

# **A study on beneficiary's satisfaction during camp and at the referral centers: a cross-sectional study**

**By**

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***To***

***Christofel Blinded Mission (CBM)***

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## Acknowledgement

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Thankful we ever remain...

The study team

## ABBREVIATIONS

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CBM	: Cristofel Blinded Mission
CP	: Cerebral Palsy
CTEV	: Congenital Talipes Equino Varus
CWDs	: Children with Disabilities
ESAR	: Emergency Surveillance and Response
FOD	: Friends of Disabled
HRDC	: Hospital and Rehabilitation Centre for Disabled Children
PBC	: Post Burn Contracture
PWDs	: Persons with Disabilities

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## **Summary**

Immediately after the devastating earthquake of April 25, 2015 in Nepal, Hospital and Rehabilitation Center for Disabled Children (HRDC) launched an Emergency Surveillance and Response (ESAR) Project to respond to the extreme condition after earthquake and to support the victims in the affected areas. HRDC ESAR initiated operations in the form of mobile health camps onsite and referral including appropriate counseling services to the people at risk. Lot of individuals and institutions joined the hands on hands in this operation. CBM supported 36 health relief camps for medical and surgical treatment and follow up activities for the people affected by earthquake.

The beneficiary satisfaction survey conducted in March 2016, among the people benefited through the ESAR activities in response to Nepal earthquake. During this survey, a total of 100 randomly selected beneficiaries interviewed from earthquake affected four districts i.e. Sindhupalchok, Kavrepalanchok, Dhading and Makwanpur. Nine enumerators, 4 investigators and a consultant were involved in conducting the beneficiary satisfaction survey. The data entered in Epi data and analyzed in SPSS 20 version.

## Background

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Following the devastating Nepal earthquake on 25 April 2015 that saw nearly 9,000 deaths and thousands more injured and displaced, the Hospital and Rehabilitation Center for Disabled Children (HRDC) in partnership with the B&B Hospital, launched Emergency Surveillance and Response (ESAR) camps to identify, treat and rehabilitate the people affected by the Nepal earthquake and provided relief materials, medical assistance, on the spot treatment, medical evacuation including the distribution of first aid kits, dignity kits, counseling, maternal and child health services and child friendly space in the earthquake-affected areas. The ESAR camps began the very next day following the earthquake and to reach the most unreached areas that were hit hard by this calamity. The initial rounds of camps centered in the worst hit districts of Sindhupalchowk (3000 deaths), Dhading, Makwanpur and Kavre. A lot of earthquake related injuries were identified and taken to HRDC and partner hospital for further treatment and rehabilitation.

HRDC has been continuously organizing mobile and surgical camps through-out the country for over 3 (three) decades. It is the only tertiary referral center for the children with physical disability in Nepal.

Every ESAR camp consists of a comprehensive group of staff (40-50 per camp) consisting of triage nurse, specialists in medicine, surgery, pediatrics, obs/gynae, orthopedics, allied health professionals including physiotherapists, orthotics & prosthetics and psychosocial counselors. The camps also had a designated children's play therapy and counseling area, a mobile pharmacy dispensing a wide varieties of medication, a dressing area taking care of wounds, a casting area for primary treatment of bony injuries and a relief distribution area that

distributed dignity kits, food supplies, clothing, mosquito nets, blankets, tents, umbrella's and shoes. The dignity kits contained a towel, comb, nail cutter, razor, soap, toothbrush, toothpaste, crepe bandage, band aid, antiseptic liquid, glucose and sanitary pads for females. The food packets and snack packs contained a combination of nutrients and snacks.

"There are two methods of measuring quality of service one attributed to Parasurman et al (1985, as cited in Zamil & Areiqat, 2012) and based on recipients' expectations of service level and understanding of the level of services already provided, and then selecting the gap/match". Study of perceived quality of services provided will further build confidence of service provider and ensure the rights and satisfaction of beneficiaries (Al-Salaymeh, 2013).

In Nepal, there are very few community based studies carried out on beneficiaries' satisfaction during the camp period. Hence, the present study designed to know the satisfaction level of beneficiaries from four districts i.e. Kavre, Dhading, Sindupalchawk and Makwanpur during the camps and at the referral centres.

## **MATERIAL AND METHODS**

### **Source of the study, sampling procedure and Data collection:**

Emergency Surveillance and Response (ESAR) camps provided its services to 45,166 persons in totality in 7 districts i.e. Dhading, Chitwan, Makwanpur, Kavre, Sindupalchawk, Nuwakot and Lalitpur. The present study carried out in four districts of Nepal namely Kavrepalanchowk, Sindhupalchok, Dhading and Makwanpur, which had the total beneficiaries of 12,102 (7466 Females), out of which 340 patients were referred to better centres for the further assessment, treatment and rehabilitation.

