

Health System

Immunization

Baseline KAP Survey Report

Strengthening the Health System of the Areas Deprived of Immunization and Mother-Child Health Services

Immunization

Civil Society Human and Institutional Development Programme (CHIP)
GAVI Alliance (GAVI)

Health System

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LIST OF ACRONYMS

BHU	Basic Health Unit
CBO	Community Based Organization
CHIP	Civil Society Human & Institutional Development Program
DHQ	District Headquarter Hospital
EPI	Extended Program of Immunization
FAP	First Aid Point
FLCF	First Level Care Facility
GB	Gilgit Baltistan
KPK	Khyber Pakhtoon Khwa
LHW	Lady Health Worker
ORS	Oral Re-hydration Salt
RHC	Rural Health Center
SBA	Skilled Birth Attendant
UC	Union Council

EXECUTIVE SUMMARY

This report presents findings from the baseline survey of Civil Society Human and Institutional Development Programme's (CHIP) mother and child healthcare initiative for GAVI Alliance (GAVI) in Pakistan. This independent research was conducted by CHIP and GAVI supported the effort with financial resources.

CHIP implemented a six year programme regarding mother and child healthcare in villages of District Jhelum (Punjab Province), District Swabi (Khyber Pakhtun Khwa Province) and District Skardu (Gilgit Baltistan Province) of Pakistan beginning July 2009. This final phase of the project is being implemented in a total of 35 villages of District Jhelum and Skardu. The project aims to improve mother and child healthcare through increasing routine immunization. The project also aims to improve quality of services at first level care facilities (FLCF), train local human resources to extend improved mother and child health care services and enhance awareness level of mothers and decision makers regarding safe delivery and immunization.

Methods

To assess the baseline situation of mother and child healthcare, particularly routine immunization coverage in 35 villages of district Jhelum and Skardu, we conducted a cross-sectional household survey of randomly selected mothers, pregnant women and decision makers from all 35 villages. All FLCF, LHW and SBAs in the area participated in one on one structured qualitative interviews.

Key Findings

Target Mothers

Data collected from the target mothers suggests that there is low awareness level regarding danger signs of pregnancy, vaccination, common ailments of children and ORS. Only 23.2% mothers know about danger signs of pregnancy, 30% about vaccination and 35.4% about ORS. In addition to this, a relatively low percentage, 58.1% of mothers have got their children vaccinated at least once.

Decision Makers

Data suggests that decision makers have low awareness levels regarding danger signs of pregnancy and vaccination as only 19.6% know about danger signs of pregnancy and 41% about vaccination.

Pregnant Women

Overall findings show that only 39.8% of pregnant women have knowledge regarding tetanus and only 37.5% have been vaccinated for tetanus at least once.

First Level Care Facilities

In District Skardu, 80% of the FLCF in the target District offer EPI services, while in Jhelum 75% offer EPI services. All EPI service offering FLCFs have availability of vaccines for routine immunization, cold chain and vaccinators. None of the vaccinators in Skardu have received training in social mobilization, while 66.66% of vaccinators in Jhelum have received the said

training. Only 20% of the FLCF in Skardu offer delivery services, while 75% in Jhelum offer delivery services. There are no functional village health committees in both Jhelum and Skardu, which is why none of the VHCs have paid visits to FLCFs or conducted meetings with the FLCF staff.

Lady Health Workers

None of the LHWs in Skardu have received training in social mobilization, while only three in Jhelum have (14%). As per LHW record, there are a total number of 172 pregnant women in our target areas of Jhelum and Skardu, out of which 118 pregnant women require TT vaccination. None of the LHWs in Skardu have referral slips, while 50% of the LHWs in Jhelum have them. None of the LHWs in Skardu have referred any children to FLCF for immunization in the past three months, while 198 children have been referred for immunization by the LHWs in Jhelum. A total of 201 women have been referred by LHWs in Skardu and Jhelum to FLCF for immunization in the past three months. Majority of those referred are from Jhelum (191).

Skilled Birth Attendants

Only 20% of the villages in Skardu and 53.33% in Jhelum have SBAs available. None of the SBAs in Skardu have been trained in social mobilization, while only one SBA in Jhelum (12.5%) has received social mobilization training from CHIP. None of the SBAs in Skardu have received training on maternal health and safe deliveries, while only one SBA in Jhelum (12.5%) has received training from DHQ on maternal health and safe deliveries. None of the SBAs in Skardu have received practical exposure at a health care facility, while one SBA in Jhelum (12.55%) has.

Conclusion and Selected Programmatic Recommendations

Findings suggest that CHIP needs to work towards raising both the awareness levels in the community regarding mother and child healthcare, as well as the routine immunization coverage of infants and pregnant women. It is also evident that improvement of mother and child healthcare lies within households, communities, health institutions and local human resource. Therefore, it is essential to have interventions that interlock all levels – households, communities, health institutions, as well as local human resource. Although more details regarding programmatic recommendations are mentioned in the main text, please find below some crosscutting recommendations:

The concept of a ‘model family’ should be introduced. Target mothers and decision makers should be encouraged to consider health as an important indicator for family happiness and prosperity. Community awareness and participation in project activities should be increased to gain maximum results. Improvement in ease of access to vaccination centers and better on ground organization when a vaccinator visits the community needs to be looked into so that there are no ‘missed’ children. Linkages between the village health committees and FLCF staff at the UC and district level need to be improved so as to increase routine immunization coverage via demand creation and improved quality of services. LHWs and SBAs should be further trained so that they are confident in dealing with cases at the village level.

