b>None of these</b> to [NAME] immediately at birth?	1= Yes 2= No 9= Don't know	_
293h	Where was [NAME] placed immediately after delivery?	1=Alone/on the floor 2=On the mother's belly/chest 3=Beside the mother 4=With someone else 8=Other (specify) 9= Don't know	_
294h	When [NAME] was born, was she/he dried/wiped?	1=Yes 2=No If 2 or 9 Skip to 296 9=Don't know	_
295h	How long after [NAME] was born was she/he dried/wiped?	Enter in minutes, check for time after the baby was born (Not time after the placenta came out). If don't know 99	_
296h	When [NAME] was born, was she/he wrapped with a cloth?	1=Yes 2= No If 2 or 9 SKIP TO 298 9=Don't know	_
297h	How long after [NAME] was born was she/he wrapped with a cloth?	Enter in minutes, check for time after the baby was born (Not time after the placenta came out). If don't know 99	_
298h	What was used to tie the cord?	1=New string/thread 2=Boiled string/thread 3=Any string/thread 4=Nothing 8=Other (specify) 9=Don't know	_
299h	What was used to cut the cord?	1=New razor blade 2=Any razor blade 3=Scissors 8=Other (specify) 9=Don't know	_
300h	Was anything applied to the cord after cutting and tying?	1=Yes 2= No <b>SKIP TO 308</b>	_

		9=Don't know SKIP TO 308	
Do Not re	ead out list, prompt, 'anything else' record 1=Yes for all th	at apply	1
301h	What was applied to the cord just after cutting the cord? <b>Butter</b>	1= Yes 2= No	
302h	What was applied to the cord just after cutting the cord? <b>Ash</b>	1= Yes 2= No	_
303h	What was applied to the cord just after cutting the cord? <b>Ointment</b>	1= Yes 2= No	_
304h	What was applied to the cord just after cutting the cord? <b>Animal dung</b>	1= Yes 2= No	_
305h	What was applied to the cord just after cutting the cord? <b>Oil</b>	2= No 1= Yes	
306h	What was applied to the cord just after cutting the cord? <b>Cold water</b>	1= Yes 2= No	
307h	What was applied to the cord just after cutting the cord? <b>Other</b>	Specify	
308h	When [NAME] was born, how soon was [NAME] bathed?	1=In the first hour 2=After one-hour <b>SKIP TO 310</b> 3=After one day <b>SKIP TO 311</b>	
309h	If in the first hour: After how many minutes would you say?	Write number of minutes.  SKIP TO 310	_
310h	If after one hour: After how many hours would you say?	Write number of hours. If response is 'after one hour' enter 1. If response is 'after one and a half hours' enter 1.  SKIP TO 312	_
311h	If after one day: After how many days would you say?	Write number of days. If response is 'after one day' enter 1. If response is 'after one and a half days' enter 1.	_
312h	In the first week of life, did you hold [NAME] skin to skin against your breasts during the daytime and night time?	1=Yes always 2=Yes very often 3=Yes sometime 4=Never 9=Don't know	_
313h	In the first week of life, did you sleep with [NAME] against you at night, or did you lay him/her alone on the bed or elsewhere?	1=Slept with mother 2=Baby slept alone 3=Baby slept with another person	_
314h	Did you ever breastfeed [NAME]?	1=Yes 2= No <b>SKIP TO 319</b>	
315h	How long after birth did you first put [NAME] to the breast?	1=In the first hour 2=After one-hour SKIP TO 317 3=After one day SKIP TO 318	_
316h	If in the first hour: After how many minutes would you say?	Write number of minutes.  SKIP TO 319	_
317h	If after one hour: After how many hours would you say?	Write number of hours. If response is 'after one hour' enter 1. If response is 'after one and a half hours' enter 1.  SKIP TO 319	_
318h	How soon after the baby born did you bath him/ her?	Write number of days. If response is 'after one day' enter 1. If response is 'after one and a half days' enter 1.	_
319h	Did [NAME] receive vitamin K injection after delivery?	1 = Yes 2 = No 9= Don't know	

	•		
320h	Did [NAME] receive TTC eye ointment after delivery?	1 = Yes 2 = No 9= Don't know	_
321h	Did [NAME] receive oral polio vaccine-after delivery?	1 = Yes 2 = No 9= Don't know	_
322h	Did you squeeze out and throw away the first milk?	1=Yes 2= No	_
323h	In the first three days after delivery, was [NAME] given anything to drink other than breast milk?	1=Yes 2= No	_
	Now about care for [name] in the first month of his,	/her life	
324h	In the month after [NAME] was born, did any health care provider or a traditional birth attendant check on his/her health? Probe for checks done at the place of birth on the same day as birth, and checks after	1=Yes 2= No SKIP TO 340	_
325h	If Yes: In the month after [NAME] was born, how many times did a health care provider or a traditional birth attendant check on his/her health?	Write number of times.	_
326h	If Yes: How long after delivery did the first check take place?	Record number of days if same day as delivery enter 0	
327h	If more than one time: How long after delivery did the second check take place?	Record number of days	
328h	Who checked on [NAME] health the first time? (Probe for most qualified person)	1=Doctor/Health Officer 2=Nurse/Midwife 3=Health Extension Worker 4=Traditional birth attendant 8=Other (specify)	_
329h	Where did the first check on [NAME] take place?	1=Home 2=Health post 3=Health centre 4=Hospital 8=Other (specify)	_
330h	At any of the health checks in the first month, what was done to check the health of baby?  Generally examined/ looked at baby's body	1=Yes 2= No	_
331h	At any of the health checks in the first month, what was done to check the health of baby?  Weighed baby	1=Yes 2= No	_
332h	At any of the health checks in the first month, what was done to check the health of baby?  Checked cord	1=Yes 2= No	_
333h	At any of the health checks in the first month, what was done to check the health of baby?  Counselled on breastfeeding	1=Yes 2= No	_
334h	At any of the health checks in the first month, what was done to check the health of baby?  Observed breastfeeding	1=Yes 2= No	_
335h	At any of the health checks in the first month, what was done to check the health of baby?  Counselled on skin-to-skin contact/warmth	1=Yes 2= No	_
336h	At any of the health checks in the first month, what was done to check the health of baby?	1=Yes 2= No	

	Checked baby for danger signs		
	At any of the health checks in the first month,	1=Yes	
337h	what was done to check the health of baby?	2= No	
	Counselled on danger signs		
	At any of the health checks in the first month,	1-Vos	
338h	what was done to check the health of baby?	1=Yes	
	Referred to a health facility	2= No	
	At any of the health checks in the first month,	4 1/	
339h	what was done to check the health of baby?	1=Yes	
	Nothing	2= No	
	Now I want to talk to you about any sickness your chi	ld experienced in the <b>first month of</b> I	life.
341h	Was [NAME] sick in the first month?	1=Yes	<u> </u>
34111	was [wave] sick in the first month.	2= No SKIP TO 396	
		2 110 3111 10 330	
342h	Can I just check, did [NAME] have any of the	1=Yes	
34211	following symptoms? <b>Stopped feeding well</b>	2= No	
	Tollowing symptoms: Stopped recalling well		
343h			
	Can I just check, did [NAME] have any of the	1=Yes	
	following symptoms?	2= No	
	Difficult or fast breathing		
344h	Can I just check, did [NAME] have any of the	1=Yes	
	following symptoms? Chest in-drawing	2= No	
345h	Can I just check, did [NAME] have any of the	1=Yes	
	following symptoms? Unusually hot or cold	2= No	
346h	Can I just check, did [NAME] have any of the	1=Yes	
34011	following symptoms?	2= No	
	Baby less active than usual		
347h	Can I just check, did [NAME] have any of the	1=Yes	
	following symptoms? Body became yellow	2= No	
348h	Can I just check, did [NAME] have any of the	Specify	
	following symptoms? Other		
349h	If any sickness/symptom reported: How old	Record number of days of age	
34311	was [NAME] when sick for the first time?	when [NAME] was first sick if on	
	was [17/17/2] when sick for the first time:	first day of life enter 0	
	Check all the following symptoms: (Read all)		
350h	When [NAME] was sick that first time what	1=Yes	
	was the problem? Fever	2= No	
351h	When [NAME] was sick that first time what	1=Yes	
33111	was the problem? Unable to suckle/feed	2= No	
	When [NAME] was sick that first time what	1=Yes	
352h		1=Yes 2= No	_
	was the problem? Difficult/fast breathing		
353h	When [NAME] was sick that first time what	1=Yes	
	was the problem? Severe chest in-drawing	2= No	
354h	When [NAME] was sick that first time what	1=Yes	
33711	was the problem? Diarrhea	2= No	
2554	When [NAME] was sick that first time what	1=Yes	
355h	was the problem? Convulsions	2= No	
356h	When [NAME] was sick that first time what	1=Yes	
20011	was the problem? Persistent vomiting	2= No	
357h	When [NAME] was sick that first time what	1=Yes	
33711	was the problem? Yellow palms/soles/eyes	1=Yes 2= No	
	was the problem: Tenow paints/soles/eyes	2- 110	<u> </u>

358h	When [NAME] was sick that first time what	1=Yes	
	was the problem? <b>Lethargy</b>	2= No	
359h	When [NAME] was sick that first time what	1=Yes	
	was the problem? Unconscious	2= No	
360h	When [NAME] was sick that first time what	1=Yes	
	was the problem? Red/discharge eyes	2=No	
361h	When [NAME] was sick that first time what	1=Yes	l
	was the problem? Skin pustules	2=No	
362h	When [NAME] was sick that first time what	1=Yes	
	was the problem? Skin around cord was red	2=No	
363h	When [NAME] was sick that first time what	1=Yes	
	was the problem? Pus from cord	2=No	
364h	When [NAME] was sick that first time what	6	
	was the problem? Other	Specify	
Select all t	hat apply for the time before the baby was taken for ext	ra care (do Not read out list, promp	nt, 'anything else'
	es for all that apply)		
365h	How was [NAME] treated for this illness at	1=Yes	
	home? Giving drugs	2=No	
366h	How was [NAME] treated for this illness at	1=Yes	
	home? Giving herbs	2=No	
267h	How was [NAME] treated for this illness at	1=Yes	
367h	home? Contacting a provider for advice	2=No	_
	How was [NAME] treated for this illness at	1=Yes	
368h	home? Contacting someone else for advice	2=No	
	Home: Contacting someone else for advice	2-100	
369h	How was [NAME] treated for this illness at	1=Yes	
30911	home? No treatment given at home	2=No	
370h	How was [NAME] treated for this illness at	1=Yes	
37011	home? Don't remember	2=No	
371h	Did you seek care for [NAME] outside the	1=Yes <b>SKIP TO 373</b>	
37111	home at that time?	2= No	
	If No care sought at that time: Why didn't you		
372h a	seek care for [NAME] outside the home during	1=Yes	
0724	that first illness?	2=No	
	Expected him/her to get better		
	If No care sought at that time: Why didn't you	1=Yes	
372h_b	seek care for [NAME] outside the home during	2=No	_
	that first illness? Health facility too far		
	If No care sought at that time: Why didn't you		
372h_c	seek care for [NAME] outside the home during	1=Yes	
_	that first illness?	2=No	
	Cost of treatment too expensive		
2721- 1	If No care sought at that time: Why didn't you	1 //	
372h_d	seek care for [NAME] outside the home during	1=Yes 2=No	
	that first illness? <b>Don't trust the facility</b>	2-140	
2725 -	If No care sought at that time: Why didn't you	1=Yes	
372h_e	seek care for [NAME] outside the home during	2=No	
	that first illness? Family member didn't allow		
	If No care sought at that time: Why didn't you	1-Voc	
372h_f	seek care for [NAME] outside the home during that first illness?	1=Yes 2=No	
_		2-140	
	Community advisor/TBA advised against it  If No care sought at that time: Why didn't you		
272h ~	seek care for [NAME] outside the home during	Specify	
372h_g	that first illness? <b>Other</b>	Specify	
<u> </u>	that hist illness? Other		<u> </u>

	If a such a such that the such		
373h	If sought care: How many times did you seek care for that illness?	Write number of times	
		1=Health post	
374h	Where outside the home did you seek care	2=Health centre	
	from the first time?	3=Hospital	
		4=Pharmacy/shop	
		8=Other (specify)	
	Do you have any medical record from when	1=Yes	
375h	you went for health care outside the home the	2= No <b>SKIP TO 377</b>	
	first time?		
376h	If Yes, can I see it?	1=Yes	
	· ·	2= No Write number of days from the	
	After how many days did you seek care the	onset of illness, if first day of	
377h	first time?	illness write 0. If possible use	
		the medical record to confirm	
	If Yes to any of the symptoms (342-348): At	If the information is available	
378h	any time during the illness, did [NAME] take	from the card use it	
37011	any drugs for the illness?	1=Yes	
Cala : "		2= No (END OF MODULE)	
Select all r	nentioned (do Not read out list, prompt, 'anything else'	record 1=Yes for all that apply)	
	What drugs did [NAME] take?	1=Yes	
379h	Antimalarial tablet	2= No	
	What drugs did [NAME] take?	1=Yes	
382h	Antibiotic: Gentamicin injection	2= No	
	What drugs did [NAME] take?	1=Yes	
383h	Antibiotic: Amoxicillin syrup or tablet	2= No	
204	What drugs did [NAME] take?	1=Yes	
384h	Antibiotic: Cotrimoxazole syrup	2= No	
2051-	What drugs did [NAME] take?	1=Yes	
385h	Antibiotic: Other /Not known	2= No	
2061-	What drugs did [NAME] take?	1=Yes	
386h	Tetracycline eye ointment	2= No	
387h	What drugs did [NAME] take? <b>7inc</b>	1=Yes	
30/11	What drugs did [NAME] take? <b>Zinc</b>	2= No	
388h	What drugs did [NAME] take? ORS	1=Yes	
		2= No	
389h	What drugs did [NAME] take?	1=Yes	
	Combined Zinc-ORS	2= No	
390h	What drugs did [NAME] take? Vitamin A	1=Yes 2= No	_
		1=Yes	
391h	What drugs did [NAME] take? Paracetamol	2= No	_
2021	What drugs did [NAME] take?	1=Yes	
392h	Traditional remedies herbs/local remedy	2= No	
	What drugs did [NAME] take? Other	Specify	
393h		эрсспу	
	If Yes to gentamicin injection: Did [NAME]	1=Yes	
394h	receive	2= No	
	7 consecutive days of gentamycin injection?	9 = Don't know	
2051	If Yes to amoxicillin: Did [NAME] receive	1=Yes	_
395h	7 consecutive days of amoxicillin?	2= No 9= Don't know	
	1	שם של היים – כ	

End – thank the participant. Check to see if the participant needs to answer the child module. If so, continue to Module 3. Otherwise check whether there is another woman aged 13-49 in the house.

### Module 3 - Child Health

Section 3.1: Identification of and consent from caregivers			
396h	Interviewer: How many children under 5 years of age live in this household? Check household listing.	_	
397h	Interviewer: select name of caregiver from household listing		
398h	Interviewer: select ID of the caregiver from household listing	_	
399h	Is it possible to interview the caregiver?	1=Yes <b>SKIP TO 401</b> 2=No	
400h	If No, why Not possible to interview the caregiver?	1=Travelled away 2=Sick 3=Currently Not present 8=Other reason	
401h	Interviewer: Have you read her the consent form?	1=Yes 2= No-one is available (add reason)	
402h	Interviewer: Does he/she give her consent to be interviewed??	1=Yes 2=No END INTERVIEW.	

