RESEARCH ARTICLE

A CROSS SECTIONAL STUDY ON DIRECTLY OBSERVED ROUTINE IMMUNIZATION SESSION IN DUTSINMA LOCAL GOVERNMENT AREA KATSINA STATE, NIGERIA

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ABSTRACT

A cross sectional study was conducted to directly observe and supervise Routine Immunization (RI) Sessions in Dutsin-Ma Local Government Area of Katsina State, to also assess the level of awareness about RI in caregivers through exit interviews. The study shows that caregivers in Dutsinma LGA are aware of RI (P<0.05). Traditional leaders, volunteer community Mobilizers and health workers have been identified to be the most effective social Mobilizers for Routine Immunization in the LGA. Community linkages is very effective in Dutsinma LGA as the survey shows that 80% of the HFs supervised do have an evidence of monthly Village development committees minutes of meetings. The impact of traditional leaders, volunteer community Mobilizers and Health workers on social mobilization for routine immunization is very effective. Based on the survey conducted, there is need for a continuous supportive supervision in the LGA as this will improve the quality of routine immunization.

1. INTRODUCTION

Dutsin-Ma is a Local Government Area (LGA) in Katsina State, Nigeria. Its coordinates are 12°27'18"N and 7°29'29"E .Its headquarters are in the town of Dutsin Ma. The Zobe Dam lies to the south of the town of Dutsin Ma (Isah, 2009). Dutsin-ma became a Local Government in 1976.The chairman is the official Head of Local government. The inhabitants of the Local Government are predominantly Hausa and Fulani by tribe. Their main occupation is farming and animal rearing (Isah, 2009). The LGA has an area of 527 km² and a projected population of 169,671 at the 2006 census. The LGA has 11 political wards viz: Bagagadi, Dabawa, Dutsinma A, Dutsinma B, Karofi A, Karofi B, Kuki A, Kuki B, Kutawa, Makera and Shema. There are 296 settlements in Dutsinma LGA. The postal code of the area is 821 (NIPOST, 2009). Four decades ago in 1974, the World Health Organization (WHO) launched the Expanded Programme on Immunization (EPI). The EPI blueprint laid out the technical and managerial functions necessary to routinely vaccinate children with a limited number of vaccines, providing protection against diphtheria, tetanus, whooping cough, measles, polio, and tuberculosis, and to prevent maternal and neonatal tetanus by vaccinating women of childbearing age with tetanus toxoid.

The purpose of EPI was simple and straightforward; to deliver multiple vaccines to all children through a simple schedule of child health visits (Chan, 2014). At the time, basic health systems in most lower- and lower-middle income countries (LLMICs) were weak to nonexistent. Vaccine coverage levels among children younger than 1 year of age were less than 5% (Chan, 2014). By 1990, most LLMICs had institutionalized immunization programs based on the EPI blueprint. In 1991, the global target of vaccinating 80% of the world's children was declared to have been met, saving millions of lives. The capacities and capabilities of countries built through the EPI blueprint were responsible for such significant gains (Chan, 2014). Since then, more vaccines have been added to national immunization schedules, and the contribution of immunization programs to ongoing declines in infant and child mortality has increased commensurately (Ozawa *et al.*, 2011). As of 2014, WHO has recommended that all immunization programs add vaccines against hepatitis B, Haemophilus influenzae type b, Streptococcus pneumoniae, rotavirus, rubella, and human papillomavirus (in girls). However, the full benefits of these vaccines have yet to be realized. WHO estimates 29% of deaths among children 1–59 months of age are vaccine-preventable (WHO, 2014). This gap is due largely to systems weaknesses in immunization programs that can be improved. With the addition of new vaccines, the complexity and costs of routine immunization increased (WHO, 2013; UNICEF, 2014).