1. INTRODUCTION

1.1 Overview

This report presents findings from the baseline survey of Civil Society Human and Institutional Development Programme's (CHIP) mother and child healthcare initiative for GAVI in Pakistan. This baseline study was conducted by CHIP and GAVI supported the effort with financial resources. CHIP implemented a five year programme regarding mother and child healthcare in District Jhelum, Punjab Province and District Skardu, Gilgit Baltistan Province of Pakistan beginning July 2009. The project aims to improve mother and child healthcare through increasing routine immunization. The project also aims to improve quality of services at first level care facilities (FLCF), train local human resources to extend improved mother and child health care services and enhance awareness level of mothers and decision makers regarding safe delivery and immunization. The project results were as follows:

- i. Functional village health committees that will monitor services of first level care facilities for extending quality healthcare to communities;
- ii. Improved quality of services of first level care facilities for mother child health care and routine vaccination;
- iii. Trained local human resources available for extending improved mother and child health services;
- iv. Enhanced awareness level of mothers and decision makers regarding safe delivery and immunization for children and expecting mothers; and
- v. Increased routine vaccination coverage of children and pregnant mothers.

The baseline survey for the mother and child healthcare project was conducted in March 2014 and had the following objective: to document the present state of affairs in the designated districts in relation to awareness regarding mother and child healthcare and coverage of routine immunization.

1.2 Methods and Study Sites

We conducted a survey through a structured questionnaire for six respondents:

- i. Target Mothers
- ii. Decision Makers
- iii. Pregnant Women
- iv. First Level Care Facilities
- v. Lady Health Workers
- vi. Skilled Birth Attendants

1.3 Limitations

Traveling to remote villages, particularly in District Skardu was a daunting task. Not only are the villages away from the main city, they are further spread out away from one another and the terrain leading to them is rough and infrastructure poor. Also, due to distances and conduction of interviews on one on one basis, data collection proved to be a very time consuming activity.

1.4 Sample Size and Procedures

1.4.1 Instrument Development

The questionnaire was developed by the CHIP team keeping in mind the results framework developed by CHIP and GAVI when the proposal was written in 2013. The questionnaires were piloted prior to data collection via pretest in two after which certain changes were made and the questionnaire was finalized which can be seen in the appendix.

1.4.2 Data Enumerator Training

Local data enumerators were identified for both districts and had prior experience administering community based surveys, were fluent in English and the local languages (Balti for Skardu and Punjabi for Jhelum) and were non-residents of the community. Enumerators attended one-day training in Skardu and Sanghoi respectively focusing on the project background, research ethics, data confidentiality, survey implementation and cultural norms of their respective districts.

1.4.3 Data Collection, Entry and Analysis

Data collection took place in the month of March 2014. 20% of the target mothers (310/1500), 100% of the FLCF (9/9), 20% of the target decision makers (306/1500), 183 pregnant women, 100% of the LHWs (24/24) and 100% of the SBAs (12/12) were met for individual interviews. After their questionnaires were filled by the enumerators, they were passed on for entry, analysis and storage.

2. RESULTS

2.1 Target Mothers

Table 4: Knowledge about vaccination

A total of 310 target mothers were interviewed, out of which 149 were from District Skardu and 161 from Jhelum. They were asked questions primarily relating to routine immunization, safe deliveries and common ailments in young children.

District	Yes	No	NR	Total
Skardu	25	95	29	149
Jhelum	99	62	0	161
Total	124	157	29	310
% age	40	50.6	9.4	100

2.1.1 Signs of Pregnancy

District	Yes	No	NR	Total
Skardu	32	90	27	149
Jhelum	40	121	0	161
Total	72	211	27	310
% age	23.2	68.1	8.7	100

Only 40% of the mothers interviewed said that they know the signs of pregnancy, while 50.6% said they do not.

District	Consult LHW	Consult Skilled Birth Attendant	Consult Doctor	Share with Family members	Share with Mother in Law	Other	NR	Total
Skardu	18	11	14	19	12	0	0	32
Jhelum	5	0	40	23	3	5	0	40
Total	23	11	54	42	15	5	0	72
% age	31.9	15.3	75	58.3	20.8	6.9	0	208.2

As shown in Table 2, only 23.2% of mothers recognize the danger signs of pregnancy, while 68.1% do not.

The most common answer for what should be done if danger signs of pregnancy occur is to consult a doctor, which was given by 75% of mothers. 58.3% mothers said it should be shared with family members, 31.9% mothers said an LHW should be consulted and 20.8% mothers said it should be shared with the mother in law. The least common answer was given by 15.3% of the mothers that said SBAs should be consulted if danger signs of pregnancy occur.

District	Yes	No	NR	Total
Skardu	15	112	22	149
Jhelum	78	80	3	161
Total	93	192	25	310
% age	30	61.9	8.1	100

2.1.2 Vaccination

Routine immunization or child vaccination coverage in District Jhelum and Skardu was assessed. A total of 30% of mother's said that they know about vaccination, while 61.9% said they do not.

As shown in Table 5, 58.1% mothers said they have got their child/children vaccinated for at least once, while 33.9% said they have never got their children vaccinated.