Assuming 50 percent as prevalence, the sample size calculated as 100 participants. Nine well trained enumerators, 4 investigators and a consultant were involved in the beneficiary satisfaction survey. On the basis of the total number of beneficiaries accessed by follow up camps and home visits, we used purposive sampling technique to select the number of participants from each of the four districts (i.e. 36 from Kavrepalanchawk, 27 from Dhading, 23 from Sindhupalchok and 14 from Makwanpur). Now again we used simple random sampling technique (i.e. lottery method) to select the pre determined number of study participants from each districts.

Data collected on the basis of pre-tested questionnaire. Data collected regarding the beneficiaries satisfaction both at camps and referral centres. The participants in the study were only those who received the services either in the camps or at the referred centres (i.e. B & B Hospital and HRDC).

Ethical clearance obtained from Nepal Health Research Council (NHRC), the authorized government body responsible for researches and their management. Before enrolling the participants in the study, an informed consent was mandatorily obtained. Information on socio-demographic variables, Emergency health response and relief (Immediate), Referral treatment (secondary) and Follow up & physical rehabilitation (tertiary) were collected. A pilot study carried out, to know the feasibility of the study. The questionnaire was revised accordingly.

#### **METHOD OF DATA COLLECTION:**

##### **Study Design:**

A Community based Cross sectional study

##### **Study period:**

March 1<sup>st</sup> to 31<sup>st</sup> 2016

**Study population:** All the population who received health services through Emergency Surveillance and Response (ESAR) Project in four districts of Nepal i.e. Kavre, Dhading, Sindupalchawk and Makwanpur.

##### **Sample technique:**

Purposive sampling technique and Simple random sampling method (i.e. lottery method)

##### **Inclusion criteria:**

People who received the health services either in the camps or at the referral centres from Kavre, Dhading, Sindupalchawk and Makwanpur districts.

**Exclusion criteria:** Beneficiary who refused to participate in the study.

**Sample size:**

The sample size was calculated by using the below mentioned formula:

$$n = 4pq/d^2,$$

Where,

n= sample size

p= patient satisfaction assumed to be 50%

q= 100- p= 50%

d = 10% Absolute error (10% of p)

Now,

$$n = 4pq/d^2$$

$$4 \times 50 \times 50 / 10^2 = 10,000 / 100 = 100$$

Hence, the sample size for the study was estimated as 100.

**Data collection:** The data collected on the basis of pre-tested questionnaire.

Questionnaire consisted of four parts:

1. General information
2. Emergency health response and relief (Immediate)
  - Registration, health check up, medicine dispensing, dressing, maternal and child health, Gynae & Obstetrics services, assistive devices distribution, physiotherapy, Psychosocial counseling, child field space etc.
3. Referral treatments (secondary)
  - Consultations, surgeries, physiotherapy, assistive devices support
4. Follow up and physical rehabilitation (tertiary)
  - Home visits

**Data analysis:**

Data entered into the EPI and analyzed using SPSS software version 20 and Chi-Square test used to find out the associations.

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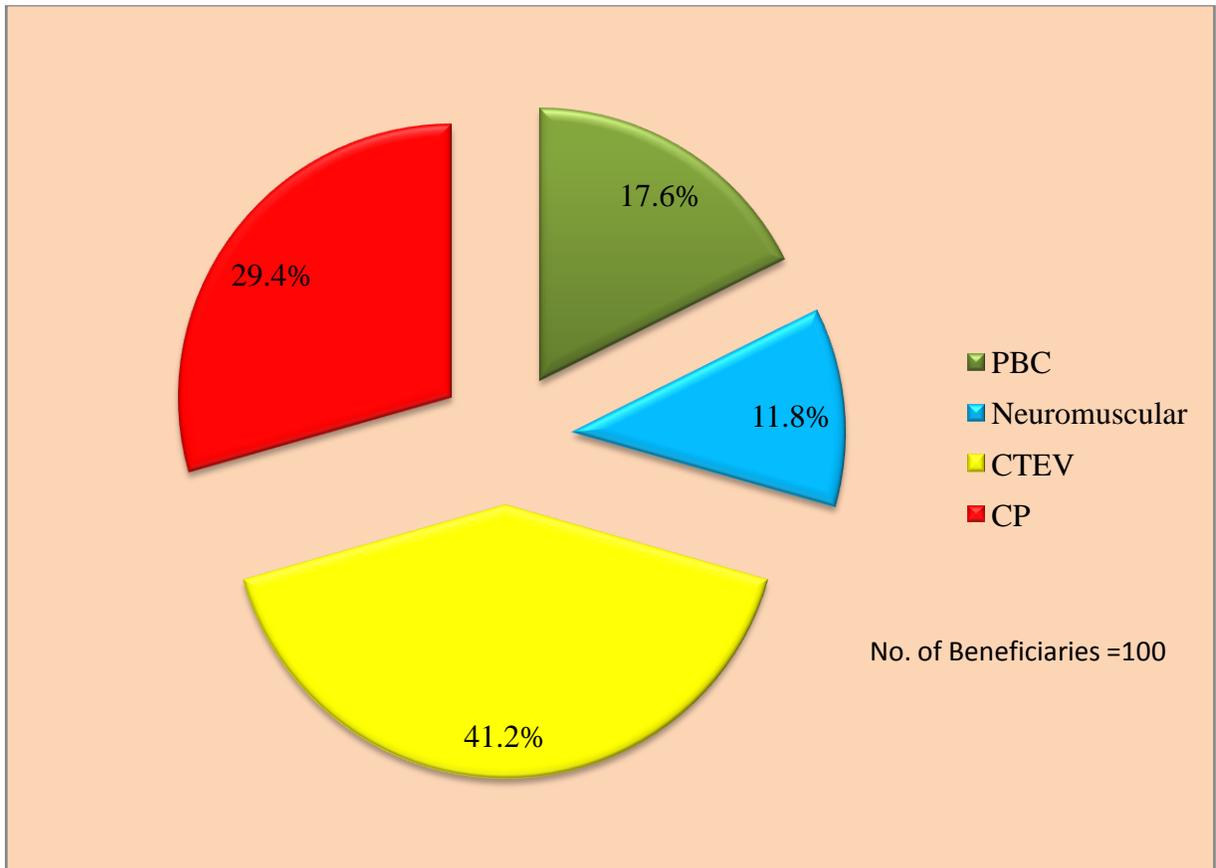
## Findings of the study