Do Not r	ead out list, prompt, 'anything else' record 1=Yes for all that app	ly
403h	Why do you sleep under a mosquito net?	1=Yes
	Protects from malaria	2=No
404h	Why do you sleep under a mosquito net?	1=Yes
	Protects from mosquitoes	2=No
405h	Why do you sleep under a mosquito net?	1=Yes
	Given free	2=No
406h	Why do you sleep under a mosquito net?	1=Yes
	Bought cheaply	2=No
407h	Why do you sleep under a mosquito net?	1=Yes
	Look attractive	2=No
408h	Why do you sleep under a mosquito net? Health worker said	1=Yes
	to use	2=No
409h	Why do you sleep under a mosquito net?	1=Yes
	Someone told me to use it	2=No
410h	Why do you sleep under a mosquito net?	1=Yes
	Neighbor uses it	2=No
411h	Why do you sleep under a mosquito net?	Specify
	Other	
412h	Why do you sleep under a mosquito net?	1=Yes
	Don't know	2=No

Do Not rea	d out list, prompt, 'anything else' record 1=Yes for all that apply	
	If you don't want to get sick from malaria, how can you	1=Yes
413h	protect yourself? Use a Bednet	2=No
414h	If you don't want to get sick from malaria, how can you	1=Yes
	protect yourself? Use repellent or spray	2=No
415h	If you don't want to get sick from malaria, how can you	1=Yes
	protect yourself? Avoid mosquitoes/bites	2=No
416h	If you don't want to get sick from malaria, how can you	1=Yes
	protect yourself? Take medication for	2=No
417h	If you don't want to get sick from malaria, how can you	1=Yes
	protect yourself? prevention Keep surroundings clean	2=No
418h	If you don't want to get sick from malaria, how can you	1=Yes
41011	protect yourself? <b>Eat well</b>	2=No
419h		1=Yes
41911	If you don't want to get sick from malaria, how can you protect yourself? <b>Drink boiled water</b>	2=No
420h		1-Voc
420h	If you don't want to get sick from malaria, how can you	1=Yes 2=No
1241	protect yourself? Avoid getting wet from rain	
421h	If you don't want to get sick from malaria, how can you	Specify
	protect yourself? <b>Other</b>	
422h	If you don't want to get sick from malaria, how can you	1=Yes
	protect yourself? Don't know	2=No
423h	Have you seen or hear any messages on:	1=Yes
	Bed nets	2=No
	Multiple options are possible. (do Not read out list, prompt, for all that apply)	'anything else' record 1=Yes
423h_1	Where did you hear the message about <b>Bed nets</b> from?	1=Yes
	Friend	2=No
423h 2	Where did you hear the message about <b>Bed nets</b> from?	1=Yes
_	At Health Centre	2=No
423h_3	Where did you hear the message about <b>Bed nets</b> from?	1=Yes
_	HEW	2=No
423h_4	Where did you hear the message about <b>Bed nets</b> from?	1=Yes
_	WDA	2=No
423h_5	Where did you hear the message about <b>Bed nets</b> from?	1=Yes
12311_3	Newspaper	2=No
423h_6	Where did you hear the message about <b>Bed nets</b> from?	1=Yes
	TV	2=No
423h 7	Where did you hear the message about <b>Bed nets</b> from?	1=Yes
	Radio	2=No
423h 8	Where did you hear the message about <b>Bed nets</b> from?	1=Yes
.2311_0	Government official	2=No
423h 9	Where did you hear the message about <b>Bed nets</b> from?	1=Yes
42311_9		2=No
422h 40	Church/Mosque	
423h_10	Where did you hear the message about <b>Bed nets</b> from?	1=Yes 2=No
422h 44	School	
423h_11	Where did you hear the message about <b>Bed nets</b> from?	1=Yes 2=No
	Poster/flier	1

423h_12	Where did you hear the message about <b>Bed nets</b> from?	1=Yes 2=No
	Meeting	
423h_13	Where did you hear the message about <b>Bed nets</b> from?	1=Yes 2=No
	Street announcement	2-140
423h_14	Where did you hear the message about <b>Bed nets</b> from?	Specify
	Other	
424h	Have you seen or hear any messages on:	1=Yes
	Malaria treatment using ACT	2=No
Multiple op	tions are possible. (do Not read out list, prompt, 'anything else' for all	that apply)
424h_1	Where did you hear the message about <b>ACT</b> from?	1=Yes
	Friend	2=No
424h_2	Where did you hear the message about ACT from?	1=Yes
	At Health Centre	2=No
424h 3	Where did you hear the message about ACT from?	1=Yes
_	HEW	2=No
424h 4	Where did you hear the message about <b>ACT</b> from?	1=Yes
	WDA	2=No
424h 5	Where did you hear the message about ACT from?	1=Yes
	Newspaper	2=No
424h 6	Where did you hear the message about <b>ACT</b> from?	1=Yes
42411_0	TV	2=No
424h 7	Where did you hear the message about <b>ACT</b> from?	1=Yes
12/	Radio	2=No
424h 8	Where did you hear the message about ACT from?	1=Yes
42411_0	Government official	2=No
424h O		1=Yes
424h_9	Where did you hear the message about <b>ACT</b> from?	2=No
42.4b 4.0	Church/Mosque	1 V
424h_10	Where did you hear the message about <b>ACT</b> from?	1=Yes 2=No
	School	
424h_11	Where did you hear the message about ACT from?	1=Yes 2=No
	Poster/flier	
424h_12	Where did you hear the message about <b>ACT</b> from?	1=Yes
	Meeting	2=No
424h_13	Where did you hear the message about <b>ACT</b> from?	1=Yes
	Street announcement	2=No
424h_14	Where did you hear the message about ACT from?	Specify
	Other	
425h	Have you seen or hear any messages on:	1=Yes
	Rapid diagnostic tests (RDT) for malaria	2=No
Multiple op	tions are possible. (do Not read out list, prompt, 'anything else' for all	that apply)
425h_1	Where did you hear the message about RDT from?	1=Yes
_	Friend	2=No
425h 2	Where did you hear the message about RDT from?	1=Yes
	At Health Centre	2=No
425h 3	Where did you hear the message about <b>RDT</b> from?	1=Yes
72311_3	HEW	2=No
	IILVV	

425h_4	Where did you hear the message about RDT from?	1=Yes
	WDA	2=No
425h_5	Where did you hear the message about RDT from?	1=Yes
	Newspaper	2=No
425h_6	Where did you hear the message about RDT from?	1=Yes
_	τν	2=No
425h 7	Where did you hear the message about RDT from?	1=Yes
,	Radio	2=No
425h 8	Where did you hear the message about <b>RDT</b> from?	1=Yes
42311_0	Government official	2=No
425h 9	Where did you hear the message about RDT from?	1=Yes
42311_9		2=No
4251 40	Church/Mosque	4 V
425h_10	Where did you hear the message about RDT from?	1=Yes 2=No
	School	
425h_11	Where did you hear the message about RDT from?	1=Yes
	Poster/flier	2=No
425h_12	Where did you hear the message about RDT from?	1=Yes
	Meeting	2=No
425h_13	Where did you hear the message about RDT from?	1=Yes
	Street announcement	2=No
425h_14	Where did you hear the message about RDT from?	Specify
_	Other	
426h	Have you seen or hear any messages on:	1=Yes
.20	Rectal artesunate	2=No
Multiple on	tions are possible. (do Not read out list, prompt, 'anything else' for all t	
426h 1	Where did you hear the message about <b>Rectal artesunate</b>	1=Yes
42011_1		2=No
40.61 0	from? Friend	
426h_2	Where did you hear the message about <b>Rectal artesunate</b>	1=Yes 2=No
	from? At Health Centre	-
426h_3	Where did you hear the message about <b>Rectal artesunate</b>	1=Yes
	from? <b>HEW</b>	2=No
426h_4	Where did you hear the message about <b>Rectal artesunate</b>	1=Yes
	from? WDA	2=No
426h_5	Where did you hear the message about Rectal artesunate	1=Yes
_		
	from? Newspaper	2=No
426h_6	from? Newspaper  Where did you hear the message about Rectal artesunate	1=Yes
	Where did you hear the message about <b>Rectal artesunate</b>	1=Yes
426h_6	Where did you hear the message about <b>Rectal artesunate</b> from? <b>TV</b>	1=Yes 2=No
426h_6 426h_7	Where did you hear the message about <b>Rectal artesunate</b> from? <b>TV</b> Where did you hear the message about <b>Rectal artesunate</b> from? <b>Radio</b>	1=Yes 2=No 1=Yes
426h_6	Where did you hear the message about <b>Rectal artesunate</b> from? <b>TV</b> Where did you hear the message about <b>Rectal artesunate</b>	1=Yes 2=No 1=Yes 2=No
426h_6 426h_7 426h_8	Where did you hear the message about Rectal artesunate from? TV  Where did you hear the message about Rectal artesunate from? Radio  Where did you hear the message about Rectal artesunate from? Government official	1=Yes 2=No 1=Yes 2=No 1=Yes 2=No
426h_6 426h_7	Where did you hear the message about Rectal artesunate from? TV  Where did you hear the message about Rectal artesunate from? Radio  Where did you hear the message about Rectal artesunate from? Government official  Where did you hear the message about Rectal artesunate	1=Yes 2=No 1=Yes 2=No 1=Yes
426h_6 426h_7 426h_8 426h_9	Where did you hear the message about Rectal artesunate from? TV  Where did you hear the message about Rectal artesunate from? Radio  Where did you hear the message about Rectal artesunate from? Government official  Where did you hear the message about Rectal artesunate from? Church/Mosque	1=Yes 2=No 1=Yes 2=No 1=Yes 2=No 1=Yes 2=No
426h_6 426h_7 426h_8	Where did you hear the message about Rectal artesunate from? TV  Where did you hear the message about Rectal artesunate from? Radio  Where did you hear the message about Rectal artesunate from? Government official  Where did you hear the message about Rectal artesunate from? Church/Mosque  Where did you hear the message about Rectal artesunate	1=Yes 2=No 1=Yes 2=No 1=Yes 2=No 1=Yes
426h_6 426h_7 426h_8 426h_9 426h_10	Where did you hear the message about Rectal artesunate from? TV  Where did you hear the message about Rectal artesunate from? Radio  Where did you hear the message about Rectal artesunate from? Government official  Where did you hear the message about Rectal artesunate from? Church/Mosque  Where did you hear the message about Rectal artesunate from? School	1=Yes 2=No 1=Yes 2=No 1=Yes 2=No 1=Yes 2=No 1=Yes 2=No
426h_6 426h_7 426h_8 426h_9	Where did you hear the message about Rectal artesunate from? TV  Where did you hear the message about Rectal artesunate from? Radio  Where did you hear the message about Rectal artesunate from? Government official  Where did you hear the message about Rectal artesunate from? Church/Mosque  Where did you hear the message about Rectal artesunate	1=Yes 2=No 1=Yes 2=No 1=Yes 2=No 1=Yes 2=No 1=Yes

		1
426h_12	Where did you hear the message about <b>Rectal artesunate</b>	1=Yes
	from? Meeting	2=No
426h_13	Where did you hear the message about Rectal artesunate	1=Yes
	from? Street announcement	2=No
426h_14	Where did you hear the message about <b>Rectal artesunate</b>	Specify
	from? Other	
427h	Have you seen or hear any messages on:	1=Yes
	Diarrhea treatment	2=No
Multiple op	tions are possible. (do Not read out list, prompt, 'anything else' for all th	at apply)
427h_1	Where did you hear the message about Diarrhea treatment	1=Yes
	from? Friend	2=No
427h_2	Where did you hear the message about Diarrhea treatment	1=Yes
	from? At Health Centre	2=No
427h_3	Where did you hear the message about Diarrhea treatment	1=Yes
	from? <b>HEW</b>	2=No
427h_4	Where did you hear the message about Diarrhea treatment	1=Yes
	from? WDA	2=No
427h_5	Where did you hear the message about Diarrhea treatment	1=Yes
_	from? Newspaper	2=No
427h_6	Where did you hear the message about Diarrhea treatment	1=Yes
_	from? TV	2=No
427h 7	Where did you hear the message about Diarrhea treatment	1=Yes
_	from? Radio	2=No
427h 8	Where did you hear the message about Diarrhea treatment	1=Yes
_	from? Government official	2=No
427h_9	Where did you hear the message about Diarrhea treatment	1=Yes
	from? Church/Mosque	2=No
427h_10	Where did you hear the message about Diarrhea treatment	1=Yes
	from? School	2=No
427h_11	Where did you hear the message about Diarrhea treatment	1=Yes
	from? Poster/flier	2=No
427h_12	Where did you hear the message about Diarrhea treatment	1=Yes
	from? Meeting	2=No
427h_13	Where did you hear the message about <b>Diarrhea treatment</b>	1=Yes
_	from? Street announcement	2=No
427h_14	Where did you hear the message about Diarrhea treatment	Specify
	from? Other	
428h	Have you seen or hear any messages on:	1=Yes
	Pneumonia treatment	2=No
Multiple options are possible. (do Not read out list, prompt, 'anything else' for all that apply)		
428h_1	Where did you hear the message about <b>Pneumonia</b>	1=Yes
_	treatment from? Friend	2=No
428h 2	Where did you hear the message about <b>Pneumonia</b>	1=Yes
_	treatment from? At Health Centre	2=No
428h_3	Where did you hear the message about <b>Pneumonia</b>	1=Yes
	treatment from? HEW	2=No
	1	1

428h_4	Where did you hear the message about <b>Pneumonia</b>	1=Yes
	treatment from? WDA	2=No
428h_5	Where did you hear the message about <b>Pneumonia</b>	1=Yes
	treatment from? Newspaper	2=No
428h 6	Where did you hear the message about <b>Pneumonia</b>	1=Yes
	treatment from? TV	2=No
420h 7		1=Yes
428h_7	Where did you hear the message about <b>Pneumonia</b>	2=No
	treatment from? Radio	
428h_8	Where did you hear the message about <b>Pneumonia</b>	1=Yes
	treatment from? Government official	2=No
428h_9	Where did you hear the message about <b>Pneumonia</b>	1=Yes
	treatment from? Church/Mosque	2=No
428h_10	Where did you hear the message about <b>Pneumonia</b>	1=Yes
	treatment from? School	2=No
428h 11	Where did you hear the message about <b>Pneumonia</b>	1=Yes
	treatment from? Poster/flier	2=No
428h 12	Where did you hear the message about <b>Pneumonia</b>	1=Yes
72011_12	treatment from? Meeting	2=No
420l- 42	<u> </u>	1 1/22
428h_13	Where did you hear the message about <b>Pneumonia</b>	1=Yes 2=No
	treatment from? Street announcement	
428h_14	Where did you hear the message about <b>Pneumonia</b>	Specify
	treatment from? Other	
429h	Have you seen or hear any messages on:	1=Yes
	Treatment for sick newborns	2=No
429h_1	Where did you hear the message about <b>Pneumonia</b>	1=Yes
_	treatment from? Friend	2=No
Multiple op	tions are possible. (do Not read out list, prompt, 'anything else' for all th	nat apply)
429h 2	Where did you hear the message Treatment for sick	1=Yes
42311_2	newborns from? At Health Centre	2=No
420h 2		1-Vos
429h_3	Where did you hear the message about <b>Treatment for sick</b>	1=Yes 2=No
	newborns from? HEW	-
429h_4	Where did you hear the message about <b>Treatment for sick</b>	1=Yes
	newborns from? WDA	2=No
429h_5	Where did you hear the message about <b>Treatment for sick</b>	1=Yes
	newborns from? Newspaper	2=No
429h_6	Where did you hear the message about Treatment for sick	1=Yes
	newborns from? TV	2=No
429h 7	Where did you hear the message about <b>Treatment for sick</b>	1=Yes
	newborns from? Radio	2=No
429h_8	Where did you hear the message about <b>Treatment for sick</b>	1=Yes
72311_0	newborns from? Government official	2=No
420h 0		1=Yes
429h_9	Where did you hear the message about <b>Treatment for sick</b>	1=Yes 2=No
	newborns from? Church/Mosque	
429h_10	Where did you hear the message about <b>Treatment for sick</b>	1=Yes 2=No
	newborns from? School	I Z-INU
429h_11	Where did you hear the message about <b>Treatment for sick</b>	1=Yes
429h_11		