Table 5: Have you got your child/children vaccinated for any disease

District	Yes	No	NR	Total
Skardu	45	79	25	149
Jhelum	135	26	0	161
Total	180	105	25	310
% age	58.1	33.9	8.1	100

Table 6: Why children not vaccinated?

District	Not necessary	Cost too much	Too far	Service not good	No one to go with	Did not know where to go	Did not want to see a male vaccinator	Not allowed by decision maker of the house	Side effects of vaccination	Others	Total
Skardu	32	4	26	5	0	2	0	2	2	6	79
Jhelum	0	0	21	0	0	0	0	2	0	3	26
Total	32	4	47	5	0	2	0	4	2	9	105
% age	30.5	3.8	44.8	4.8	0	1.9	0	3.8	1.9	8.6	100

When asked why they had never got their children vaccinated, 44.8% mothers said it was because they have to travel too far to get vaccination done, 30.5% said it was not necessary, 4.8% said service was not good, 3.8% said it cost too much, another 3.8% said they were not allowed to do so by the decision maker of the house, 1.9% said they did not know where to go and 1.9% said they did not get their children vaccinated because of the side effects of vaccination.

2.1.3 Common Ailments of Children

District	Diarrhea	Pneumonia	Mal Nutrition	Malaria	Others	NR	Total
Skardu	66	40	16	7	47	0	149
Jhelum	56	52	2	8	29	14	161
Total	122	92	18	15	76	14	310
% age	39.4	29.7	5.8	4.8	24.5	4.5	108.7

39.4% of mothers said they have knowledge about diarrhea, 29.7% said they know about pneumonia, 5.8% said they know about malnutrition, and only 4.8% said they know about malaria. 24.5% of the mothers interviewed mentioned flu and high fever as common ailments of children.

District	Yes	No	NR	Total
Skardu	22	102	25	149
Jhelum	83	75	3	161
Total	105	177	28	310
% age	33.8	57.1	9	100

Only 33.8% said they have knowledge about pneumonia, while 57.1% said they do not.

District	Shallow and rapid breathing	Exaggerated movement of rib cage	Decrease in food and milk intake	Drowsiness	Fits	Decrease in body temperature	Other	NR	Total
Skardu	17	3	1	0	0	0	1	0	22
Jhelum	28	9	3	16	2	21	4	0	83
Total	45	12	4	16	2	21	5	0	105
% age	42.9	11.4	3.8	15.2	1.9	20	4.8	0	100

Below are the symptoms of pneumonia that were recognized by mothers in both districts: Overall, 42.9% of mothers said they recognize shallow and rapid breathing as a symptom, 20% recognize decrease in body temperature, 15.2% recognize drowsiness, 11.4% recognize exaggerated movement of the rib cage, 3.8% recognize decrease in food and milk intake and 1.9% recognize fits.

Table 10: Knowledge about diarrhea				
District	Yes	No	NR	Total
Skardu	49	80	20	149
Jhelum	59	100	2	161
Total	108	180	22	310
% age	34.8	58	7.09	100

As shown in Table 10, only 34.8% of mothers said they have knowledge about diarrhea, while 58% said they did not.

2.1.4 ORS

Table 11: Knowledge about ORS				
District	Yes	No	NR	Total
Skardu	47	75	27	149
Jhelum	63	94	4	161
Total	110	169	31	310
% age	35.4	54.5	10	100

Only 35.4% of mothers said they have knowledge of ORS, while 54.5% said they do not.

Table 12: Knowledge about how to prepare ORS at home				
District	Yes	No	NR	Total
Skardu	32	108	9	149
Jhelum	38	120	3	161
Total	70	228	12	310
% age	22.6	73.5	3.9	100

As shown in Table 12, only 22.6% of mothers said they know how to prepare ORS at home, while an overwhelming majority of 73.5% said they do not.

2.2 Decision Makers

Household decision makers in rural areas of District Skardu and Jhelum are usually husbands or mother-in-laws. The decision makers that were interviewed for the baseline survey were husbands of the target mothers. Decision makers were asked whether they recognized the danger signs of pregnancy, and if so, whether they could relay the specific signs they recognize. The danger signs include: yellow coloring, vaginal bleeding or spotting, smelly vaginal discharge, severe pain in stomach and lower abdomen, severe headache or blurred vision, swelling of hands and feet, fits or convulsions, and no feeling of movement from baby after the 4th month.

District	Yes	No	NR	Total
Skardu	29	114	2	145
Jhelum	31	128	2	161
Total	60	242	4	306
% age	19.6	79	1.3	100

2.2.1 Danger Signs of Pregnancy

As shown in Table 13, only 19.6 % of decision makers interviewed recognize the danger signs of pregnancy, while 79% do not.

District	Consult LHW	Consult Skilled Birth Attendant	Consult Doctor	Share with Family Members	Share with Mother in Law	Wait and do nothing	Other	NR	Total
Skardu	27	9	6	29	4	2	0	0	29
Jhelum	9	0	31	9	0	2	2	0	31
Total	36	9	37	38	4	4	2	0	60
% age	60	15	61.6	63.3	6.7	6.7	3.3	0	216.6

When these danger signs occur, as shown in Table 14, 63.3% of decision makers said they should share it with family members, 61.6 % said they should consult a doctor, 60% said they should consult an LHW, 15% said they should consult an SBA, while 6.7% said they should share it with the mother-in-law and another 6.7% said they should wait and do nothing.