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More vaccinations to protect against more diseases require additional and better communication between health workers and caregivers as well as greater cold chain capacity. New vaccines and doses that expand immunization beyond infancy extend the benefits of vaccines across the life spectrum into adolescence and adulthood. Moreover, health systems in general are becoming more complex as new programs and services are added.

1.1 Literature review

Immunization is a proven strategy for reducing morbidity and mortality among women and children in Africa. Substantial investment has been made in the past three decades to establish and maintain national routine immunization (RI) systems (Okwo-Bele and Cherian 2011; GAVI 2012; Kamara *et al.*, 2013) and progress has been remarkable (Chan, 2014). In spite of these advances, equity in access to vaccination remains a challenge and coverage rates vary greatly among countries. Even within countries, where there is greater potential for consistent resource allocation, coverage is uneven (Bryce *et al.*, 2006; Hanson *et al.*, 2013). The factors leading to coverage disparities in immunization programmes in Africa are generally not well understood; only a few studies ask why coverage has improved in some settings and not others (Gauri and Khaleghian 2002; Pegurri *et al.*, 2005; Naimoli *et al.*, 2008). The most common approaches to assessing the performance of immunization systems focus on identifying key factors associated with high or low coverage, barriers to obtaining or delivering immunizations and problems or deficiencies in immunization programs (gap analysis). Missing in general from published and unpublished work is an exploration of the dynamics of coverage improvement—analyses that focus on the complexity of implementation and on what can be learned from studying success rather than failure.

Most analysts pointed to one factor or another to explain high or low coverage, yet few studies increased our understanding of how the potential drivers affected performance in practice. Tanner (2005), referring to the Reaching Every District approach (World Health Organization and Regional Office for Africa 2008), cited the effectiveness of multi-dimensional interventions, suggesting that synergies rather than single elements could explain the attainment of adequate coverage levels. However, studies generally lacked sufficient detail about a particular driver or driver cluster to determine when it was introduced, how it was implemented, or how it contributed to performance improvement. Moreover, the influence of contextual forces, such as global health policies, country-level economic and political factors, and health system capacity, was rarely reported, restricting us from assessing the relevance of the setting to the performance achieved (JSI Research and Training Inc. 2012a).

1.2 Aim and Objectives

1.2.1 Aim

To Directly Observe and Supervise Routine Immunization Sessions in Dutsin-Ma Local Government Area of Katsina State.

1.2.2. Objectives

2. To directly observe Routine Immunization (RI) sessions using effective strategies for conducting supportive supervision using National Primary Health Care Development Agency (NPHCDA) approved Routine Immunization (RI) check list (Appendix I).
3. To assess level of awareness about RI in caregivers through exit interviews.
4. To identify problems of Routine Immunization (RI) service delivery, data quality and initiate corrective actions through establishing agreed action points.

1.3 Research hypothesis

1.3.1 Null Hypothesis (Ho)

There is no significant level of awareness on RI in caregivers of Dutsinma LGA, Katsina State Nigeria.

1.3.2 Alternate Hypothesis (Ha)

There is significant level of awareness on RI in caregivers of Dutsinma LGA, Katsina State Nigeria.

2.0 MATERIALS AND METHODS

2.1 The study area

The field work was conducted in 11 wards of Dutsinma LGA covering latitude $1219.93977(12^{0}19'94)$ N to $1231. 67585$ $(12^{0}31'64)$ N and longitude $72.755(7^{0}27'55'')$ E to $72.908(7^{0}29'08'')$ E.

2.2 Study design

A cross sectional study of health facilities offering routine immunization sessions in all the eleven (11) geopolitical wards was done. At least one health facility per ward was directly supervised on the conduct of routine immunization service.

2.3 Routine immunization supportive supervision checklist

Routine Immunization Supportive Supervision Checklist (Appendix 1.0) was used to conduct the exercise. The checklist is the approved standard data tool by the National Primary Health Care Development Agency (NPHCDA) to be used during supportive supervision. The checklist is divided into five sections namely:

A. Identifying Information
B. Findings at the Health Facility
C. Observation during Routine Immunization Session
D. Exit interview with parents/caregivers
E. Community survey

2.4 Routine immunization session plan

A session plan was developed for all the forty one health facilities offering routine immunization in the Local Government Area. This was used as a guide to plan on the

dates each of the health facilities are conducting their routine immunization service.