429h_12	Where did you hear the message about Treatment for sick	1=Yes
	newborns from? Meeting	2=No
429h_13	Where did you hear the message about Treatment for sick	1=Yes
	newborns from? Street announcement	2=No
429h_14	Where did you hear the message about Treatment for sick	Specify
	newborns from? Other	

ead out list, prompt, 'anything else' record 1=Yes		
If your child is sick with a <u>fever</u> what should	1=Yes	
you do? Ignore it will go away	2=No	
If your child is sick with a <u>fever</u> what should	1=Yes	
you do? Go to health centre	2=No	
If your child is sick with a <u>fever</u> what should	1=Yes	
you do? Go to HEW	2=No	
If your child is sick with a <u>fever</u> what should	1=Yes	
you do? Go to WDA	2=No	
If your child is sick with a <u>fever</u> what should	1=Yes	
you do? Go to traditional healer	2=No	
If your child is sick with a fever what should	1=Yes	
you do? Ask to be tested for malaria	2=No	
If your child is sick with a fever what should	1=Yes	
you do? Treat with antimalarial / ACT	2=No	
If your child is sick with a fever what should	1=Yes	
you do? Treat with paracetamol	2=No	
If your child is sick with a fever what should	1=Yes	
you do? Treat with antibiotic	2=No	
If your child is sick with a fever what should	1=Yes	
you do? Treat with other medicine	2=No	
If your child is sick with a fever what should	Specify	
you do? Other		
ead out list, prompt, 'anything else' record 1=Yes	for all that apply)	
If your child is sick with a diarrhea what	1=Yes	
should you do? Ignore it will go away	2=No	
If your child is sick with a diarrhea what	1=Yes	
should you do? Go to health centre	2=No	
If your child is sick with a diarrhea what	1=Yes	
should you do? Go to HEW	2=No	
If your child is sick with a <u>diarrhea</u> what	1=Yes	_
should you do? Go to WDA	2=No	
If your child is sick with a <u>diarrhea</u> what	1=Yes	
should you do? <b>Go to traditional healer</b>	2=No	
If your child is sick with a <u>diarrhea</u> what	1=Yes	
	2=No	ı <del></del>
	If your child is sick with a fever what should you do? Ignore it will go away  If your child is sick with a fever what should you do? Go to health centre  If your child is sick with a fever what should you do? Go to HEW  If your child is sick with a fever what should you do? Go to WDA  If your child is sick with a fever what should you do? Go to traditional healer  If your child is sick with a fever what should you do? Ask to be tested for malaria  If your child is sick with a fever what should you do? Treat with antimalarial / ACT  If your child is sick with a fever what should you do? Treat with paracetamol  If your child is sick with a fever what should you do? Treat with antibiotic  If your child is sick with a fever what should you do? Treat with other medicine  If your child is sick with a fever what should you do? Other  and out list, prompt, 'anything else' record 1=Yes  If your child is sick with a diarrhea what should you do? Ignore it will go away  If your child is sick with a diarrhea what should you do? Go to health centre  If your child is sick with a diarrhea what should you do? Go to HEW  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA	If your child is sick with a fever what should you do? Ignore it will go away  If your child is sick with a fever what should you do? Go to health centre  If your child is sick with a fever what should you do? Go to HEW  If your child is sick with a fever what should you do? Go to WDA  If your child is sick with a fever what should you do? Go to traditional healer  If your child is sick with a fever what should you do? Go to traditional healer  If your child is sick with a fever what should you do? Ask to be tested for malaria 2=No  If your child is sick with a fever what should you do? Treat with antimalarial / ACT  If your child is sick with a fever what should you do? Treat with paracetamol  If your child is sick with a fever what should you do? Treat with antibiotic  If your child is sick with a fever what should you do? Treat with antibiotic  If your child is sick with a fever what should you do? Treat with other medicine  If your child is sick with a fever what should you do? Treat with other medicine  If your child is sick with a fever what should you do? Other  and out list, prompt, 'anything else' record 1=Yes for all that apply)  If your child is sick with a diarrhea what should you do? Go to health centre  If your child is sick with a diarrhea what should you do? Go to HEW  If your child is sick with a diarrhea what should you do? Go to HEW  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should you do? Go to WDA  If your child is sick with a diarrhea what should

	packet / ordinary rehydration salts (ORS)		
461h	If your child is sick with a diarrhea what	1=Yes	
	should you do? A gov-recommended	2=No	
	home-made fluid for diarrhoea		
462h	If your child is sick with a diarrhea what	1=Yes	
	should you do? Treat with paracetamol	2=No	
463h	If your child is sick with a diarrhea what	1=Yes	
	should you do? Treat with antibiotic	2=No	
464h	If your child is sick with a diarrhea what	1=Yes	
	should you do? Treat with other medicine	2=No	
465h	If your child is sick with a <u>diarrhea</u> what	Specify	
	should you do? Other	,	_
Do Not re	ead out list, prompt, 'anything else' record 1=Yes	for all that apply)	
466h	If your child is sick with a cough/	1=Yes	
	respiratory infection what should you do?	2=No	_
	Ignore it will go away		
467h	If your child is sick with a cough/	1=Yes	
	respiratory infection what should you do?	2=No	_
	Go to health centre	2-110	
468h	If your child is sick with a cough/	1=Yes	
40011	respiratory infection what should you do?	2=No	_
	Go to HEW	2-110	
469h	If your child is sick with a cough/	1=Yes	
40511	respiratory infection what should you do?	2=No	_
	Go to WDA	2-110	
470h		1 Van	
470h	If your child is sick with a cough/	1=Yes	
	respiratory infection what should you do?  Go to traditional healer	2=No	
471 b		1 //	
471h	If your child is sick with a cough/	1=Yes	
	respiratory infection what should you do? Treat with antibiotic	2=No	
472h	If your child is sick with a cough/	1=Yes	
	respiratory infection what should you do?	2=No	
	Treat with paracetamol		
473h	If your child is sick with a cough/	1=Yes	
	respiratory infection what should you do?	2=No	
	Treat with other medicine		
474h	If your child is sick with a cough/	Specify	
	respiratory infection what should you do?		_
	Other action		
Do Not re	ead out list, prompt, 'anything else' record 1=Yes	s for all that apply)	
475h	What are the signs of illness for a newborn	1=Yes	
., 511	baby? Reduced feeding	2=No	-
476h	What are the signs of illness for a newborn	1=Yes	
4/011	baby? Difficult or fast breathing	2=No	
	baby: Difficult of last breathing	Z-1NU	
477h	What are the signs of illness for a newborn	1=Yes	
	baby? Movement only when stimulated or	2=No	
	No movement even when stimulated		

478h	What are the signs of illness for a newborn	1=Yes	
	baby? Unusually hot or cold	2=No	
479h	What are the signs of illness for a newborn	1=Yes	
	baby? Convulsions	2=No	
480h	What are the signs of illness for a newborn	1=Yes	
	baby? Severe chest in-drawing	2=No	
481h	What are the signs of illness for a newborn	1=Yes	
	baby? Yellow palms/soles/eyes	2=No	
482h	What are the signs of illness for a newborn	1=Yes	
	baby? Diarrhea	2=No	
483h	What are the signs of illness for a newborn	1=Yes	
	baby? Skin pustules	2=No	
484h	What are the signs of illness for a newborn	1=Yes	
	baby? Cord red or draining puss	2=No	
485h	What are the signs of illness for a newborn	1=Yes	
	baby? Small infant (weight <2000 grams)	2=No	
Symptoms	are: reduced feeding, difficult or fast breathing	a, Movement only when stimulated	d or No movement even
	ulated, unusually hot or cold, convulsions, seve		
486h	If your newborn child has symptoms of	1=Yes	
	neonatal sepsis what should you do?	2=No	
	Ignore it will go away		
487h	If your newborn child has symptoms of	1=Yes	
	neonatal sepsis what should you do?	2=No	
	Go to health centre		
488h	If your newborn child has symptoms of	1=Yes	
	neonatal sepsis what should you do?	2=No	
	Go to HEW		
489h	If your newborn child has symptoms of	1=Yes	
	neonatal sepsis what should you do?	2=No	
4001	Go to WDA		
490h	If your newborn child has symptoms of neonatal sepsis what should you do?	1=Yes	
	Go to traditional healer	2=No	
491h	If your newborn child has symptoms of	1=Yes	
	neonatal sepsis what should you do?	2=No	
	Treat with antibiotic		
492h	If your newborn child has symptoms of	1=Yes	
	neonatal sepsis what should you do?	2=No	
402h	Treat with paracetamol	1-Voc	
493h	If your newborn child has symptoms of	1=Yes	_
	neonatal sepsis what should you do?	2=No	
40.41	Treat with other medicine	6	
494h	If your newborn child has symptoms of	Specify	
	neonatal sepsis what should you do?		
1	Other action		

Section	on 3.3: Health care available in kebele	and recent interactions	
495h	Is there a health post in your kebele?	1= Yes	
		2=No <b>SKIP TO 506</b>	
496h	How long does it take you to walk to the nearest	Record the distance in minutes.	
	health post?	If don't know, record 99	
497h	How many times have you visited the health post	Record the number of times	
	in the last six months?	If any visits last 6 months,	
		SKIP TO 504	
	ead out list, prompt, 'anything else' record 1=Yes for all tha		
498h	If never in the last 6 months: What are the	1=Yes	<b> </b> —
	reasons why you have Not visited the health post	2=No	
	in the last six months? <b>No illness in the</b>		
1001	family/No births	4.77	
499h	If never in the last 6 months: What are the	1=Yes	_
	reasons why you have Not visited the health post	2=No	
	in the last six months? <b>Health post is too far</b>		
500h	If never in the last 6 months: What are the	1=Yes	
30011	reasons why you have Not visited the health post	2=No	<del>-</del>
	in the last six months? <b>health post Costs too</b>	2-140	
	much to go to		
501h	If never in the last 6 months: What are the	1=Yes	
30111	reasons why you have Not visited the health post	2=No	_
	in the last six months? <b>Not enough time to visit</b>		
502h	If never in the last 6 months: What are the	1=Yes	
	reasons why you have Not visited the health post	2=No	
	in the last six months? Poor services available at		
	the health post		
503h	If never in the last 6 months: What are the	Specify	
	reasons why you have Not visited the health post		
	in the last six months? Other		
504h	When was the last time you visited that health	Record DD/MM. If don't know	
	post?	99/99. If know month but Not day	/
505h	The last time you visited the health post, what	record 99/MM 01=Family planning	
30311	was the primary reason?	02=Child immunisation	
	was the primary reason:	03=Antenatal care	
		04=Delivery care	
		05=Postnatal care	
		06=Neonatal care	
		07=Health education 08=Growth monitoring	
		09=Referral of sick child	
		10=Diarrhea treatment	
		11=Malaria treatment	
		13=Pneumonia treatment	
		14=other treatment of sickness	
		15=receive mosquito nets	
506h	Is there another health facility in your kebele?	88=other (specify) 1= Yes	
20011	is there another health facility in your kepele?	2=No <b>SKIP TO 518</b>	
507h	What kind of a health facility	1=Health Centre	_
		2=Hospital	

		3=Private clinic	
		8=Other	
508h	How long does it take you to walk to the nearest health facility?	Record the distance in minutes. If don't know, record 99	
509h	How many times have you visited the health facility in the last 6 months?	Record the number of times If any visits last 6 months, SKIP TO 516	_
Do Not i	read out list, prompt, 'anything else' record 1=Yes for	all that apply Then <b>SKIP TO 516</b>	
510h	If never in the last 6 months: What are the	1=Yes	
	reasons why you have Not visited the health facility in the last six months?	2=No	
F11h	No illness in the family/No births	1=Yes	
511h	If never in the last 6 months: What are the reasons why you have Not visited the health facility in the last six months?  Health facility is too far away	2=No	_
512h	If never in the last 6 months: What are the	1=Yes	
31211	reasons why you have Not visited the health facility in the last six months?	2=No	_
E4.21-	Costs too much to go to health post	1=Yes	
513h	If never in the last 6 months: What are the reasons why you have Not visited the health facility in the last six months?	2=No	_
	Not enough time to visit		
514h	If never in the last 6 months: What are the reasons why you have Not visited the health facility in the last six months? <b>Poor services</b>	1=Yes 2=No	_
515h	available at the health facility  If never in the last 6 months: What are the	Specify	
J1311	reasons why you have Not visited the health facility in the last six months? <b>Other</b>	Specify	
516h	When was the last time you visited that health facility?	Record DD/MM. If don't know 99/99. If know month but Not day record 99/MM	
517h	The last time you visited the health facility, what was the primary reason?	01=Family planning 02=Child immunisation 03=Antenatal care 04=Delivery care 05=Postnatal care 06=Neonatal care 07=Health education 08=Growth monitoring 09=Referral of sick child 10=Diarrhoea treatment 11=Malaria treatment 13=Pneumonia treatment 14=Other treatment of sickness 15=Receive mosquito nets 88=Other (specify)	
518h	Have you been visited at home during the past 6 months by a Health Extension Worker to talk about health related issues?	1= Yes 2=No SKIP TO 537	_
519h	When was the last time the HEW visited you at home?	Record DD/MM. If don't know 99/99. If know month but Not day record 99/MM	
Do Not re	I ead out list, prompt, 'anything else' record 1=Yes for all tha	t apply	

520h	Who did the HEW talk to the last time she visited	1=Yes	
	you at home? Myself	2=No	
521h	Who did the HEW talk to the last time she visited	1=Yes	
	you at home? Other adult woman	2=No	
522h	Who did the HEW talk to the last time she visited	1=Yes	
	you at home? Head of household	2=No	
523h	Who did the HEW talk to the last time she visited	1=Yes	
	you at home? Other adult male	2=No	
Do Not re	ead out list, prompt, 'anything else' record 1=Yes for all tha	t apply	
524h	What was discussed the last time the HEW visited	1= Yes	
	you at home? Immunisation	2=No	
525h	What was discussed the last time the HEW visited	1=Yes	
	you at home? Child nutrition	2=No	
526h	What was discussed the last time the HEW visited	1=Yes	
	you at home? Family planning	2=No	_
527h	What was discussed the last time the HEW visited	1=Yes	
027	you at home? Pregnancy care	2=No	_
528h	What was discussed the last time the HEW visited	1=Yes	
020	you at home? <b>Delivery care</b>	2=No	_
529h	What was discussed the last time the HEW visited	1=Yes	
020	you at home? <b>Newborn care / postnatal care</b>	2=No	
530h	What was discussed the last time the HEW visited	1=Yes	
33011	you at home? Information about HIV/AIDS	2=No	
531h	What was discussed the last time the HEW visited	1=Yes	
33111	you at home? Information on hygiene	2=No	<del>-</del>
532h	What was discussed the last time the HEW visited	1=Yes	
33211	you at home? Diarrhea treatment	2=No	
533h	What was discussed the last time the HEW visited	1=Yes	
33311	you at home? Malaria treatment	2=No	_
534h	What was discussed the last time the HEW visited	1=Yes	
33411	you at home? Pneumonia treatment	2=No	_
535h	What was discussed the last time the HEW visited	1=Yes	
33311	you at home? <b>Promotion of latrine use</b>	2=No	<del>-</del>
536h	What was discussed the last time the HEW visited	1=Yes	
33011	you at home? <b>Promotion of safe water use</b>	2=No	<del>-</del>
	you de nome. Tromotion of sale water ase		
537h	Are you aware of women development army who	1= Yes	
33711	visit people at home to talk about health issues?	2=No <b>SKIP TO 556</b>	
538h	If Yes When was the last time the WDA visited	Record DD/MM. If don't know	<del> </del>
33011	you at home?	99/99. If know month but Not day	
	you at nome:	record 99/MM	<del></del>
Do Not re	ead out list, prompt, 'anything else' record 1=Yes for all tha	t apply	
E201-	Mile add the MIDA tellets at the translation in	1=Yes	
539h	Who did the WDA talk to at that last visited to	2=No	<del></del>
E 401	your home? Myself		
540h	Who did the WDA talk to at that last visited to	1=Yes	
F 4 4 1	your home? Other adult woman	2=No	
541h	Who did the WDA talk to at that last visited to	1=Yes	
F 401	your home? Head of household	2=No	
542h	Who did the WDA talk to at that last visited to	1=Yes	
= ::	your home? Other adult male	2=No	
	ead out list, prompt, 'anything else' record 1=Yes for all that		
543h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Immunisation	2=No	
544h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Child nutrition	2=No	