2.2.2 Vaccination

District	Yes	No	NR	Total
Skardu	40	92	13	145
Jhelum	82	79	0	161
Total	122	171	13	306
% age	41	55.8	4.2	100

Only 41% of decision makers in Jhelum and Skardu said they know about vaccination, while 55.8% said they do not.

District	1	2	3	4	5	6	7	8	9	Other	NR	Total
Skardu	8	8	12	8	3	1	0	0	0	0	0	40
Jhelum	70	4	2	0	0	6	0	0	0	0	0	82
Total	78	12	14	8	3	7	0	0	0	0	0	122
% age	63.9	9.8	11.5	6.6	2.5	5.7	0	0	0	0	0	100

None of the decision makers knew that vaccination protects children from nine diseases. Majority of the respondents, that is 63.9% thought vaccination protects a child from one disease, while 11.5% thought it protected children from three diseases, 9.8% thought it was two diseases, 6.6% thought it was four diseases, 5.7% thought it was six diseases, while 2.5% thought it was five diseases.

	Skardu	Jhelum	Total	% age
Measles	8	21	29	23.8
Hepatitis B	1	0	1	0.8
Whooping Cough	0	3	3	2.5
Tetanus	2	7	9	7.4
Polio	40	43	83	68
TB	19	4	23	18.9
Pneumonia	0	4	4	3.3
Small Pox	0	0	0	0
Malaria	0	0	0	0
Other	0	0	0	0
NR	0	0	0	0
Total	62	23	85	100

68% said they knew vaccination protects against polio, 23.8% knew about protection against measles, 18.9% knew about protection against TB, 7.4% knew about protection against tetanus, 3.3% knew about protection against pneumonia, 2.5% knew about protection against whooping cough, 0.8% knew about protection against Hepatitis B and none of the decision makers knew about protection against small pox and malaria.

2.3 Pregnant Women

Pregnant women were interviewed to primarily gauge their status of tetanus vaccination. Pregnant women who are up to date on tetanus toxoid vaccinations during pregnancy are nearly 100 % protected against tetanus for both their newborn and themselves. Two doses of tetanus toxoid during a first pregnancy offer full protection. However, if a woman was vaccinated during a previous pregnancy, she may only need a booster to give full protection. Five doses at the appropriate intervals provide lifetime protection. The criteria for the pregnant women interviewed were that they must be at least 3 months pregnant and from the target village. There was no standard number of pregnant women interviewed as it varied according to how many pregnant women resided in the village and how many were available to be surveyed at the time of data collection.

2.3.1 Tetanus

District	Yes	No	NR	Total
Skardu	11	73	2	86
Jhelum	62	35	0	97
Total	73	108	2	183
% age	39.8	59	1	100

As shown in Table 18, 39.8% of the pregnant women interviewed knew about tetanus, while 59% did not. The proportion of pregnant women that know about tetanus is significantly higher in Jhelum (63.9%) though as compared to Skardu (12.8%).

District	Yes	No	NR	Total
Skardu	17	62	7	86
Jhelum	40	23	3	97
Total	57	85	10	152
% age	37.5	55.9	6.6	100

Table 19 shows how many of the pregnant women had been vaccinated for tetanus. Out of the 152 women interviewed, 37.5% had been vaccinated for tetanus at least once, while 55.9% had never received a tetanus shot.

District	1 st doze (4-5 months)	2 nd doze (7-8 months)	3 rd doze (9 months)	NR	Total
Skardu	15	17	0	0	17
Jhelum	40	40	40	0	40
Total	55	57	40	0	57
% age	96.5	100	70.2	0	266.7

As shown in Table 20, 96.5% of the 57 women in both districts that had been vaccinated for tetanus received one TTI during this pregnancy; 100% received two doses and 70.2% received three doses.

District	Vaccinator came to the village	EPI Fixed Point	BHU	FAP	Dispensary	RHC	DHQ	Other	NR	Total
Skardu	10	0	1	0	0	0	2	4	0	17
Jhelum	3	0	35	0	2	0	0	0	0	40
Total	13	0	36	0	2	0	2	4	0	57
% age	22.8	0	63.2	0	3.5	0	3.5	7	0	100

As shown in Table 21, majority of the vaccinated women, that is 63.2% were vaccinated at BHU, while 22.8% were vaccinated by a vaccinator that came to their village, 3.5% from a dispensary and another 3.5% from the DHQ.

	Skardu	Jhelum	Total	% age
Not necessary	11	19	30	35.3
Cost too much	1	1	2	2.4
Too far	12	1	13	15.3
Service not good	5	2	7	8.2
No one to go with	4	0	4	4.7
Did not know where to go	0	0	0	0
Did not want to see a male vaccinator	2	0	2	2.4
Not allowed by decision maker of the house	1	0	1	1.2
Side effects of vaccination	1	0	1	1.2
Other	18	0	18	21.2
NR	7	0	7	8.2
Total	62	23	85	100

35.3% of the 85 pregnant women that did not get vaccinated said they did not get vaccinated because it was not necessary, 15.3% said the place for vaccination was too far, 8.2% said the service was not good, 4.7% said that no one would go with them, 2.4% said it cost too much, 2.4% did not want to see a male vaccinator, 1.2% said that they were not allowed by the decision maker of the household and another 1.2% said they did not get vaccinated due to the side effects.