2.5 Sampling

Purposive also known as judgmental sampling was used in which Health Facilities (HFs) with less than 50% (<50%) PENTA III and <50% OPV III coverage and drop-out rate greater than (>10%) were selected for the survey. Based on this, eighteen (18) Health Facilities (HFs) were supervised.

2.6 Exit interview with the parents/caregivers

Based on the design of the checklist template, four caregivers were interviewed in each RI session supervised to assess their level of awareness on RI based on a ten points score for each response obtained using prompted recall format (Waller *et al.*, 2004). Care-givers response will be summed up into five categories as shown below:

- Scores of 0-2 will be classified as having very limited awareness
- Scores of 3-4 will be classified as having limited awareness
- Scores of 5-6 will be classified as having average awareness
- Scores of 7-8 will be classified as having good awareness
- Scores of 9-10 will be classified as having very good awareness

2.7 Statistical analysis

Descriptive analysis of data was carried out. Significance in the level of awareness was tested using Fisher's test as described by Antony Stewart, 2002. Ho will be rejected if calculated F-value is $\geq$ F-critical at $\alpha = 0.05$ (5%).

3.0 RESULTS

3.1 Identifying information

The study was conducted from the 11th of November, 2014 to 23rd December, 2014 covering a period of 6 weeks. A total of 11 wards with 18 health facilities were sampled. During the period of study, ten (10) sessions were directly observed and RI checklist filled. Seven (70%) of the sessions directly supervised were fixed sessions and three (30%) were outreach sessions. All the Health Facilities (HFs) sampled were public HFs. The supervision was conducted by LGA Team and partners as shown in table 3.1. There are Volunteer Community Mobilizers (VCMs) in all the catchment settlements areas of the HFs sampled.