545h	What was discussed the last time the WDA visited	1=Yes	_
	you at home? Family planning	2=No	
546h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Pregnancy care	2=No	
547h	What was discussed the last time the WDA visited	1=Yes	
	you at home? <b>Delivery care</b>	2=No	
548h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Newborn care / postnatal care	2=No	
549h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Information about HIV/AIDS	2=No	
550h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Information on hygiene	2=No	
551h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Diarrhoea treatment	2=No	
552h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Malaria treatment	2=No	
553h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Pneumonia treatment	2=No	
554h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Promotion of latrine use	2=No	
555h	What was discussed the last time the WDA visited	1=Yes	
	you at home? Promotion of safe water use	2=No	
556h	Have you participated in developing local	1= Yes	
	community-based action plan addressing	2=No <b>SKIP TO 559</b>	
	maternal newborn and child health issues about		
	health issues in the past 12 months?		
557h	If Yes: When did you last participate in a	Record DD/MM. If don't know	
33711	community-based action plan?	99/99. If know month but Not day	/
	community susce detrompton.	record 99/MM	
558h	Who organized the community-based action	1=Kebele health team	
	plan?	2=Health extension worker	
		3=Community health worker	
		8=other (specify)	
	Have you attended any mostings in your	9=don't know 1= Yes	
559h	Have you attended any meetings in your	2=No <b>SKIP TO 575</b>	
	community (outside your home) about health	2-110 3111 10 373	
F.COL-	issues in the past 12 months?	Record DD/MM. If don't know	
560h	If Yes: When was the last meeting you attended	99/99. If know month but Not day	,
	outside your home?	record 99/MM	
561h	Who organised the last meeting?	1=Kebele health team	
		2=Health extension worker	
		3=Community health worker	
		8=other (specify)	
		9=don't know	
	ead out list, prompt, 'anything else' record 1=Yes for all that		
562h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Immunisation		
563h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home? Child	2=No	
	nutrition		
564h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Family planning		
565h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
		•	-

	Pregnancy care		
566h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Delivery care		
567h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Newborn care / postnatal care		
568h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Information about HIV/AIDS		
569h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Information on hygiene		
570h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Diarrhea treatment		
571h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Malaria treatment		
572h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Pneumonia treatment		
573h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Promotion of latrine use		
574h	What was discussed at the last community	1= Yes	
	meeting you attended outside your home?	2=No	
	Promotion of safe water use		

Section	Section 3.4: Identification of child & general questions			
The fol	lowing questions are to be asked for all und	der 5 years old. Start with the young	est	
575h	Interviewer: What is the name of the youngest child?	Check household listing		
576h	Interviewer: select ID of the child from household listing			
577h	Did you ever breastfeed [name]? OR Was [name] breastfed?	1=Yes 2=No 9=Don't know	_	
578h	Are you still breastfeeding [name]? OR Is [name] still being breastfed?	1=Yes 2=No 9=Don't know	_	
579h	For how many months did you breastfeed? OR For how many months was [name] breastfed?	Record number of months. If don't know record 98	_	
580h	Did [name] receive a vitamin A dose (like this) during the last 6 months?	Show ampule/capsule/syrup 1=Yes 2=No 9=Don't know	_	

Section	on 3.5: Immunizations		
581h	Do you have a card where [name's] vaccinations are written down? If Yes, may I see it?	1=Yes seen SKIP TO 583 2=Yes Not seen SKIP TO 599 3=No 9=Don't know	_
582h	If No card, did you ever have a vaccination card?	1=Yes 2=No 9=Don't know	— If ALL answered <b>SKIP TO 599</b>
Record 4	4 in the DAY column if card shows that a vaccinat	ion was given but No date is recorded.)	Record DD/MM/YYYY.
583h	Copy vaccination date for <b>BCG</b> from the card		
584h	Copy vaccination date for Polio 0 (Polio given at birth) from the card		
585h	Copy vaccination date for <b>Polio 1</b> from the card		
586h	Copy vaccination date for <b>Polio 2</b> from the card		
587h	Copy vaccination date for <b>Polio 3</b> from the card		
588h	Copy vaccination date for <b>Pentavalent</b> (DPT, HIV, Hep B) from the card		
589h	Copy vaccination date for <b>Pentavalent 2</b> from the card		
590h	Copy vaccination date for <b>Pentavalent 3</b> from the card		
591h	Copy vaccination date for <b>PCV 1</b> from the card		

			-
592h	Copy vaccination date for <b>PCV 2</b> from		
	the card		
593	Copy vaccination date for <b>Rota 1</b> from		
	the card		
594	Copy vaccination date for <b>Rota 2</b> from		
	the card		
595	Copy vaccination date for <b>Rota 3</b> from		
	the card		
596	Copy vaccination date for <b>Measles</b> from		
	the card		
597	Copy vaccination date for Vitamin A		
	from the card		
598	Copy vaccination date for <b>Deworming</b>		
	from the card		
Ask and f	fill this question, only If the vaccination status in t	he card is empty (583-598)	
599h	Did [name] receive any vaccinations that	1=Yes	Record Yes only if respondent
	are not on this card, including	2=No	mentions BCG, Polio 0-3,
	vaccinations received in a national	9=Don't know	Pentavalent, and/or measles
	immunization campaign?		vaccine(s)
600h	Did [name] receive <b>BCG</b> ?	1=Yes	
		2=No	
		9=Don't know	
601h	Did [name] receive Polio 0 (Polio given	1=Yes	
	at birth)?	2=No	
		9=Don't know	
602h	Did [name] receive <b>Polio 1</b> ?	1=Yes	
		2=No	_
COOL	Did formal gracius Balta 23	9=Don't know	
603h	Did [name] receive Polio 2?	1=Yes 2=No	
		9=Don't know	_
604h	Did [name] receive <b>Polio 3</b> ?	1=Yes	
00411	bid [name] receive <b>rono 3</b> :	2=No	
		9=Don't know	_
605h	Did [name] receive Pentavalent (DPT,	1=Yes	
	HIV, Hep B)?	2=No	
		9=Don't know	
606h	Did [name] receive <b>Pentavalent 2</b> ?	1=Yes	
		2=No	
		9=Don't know	
607h	Did [name] receive Pentavalent 3?	1=Yes	
		2=No	_
COOL	Did [name] vassive POV 42	9=Don't know 1=Yes	
608h	Did [name] receive <b>PCV 1</b> ?	2=No	
		9=Don't know	_
609h	Did [name] receive PCV 2?	1=Yes	
30311	Dia [name] receive FCV 2:	2=No	
		9=Don't know	_
	D:11 1 : D : 43	1=Yes	
610h	Did [name] receive <b>Rota 1</b> ?	1-103	
610h	Did [name] receive <b>Rota 1</b> ?	2=No	

611h Copy vaccination date for <b>Rota 2</b> ?	
9=Don't know  612h Did [name] receive Rota 3?  1=Yes 2=No 9=Don't know  613h Did [name] receive Measles?  1=Yes	
612h	
2=No	
9=Don't know  613h Did [name] receive <b>Measles</b> ?  1=Yes	
613h Did [name] receive Measles? 1=Yes	
Side [country country measures]	
2=No	
9=Don't know	
614h Did [name] receive Vitamin A? 1=Yes	
2=No	
9=Don't know	
615h Did [name] receive <b>Deworming</b> ? 1=Yes	
2=No	
9=Don't know	
616h Did [name] ever receive any 1=Yes	
vaccinations to prevent him/her getting 2=No	
diseases, including vaccinations received 9=Don't know	
in a national immunization day	
campaign?	
Please tell me if [name] received any of the following vaccinations:	
617h A BCG vaccination against tuberculosis, 1=Yes	
that is an injection in the arm or 2=No	
shoulder that usually cases a scar?  9=Don't know	
618h A POLIO vaccination, that is drops in the 1=Yes	
mouth? 2=No	
9=Don't know	
619h When was the first polio vaccine 1=just after birth	
received, just after birth or later?	
The transfer of the part of th	
received.	
621h A PENTAVALENT vaccination, which is 1=Yes	
an injection given in the thigh or 2=No  buttacks, compatimes at the came time 9=Don't know ——	
buttocks, sometimes at the same time	
as the polio drops?	
622h How many times was pentavalent Record number.	
received? 9=don't know —	
623h An injection to prevent MEASLES, 1=Yes	
usually in the upper left arm? 2=No	
9=Don't know	
624h Has [name] had any illness at any time 1=Yes	
in the last 2 weeks? 2=No <b>Go to718</b>	
9=Don't know <b>Go to 718</b>	

Section	Section 3.6: Two-Week Morbidity Module (symptoms, care seeking and drugs)			
	THE MODULE BELOW IF THE CHILD WAS ILL IN THE PREV	/IOUS TWO WEEKS. IF THE CHILD HAD	MORE THAN ONE EPISODE,	
	ER ONLY THE MOST RECENT ONE.	If loss than and day record 00		
625h	For how many days was [name] ill?	If less than one day record 00 99 if don't know	_	
626h	Is [name] ill Now?	1=Yes		
Cumant		2=No		
Sympt		1 Van		
627h	Did [name] have any of the following at any time in the last 2 weeks? <b>Convulsions</b>	1=Yes 2=No	_	
628h	Did [name] have any of the following at any	1=Yes		
02011	time in the last 2 weeks? <b>Very sleepy</b>	2=No	_	
629h	Did [name] have any of the following at any	1=Yes		
02311	time in the last 2 weeks? <b>Vomiting everything</b>	2=No	_	
630h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? <b>Drinking poorly/Not</b>	2=No		
	able to drink or breastfeed		_	
631h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? <b>Fever</b>	2=No	_	
632h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? Cough	2=No	_	
633h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? Difficult breathing	2=No	_	
634h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? <b>Diarrhea</b>	2=No	_	
635h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? Ear pain	2=No	_	
636h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? Loss of appetite	2=No	_	
637h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? Blocked or runny	2=No	_	
	Nose			
638h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? Fast breathing	2=No	_	
639h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? Eye problems	2=No	_	
640h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? Generalized rash	2=No	_	
641h	Did [name] have any of the following at any	1=Yes		
	time in the last 2 weeks? <b>Other</b>	2=No	_	
	signs/symptoms			
642h	How many days ago did this start	If less than one day record 00		
If cumnt	 oms Fast Breathing or Difficult Breathing were selected (	99 if don't know		
		1		
643h	Were symptoms of fast or difficult breathing	1=Chest 2=Nose		
	due to problem in the chest or to a blocked	3=Both	<del>-</del>	
	Nose?	<u> </u>		

		8= Other				
		9=Don't know				
If Diarrhe	If Diarrhea was selected ask the following questions:					
644h	When [name] was sick with diarrhea, how	If less than one day record 00				
	many watery stools did [name] have?	99 if don't know				
645h	During the diarrhea, did [name] have?	1=Yes				
	Repeated vomiting	2=No	_			
646h	During the diarrhea, did [name] have?	1=Yes				
	Marked thirst	2=No	_			
647h	During the diarrhea, did [name] have?	1=Yes				
	Not eating/drinking well	2=No	_			
648h	During the diarrhea, did [name] have?	1=Yes				
	Blood in the stool	2=No	_			
649h	During the diarrhea, did [name] have?	1=Yes				
	Not getting better/getting sicker	2=No	_			
650h	Now I would like to know how much [name]	1=Much less				
	was offered to drink during the diarrhoea.	2=Somewhat less 3=About the same				
	Was he/she given less to drink than usual,	4=More				
	more than usual, or about the same amount?	5=Nothing to drink				
	If less, probe: was he/she given much less than	9=Don't know				
0=41	usual to drink or somewhat less.					
651h	When [name] had diarrhea, was he/she given	1=Much less				
	less to eat than usual, more than usual, or	2=Somewhat less 3=About the same				
	about the same amount?	4=More				
	If less, probe: was he/she given much less than usual to eat or somewhat less.	5=Nothing to drink				
	usual to eat of somewhat less.	9=Don't know				
Care se	eking					
652h	Did you seek advice or treatment for [name]'s	1= Yes <b>SKIP TO 660</b>				
	illness from any source?	2= No				
		9=Don't know SKIP TO 664				
653h	Why did you Not seek advice or treatment	1= Yes				
	from any source? Health facility too far	2= No <b>SKIP TO</b> 718	_			
654h	Why did you Not seek advice or treatment	1= Yes				
	from any source? Had no time	2= No <b>SKIP TO</b> 718	_			
655h	Why did you Not seek advice or treatment	1= Yes				
	from any source? Had no money	2= No <b>SKIP TO</b> 718	_			
656h	Why did you Not seek advice or treatment	1= Yes				
	from any source? Did Not want to attend a	2= No <b>SKIP TO</b> 718	_			
	health facility					
657h	Why did you Not seek advice or treatment	1= Yes				
	from any source? Could manage at home	2= No <b>SKIP TO</b> 718	_			
658h	Why did you Not seek advice or treatment	1= Yes				
	from any source? Spouse did Not allow	2= No <b>SKIP TO</b> 718	_			
659h	Why did you Not seek advice or treatment	1= Yes				
	from any source? Other	2= No <b>SKIP TO</b> 718				
660h	Where did you seek advice or treatment?	1= Yes				
	Anywhere else? Health Post	2= No	_			
CCAL						
661h	Where did you seek advice or treatment? Anywhere else? Health Centre	1= Yes 2= No				

662h	Where did you sook advise or treatment?	1= Yes	-
662h	Where did you seek advice or treatment?		
	Anywhere else? Hospital	2= No	
663h	Where did you seek advice or treatment?	Specify	
	Anywhere else? Other		
664h	Interviewer: Check was treatment sought at	1=Yes	
	two or more places?	2=No <b>SKIP TO 665</b>	
665h	Where did you first seek treatment?	1=Health Post	
		2=Health Centre	
		3=Hospital	<del></del>
		8=Other	
666h	How many days after the illness began did	If same day record 00. If don't know	
	you first seek treatment for [name]?	record 99.	
667h	Did the health worker ask you to bring [name]	1=Yes	
	back to be seen again?	2=No	
	-	9=Don't know SKIP TO 670	
668h	When did he/she say that [name] should be	1=Before today's date	
	brought back?	2=After today's date SKIP TO 670	
		9=Don't know SKIP TO 670	
669h	Did you take [name] back?	1=Yes	
		2=No	
		9=Don't know	
670h	Has [name] been hospitalized for this illness?	1=Yes	
		2=No <b>SKIP TO 672</b>	l —
		9=Don't know SKIP TO 672	
671h	How many nights has [name] been	Record number of nights. If don't know	
	hospitalized during this illness?	record 99.	
672h	Has [name] been hospitalized at any time in	1=Yes	
	the last 3 months?	2=No	
		9=Don't know	
673h	How many nights has [name] been	Record number of nights. If don't know	
	hospitalized in the last three months?	record 99.	
674h	At any time during this illness, did [name]	1=Yes	
	have blood taken from his/her finger or heel	2=No <b>SKIP TO 678</b>	
	for testing?	9=Don't know SKIP TO 678	
675h	Which test was done?	1=Microscopy	
		2=RDT	
		9=Don't know	
676h	Where was the test done?	1=Health Post	
		2=Health Centre	
		3=Hospital	_
		8=Other	
677h	Was the test positive for malaria?	1=Yes	
		2=No	
		9=Don't know	
678h	In addition, did you seek advice from any of	1=Yes	
	the following? Traditional birth attendants	2=No	
679h	In addition, did you seek advice from any of	1=Yes	
	the following? Religious leader	2=No	
680h	In addition, did you seek advice from any of	1=Yes	
00011	the following? Pharmacy	2=No	_
C01L		1=Yes	
681h	In addition, did you seek advice from any of	1=Yes 2=No	
		Z-INU	

	the following? Traditional drug seller		
682h	In addition, did you seek advice from any of	1=Yes	_
	the following? Relative or friend	2=No	
683h	In addition, did you seek advice from any of	Specify	
	the following? Other		