2.4 First Level Care Facilities

District	Total Number of FLCF
Skardu	05(+ 01dispensary)
Jhelum	04
Total	09
Percentage	100%

There are a total of nine FLCF – five in District Skardu and four in District Jhelum.

2.4.1 EPI Services

District	Total Number of FLCF	No. Of FLCF that offer EPI services	Percentage
Skardu	05	04	80%
Jhelum	04	03	75%
Total	09	07	77.77%
Percentage	100%	77.77%	77.77%

In District Skardu, 80% of the FLCF in the target District offer EPI services, while in Jhelum 75% offer EPI services.

Table 25: Availability of vaccines for routine immunization in the visited FLCFs				
District	Total Number of FLCF	No. Of FLCF that offer EPI services	Availability of vaccines for routine immunization in FLCF	Percentage
Skardu	05	04	04	100%
Jhelum	04	03	03	100%
Total	09	07	07	100%
Percentage	100%	100%	100%	

Table 26: Availability of Cold Chain in the visited FLCFs				
District	Total Number of FLCF	No. Of FLCF that offer EPI services	Availability of cold chain in FLCF	Percentage
Skardu	05	04	04	100%
Jhelum	04	03	03	100%
Total	09	07	07	100%
Percentage	100%	100%	100%	

Table 27: Availability of vaccinator in the visited FLCFs				
District	Total Number of FLCF	No. Of FLCF that offer EPI services	Availability of vaccinators in FLCF	Percentage
Skardu	05	04	04	100%
Jhelum	04	03	03	100%
Total	09	07	07	100%
Percentage	100%	100%	100%	

As shown in Tables 25,26 and 27, all EPI service offering FLCFs have availability of vaccines for routine immunization, cold chain and vaccinators.

2.4.2 Delivery Services

Table 28: Number of FLCF that offer delivery services			
District	Total Number of FLCF	Number of FLCF that offer delivery services	Percentage
Skardu	05	01	20%
Jhelum	04	03	75%
Total	09	04	44.44%
Percentage	100%	44.44%	

Only 20% of the FLCF in Skardu offer delivery services, while 75% in Jhelum offer delivery services.

Types of delivery facilities available in the visited FLCFs	Jhelum	Skardu	Total	%
Labour Room	3	1	4/9	44.44%
Ultrasound	3	0	3/9	33.33%
Delivery table	3	1	4/9	44.44%
Mid wife	3	0	3/9	33.33%
LHV	2	1	3/9	33.33%
Doctor	2	0	2/9	22.33%
Cotton, Gauze, clamp, blade & medicine	2	1	3/9	33.33%

44.44% of the FLCFs in Jhelum and Skardu have labour rooms and delivery tables, 33.33% have ultrasound machine, midwives, LHVs and essential items such as cotton, gauze, clamps, blades and medicines. Only 22.33% of the FLCFs in Jhelum and Skardu have the availability of a doctor.

District	Total Number of FLCF	Availability of midwife/LHV in FLCF	Percentage
Skardu	05	01 (only one in BHU Tormik)	20%
Jhelum	04	03	75%
Total	09	04	44.44%
Percentage	100%	44.44%	

Only 20% of FLCFs in Skardu have availability of a midwife and/or LHV, while 75% of FLCFs in Jhelum have the availability of a midwife and/or LHV.

District	Total Number of FLCF	Number of antenatal checkups in past 03 months	Percentage
Skardu	05	100 (In Skardu only 1 facility i.e. BHU Tormik is providing Ante natal care services and no data for the ante natal check ups exist as such. But during field visit, LHW stated that during past month she conducted 100 check ups approximately.	
Jhelum	04	330 (330 check ups were conducted only in 3 facilities of Jhelum during past 3 months. As BHU Pind Swika, has limited staff, no ante natal check ups were not conducted there).	
Total	09	430	
Percentage	100%		

There have been 100 antenatal checkups conducted in Skardu in the past three months and 330 in Jhelum during the same time period.

2.4.3 Vaccinators

District	Total Number of FLCF	Number of vaccinators in the FLCF	Percentage
Skardu	05	4	80%
Jhelum	04	3	75%
Total	09	7	77.77%
Percentage	100%	77.77%	

As shown in Table 32, 80% of FLCF in Skardu have vaccinators and 75% in Jhelum have vaccinators.

District	Total Number of FLCF	Number of vaccinators in the FLCF	Number of vaccinators that have received training on social mobilization	Percentage
Skardu	05	4	0	0%
Jhelum	04	3	2	66.66%
Total	09	7	2	28%
Percentage	100%	77.77%	28.57%	

District	Total Number of FLCF	Number of vaccinators in the FLCF	Number of vaccinators that have received training on social mobilization	Name of organization that imparted training on social mobilization		Percentage
				CHIP	Any Other	
Skardu	05	4	0	0	-	0%
Jhelum	04	3	2	2	-	66.66%
Total	09	7	2	2	-	28.57%
Percentage	100%	77.77%	28.57%			

None of the vaccinators in Skardu have received training in social mobilization, while 66.66% of vaccinators in Jhelum have received the said training. They received this training through CHIP.