4.2 Findings at the health facilities

Out of the 10 HFs sampled, updated Reaching Every Ward (REW) micro-plan is present in seven of the Health Facilities (70%) sampled. Only one (10%) out of the ten HFs did not conduct all the sessions planned in the last month due to competing programs. Similarly one HFs (10%) was observed with monitoring chart (RI Monitoring chart) not updated.
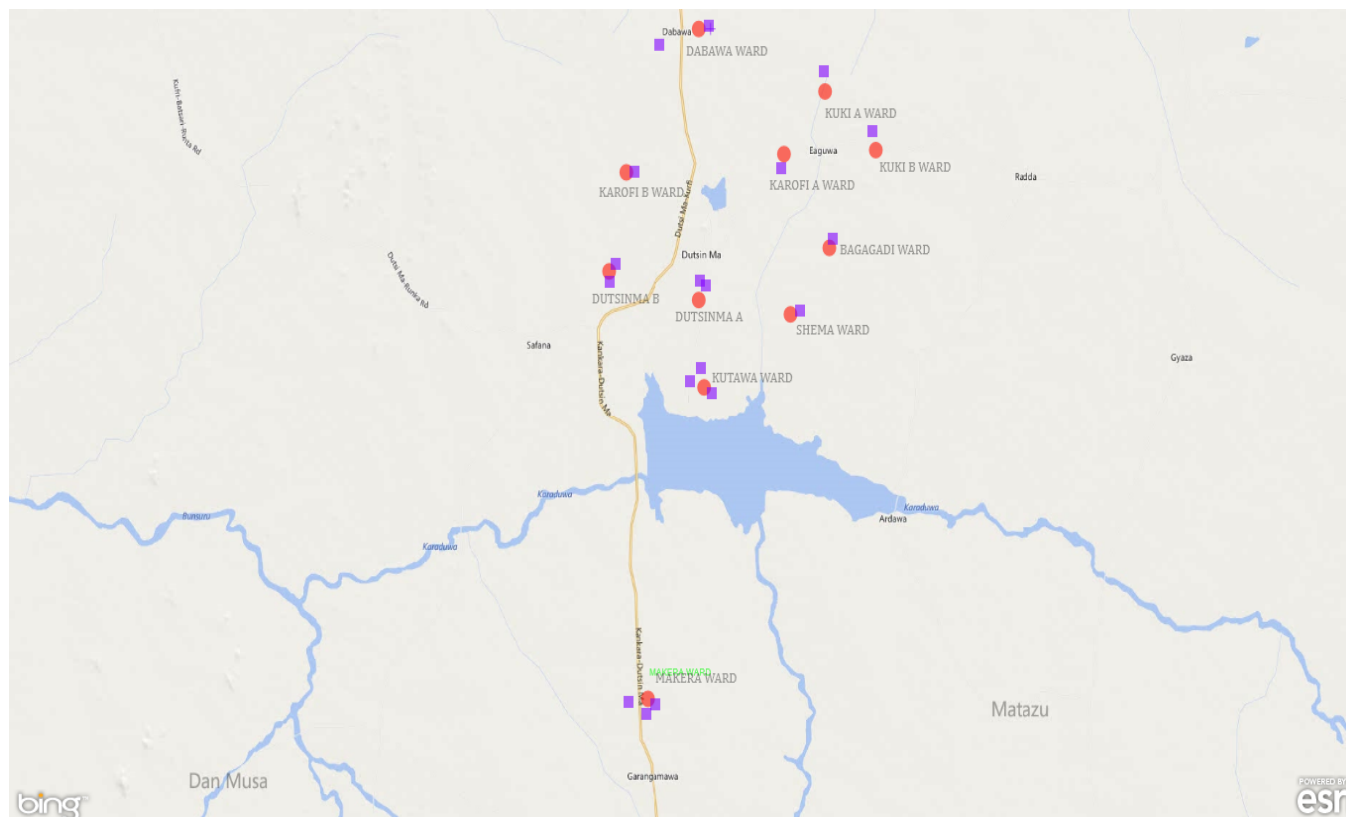
KEYS: **Red** represents Wards sampled and **purple** represents communities were DORIS survey was conducted. **Source:** EPI INFO® GPS mapping tool.

Fig. 1.0. Dutsinma LGA Case cluster map of health facilities and communities sampled during the study

Village development committee are functional in eight (80%) of the HFs as evidence of minutes of meetings was found in the HFs. However, two (20%) out of the ten HFs do not have a vaccine ledger in their custody. Vaccines are usually collected from the LGA and used on the day of the session.

Table 3.1. Profile of supervision and supervisors

Supervisors	Session Type	Number of supervision N=18 N = 100	Percent %:
CDC-NSLO & LIO	Fixed session	5	27.8
CDC-NSLO & LGAF	Fixed session	2	11.1
CDC-NSLO & SMC	Fixed session	4	22.2
CDC-NSLO, LIO & LGAF	Fixed session	3	16.7
CDC-NSLO & PHCC	Fixed session	1	5.6
CDC-NSLO Alone	Outreach session	3	16.7
Total		18	100

KEYS: **CDC-NSLO** (Center for Disease Control and Prevention, National Stop Transmission of Polio Local government Officer), **LIO** (Local government Immunization Officer), **LGAF** (Local government Area Facilitator), **SMC** (Social Mobilization Consultant), **PHCC** (Primary Health Care Coordinator).

4.3 Observation during routine immunization session

A total of ten sessions were directly observed. The Routine Immunization (RI) Providers responded to have received training within last year. It was observed that two (20%) of RI providers do not have knowledge of the expected number of target children for the RI session there were currently conducting. There was inadequacy of some antigens, data tools and logistics in some sessions directly observed (Table 3.2). Similarly, it was observed that some products and services were rendered alongside RI services (Table 3.3).