Drugs			
684h	At any time during the illness, was [name]	1=Yes	
	prescribed any drugs for the illness?	2=No <b>SKIP TO 718</b>	
	presented any drugs for the liness.	9=Don't know SKIP TO 718	_
685h a	What drugs did [name] take? Antimalarial	4. V	
	tablet (Co-artem, Chloroquine, etc)	1= Yes	
	, , , ,	2 = No	_
685h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take Antimalarial tablet?	write 0 If 7 days or more write 7.	
		If don't know write 9	_
685h_c	Did [name] complete taking the Antimalarial	1= Yes	
	tablet?	2 = No	
685h_d	Did you have [Antimalarial tablet] at home or	1=Home	
	did you get it from somewhere else.	2=Public health facility	
		3=Private health facility	
	If somewhere else, probe for the source.	4=HEW	
		5=Shop	
		8=Other Specify	
		9=Don't know	
694h_a	What drugs did [name] take?	1= Yes	
	Amoxycillin	2 = No	
694h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	_
	first take Amoxycillin?	write 0. If 7 days or more write 7.	
		If don't know write 9	
694h_c	Did [name] complete taking the Amoxycillin?	1= Yes	
		2 = No	
694h_d	Did you have <b>Amoxycillin</b> at home or did you	1=Home	
	get it from somewhere else.	2=Public health facility	
		3=Private health facility	
		4=HEW	
	If somewhere else, probe for the source.	5=Shop	
		8=Other Specify	
		9=Don't know	
695h_a	What drugs did [name] take?	1= Yes	_
	Erythromycin	2 = No	
695h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take Erythromycin?	write 0. If 7 days or more write 7. If don't know	
		write 9	
695h_c	Did [name] complete taking the <b>Erythromycin?</b>	1= Yes	_
		2 = No	
695h_d	Did you have <b>Erythromycin</b> at home or did	1=Home	
	you get it from somewhere else?	2=Public health facility	
		3=Private health facility	
	If somewhere else, probe for the source.	4=HEW	
		5=Shop	
		8=Other Specify	

		9=Don't know	
696h_a	What drugs did [name] take?	1= Yes	
	Azithromycin	2 = No	_
696h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
03011_5	first take Azithromycin?	write 0. If 7 days or more write 7.	_
	,	If don't know write 9	
696h_c	Did [name] complete taking the Azithromycin?	1= Yes	
_		2 = No	
696h_d	Did you have <b>Azithromycin</b> at home or did you	1=Home	
	get it from somewhere else.	2=Public health facility	
		3=Private health facility	
	If somewhere else, probe for the source.	4=HEW	_
		5=Shop	
		8=Other Specify	
		9=Don't know	
697h_a	What drugs did [name] take?	1= Yes	_
	Cotrimoxazole	2 = No	
697h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	_
	first take Cotrimoxazole?	write 0. If 7 days or more write 7.	
		If don't know write 9	
697h_c	Did [name] complete taking the	1= Yes	_
	Cotrimoxazole?	2 = No	
C07h d	District have Catalynamical and have an	1 Hama	
697h_d	Did you have <b>Cotrimoxazole</b> at home or	1=Home	
	did you get it from somewhere else.	2=Public health facility 3=Private health facility	
	If somewhere else, probe for the source.	4=HEW	_
	ij somewnere eise, probe for the source.	5=Shop	
		8=Other Specify	
		9=Don't know	
698h_a	What drugs did [name] take?	1= Yes	
_	Other antibiotic (pill or syrup)	2 = No	_
698h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take other antibiotic (pill or syrup)?	write 0. If 7 days or more write 7.	
		If don't know write 9	
698h_c	Did [name] complete taking other antibiotic	1= Yes	
	(pill or syrup)?	2 = No	
698h_d	Did you have other antibiotic (pill or syrup) at	1=Home	
	home or did you get it from somewhere else.	2=Public health facility	
		3=Private health facility	
	If somewhere else, probe for the source.	4=HEW	
		5=Shop	
		8=Other Specify	
		9=Don't know	
699h_a	What drugs did [name] take?	1= Yes	_
coct :	Antibiotic injection	2 = No	
699h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	_
	first take antibiotic injection?	write 0. If 7 days or more write 7.	
6005	Did Inomal complete talking a vilitation	If don't know write 9	
699h_c	Did [name] complete taking antibiotic	1= Yes	
600h 4	injection?	2 = No	
699h_d	Did you have antibiotic injection at home or did you get it from somewhere else.	1=Home 2=Public health facility	
	מום אסט בבי וני וויסווו שוווופשוופוצ פושב.	3=Private health facility	
		5 Trivate health facility	

	If compulare also prohe for the course	1-HEW	1
	If somewhere else, probe for the source.	4=HEW	_
		5=Shop	
		8=Other Specify	
7001	What down did from Nation	9=Don't know	
700h_a	What drugs did [name] take?	1= Yes	
700h h	Zinc	2 = No	
700h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take Zinc?	write 0. If 7 days or more write 7. If don't know	
===1		write 9	
700h_c	Did [name] complete taking the <b>Zinc?</b>	1= Yes	
		2 = No	
700h_d	Did you have <b>Zinc</b> at home or did you get it	Write number of days. If child did Not take drug	
	from somewhere else.	write 0 If 7 days or more write 7. If don't know	
	If somewhere else, probe for the source.	write 9	
701h_a	What drugs did [name] take?	1= Yes	
/0111_a	Fluid made from special packet called ORS	2 = No	
701h h		Z - INO	
701h_b	How long after the illness started did [name] first take fluid made from special packet	Write number of days. If child did Not take drug	
	called ORS?	write 0. If 7 days or more write 7. If don't know	
	called OKS?	write 9	
702h_a	What drugs did [name] take?	1= Yes	
70211_a	ORS-Zinc combined	2 = No	
702h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
/UZII_D	first take <b>ORS-Zinc combined</b> ?	write 0. If 7 days or more write 7. If don't know	
	mst take Oks-zinc combined:		
704h a	What drugs did [nama] take?	write 9	
704h_a	What drugs did [name] take?	1= Yes	
704h h	Gov. recommended home mad fluid	2 = No	
704h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take Gov. recommended home mad	write 0. If 7 days or more write 7. If don't know	
705h a	fluid?	write 9	
705h_a	What drugs did [name] take?	1= Yes	
705h h	Pill or Syrup	2 = No	
705h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take Pill or Syrup?	write 0. If 7 days or more write 7. If don't know	
====		write 9	
706h_a	What drugs did [name] take?	1= Yes	
	Injection	2 = No	
706h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take Injection?	write 0. If 7 days or more write 7. If don't know	
		write 9	
707h_a	What drugs did [name] take?	1= Yes	_
	IV intravenous	2 = No	
707h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take IV intravenous?	write 0. If 7 days or more write 7. If don't know	
		write 9	
708h_a	What drugs did [name] take?	1= Yes	
	Home remedies/herbal medicine	2 = No	
708h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	_
	first take home remedies/herbal medicine?	write 0. If 7 days or more write 7. If don't know	
		write 9	
709h_a	What drugs did [name] take?	1= Yes	
	Paracetamol	2 = No	
709h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	and and and and promise	te namber of days. If clinia did Not take drug	1 —

	first take Paracetamol?	write 0. If 7 days or more write 7.	
		If don't know write 9	
710h_a	What drugs did [name] take?	1= Yes	
	Panadol	2 = No	
710h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take Panadol?	write 0. If 7 days or more write 7.	
		If don't know write 9	
711h_a	What drugs did [name] take?	1= Yes	
	Aspirin	2 = No	
711h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take Aspirin?	write 0. If 7 days or more write 7.	
		If don't know write 9	
712h_a	What drugs did [name] take?	1= Yes	
	Ibuprofen	2 = No	
712h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	
	first take <b>Ibuprofen</b> ?	write 0. If 7 days or more write 7.	
		If don't know write 9	
713h_a	What other drugs did [name] take?	Specify	
	Other	Specify	
713h_b	How long after the illness started did [name]	Write number of days. If child did Not take drug	_
	first take other drug?	write 0. If 7 days or more write 7.	
		If don't know write 9	
714h	What other drugs did [name] take?	1= Yes	
	Don't know	2 = No	
Section	on 3.7: MUAC		
		In centimeters	
718h	Mid-upper arm circumference	9994=If Not present	
		9995=Refused	l·
		9996=Other	

113

114

Did the

interviewed?

If not, why not?

#### ANNEX C: INSTRUMENTS FOR HEALTH PROVIDER SURVEY

### Dagu Baseline Facility Questionnaire: Health Post

#### MODULE 1: BACKGROUND INFORMATION OF THE HEALTH POST 100 Date (Gregorian Calendar) dd 101 **Region Code Zone Code** 102 103 **Woreda Name** Woreda code 104 PHCU/Health Centre name 105 106 Kebele name 107 Gote name 108 Cluster code 109 **GPS Latitude** Take coordinates of health post 110 **GPS Longitude** Take coordinates of health post 111 **Interviewer Initials** 112 Did you read the HEW the consent 1 = Yes form? 2 = No

2 = No

#### MODULE 2: FACILITY, EQUIPMENT, MEDCINE AND JOB AIDS

agree

HEW

INTERVIEWER: I would now like to ask you questions about the facility, equipment, medicine and job aids at this health post.

1= Yes - GO TO MODULE 2

WALK AROUND THE FACILITY WITH THE HEW AND PERSONALLY CHECK THE AVAILABILITY OF EQUIPMENT, AND MEDICINE IN STOCK.

Does the facility have the following essential support services?

Dues the	s the judnity have the johowing essential support services:			
115	What is the main source of drinking	1 = Piped connection into health post	II	
	water?	2 = Piped connection into yard		
		3 = Public standpipes		
		4 = Boreholes		
		5 = Protected dug wells		
		6 = Protected springs		
		7 = Rainwater collection		
		8 = Surface water		
		9 = Open dug wells		
		10 = Unprotected springs		
		11 = Vendor provided water		
		12 = Bottled water		
		13 = Tanker		
116	Water supply available on day of	1 = Yes	II	
	survey	2 = No		
117	Electricity connection or other power	1 = Yes	II	

	sources (example, gas/solar	2 = No	o-SKIP 119	
	generator)			
118	Electricity supply on day of survey?	1 = Ye	•	
		2 = No	)	
119	Functional sterilizer that works on the	1 = Ye	S	
	day of the survey?	2 = No	)	
120	Functional fridge that works on the	1 = Ye	S	
	day of the survey?	2 = No	)	
121	Toilets accessible to facility users?	1 = Ye	S	
		2 = No	)	
122	Generally is there a cell phone signal	1 = Ye	S	
	at this health post?	2 = No		
123	Is it all functional today?	1 = Ye	S	
	INTERVIEWER -check your phone if	2 = No		
	there is signal on day of survey			
	Which means of communication do		For each:1 = Yes 2 = No	
	you have to speak to the health	124	Facility landline/mobile phone	
	facility?	125	Staff member mobile phone	
		126	Phone outside the facility	
	Check all that apply	127	In person communication	
			,	11
128	During the last sick newborn referral	1 = Ye	S	
	from the health post to health center,	2 = No – GO TO 130		
	did you speak to the health facility	3 =Don't know - GO TO 130		
	directly?			
129	IF YES, Which means of	1 = Facility landline/mobile phone		
	communication did you use?	2 = Staff member mobile phone;		
		3 = Ph	one outside the facility	
		4 = Ra	dio	
		5 = In person communication;		
130	When referring from this health post	1 = \	es (NOTE: check to see if an	
	to the health center for further care,	officia	l referral form)	
	do you use referral forms?	2 = No	)	
131	Do you receive any back referral	1 = Ye	s	
	forms on cases you have referred?	2 = No		

Walk ar	Walk around the facility with the respondent and personally check the availability of medicine						
	Does the facility have the following medicines today?			If not available or expired, what was the duration of stock out /expiry for?			
	For each:  1 = Yes  2 = Not available  3= Expired  4 = Never available			Check for the last three months and what was the longest number of consecutive days without that item (in days)			
132	Vitamin k 1 mg	II	133	Vitamin k 1 mg	_ _ _		
132A	Vitamin k 10 mg	II	132B	Vitamin k 10 mg	_ _ _		
134	Vitamin A 200,000 IU	II	135	Vitamin A 200,000 IU	_ _ _		
136	Vitamin A 100,000 IU	II	137	Vitamin A 100,000 IU	_ _ _		
138	TTC eye ointment	II	139	TTC eye ointment	_ _ _		
140	Chlorohexidine		141	Chlorohexidine	_ _		

142	Gentamycin 20 mg/2ml, box of 50 amp	ll	143	Gentamycin 20 mg/2ml, box of 50 amp	_ _ _
144	Gentamycin 80mg/2ml		145	Gentamycin 80mg/2ml	_ _ _
146	Amoxicillin suspension (125 mg/5 ml)		147	Amoxicillin suspension (125 mg/5 ml)	_ _
148	Amoxicillin tab 250 (dispersible)		149	Amoxicillin tab 250 (dispersible)	_ _ _
150	Amoxicillin tab 125 mg (dispersible)	II	151	Amoxicillin tab 125 mg (dispersible)	_ _ _
152	Ampicillin powder for inj, 500 mg		153	Ampicillin powder for inj, 500 mg	_ _ _
154	Paracetamol	II	155	Paracetamol	_ _ _
156	Iron	II	157	Iron	_ _ _
158	Folate	II	159	Folate	_ _ _
160	BCG	II	161	BCG	_ _ _
162	Polio vaccine		163	Polio vaccine	_ _ _
164	ORS		165	ORS	_ _ _
166	Zinc		167	Zinc	_ _ _
168	Zinc-ORS combined		169	Zinc-ORS combined	_ _ _
170	Malaria RDT	II	171	Malaria RDT	_ _ _
172	Coartem (Artemether/lumefantrine)		173	Coartem (Artemether/lumefantrine)	_ _ _
174	Chloroquine syrup	II	175	Chloroquine syrup	_ _ _
176	Artesunate suppository	II	177	Artesunate suppository	<u> _ _ _ </u>
178	HIV diagnostic tests	II	179	HIV diagnostic tests	<u> _ _ _ </u>
180	Cotrimoazole	<u>                                     </u>	181	Cotrimoazole	_ _
182	Plumpy nut	II	183	Plumpy nut	<u>                                     </u>
184	BP100	<u> </u>	185	BP100	_ _ _

Does the facility have the		For each 1=yes, 2=no	
following functional equipment today?	186	Ambu bag / face mask (full size 0 and 1)	II
equipment today:	187	Any Thermometer	II
	188	Infant scale	11
	189	Weighing sling	11
	190	Blood pressure cuff	II
	191	Stethoscope	II
	192	Watch or clock	lI
	193	Tape measure	lI
	194	Examination couch	II
	195	Drape	II
	196	Washable mackintosh	II
	197	Dustbin	II