2.4.4 Linkages with Village Health Committees

District	Total Villages	Number of functional village health committees	Percentage
Skardu	20	0	0%
Jhelum	15	0	0%
Total	35	0	0%
Percentage	100%	0%	0%

District	Total Villages	Number of functional village health committees	Visits paid by VHC to first level care facilities	Percentage
Skardu	20	0	0	0%
Jhelum	15	0	0	0%
Total	35	0	0	0%
Percentage	100%	0%	0%	0%

District	Total Villages	Number of functional village health committees	Meetings held between VHC members and first level health care staff	Percentage
Skardu	20	0	0	0%
Jhelum	15	0	0	0%
Total	35	0	0	0%
Percentage	100%	0%	0%	0%

As shown in Table 35, 36 and 37, there are no functional village health committees in both Jhelum and Skardu, which is why none of the VHCs have paid visits to FLCFs or conducted meetings with the FLCF staff.

2.5 Lady Health Workers

2.5.1 Monthly Responsibilities

Monthly responsibilities of the LHW as stated by the interviewed LHWs	Jhelum	Skardu	Total	%
Coordinate with SBA & local facilities regarding mother checkups	5	3	8/24	33.33
Counsel mothers regarding MCH issues	17	2	19/24	79.1
Refer children and mother to FLCF for vaccinations	18	2	20/24	83.33
Facilitate vaccinator outreach teams	17	0	17/24	70.8
Visit household 7/- day	15	3	18/24	75
Others	5	0	5/24	20.8

33.33% LHWs said that it was part of their monthly responsibilities to coordinate with SBA and local facilities regarding mother checkups, 79.1% said it was to counsel mothers regarding MCH issues, 83.33% said it was to refer children and mother to FLCF for vaccinations, 70.8% said it was to facilitate vaccinator outreach teams and 75% said it was to visit households (seven per day).

2.5.2 Social Mobilization

District	Total Villages	Available LHW's in villages	Number of LHW's trained in social mobilization	Percentage
Skardu	20	7	0	0
Jhelum	15	21	3	14%
Total	35	28	3	10.7%
Percentage	100%	%	10.7%	

Table 40: Name of organizations that imparted the social mobilization trainings to LHW's in the visited FLCFs						
District	Total Number of villages	Number of LHW's in the FLCF	Number of LHW's that have received training on social mobilization	Name of organization that imparted training on social mobilization		Percentage
				CHIP	Any Other	
Skardu	20	7	0	0	0	
Jhelum	15	21	3	1	2	
Total	35	28	3	1	2	
Percentage	100%	80%	10.7%	33.33%	66.66%	

None of the LHWs in Skardu have received training in social mobilization, while only three in Jhelum have (14%). One of these three have received the training from CHIP, while the other two received it from other organizations.

2.5.3 Record Keeping

Table 41: Total Number of Pregnant women that require TT vaccination as per record of LHW				
District	Total villages	Total Number of Pregnant women as records of LHW	Number of pregnant women that require TT vaccination	Percentage
Skardu	20	149	103	
Jhelum	15	23	15	
Total	35	172	118	
Percentage	100%			

As per LHW record, there are a total number of 172 pregnant women in our target areas of Jhelum and Skardu, out of which 118 pregnant women require TT vaccination.

Table 42: Total Number of children up to 23 months age as per record of LHW			
District	Total villages	Total number of children under 23 months age as record of LHW's	Percentage
Skardu	20	845	
Jhelum	15	130	
Total	35	975	
Percentage	100%		

As per LHW record, there are a total of 975 children up to 23 months of age in Jhelum and Skardu. Majority of the children (845) are in Skardu.

District	Total villages	Total number of births in last 03 months as record of LHW's	Percentage
Skardu	20	43	
Jhelum	15	89	
Total	35	132	
Percentage	100%		

According to LHW record, there are 132 new births in the past three months in Jhelum and Skardu. Majority of the births were in Jhelum (89).

2.5.4 Referral System

District	Total Villages	Available LHW's in villages	Number of LHW's that have referral slips	Percentage
Skardu	20	7	0	0
Jhelum	15	21	12	50%
Total	35	28	12	50%
	100%		50%	

None of the LHWs in Skardu have referral slips, while 50% of the LHWs in Jhelum have them.

District	Total Villages	Available LHW's in villages	Number of Children referred by LHW to FLCF for immunization in past 03 months	Percentage
Skardu	20	7	0	
Jhelum	15	21	198	
Total	35	28	198	
	100%			

None of the LHWs in Skardu have referred any children to FLCF for immunization in the past three months, while 198 children have been referred for immunization by the LHWs in Jhelum.

District	Total Villages	Available LHW's in villages	Number of women referred by LHW to FLCF for immunization in past 03 months	Percentage
Skardu	20	7	10	
Jhelum	15	21	191	
Total	35	28	201	
	100%			

A total of 201 women have been referred by LHWs in Skardu and Jhelum to FLCF for immunization in the past three months. Majority of those referred are from Jhelum (191).

2.6 Skilled Birth Attendants

District	Total Villages	Available Skilled Birth Attendants in the villages	Percentage
Skardu	20	04	20%
Jhelum	15	08	53.33%
Total	35	12	34.28%
Percentage	100%	34.28%	34.28%

Only 20% of the villages in Skardu and 53.33% in Jhelum have SBAs available.