Table 3.2. Inadequacy of antigens, logistics and data tools

Variable	Frequency N=10	Percent %
Antigens:		
Bacille Calmette Guerrin (BCG)	8	80
Tetanus Toxoid (TT)	3	30
Logistics:		
5ml Reconstitution syringe	1	10
2ml Reconstitution syringe	7	70
BCG Syringe (0.05ml)	1	10
Data Tools:		
AEFI forms	1	10

N- Total Number of sessions directly observed

Table 3.3. Products services rendered with ri services

Variable	Frequency N=10	Percent %
ORS	4	40
Paracetamol	9	90
Vitamin A	3	30
Curative services	7	70
Atenatal Care	2	20
Albendazole	1	10
Soap	1	10

4.4 Exit interview with parents/caregivers

Exit interview was conducted on forty (40) willing caregivers to assess their level of awareness on Routine Immunization using the RI checklist. Their level of awareness was summed up and categorized as shown in Table 3.4.

Table 3.4. Result of categorization of response on the level of awareness on RI of caregivers

Level of Awareness	Caregiver 1	Caregiver 2	Caregiver 3	Caregiver 4
Very limited	4	2	3	1
Limited	1	5	1	1
Average	2	2	1	3
Good	2	0	5	3
Very good	1	1	0	2
				40

Table 3.5. Summary of f-test conducted to assess the level of awareness on RI

Source of variation	d.f	SS	MS	F-Value	F-critical
Total	19	40			
Category	3	0	0	0	3.24
Error	16	40	2.5		

KEYS: d.f- degree of freedom, SS- Sum of Squares, MS- Mean Sum of Square
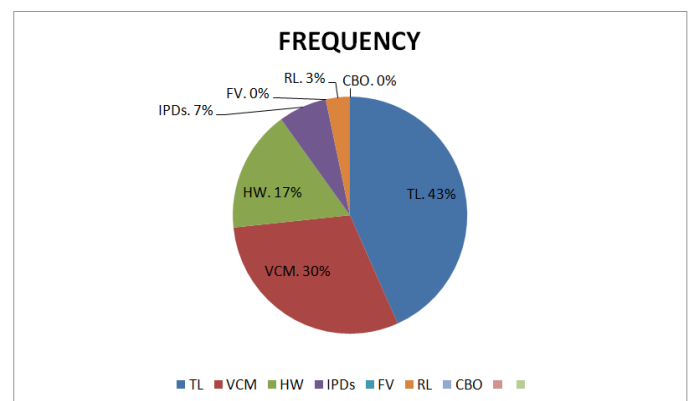
TL- Traditional Leader, **VCM**- Volunteer Community Mobilizers, **HW**- Health Worker, **IPDs**- Immunization Plus Days, **FV**- Field Volunteers, RL- Religious Leaders, **CBO**- Community Based Organizations

Fig. 3.1. Mobilization for routine immunization as responded by caregivers

Table 3.6. RI Status of children sampled during doris community survey

Variable	Frequency N=180	Percent %
Sex:		
Males	71	39
Females	109	61
Child health cards:		
Yes	131	73
No	49	27
Fully Immunized Children	105	58
Partially Immunized	41	23
Non immunized Children	34	19

N- Total Number of surveys

4.5 Community survey

A total of eighteen (18) community surveys were conducted to determine the RI coverage of the LGA. RI status of one hundred and eighty children (180) under one year children was assessed during the community survey. Table 3.6 is a summary of the RI status of the children sampled.