	198	Cups/drinking water	11
	199	Sharps container	II
	200	Chlorine bleach	II
	201	Bucket for decontamination solution	II
	202	Contaminated waste container	II
	203	Soap and towel or handrub	II
	204	Alcohol-based hand rub	II
	205	Clean glove	II
	206	Syringe with needle for Gentamycin injection	II
	207	MUAC tape measure	II
Does the facility have the		For each 1=yes, 2=no	
following job aids and forms today?	208	Pregnant woman registration book	lI
iornis today.	209	ANC Register	lI
	210	Delivery Register	lI
	211	PNC Register	lI
	212	ICCM registration book for 0- under 2 months	lI
	213	ICCM registration book 2 -59 months	lI
	214	Family health cards	ll
	215	Vaccination cards	lI
	216	Family folder	lI
	217	Stock card/bin card	ll
	218	HMIS forms (monthly and quarterly reporting)	ll
	219	Request and re-supply form	lI
	220	Chart booklet	

MODUL	MODULE 3: HEALTH POST REGISTER REVIEW BY THE DATA COLLECTOR						
WRITE 9 I would i services	PLEASE LOOK AT THE SPECIFIED HEW REGISTERS DETAILED BELOW FOR THE DIFFERENT DATA ELEMENTS.  WRITE 9999, 999 OR 99 IF NOT AVAILABLE.  I would now like to take a look at your registers to abstract information about the community in this kebele and the services provided them. I will ask about the population profile for the last 12 months and services provided by you for the last three months from to						
	Obtain data on population FOR THE YEAR from the day of survey from Health Post wall records						
221	Number of people in the kebele	_ _ _					
222	Number of households in the kebele	_ _					
223	Total number of women of reproductive age	_ _ _					
224	Total number of under 5 children in the kebele	_ _					
	Obtain data on expected number of pregnancies and births from the PAST QUARTER from Health Post wall records						
225	Expected number pregnancies	_ _					
226	Expected number of births	_ _					

227	Expected number of facility births	
	Obtain data from ANC registers for the PAST QUARTER	
228	Number of women receiving 1 visit	
229	Number of women receiving 2 visits	
230	Number of women receiving 3 visits	
231	Number of women receiving 4 visits	
	Obtain data from delivery registers for the PAST QUARTER	
232	Number of births attended by the HEW	
233	Number of total births (home, health post, health center, hospital)	_
234	Number of live births	_
235	Number of newborn deaths (28 days or less)	
	PNC data	
236	Is there a Post Natal Care register (standard or otherwise) in this health post 1= Yes, 2=No	1_1
	If Post Natal Care register is not available but family folder is available, obtain the information from the family folder given for the PAST QUARTER. Ask the HEWs to separate those.	
237	Number receiving 1 visit	_
238	Number receiving 2 visits	_
239	Number receiving 3 visits	_
	If information is not available from register books on the following, enquire from the HEW where to obtain the following information for the PAST QUARTER	
240	Number of newborns treated for asphyxia, initial stimulation, or resuscitation by the HEW	_ _
241	Number of newborns given chlorohexidine cord care by the HEW	
	Obtain data from the ICCM 2-59 month register for the PAST QUARTER	
242	Number of initial consultations with children	_
243	Number of sick children who were referred	_
244	Number of children classified as having pneumonia	_
245	Number of children classified as having diarrhea	_
246	Number of children classified as having malaria	_
247	Number of children who received antibiotic for pneumonia	_ _ _
248	Number of children who received ORS for diarrhea	_
249	Number of children who received zinc for diarrhea	_
250	Number of children who received zinc-ORS combined for diarrhea	_
251	Number of children who received RDT for malaria	_
252	Number of children who received ACT for malaria	

Obtain data from iCCM 0-2 month registration book for information below for the PAST QUARTER For each of the newborn less than 2 months old seen at the health center (recorded above) complete a separate record review.

Recor	<u>d 1</u>				
253A	How many 0-2 months were s	een in th	e last quarter?	11_	
253	Name of child		First name	<b> </b>	
			Last name		
254	Address of child		Gote name		
			Keble name		
255	Date Seen		Gregorian calendar (DD/MM/YY)	1 1 1/	/     /
				''	111/111
256	Age of baby at the ti	ime of	Record age of baby in weeks	we	eeks
	consultation in weeks		ranging from 1-8 weeks.		
			If unknown 9		
257	Gender of baby		1 = Male		
258	Weight on the day of consult	ation in	2 = Female  If weight is given in KGs record in	1 1	1 1 1
236	grams	ation in	grams e.g $3.5 \text{ KG} = 3500 \text{ grams}$ .	grams	_
	8.4		If unknown 9999	8	
259	Birth Weight		1= < 1,500 grams	II	
	(Written for those less than 7	days)	2= 1,500 - < 2,500 grams		
			3= >/= 2,500 grams		
260			9= Unknown 1= < 32 weeks	1 1	
260	Gestational Age (in weeks)		1= < 32 weeks 2= 32 – 36 weeks		
			$3 = \frac{32 - 30 \text{ weeks}}{3}$		
			9= Unknown		
261	Temperature on the d	lay of		ll_	_ .  °C
	consultation in degree Celsiu	s	decimal place (e.g. 34.3 $^{\circ}C$ )		
			If unknown 99.9		
262	Descriptory Data was unique		If walman 200	1 1	1 1
262	Respiratory Rate per minute day of consultation	on the	If unknown 999		_
	Signs and symptoms of the		For each:1 = Yes 2 = No		
	newborn at the time of	263	Reduced feeding/unable to feed		
	consultation?	264	Convulsion		ii
		265	Severe Chest in-drawing		
	Record all that apply	266	Vomiting		ll
		267	Fever		
		268	Diarrhea		
		269	Fast breathing		
		270	Coughing		
		271 272	Grunting Skin pustules		
		273	Yellow palms and soles		<u>                                   </u>
		274	Yellow eyes and skin		
		275	Red umbilicus or draining pus		
		276	Movement only when stimulate	d or no	II
			movement even when stimulated		
		277	Movement only when stimulate	d or no	lI
	1	1	movement even when stimulated		1

	270	Policina for the college	1 1
	278	Bulging fontanelle	<u> </u>
	279	Restless/Irritable	<u> </u>
	280	Sunken eyes	
	281	Skin pinch goes back slowly	<u>  </u>
	282	Skin pinch goes back very slowly	<u>                                     </u>
	283	Diarrhea lasting 14 days or more	<u>    </u>
	284	Blood in the stool	<u>  </u>
	285	Not suckling well	<u>  </u>
	286	Less than 8 breast feeds in 24 hours	
	287	Switching to another breast before one is emptied	II
	288	Not breast feeding more frequently and longer during sickness	II
	289	Poor positioning during breast feeding	1 1
		Not well attached during breast feeding	<u>  </u>
	290 291	Receives other foods or drinks (even water)	<u>                                   </u>
	291	Low weight for age	<u>  </u>
	293	Thrush (ulcers or white patches in mouth)	<u>                                   </u>
	293	Signs and symptoms not given	<u>                                   </u>
	294	Other – GO TO 297	<u>                                   </u>
	295	Specify	<u>    </u>
Disease classification of the	230	For each:1 = Yes 2 = No	
newborn	297	Very Preterm and/or very low birth weight	1 1
Record all that apply	298	Preterm and/or low birth weight	<u>                                   </u>
дер.,	299	VSD	<u>                                   </u>
	300	Local bacterial infection	''
	301	Severe Dehydration	<u>  </u>
	302	Some Dehydration	<u>'</u>
	303	No Dehydration	<u>                                   </u>
	304	Severe Persistent Diarrhea	<u>'</u>   
	305	Dysentery	<u>   </u> 
	306	Jaundice	<u>                                   </u>
	307	Severe Jaundice	<u>                                   </u>
	308	Malaria	<u>                                   </u>
	309	Feeding problem or low weight	<u>    </u>
	310	Classification not given	<u>                                   </u>
	311	Other Go to 313	<u>    </u>
	312	Specify	<u> </u>
Treatment given to the	312	For each:1 = Yes 2 = No	
newborn	313	Gentamycin IM first dose	1 1
Record all that apply	314	Gentamycin IM for seven days	
	315	Amoxicillin suspension/dispersible first dose	
	316	Amoxicillin suspension/dispersible for 7 days	
	317	Amoxicillin suspension/dispersible for 5 days	
	318	ORS (Plan B) – Facility treatment	
	319	ORS (Plan A) – Home treatment	
	320	Zinc for 10 days	
	321	Zinc-ORS combined	
	322	Oral chloroquine (Anti-malarial)	
	323	Oral quinine (Anti-malarial)	
	324	Oral coartem (Anti-malarial)	
	325	Rectal Artesunate (Anti-malarial)	
	326	IV Quinine (Anti-malarial)	
	327	Other Antimalarial (specify)	
		1 · · · · · · · · · · · · · · · ·	· · ·

		328	TTC (Tetracycline) eye ointment	
		329	GV paint (Gentian Violet)	
		330	Nutritional Counseling	
		331	Exposing to sunshine 20– 30 minutes	
			everyday	
		332	Other treatment GO TO 334	
		333	Specify	
334	Was newborn referred to a	higher	1 = Yes – GO TO 337	
	facility?		2 = No	
335	If newborn had VSD an	d was	1 = Yes	
	treated at health post	was	2 = No	
	gentamycin treatment comple	eted?	3 = Not VSD case	
	Outcome of the newborn		For each:1 = Yes 2 = No	
	treatment	336	Health improved/healed	ll
		337	Died	
		338	Worsened	
		339	Same	
		340	Unknown	<u>                                     </u>

Obtain data from iCCM 2-59 registration book for information below for the PAST QUARTER For the past 10 children seen at the health post (recorded above) complete a separate record review.

Record	<u>1</u>			
341A	How many 2-59 months were	seen in t	he last quarter?	_
341	Name of child		First name	
			Last name	
342	Address of child		Gote name	
			Keble name	
343	Date Seen		Gregorian calendar (DD/MM/YY)	/     /
3 13	Date See.		Cregorian caremaan (22) mm, 117	111/111/11
344	Age of child at the t	ime of	3 ,	months
	consultation		If unknown 99	
345	Gender		1 = Male	
246	Maight on the day of consult	tation in	2 = Female	
346	Weight on the day of consult grams	tation in	If weight is given in KGs record in grams	grams
	granis		e.g 3.5 KG = 3500 grams.	grains
			If unknown 9999	
347	Temperature on the o	day of	Record temperature to one	°C
	consultation in degree Celsius	-	decimal place (e.g. 34.3 °C)	
	_		If unknown 99.9	
348	Respiratory Rate per minute	on the	If unknown 999	_
	day of consultation	1		
	Signs and symptoms of the		For each:1 = Yes 2 = No	Т.
	child at the time of	349	Reduced feeding/unable to feed	
	consultation?	350	Vomiting	_
	Pocord all that apply	351	Convulsion	
	Record all that apply	352	Movement only when stimulated	d or no
		353	movement even when stimulated  Movement only when stimulate	d or no l
		333	movement even when stimulated	u oi iio   11
		354	Restless/Irritable	1 1
		355	Difficult breathing	
		356	Fast breathing	<u> </u>
		357	Coughing	11
		358	Severe Chest in-drawing	
		359	Stridor	<u>    </u>
		360	Diarrhea	
		361	Diarrhea lasting 14 days or more	_
		362	Blood in the stool	
		363	Skin pinch goes back slowly	<u> </u>
		364 365	Skin pinch goes back very slowly Fever	<u>    </u>
		366	Bulging fontanelle	
		367	Rash	<u> </u>
		368	Mouth ulcers	
		369	Pus or clouding of cornea	
		370	Perform malaria RDT	
		371	Discharge / pus in the ear	
		372	Swelling	11
		373	Visible severe wasting	1

	374	Palmor pallor	1 1
	375	Signs and symptoms not given	<u> </u>
	376	Other – GO TO 377	<u>                                   </u>
	377	Specify	11
Disease classification of the	377	For each:1 = Yes 2 = No	
child	378	One or more danger signs (unable to drink or	1 1
Record all that apply	370	breastfeed, vomits everything, convulsions,	''
necessa am amas appriy		movement only when stimulated or no	
		movement even when stimulated	
	379	Severe pneumonia/very severe disease	1 1
	380	Pneumonia	<u>'</u> '
	381	Severe dehydration	
	382	Some dehydration	<u> </u>
	383	Severe persistent diarrhoea	<u> </u>
	384	Persistent diarrhoea	i i
	385	Dysentery	i i
	386	Very severe febrile disease	i i
	387	Malaria	II
	388	Fever, malaria unlikely	
	389	Fever, no malaria	
	390	Severe complicated measles	<u>                                     </u>
	391	Measles with eye/mouth complications	
	392	Measles	
	393	Acute ear infection	l <u></u> l
	394	Chronic ear infection	<u>  </u>
	395	Severe malnutrition	<u>  </u>
	396	Moderate malnutrition	<u>  </u>
	397	Severe anaemia	<u>  </u>
	398	Anaemia	<u>                                     </u>
	399	Vaccination status not up-to-date	<u>                                     </u>
	400	Vaccine(s) needed (specify)	<u>                                     </u>
	401	Vitamin A status not up-to-date	<u> </u>
	402	Classification not given	<u>                                     </u>
	403	Other Go to 404	
	404	Specify	
Treatment given to the		For each:1 = Yes 2 = No	
child	405	ORS (Plan A) – Home treatment	<u> </u>
Record all that apply	406	ORS (Plan B) – Facility treatment	<u> </u>
	407	Zinc for ten days	<u>    </u>
	408 409	Oral chloroguino (Anti-malarial)	<u>  </u>
		Oral chloroquine (Anti-malarial) Oral quinine (Anti-malarial)	<u>                                     </u>
	410	Rectal Artesunate (Anti-malarial)	<u> </u>
	411	IV Quinine (Anti-malarial)	<u> </u>
	412 413	Other Antimalarial (specify)	<u> </u>
	414	Cotrimoxazole	
	414	Vitamin A	<u>                                   </u>
	416	Paracetamol	<u>                                   </u>
	417	Gentamycin IM first dose	<u>  </u> 
	418	Gentamycin IM for seven days	<u>                                   </u>
	419	Amoxicillin suspension/dispersible first dose	<u>                                   </u>
	420	Amoxicillin suspension/dispersible for seven	<u>''</u>
		days	''
	421	Amoxicillin suspension/dispersible for five	1 1
		days	''
L.	1	1 /	

		422	TTC (Tetracycline) eye ointment	
		423	Plumpy nut	II
		424	BP100	II
		425	Nutritional Counseling	
		426	Other treatment GO TO 427	
		427	Specify	
428	Was the child referred to a	higher	1 = Yes	
	facility?		2 = No	
	Outcome of the child		For each:1 = Yes 2 = No	
	treatment	429	Health improved/healed	l <u></u> l
		430	Died	
		431	Worsened	
		432	Same	lI
		433	Unknown	II

## **OHEP HEW Questionnaire**

Unique ID----

100	Date (dd/mm/yyyy) Gregorian Calendar	_ / _ / _    dd / mm / yy		
101	Region Name			
102	Zone Name	_ _ _		
103	Woreda Name	_ _ _ _		
104	PHCU/Health Center Name			
104A	Health post code	I_I		
104B	HEW code	<u> _ </u>		
105	Kebele			
106	Gote			
107	Cluster Code	_		
108	GPS Latitude	l _ :  _ _		
109	GPS Longitude	l _ :  _ _		
ELEVATION	Elevation			
110	Interviewer Initials	III		
111	Did you read the HEW the consent form?	1 = Yes 2 = No		
112	Did the HEW agree to be interviewed?	2 1= Yes – GO TO MODULE 2 2 = No		
113	If not, why not?	END		