2.6.1 Social Mobilization

District	Total Villages	Available SBA's in villages	Number of SBA's trained in social mobilization	Percentage
Skardu	20	04	0	0
Jhelum	15	08	1	12.5%
Total	35	12	1	8.33%
Percentage	100%	34.28%	8.33%	

District	Total Number of villages	Number of SBA's in the villages	Number of SBA's that have received training on social mobilization	Name of organization that imparted training on social mobilization		Percentage
				CHIP	Any Other	
Skardu	20	04	0	-	--	--
Jhelum	15	08	1	1	-	-
Total	35	12	1	1	-	-
Percentage	100%	34.28%	8.33%	-	-	-

None of the SBAs in Skardu have been trained in social mobilization, while only one SBA in Jhelum (12.5%) has received social mobilization training from CHIP.

2.6.2 Maternal Health and Safe Deliveries Training

District	Total Villages	Available Skilled Birth Attendants in the villages	Number of SBAs trained on maternal health and safe deliveries	Percentage
Skardu	20	04	0	0%
Jhelum	15	08	01	12.5%
Total	35	12	01	8.33%
Percentage	100%	34.28%	8.33%	

District	Total Number of villages	Number of SBA's in the villages	Number of SBA's that have received training on safe delivery practices	Name of organization that imparted training on safe delivery practices		Percentage
				DHQ	Any Other	
Skardu	20	04	0	0	-	
Jhelum	15	08	1	1	-	
Total	35	12	1	1	-	
Percentage	100%	34.28%	8.33%	100%	-	

None of the SBAs in Skardu have received training on maternal health and safe deliveries, while only one SBA in Jhelum (12.5%) has received training from DHQ on maternal health and safe deliveries.

2.6.3 Practical Exposure

District	Total Villages	Available Skilled Birth Attendants in the villages	Number of skilled birth attendants that have received practical exposure	Percentage
Skardu	20	04	0	0%
Jhelum	15	08	01	12.55%
Total	35	12	01	8.33%
Percentage	100%	34.28%	8.33%	

None of the SBAs in Skardu have received practical exposure at a health care facility, while one SBA in Jhelum (12.55%) has.

2.6.4 Referral System

District	Total Villages	Available SBA's in villages	Number of Children referred by SBA's to FLCF for immunization in past 03 months	Percentage
Skardu	20	4	9	
Jhelum	15	8	7	
Total	35	12	16	
	100%	34.28%	-	

A total of 16 children have been referred by SBAs in Jhelum and Skardu to FLCF for immunization in last three months.

Table 54: Number of women referred by SBA to FLCF for immunization in last 03 months				
District	Total Villages	Available SBA's in villages	Number of women referred by SBA's to FLCF for immunization in past 03 months	Percentage
Skardu	20	4	4	
Jhelum	15	8	5	
Total	35	12	9	
	100%	34.33%	-	

A total of nine women have been referred by SBAs in Jhelum and Skardu to FLCF for immunization in last three months.

Table 55: Number of Delivery cases referred by SBA to FLCF in last 03 months				
District	Total Villages	Available SBA's in villages	Number of delivery cases referred by SBA to FLCF in past 03 months	Percentage
Skardu	20	4	9	-
Jhelum	15	8	12	-
Total	35	12	21	-
	100%	34.33%	-	

A total of 21 delivery cases have been referred by SBAs in Jhelum and Skardu to FLCF in the last three months.

3. ANALYSIS

This baseline survey has presented us with useful information regarding mother and child healthcare, especially with regard to routine immunization and will be helpful in enhancing the results of CHIP's project intervention in District Jhelum and Skardu. Whereas combined results are important for understanding and framing the project interventions on a broader scale, district-specific findings are more helpful for micro level district wise planning. Analyzing the results overall will help in determining what aspects of the project intervention require most emphasis, time and resources.

3.1 *Target Mothers*

Only 23.2% mothers know about danger signs of pregnancy, 30% about vaccination and 35.4% about ORS. It is probably due to these low levels of knowledge regarding basic mother and child healthcare components that only 58.1% of mothers have got their children vaccinated at least once. It is common for mothers in rural areas of District Jhelum and Skardu to not understand the importance of issues such as vaccination.

3.2 *Decision Makers*

Only 19.6% decision makers know about danger signs of pregnancy and 41% about vaccination. It is essential for decision makers to be able to recognize danger signs of pregnancy so that they may be able to take appropriate action if they occur. It is also essential for them to understand the importance of vaccination so that they encourage and arrange for their children and women in the household to get their vaccination courses completed. Rural areas of Pakistan are generally patriarchal, which is why the decision making is usually in the hands of the men in the household. It is because they are unaware of the importance of vaccination and the repercussions of danger signs of pregnancy if they are not looked into, that the vaccination level is as low as 58.1% and there are frequent maternal and infant mortalities.

3.3 *Pregnant Women*

Only 39.8% of pregnant women have knowledge regarding tetanus which is an extremely low figure. During data collection, it was realized that even some women that had received tetanus shots did not know what the shots were protecting them from and what were the symptoms of the disease from which they were gaining protection. Some women got tetanus shots as a mere formality during pregnancy without understanding its importance. It is essential for women and those around them to understand the true essence of routine immunization so that they go to all lengths to complete vaccination courses. Only 37.5% have been vaccinated for tetanus at least once in both District Jhelum and Skardu. Low coverage is directly linked with lack of knowledge, which is why both men and women should be told about tetanus, its causes, symptoms and methods of prevention. Increase in knowledge will also result in decrease in myths and adulterated cultural and religious beliefs, which are another major cause of lack of coverage. Some women believe that it was tetanus shots that resulted in their previous miscarriage, without realizing that there are other factors such as poor health, lack of iron and malnutrition that may have caused the miscarriage.