Table 3.7. Reasons for child not receiving routine vaccines up to date

Code	Code Definition	Frequen	Percen
1	Not aware of RI	17	23
2	Health worker attitude	23	31
3	Does not believe in vaccination	13	17
4	Dissatisfied with health worker	5	7
5	Non availability of vaccines	10	13
6	No immunization services in the settlement	0	0
7	Adverse Event Following Immunization	7	9
Total		75	100

N= 75 represents total number of children partially immunized and not immunized

4.6 Directly observed routine immunization session summary of action points

Sequel to the eighteen (18) sessions observed, the following action points were made:

1. Village Development Committees need to be activated by way of sensitization. Also, development of meeting schedules on a monthly basis.
2. Provision of child health cards to caregivers attending RI services.
3. Early take off for sessions especially outreach sessions.
4. Continuous update of RI charts on monthly basis by RI Focal persons in the Health facilities.
5. Proper documentation of RI data in the appropriate data tools.
6. Health facilities should not be used for stocking animal pasture.
7. Health education should be given to caregivers always during RI sessions.
8. Proper planning for every session so as not to run out of vaccines. This has led to drop outs and missed opportunities in some of the health facilities.

4.0 DISCUSSION

Findings at the health facilities directly supervised have shown that update of Reaching Every Ward (REW) micro-plan has not been implemented in 30% of the health facilities sampled. The responsible RI Focal persons saddled with this responsibility do not take it serious and in many cases fail to act on such agreed action point (update of REW Micro-plan).This can be attributed to the weakness in supervision and lack of institutionalized and or established sanctioning structure for defaulters by the governing authority.

Community linkages is very effective in Dutsinma LGA as the survey shows that 80% of the HFs supervised do have an evidence of monthly Village development committees minutes of meetings. Similarly, all the HFs sampled collect vaccines from the central cold store of the LGA. Vaccines are however collected and used on the same day. Vaccine ledgers are adequately distributed in the health facilities (HFs) as the study shows 80% of Health Facilities sampled have vaccine ledgers. The study shows that the most commonly stocked out vaccines are BCG and tetanus toxoid. So also, AEFI form is inadequate in the LGA base on the study.

The caregivers in Dutsinma LGA are aware of RI (P<0.05) since F-value is less than F-critical at α = 0.05 (table 3.5). Traditional leaders (43%), volunteer community Mobilizers (30%) and health workers (17%) have been identified to be the most effective social Mobilizers for Routine Immunization in the LGA. Routine Immunization coverage in the LGA is good as the study show 81% of the children sampled have been vaccinated against at least one of the infant vaccine preventable diseases.

5.0 Conclusion

There is significant level of awareness on RI in caregivers of Dutsinma LGA, Katsina State Nigeria. The impact of traditional leaders, volunteer community Mobilizers and Health workers on social mobilization for routine immunization is very effective.

Community linkages are very effective in LGA. There is good vaccine control in the LGA as stock outs were rarely encountered. So also, routine immunization coverage in the LGA is on track based on the World Health Organization (WHO) recommendation as greater than 80% of the children sampled have been vaccinated with at least one form of antigen.

6.0 Recommendation

Based on the survey conducted, the following recommendations were therefore made:

1. There is need for a continuous supportive supervision in the LGA as this will improve the quality of routine immunization.

2. Routine immunization focal persons should endeavor to give health education to caregivers as this will improve utilization.

3. The Local government authority should establish a structure of sanctioning those RI focal persons that default consistently on agreed action points during supervision. This will boost the quality of routine immunization service delivery in the LGA.

4. All unit heads under the health department should consistently participate in supportive supervision so as to improve RI quality and health services in general.