Module: 2

114	What is your name?		
115 Y	What is your date of birth?	yyyy   _ _  Ethiopian Calendar	
115 M	What is your date of birth?	mm  _  Ethiopian Calendar	
115 D	What is your date of birth?	dd     Ethiopian Calendar	
116	What is the number of years you attended school?	Write number of years	Years
117	As an HEW, what is your level?	1 = Level 1 2 = Level 2 3 = Level 3 4 = Level 4	<u>    _   </u>
118	Do you have any specific qualification in addition to HEW training?	1 = Yes 2 = No – GO TO 120	
119	If yes, specify		
120 YY	For how long have you worked as an HEW (including work at other kebeles)?	Write number of years.	Years
120MM	If less than one year, enter number of months only.		Months
121YY	For how long have you worked as an HEW in this Health post?	Write number of years and months.	Years      Months
121MM	If less than one year, enter 00 years and number of months		
122	Do you reside in this kebele?	1 = Yes 2 = No Skip to 124	II
123	Was a home provided to you by the kebele?	1 = Yes 2 = No	II
124	How many HEWs work in this health post?	Enter number, including the person being interviewed	
125	In this health post who is the HEW in charge (senior HEW)?	1 = Myself 2 = Other HEW 3 = Neither of us	11

126	How many days a week is the health post facility functionally open by at least 1 HEW?	Enter number of days		II
127	Do you post the health post functional days for clients to see?	1 = Yes 2 = No		
128	Do you post the health posts hours of operation for clients to see?	1 = Yes 2 = No		II
			For each: 1 = Yes 2 = No	
	During the weekend and public holidays- where		Health center	II
During the v			Health Post	<u>  </u>
do the residents of the kebele seek medical care?  Select all that apply		131	With HEW (at her house or elsewhere)	
		132	Pharmacy	II
		133	Traditional Healers	
		134	Other –	
		135	Specify	

# Instruction: From Question HEW\_132-HEW\_207 Don't prompt. Select all mentioned

	For each: 1 = Yes 2 = No		
	136	Deliver baby onto mother's abdomen	II
	137	Dry and wrap baby	II
	138	Assess breathing	II
What are the main components of immediate newborn care?	139	Delay cord clamping for three minutes	II
Po and assessed	140	Tie and cut cord appropriately	II
Do not prompt Select all mentioned.	141	Skin to skin contact	II
	142	Initiate breastfeeding	II
	143	Apply TTC eye ointment	II
	144	Apply chlorohexidine on cord	II
	145	Give Vitamin K	II
	146	Weight baby	l <u> </u>
	999	None mentioned from the list	
What are the main components of the first PNC	For each: 1	L = Yes 2 = No	·
<u>visit</u> for newborn?	147	Advice washing hands before touching baby	<u>                                     </u>

	1		
Do not prompt	148	Check for danger sings	
Select all mentioned	149	Check for congenital abnormalities	<u>    </u>
	150	Measure temp	ll
	151	Measure weight	11
	152	Apply TTC eye ointment	II
	153	Encourage exclusive breast feeding for baby	II
	154	Advice to delay bathing of baby for 24 hrs	II
	155	Encourage skin to skin contact	II
	156	Provide cord care (Chlorohexidine)	
	157	Education on appropriate cord care (Chlorohexidine)	II
	158	Vaccinate for polio and BCG	1 1
	159	Teach mother on how to recognize newborn danger signs using family health card.	11
	999	None mentioned from the list	
	For each: 1	L = Yes 2 = No	
	160	Check for newborn danger signs	II
What are the main components of subsequent	161	Advice to keep cord clean	II
(3 <sup>rd</sup> and 7 <sup>th</sup> day and 6 <sup>th</sup> week) PNC visits for newborn?	162	Assess breastfeeding	II
newson.	163	Advise on breastfeeding	
Do not prompt Select all mentioned	164	Ensure baby is kept warm	
Select all mentioned	165	Check baby's weight	1_1
	166	Vaccination	II
	999	None mentioned from the list	
	For each: 1	L = Yes 2 = No	
When a newborn weighs less than 1.5 kgs or has	167	Continue feeding with expressed breast milk	II
a gestational age of less than 32 weeks, what special care do you provide?	168	Monitor ability to breastfeed	lI
	169	Cover baby well including head	
Do not prompt Select all mentioned	170	Hold close to mother	II
Coloca di mendined	171	Refer urgently with mother to health center or hospital	II
	999	None mentioned from the list	
	For each: 1	L = Yes 2 = No	
When a newborn weighs between1.5 - 2.5 kgs or	172	Make sure the baby is warm	II
has a gestational age of 32-<37 weeks, what special care do you provide?	173	Educate on optimal breastfeeding	II
	174	Monitor ability to breastfeed	II
Do not prompt Select all mentioned	175	Monitor baby for the first 24 hours	II
Select all mentioned	176	Educate on infection prevention	II
	999	None mentioned from the list	
What are the main signs for good attachment	For each: 1	L = Yes 2 = No	•

duston bornet for the 2	477	Chin touching house	1 1
during breast feeding?	177	Chin touching breast	1 1
Do not prompt	178 179	Mouth open wide  Lower lip turned out	<u>                                   </u>
Select all mentioned	180	More areola showing above	
	999	None mentioned from the list	
		L = Yes 2 = No	
	181	Not well-attached to breast	1 1
	182	Not suckling effectively	1 1
Nove do con determine feeding madeless in a	183	Less than 8 breastfeeds in 24 hours	
How do you determine feeding problems in a newborn?	184	Switching to another breast before one is emptied	<u>                                   </u>
Do not prompt Select all mentioned	185	Receives other foods or drinks (even water)	II
	186	Underweight for age	1 1
	187	Thrush (ulcers or white patches in mouth)	
	999	None mentioned from the list	
		L = Yes 2 = No	1
	188	Advise mother to breastfeed as often and as long as infant wants in 24 hours	II
When a newborn shows signs of feeding problems or is underweight, what initial steps do	189	Teach mother correct positioning and attachment	II
you take?	190	Educate on exclusive breastfeeding	lI
Do not prompt Select all mentioned	191	Teach the mother to treat thrush at home	II
	192	Follow-up any feeding problem	<u>                                  </u>
	193	Follow-up any thrush in two days	<u>                                  </u>
	194	Follow-up underweight for age in 14 days	II
	999	None mentioned from the list	
	For each: 1	L = Yes 2 = No	T
	195	Convulsions	<u>    </u>
	196	Stopped feeding or significantly reduced feeding	II
	197	Severe chest in drawing	11
What are the main signs for very severe disease	198	Fast breathing	<u>                                  </u>
in newborns?  Do not prompt Select all mentioned	199	Temperature with 37.5 or more (warm) (Note: if high temperature only mentioned ask for clarification to what extent)	II
	200	Temperature less than 35.5 (cold) (Note: if low temperature only mentioned ask for clarification to what extent)	II
	201	No or very limited movement on stimulation	II

			999	None mentioned from the list	
			For each: 1	L = Yes 2 = No	
			202	Continue to breastfeed or if unable to suck give breast milk that has been expressed	II
	When the newborn presents sign of very severe disease, what initial steps do you take?			Begin a dose of amoxicillin (pre-referral)	II
Do not prompt	itiai steps do you take:		204	Begin a dose of gentamycin antibiotics (pre-referral)	II
Select all mentio	ned		205	Refer URGENTLY	II
			206	When referral is not possible treat with/prescribe amoxicillin for 7 days	II
			207	When referral is not possible treat with gentamycin daily for 7 days	II
			999	None mentioned from the list	
			For each: 1	= Yes 2 = No	
What are the infection in new	main signs for loca borns?	l bacterial	208	Umbilicus red	II
Do not prompt			209	Umbilicus draining pus	II
Select all mentio	ned		210	Skin pustules	II
			999	None mentioned from the list	
		For each: 1	= Yes 2 = No		
				Give amoxicillin syrup for 5 days	11
	wborn presents sign		212	Follow up care on 2 <sup>nd</sup> day from initial visit	II
Do not prompt	on, what initial steps do	o you take?	213	Advice mother when to return	II
Select all mentio	ned		214	Breastfeed more frequently	ll
			215	Advice mother to give breast milk more frequently	11
			216	Advice mother to keep baby warm	11
			999	None mentioned from the list	
Are the possible si of using gentamicin neonatal ill		ide effects injectable for	1= Yes – 2 = No – Skip to 228		
			For each: 1	L = Yes 2 = No	
218	What are the possible side effects of using inject able gentamicin for neonatal illness?				
, 5		218	Kidney damage (nephropathy)	 	
What are the possible side effects of using injectable gentamicin for neonatal illness?			219	Nerve damage (neuropathy especially hearing or visual damage)	II
			220	Hearing loss	ll
			221	Lethargy	<u>    </u>
			222	Nausea/vomiting	<u>    _   _   _     _     _</u>

			223	General anaphylactic reaction	II
			224	Fever	II
			225	Poor appetite	II
			226	Weight loss	II
			227	Skin rash	II
228		any contraindication of using in for the neonatal illness?	injectable	1= Yes 2 = No - 232	
			For each: 1	1 = Yes 2 = No	
using inj	jectable	ssible contraindications of gentamicin for the	229	History of general body reaction or shock to injectable gentamicin (Anaphylactic reaction	II
neonatal illness?		230	History of kidney/urine problem	ll	
		T	231	History of skin reaction to gentamicin	<u>                                     </u>
232		Are there any possible side using amoxicillin for the illness?		1= Yes 2 = No - 234	ll
				For each: 1 = Yes 2 = No	
233		are the possible side effect cillin for the neonatal illness?	U	1 = General anaphylactic reaction (penicillin hypersensitivity)     9.Not mentioned	II
234	l l	ere any contraindication cillin for the neonatal illness?	of using	1= Yes 2 = No – GO TO 236	II
				For each: 1 = Yes 2 = No	
235	What are those possible contraindications of using amoxicillin for the neonatal illness		1 = History of General body reaction or shock to amoxicillin (penicillin hypersensitivity) 9.Not mentioned		
236	of usin	ere any possible additional s ng antibiotics (injectable gen cillin) for non-severe neonat	tamicin or	1= Yes 2 = No - 238	II
				For each: 1 = Yes 2 = No	
237	using	are those additional side antibiotics (injectable gent cillin) for non-severe neonata	amicin or	1 = Drug resistance 9.Not mentioned	II
	the mai	n signs for jaundice in	For each: 1	L = Yes 2 = No	I
newborns?			238	Yellow skin	<u>    </u>
Do not prom Select all me	-		239	Yellow eyes	II
999		999	Not mentioned		
			For each: 1	L = Yes 2 = No	
When the what initial		oresents signs of jaundice, ou take?	240	Breastfeed more frequently	II
Do not prom			241	Advise mother to keep young infant warm	ll
Select all me	entioned		242	Expose to sunshine 20 to 30 minutes every day	lI

	243	Advise mother to return immediately if sign & symptoms of jaundice aggravates	II
	244	Follow-up in 2 days	II
	For each: 1	L = Yes 2 = No	
What are the main symptoms/signs for severe jaundice in newborns?	245	Jaundice in newborns of Age 14 days or more	II
Do not prompt	246	Jaundice in newborns of Age less than 24 hours	II
Select all mentioned	247	Palms yellow	ll
	248	Soles yellow	11
	999	Not mentioned from the list	
	For each: 1	L = Yes 2 = No	
When the newborn presents symptoms /signs of severe jaundice what initial steps do you take?	249	Breastfeed more frequently	II
Do not prompt	250	Refer URGENTLY to health center /hospital	II
Select all mentioned	251	Keep the baby warm	II
What are the main signs for some dehydration	For each: 1	L = Yes 2 = No	
caused by diarrhea in newborns?	252	Restless and irritable	II
Do not prompt Select all mentioned	253	Sunken eyes	II
Select all mentioned	254	Skin pinch goes back slowly	II
	999	None mentioned from the list	
	For each: 1	L = Yes 2 = No	
	255	Give ORS fluids	II
When the newborn presents signs of some	256	Give zinc treatment for 10 days	II
dehydration caused by diarrhea what initial steps do you take?	257	Advise mother to breastfeed more frequently and longer	II
Do not prompt Select all mentioned	258	Keep the infant warm	II
Select all mentioned	259	Advise mother when to return	II
	260	Follow up in 2 days	II
	999	None mentioned from the list	
	For each: 1	L = Yes 2 = No	•
What are the main symptoms/signs for severe dehydration caused by diarrhea in newborns?	261	Limited or No movement even when stimulated	II
Do not prompt	262	Sunken eyes	II
Select all mentioned	263	Skin pinch goes back VERY slowly	lI
	999	None mentioned from the list	
When the newborn presents signs of severe dehydration caused by diarrhea what initial steps	264	Give first dose of amoxicillin syrup	II
do you take?	265	Give first dose of IM Gentamycin	ll
Do not prompt	266	Refer URGENTLY to health center/hospital	II
Select all mentioned	267	Ensure mother gives child ORS on the way to health center/hospital	II
	268	Advise mother to breastfeed more	

	1		
		frequently and longer	
	269	Advice mother to keep young infant warm	II
	For each: 1	L = Yes 2 = No	
What are the main signs and symptoms of pneumonia in a child aged 2-59 months?	270	Cough	II
	271	Difficult or fast breathing	II
Do not prompt Select all mentioned	272	Chest indrawing	1_1
Select all mentioned	273	Stridor	
	999		
	For each: 1	L = Yes 2 = No	
When the child presents signs and symptoms of pneumonia what initial steps do you take?	274		1 1
	2/4	Give antibiotics	
Do not prompt	275	Advise on when/how to administer	II
Select all mentioned	276	Keep the child warm	II
	277	Advise mother when to return	ll
	999	None mentioned from the list	
	For each: 1	L = Yes 2 = No	
What are the main signs and symptoms of	278	Diarrhea	
diarrhea in a child aged 2-59 months?	279	Blood in stool	
Do not prompt	280	Restless or irritable	
Select all mentioned	281	Sunken eyes	
	282	Skin pinch goes back slowly	
	999	None mentioned from the list	''
	For each: 1	L = Yes 2 = No	
	283	Give ORS fluids	<u>                                     </u>
When the child presents signs and symptoms of	284	Give zinc treatment for 10 days	II
diarrhea what initial steps do you take?	285	Advise on when/how to administer	
Do not prompt Select all mentioned	286	Advise mother to breastfeed / feed more frequently and longer	II
	287	Keep the child warm	II
	288	Advise mother when to return	 
	289	Follow up in 2 days	
	999	None mentioned from the list	
What are the main signs and symptoms of	For each: 1	L = Yes 2 = No	
malaria in a child aged 2-59 months?	290	Fever	II
Do not prompt Select all mentioned	291	Chillis	
			''
	For each: 1	L = Yes 2 = No	
When the child presents signs and symptoms of malaria what initial steps do you take?	292	Use RDT to test for malaria	II
maiana what iliitial steps do you taker	293	Treat malaria with Coartem / ACT	II
Do not prompt Select all mentioned	294	Advise on when/how to administer Coartem	
	295	Advise mother when to return	II
	999	None mentioned from the list	,
			l .