3.4 First Level Care Facilities

In District Skardu, 80% of the FLCF in the target District offer EPI services, while in Jhelum 75% offer EPI services. All EPI service offering FLCFs have availability of vaccines for routine immunization, cold chain and vaccinators. Considering this, it is alarming that only 58.1% of mothers have got their children vaccinated at least once. This could be due to the fact that existence of EPI centres is not enough – they need to be fully functional with vaccinators available during their designated timings. Another aspect that needs to be considered, especially in the case of Skardu is the accessibility to EPI centres/FLCFs. There remains to be poor road infrastructure and difficult terrain in the rural areas of District Jhelum and Skardu that then puts off parents/decision makers from using the vaccination services. Another aspect is that of transportation costs – at times to avoid transportation costs, parents will wait for the day that the mobile vaccinator team is to visit the village and if they are not present in the village that day, the child will be missed. None of the vaccinators in Skardu have received training in social mobilization, while 66.7% of vaccinators in Jhelum have received the said training. Training in social mobilization is vital so that vaccinators learn how to approach the community and ensure that no child or pregnant woman is left behind when it comes to vaccination.

3.5 Lady Health Workers

None of the LHWs in Skardu have received training in social mobilization, while only three in Jhelum have (14%). This is quite alarming as one of the aspects of the job of an LHW is that she must visit 5-7 households per day to check their immunization records and counsel them regarding mother and child healthcare. In order to their job well, LHWs must have strong social mobilization skills. None of the LHWs in Skardu have referral slips, while 50% of the LHWs in Jhelum have them. None of the LHWs in Skardu have referred any children to FLCF for immunization in the past three months, while 198 children have been referred for immunization by the LHWs in Jhelum. A total of 201 women have been referred by LHWs in Skardu and Jhelum to FLCF for immunization in the past three months. Majority of those referred are from Jhelum (191). This data suggests that the referral system in both districts, but particularly in Skardu requires attention. LHWs in Skardu need to be trained in social mobilization and their linkages with FLCFs need to be improved so that they can refer women and children for immunization.

3.6 Skilled Birth Attendants

Only 20% of the villages in Skardu and 53.3% in Jhelum have SBAs available. Lack of local human resource knowledgeable in mother and child healthcare will result in suffrage of those who do not have access to FLCFs. Women should be able to approach SBAs and LHWs at the village level to find solutions to their basic healthcare problems and advice regarding deliveries and vaccination. None of the SBAs in Skardu have been trained in social mobilization, while only one SBA in Jhelum (12.5%) has received social mobilization training from CHIP. None of the SBAs in Skardu have received training on maternal health and safe deliveries, while only one SBA in Jhelum (12.5%) has received training from DHQ on maternal health and safe deliveries. None of the SBAs in Skardu have received practical exposure at a health care facility, while one SBA in Jhelum (12.55%) has. One cannot emphasize enough the importance of training local human resource in rural areas of Pakistan. Only once SBAs will have received trainings, will they be confident enough to deal with non-complicated delivery cases and will gain the trust of the community.

4. CONCLUSION & SPECIFIC RECOMMENDATIONS

The conclusion drawn from the findings of this baseline survey is that mother and child healthcare can only be improved if the project targets all levels involved: individual level (target mother and decision maker), village level (LHW, VHC and SBA) and district level (FLCF). If the synergy among all these groups is well organized and coordinated, the health indicators in the respective districts can improve significantly. There is potential for a lot of improvements to be made in both districts, particularly in reference to improving knowledge of mothers and decision makers and trainings of local human resource, as well as health staff.

Considering the fact that this current phase of the mother and child healthcare project is for the duration of 12 months only, implementation of activities and plans will have to be done in an orderly and organized manner to achieve maximum results. Some recommendations on how to make this project most fruitful include the following:

- 4.5 The concept of a ‘model family’ should be introduced. Target mothers and decision makers should be encouraged to consider health as an important indicator for family happiness and prosperity. Community awareness and participation in project activities should be increased to gain maximum results.
- 4.6 Local human resource should be trained at the village level to be able to conduct informative sessions on mother and child healthcare related topics such as importance of vaccination, danger signs of pregnancy and tetanus.
- 4.7 Innovative methods should be used to increase the knowledge level of communities regarding mother and child healthcare issues. Methods can include usage of local media, wall chalking, puppet shows and communal events such as Mothers Day.
- 4.8 Improvement in ease of access to vaccination centers and better on ground organization when a vaccinator visits the community needs to be looked into so that there are no ‘missed’ children.
- 4.9 Vaccinators should be trained in social mobilization and their confidence level should be increased through events that appreciate them and encourage them to continue to do their work in an honest manner.
- 4.10 Linkages between the village health committees and FLCF staff at the UC and district level need to be improved so as to increase routine immunization coverage via demand creation and improved quality of services.
- 4.11 LHWs and SBAs should be further trained so that they are confident in dealing with cases at the village level.