APPENDIX 1.0: RI CHECK LIST

Routine Immunization Session Monitoring Checklist, Nigeria

A. Identifying information

1. Name of Supervisor: _____ LGAF ☐ CC ☐ SC ☐ Fed Govt ☐ State Govt ☐ Others ☐
2. Designation: _____ ZC ☐ STOP ☐ WCO ☐ STC ☐ LGA Offical ☐ Partners ☐ Specify _____
3. Mobile Number of the Supervisor _____ 4. Date of Support Visit (dd-mm-yyyy): _____ 5. Time (hh:mm) : _____
6. State: _____ 7 LGA: _____ 8 Ward: _____
9. Settlement: _____ 10 Health Facility Name: _____ 11 Facility Type : Private ☐ Public ☐
12. Profile of the Settlement: Rural ☐ Urban ☐ Hard to Reach ☐ Border ☐ 13. Is this a high risk settlement for Polio Y ☐ N ☐ 14. Is there a VCM in this settlement Y ☐ N ☐

B Findings at the Health Facility (Should be answered only on sighting evidence)

#	Question	Y/N		#	Question	Y/N
15	Does health facility have updated REW Microplan	Y ☐ N ☐		22	Does the health facility have cold chain capacity (refrigerator, solar etc) to store vaccines	Y ☐ N ☐
16	Does health facility have an updated Immunization session Plan	Y ☐ N ☐		23	If Q 22 is Yes, Is the cold chain equipment fully functional, If NO, Skip this question	Y ☐ N ☐
17	Number of Immunization sessions planned and implemented {fixed (FS) and Outreach (OS)} in the last one month in this Health Facility — Planned: FS OS TOTAL; Implemented: FS OS TOTAL			24	If Q22 is Yes, then is there a temprature chart regularly maintained and updated on each of the equipment	Y ☐ N ☐
18	Were all sessions planned for last month conducted?	Y ☐ N ☐		25	If Q 22, is Yes, Then are the vaccines stored properly inside the equipment	Y ☐ N ☐
19	If Q18 above is NO, Choose the reasons for sessions not being conducted in the last month: a) Non availibility of Vaccines / Logistics ☐ b) No trained health Worker ☐ c) Non availability of Funds ☐ d) Competing programmes ☐ d) Issues related with the community ☐ f) Others ☐			26	Does the health facility have an updated vaccine ledger	Y ☐ N ☐
				27	Is there a waste disposable system in the HF: Pit ☐ Burn & Bury ☐ Incerinator ☐ None ☐	
				28	Has the Health facilty received timely funding for RI (in last 3 months)	Y ☐ N ☐
20	Does health facility have an updated RI monitoring chart	Y ☐ N ☐		29	Is there a functional Village Development committee (VDC)	Y ☐ N ☐
21	How does health facility receive RI vaccines for sessions: Delivered ☐ Collected ☐			30	Is there evidence that the community is involved in organizing RI session	Y ☐ N ☐

C. Observation during RI Session

#	Question	Y/N		#	Question	
31	Is the planned routine immunization session being conducted	Y ☐ N ☐		43	Does health worker know definition of AEFI? (Adverse events following immunization)	Y ☐ N ☐
32	Type of session being monitored: Fixed ☐ Outreach ☐			44	Has health worker recorded any AEFI in the last 3 months?	Y ☐ N ☐
33	Has the health worker, providing services been trained in Routine Immunization? No ☐ Yes, within last 1yr ☐ Yes, more than 1yr ago ☐			45	Which antigens are NOT adequately available for this vaccination session? (Tick whichever is applicable) a) BCG ☐ b) tOPV ☐ c) DPT / PENTA ☐ d) Measles ☐ e) TT ☐ f) Yellow Fever ☐ g) Hepatitis B ☐	
34	Does the health worker know the expected number of target age children for this particular session, if No skip Q 33.	Y ☐ N ☐				
35	What is the expected number of target age children for this session	_____		46	Which of the following are NOT adequately available for this vaccination session? a) 5ml reconstitution syringes ☐ b) 2ml reconstitution syringes ☐ c) Child Health / vaccination cards ☐ d) AD (0.05ml) syringes ☐ e) AD (0.5ml) syringes ☐ f) Safety Boxes ☐	
36	Is the health worker using the right diluents for each of vaccine administered (BCG, Measles, YF)	Y ☐ N ☐				
37	Does Health Worker give the vaccine correctly i.e. at the correct site, using correct route and with correct dose	Y ☐ N ☐		47	Which of the following data tools are NOT available for this vaccination session? Immunization register ☐ Tally sheet ☐ Vaccine Management Tool (VM1) ☐ AEFI reporting forms ☐ Immunization Summary sheet ☐	
38	Does Health Worker use only one syringe/needle for each dose of antigen given	Y ☐ N ☐				
39	Does Health Worker dispose of used syringes / needle into safety box immediately	Y ☐ N ☐		48	Are any other services being provided together with RI session? ORS ☐ Paracetamol ☐ Nutritional supplements ☐ Vitamin A ☐ Curative services ☐ ANC Services ☐ Others (Specify) ☐	
40	Does health worker tally each vaccine given correctly ?	Y ☐ N ☐				
41	Does health worker record on the child health / vaccination card correctly?	Y ☐ N ☐				
42	Does health worker provide the 6 key messages to parent/caretaker (see below for the messages)	Y ☐ N ☐				