What are the main signs and symptoms of acute	For each: 1 = Yes 2 = No				
malnutrition in a child aged 2-59 months?	296	Pitting edema of both feet	II		
Do not prompt	297	Visible severe wasting	II		
Select all mentioned	298	MUAC measurement <11cm (if 6 months or older)	II		
	999	None mentioned from the list			
	For each: 1	L = Yes 2 = No			
When the child presents signs and symptoms of	299	Appetite test if 6 months or older	II		
acute malnutrition what initial steps do you take?  Do not prompt	300	Give with RUTF (Plumpy nut or BP 100)	II		
Select all mentioned	301	Advise on when/how to take RUTF	II		
	302	Advise mother when to return	II		
	999	None mentioned from the list			
	For each: 1 = Yes 2 = No				
What are general danger signs in child aged 2-59					
	303	Unable to drink or breastfeed	II		
What are general danger signs in child aged 2-59 months?	303 304	Unable to drink or breastfeed Convulsions	<u>                                     </u>		
months?  Do not prompt	304	Convulsions  Movement only when stimulated or			
months?  Do not prompt Select all mentioned	304 305 999	Convulsions  Movement only when stimulated or no movement even when stimulated	    		
months?  Do not prompt	304 305 999	Convulsions  Movement only when stimulated or no movement even when stimulated  None mentioned from the list			
months?  Do not prompt Select all mentioned  When the child presents with general danger signs and symptoms what initial steps do you take?	304 305 999 For each: 1	Convulsions  Movement only when stimulated or no movement even when stimulated  None mentioned from the list  = Yes 2 = No			
months?  Do not prompt Select all mentioned  When the child presents with general danger signs and symptoms what initial steps do you	304 305 999 For each: 1	Convulsions  Movement only when stimulated or no movement even when stimulated  None mentioned from the list  L = Yes 2 = No  Refer to health centre  Giver pre-refferal dose and refer to			

MODULE 4: TRAINING OF THE HEW							
Intervie	wer: I would now like to ask	you some quest	ions on your tr	aining.			
12 MON	INTERVIEWER: PLEASE STATE THE START AND END MONTHS THAT CAPTURE THE PAST 12 MONTHS FROM THE DATE OF THE INTERVIEW AND INSERT IT INTO THE QUESTION BELOW.						
Have you received training or training update from HC, Woreda health office or NGO in the last 12 months between (start month) and (end month) in? [READ TOPIC]  FOR EACH QUESTION IF NO ASK THE FOLLOWING: Did you receive a training or training update more than 12 months ago?  REPEAT BOTH QUESTIONS FOR EACH TOPIC							
Yes, within past 12 months ago  Yes, over past 12 months ago  No in-service training or update							
309	CBNC	1	2	3			

310	Providing antenatal services	1		2	3	
311	PMTCT	1		2	3	
312	Misoprostol use	1		2	3	
313	Providing post-natal care to mother	1		2	3	
314	Providing postnatal care to newborn	1		2	3	
315	Clean cord care	1		2	3	
316	Managing newborns with very severe disease	1		2	3	
317	Managing newborn with local bacterial infection	1		2	3	<u>  </u>
318	Managing newborn neonates with jaundice/severe jaundice	1		2	3	
319	Managing neonates with diarrhea	1		2	3	
320	Managing neonates with feeding problem or who are underweight	1		2	3	<u>  </u>
321	iCCM	1		2	3	
322	Using referral forms for VSD	1		2	3	
323	Using/filling family folder	1		2	3	
324	Integrated Refresher training on MNCH services	1		2	3	
325	EPI	1		2	3	
326	Can you tell us whether or not you were satisfied with the quality of training received for managing sick neonate?  Do not give options to the	1 = Yes was satisfied 2 = No was not satisfied – GO TO 328 3 = Neither satisfied nor dissatisfied – GO TO 329 4= No training in the last 12 months –GO TO 335				
	respondent  IF YES, then what was the level of					
327	satisfaction		tisfied – GC hat satisfie	) ТО 329 d – GO ТО 329		
	Give both options to the respondent	4 = 11 11				
328	IF NO, then what was the level of dissatisfaction	1. Fully dis 2. Somewi	ssatisfied hat dissatis	fied		
	Give both options to the respondent					
	1	For each: 1	1 = Yes 2 = 1	No		ı
		329	More tra	ning		
How can th	ne quality of the training be further	330	More pra	ctice sessions		<u>  </u>
improved Read list.		331	More tra	ning aids		
Select all t	hat apply.	332	More pos	t training supervisior	1	
		333	Other – G	60 ТО 334		
		334	Spec	ify		

## **MODULE 5: SUPPORTIVE SUPERVISION**

## **INTERVIEWER:**

I would now like to ask some questions about <u>supportive supervision</u> you have received. By supportive supervision I mean being visited by individuals from the region, zone, woredaand/or health center to discuss, review and give feedback on your <u>TECHNICAL</u> or <u>PROFEESIONAL</u> work.

INTERVIEWER: PLEASE STATE THE START AND END MONTHS THAT CAPTURE THE PAST 6 MONTHS FROM THE DATE OF THE INTERVIEW AND INSERT IT INTO THE QUESTION BELOW

BELOW.						
LAST 6 MONTHS: STATE THE START & END MONTHS START MONTH END MONTH						
335	Have you received a supportive supervisory visit in the last 6 months?	1 = Yes 2 = No – G	О ТО 366	<u>  </u>		
IF YES: Wh	o from?	For each: 1	L = Yes 2 = No			
_		336	Woreda health office			
Select all t	hat apply	337	PHCU/health centre			
		338	NGO			
339	<b>IF YES:</b> How many times did you receive the last 6 months?	this visit in	Enter total number of times IF 0 skip to 342			
340	How many of these visits were in last 3 r	nonths?	Enter total number of times IF 0 skip to 342			
341	How many of these visits were in last 1 r	month?	Enter total number of times	<u>                                     </u>		
342	Who provided the most recent supervisor Select one	ory visit?	1 = Woreda Health Office 2 = Health Centre 3 = NGO 4 = Woreda Health Office and Health center 5 = Woreda Health Office and NGO 6 = Health Center and NGO 7 = All three together (Woreda, Health Center, NGO)			
		For each: 1	L = Yes 2 = No	•		
		343	Discussing early identification of pregnancy			
		344	Discussing provision focused ANC			
		345	Discussing promotion of institutional delivery			
		346	Discussing safe and clean delivery			
If YES to : following?	<b>335</b> : Did that visit include any of the	347	Discussing immediate newborn care including cord care (chlorohexidine)			
Read all th	e following	348	Discussing recognition of asphyxia, initial stimulation, and resuscitation of newborn babies	<u> </u>		
		349	Discussing prevention and management of hypothermia	<u> </u>		
		350	Discussing management of pre-term and/or low			

			birth weight neonates	
		351	Discussing management of very severe disease in newborns	
		352	Discussing diagnosis or treatment of suspected pneumonia	II
		353	Discussing diagnosis or treatment of diarrheoa	11
		354	Discussing diagnosis or treatment of malaria	11
		355	Discussing diagnosis or treatment of acute malnutrition	
		356	Discussing HEW activities with WDA	
		357	Observing record keeping	
		358	Checking the register for consistency and completeness	
		359	Checking supplies including training manuals, job aides, request forms	
		360	Delivering supplies including /training manuals, job aides, request forms	
		361	Observing client Consultation with HEW	
		362	Conducted postnatal household visits together to observe HEWs skill on checking general danger signs	
		363	Checking if they visited a sick neonate under treatment or that has been treated,	
		364	Providing <u>WRTTTEN</u> feedback to you on your work	
		365	WRTTTEN feedback: copy of the last visit available and checked by the interviewer	
366	Did you receive a follow up visit within 6 weeks of CBNC training to assess and support your <b>CBNC work</b> ?	1 = Yes 2 = No - GO 3 = No CBNO	0 TO 371 C training –GO TO 371	<u> </u>
		Fo	or each: 1 = Yes 2 = No	
If received ( 6 weeks foll	CBNC post-training visit who conducted	367	Zone	
O WEEKS IOII	ow up visit:	368	Woreda	
Select all th	at apply	369	Health Center	
		370	NGO	

371	Can you tell us whether or not you were satisfied with the QUALITY of supportive supervision received in last six months?  Do not read options	1 = Yes was satisfied 2 = No was not satisfied – GO TO 373 3 = Neither satisfied nor dissatisfied – GO TO 374 4 = no supportive supervision in the last 6 months GO TO 379		
372	IF YES, then what was the level of satisfaction?  Read options	1. Fully satisfied -GO TO 379 2. Somewhat satisfied -GO TO 374		
373	IF NO, then what was the level of dissatisfaction?  Read options	1. Fully d 2. Somev		
		For each	: 1 = Yes 2 = No	
	e quality of the supervision be further	374	More visits	
improved:		375	More crash trainings during supervision	
Read list	Read list Select all that apply		More technical supervision	
Sciect all ti			Other can the quality of the supervision be further improved	
		378	Specify	

## Interviewer:

I would now like to ask you some questions about Performance Review and Clinical Mentoring Meeting (PRCMM) By this I mean when NGO, health center and health post staff meet together to review records, discuss performance, and ways to improve your TECHNICAL skills and achieve targets for CBNC/ICCM?

INTERVIEWER: PLEASE STATE THE START AND END MONTHS THAT CAPTURE THE PAST 6 MONTHS FROM THE DATE OF THE INTERVIEW AND INSERT IT INTO THE QUESTION BELOW.

LAST 6 MONTHS: STATE THE START & END MONTHS START MONTH					
END MO	DNTH				
379	In the past 6 months, did you participate in a PRCMM meeting, where the health center, health post and/or NGO staff met together to discuss performance, targets, and ways to improve HEWs' skills and achieve targets for CBNC and/or ICCM?	1 = Yes 2 = No 3 = No CBI			
380	Since training of CBNC and/or ICCM, have you participated in any PRCM meeting conducted in your Health center catchment area?	1 = Yes 2 = No – G	1 = Yes 2 = No – GO TO MODULE 6		
381	Did the meeting extract data from the HEW's 0-2 month (newborn) registers?	1 = Yes 2 = No			
382	At that meeting, did your health center staff get a chance to offer mentoring on how to improve your newborn illness management skills?	1 = Yes 2 = No			
			For each: 1 = Yes 2 = No		
		383	Early identification of pregnancy		
		384	Focused ANC		
		385	Promotion of institutional delivery		
		386	Safe and clean delivery		
Did that	meeting cover discussions on	387	Immediate newborn care including cord care (chlorohexidine)		
	meeting cover discussions on ce and targets on the following?	388	Recognition of asphyxia, initial stimulation and resuscitation of newborn babies		
Read all th	e following	389	Management of diarrhea among neonate		
		390	Breast feeding among neonate		
		391	Immunization among neonate		
		392	Management of hypothermia		
		393	Management of pre-term and/or low birth weight neonates	<u>  </u>	
		394	Management of neonatal/very severe disease		
		395	Register review		
		396	Community level observation		

## MODULE 6: HEWS SERVICES PROVIDED IN THE LAST 3 MONTHS

Interviewer: I would now like to ask you about the services you provided in the last 3 months.

REFER TO HEW'S RECORD BOOKS (AT THE HEALTH POST REGISTERS) TO COMPLETE THE FOLLOWING; ONLY COUNT EVENTS ATTENDED BY THE SPECIFIC HEW BEING INTERVIEWED:

INTERVIEWER: PLEASE STATE THE START AND END MONTHS THAT CAPTURE THE PAST 3 MONTHS FROM THE DATE OF THE INTERVIEW AND INSERT IT INTO THE QUESTION BELOW.

LAST 3 MONTHS: STATE THE START & END MONTHS START MONTH END MONTH					
397	In the last three months did you use community forums and meeting to deliver maternal newborn and child health education?	1 = Yes 2 = No – GO TO 406	<u> </u>		
		For each: 1 = Yes 2 =	No		
		398	Religious leaders	ll	
In the last three months did you meet any of the following to deliver maternal newborn and child health education?		399	Edir (Traditional community organization whose members assist each other during the mourning process)	II	
	Read list. Choose all that apply.		Women's savings group	ll	
Read list. Ch			Command post	II	
	,	402	Traditional birth attendants	II	
		403	Other	II	
		404	Other Specify		
405	When was the last time you used community forum and meeting to deliver maternal newborn and child health education?	/   _     dd			
406	Did you conduct pregnant women conference in the community in the last 3 months?	1 = Yes 2 = No - GO TO 411			
407	When was the last time you conducted a pregnant women's conference?	_  _  _  _     dd			
408	How regularly do you conduct the pregnant women's conference?	3 = Once a month	1 = Once a week 2 = Every two weeks		

409	In the last pregnant women conference, how many women in your catchment area were pregnant?	Enter number Enter 999 if don't know	
410	Among them, how many of them attended the pregnant women's conference? (The number should be ≤ numbers inserted in Q 408)	Enter number	
411	Did you provide ANC to any women in the last three months?	1 = Yes 2 = No – GO TO 412	<u> </u>
412	IF YES: how many?	Enter number	
413	Did you refer any pregnant women from this health post to a health center or hospital in the last three months?	1 = Yes 2 = No – GO TO 414	
414	IF YES: how many?	Enter number	
415	Did you see any women to provide postpartum care in the last three months?	1 = Yes 2 = No – GO TO 416	
416	<b>IF YES:</b> How many women did you see for postpartum care in the last three months?	Enter number	
417	Did you refer any post-partum women from this health post to a health center or hospital in the past three months?	1 = Yes 2 = No – GO TO 418	
418	IF YES: How many?	Enter number	
419	Did you see any newborns to provide a postnatal check for in the last three months?	1 = Yes 2 = No – GO TO 420	
420	<b>IF YES:</b> How many newborns did you provide a postnatal check for in the last three months?	Enter number	
421	Did you refer any newborns from this health post to a health center or hospital in the past three months?	1 = Yes 2 = No – GO TO 422	
422	IF YES: How many?	Enter number	
423	Did you give care for prevention of hypothermia in the last three months?	1 = Yes 2 = No – GO TO 424	
424	IF YES: How many?	Enter number	
425	Did you give care for management of hypothermia in the last three months?	1 = Yes 2 = No – GO TO 426	<u> </u>
426	IF YES: How many?	Enter number	
427	Did you provide care for pre-term and/or low birth weight neonates in the last three months?	1 = Yes 2 = No – GO TO 428	<u></u>
428	IF YES: How many?	Enter number	
429	Did you identify newborns with suspected very severe disease in the	1 = Yes 2 = No – GO TO 430	

	last three months?		
430	IF YES: How many?	Enter number	<u>  </u>
431	Did you treat newborns with suspected very severe disease in the last three months?	1 = Yes 2 = No – GO TO 433 3 = Antibiotics not available – GO TO 433	
432	IF YES: how many?	Enter number	<u>  </u>
433	IF YES: how many completed the treatment at the health post?	Enter number	<u>  </u>
434	Did you refer any newborns from this health post to a health center or hospital for very severe disease in the past three months?	1 = Yes 2 = No – GO TO 435	
435	IF YES: How many?	Enter number	
436	Did you see any newborns with diarrhea in the last three months?	1 = Yes 2 = No – GO TO 437	
437	IF YES, how many?	Enter number	
438	Did you see any newborns with jaundice in the last three months?	1 = Yes 2 = No – GO TO 439	<u>  </u>
439	IF YES, how many?	Enter number	
440	Are the maternity record books completely up to date until the day before survey?(observe)	1 = Yes 2 = No GO TO 442	
441	What is number of maternity cases maintained in the last three months in the maternity register?	Enter number	
442	Did you see any children (2-59 months) for suspected pneumonia in the last three months?	1 = Yes 2 = No – GO TO 443	
443	IF YES, how many?	Enter number	
444	Did you see any children (2-59 months) for diarrhea in the last three months?	1 = Yes 2 = No – GO TO 445	
445	IF YES, how many?	Enter number	
446	Did you see any children (2-59 months) for malaria in the last three months?	1 = Yes 2 = No – GO TO 447	
447	IF YES, how many?	Enter number	
448	Did you see any children (2-59 months) for acute malnutrition in the last three months?	1 = Yes 2 = No – GO TO 449	
449	IF YES, how many?	Enter number	
450	Did you refer any children (2-59 months) from this health post to a health center or hospital for very severe disease in the past three months?	1 = Yes 2 = No – Exit interview	
451	IF YES: How many?	Enter number	