Six Key Message (1) What vaccine(s) was given (2) The number of visits a child still needs in order to be fully immunized (3) What side effects may occur and how to treat them (4) The place and time of the next immunization (5) To bring the child for immunization even if he/she is sick (6) To take good care of the immunization card and bring it during the ne[...]

D	Interview with the Parents / Caregivers	Caregiver 1	Caregiver 2	Caregiver 3	E	Community Survey											Total
49	Is the mother / caregiver aware of the importance of Routine Immunization	Y N	Y N	Y N	56	Sl No of the Child Checked (Tick each checked)	1 2 3 4 5 6 7 8 9 10										
50	* Who mobilized the parent / Caregiver to the HF / Immunization site for Immunization (choose from the codes below)				57	Age of the Child checked in months <12 m											
51	Who decides wheather the child receives routine immunization / vaccines in the family	Mother / Father / Grand Parents / Relatives / Others	Mother / Father / Grand Parents / Relatives / Others	Mother / Father / Grand Parents / Relatives / Others	58	Sex of the Child checked (M / F)											M F
					59	Is there evidence of Child Health Card showing the vaccines the child has received											Y N
52	Is the caregiver aware of what vaccine was given to the child?	Y N	Y N	Y N	60	Is the Child fully immunized or appropriately immunized for age as per schedule, (Y or N)											Y N
53	Is the caregiver aware of the next date to come for follow up immunization	Y N	Y N	Y N	61	Is the child partially immunized for age (Y or N)											Y N
54	Is the mother / Caregiver satisfied with the immunization services provided at this site	Y N	Y N	Y N	62	Is the child not immunized for age (Y or N)											Y N
55	Did the child experience any adverse event following immunization during the last vaccination	Y N	Y N	Y N	63	**Reason for child not receiving routine vaccines up to date (choose codes from below)											

* Codes to fill section on Interview with Parents / Caregivers (Q): 1= Traditional Leader, 2= Voluntary Community Mobilizer (VCM), 3= Health Worker 4= IPDs Team member 5= Field Volunteer (FV), 6=Religious leader 7=Community Based organization (CBO), 8= Traditional birth Attendent (TBA), 9= Others, 10= None

**Code to fill options on Community Survey: 1= Not Aware of RI, 2=Health worker Attitude, 3=Does not believe in Vaccination, 4=Dissatisfied with Health Worker, 5=Non availability of vaccines, 6=No Immunization services in the settlement, 7=AEFI, 8= Religious beliefs, 9=Others

	Action Points	Timeline	Responsible Person
1			
2			
3			

SMS to be send to server number - State / LGA / Ward / Q9 /Q13 / Q18 /Q19/ Q28 / Q31 / Q45 / Q46 / Q56 / Q60 Y / Q61 Y / Q62 Y

Write the SMS to be sent here to facilitate easy transmission: _____

Signature of the Supervisor _____ Signature of the WFP / Health Worker _____ Date Submitted _____

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