**Table – 1: Distribution of study participants as per their general Information (n=100)**

<b>Particulars</b>	<b>Categories</b>	<b>Frequency</b>	<b>Percent</b>
<b>Age Group</b>	0-less than 18	37	37.0
	19-60	52	52.0
	61and above	11	11.0
<b>Sex</b>	Male	56	56.0
	Female	44	44.0
<b>District address</b>	Kavre	36	36.0
	Sindhupalchok	23	23.0
	Dhading	27	27.0
	Makwanpur	14	14.0
<b>Educational Attainment</b>	Can-not Read & Write	27	27.0
	Literate up to Class 7	50	50.0
	Class 8 to 10	17	17.0
	SLC & above	6	6.0
<b>Occupation</b>	Not Applicable	9	9.0
	Agriculture	45	45.0
	Student	29	29.0
	Teaching	6	6.0
	Others (Business, Driving, Household Chores, Iron work, Service, Tailoring)	11	11.0
<b>Disability</b>	Yes	17	17.0
	No	83	83.0

The study showed that more than 50% i.e. 52 study participants belonged to the age group of 19-60 years. 56% are male. Majority i.e. 36% from Kavre district. Only 6% had an educational qualification of less than 6<sup>th</sup> Standard More than 40% of the study participants are farmer.

**Figure – 1: Distribution of study participant as per the types of disability**



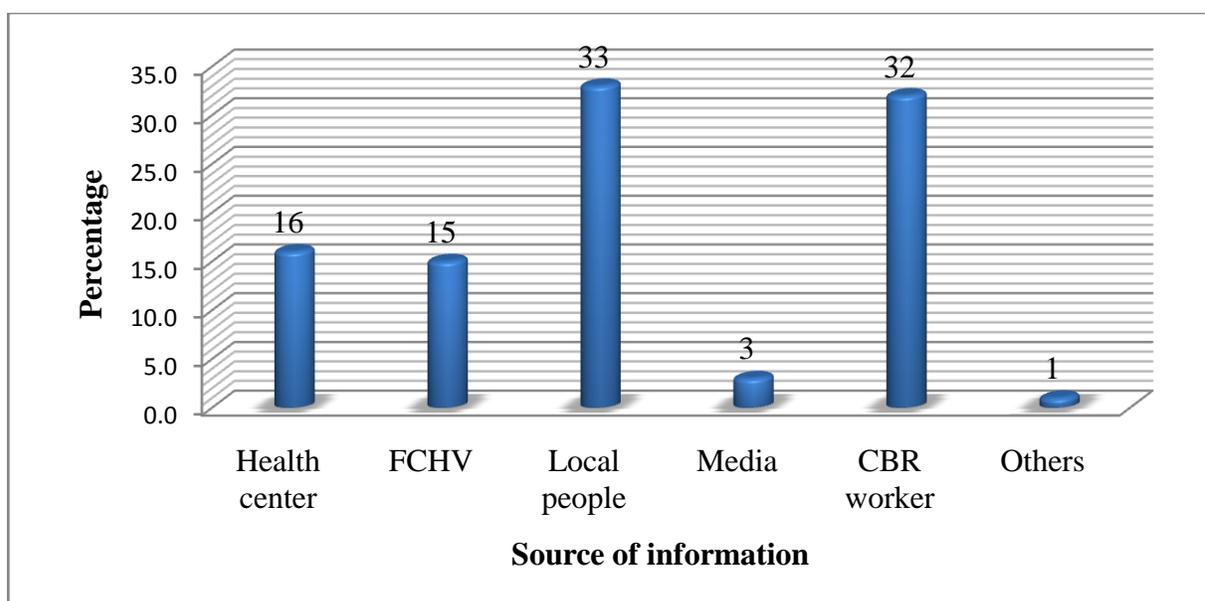
Only 17 of the study participants had some types of disabilities, out of which majority i.e. 41.2% (out of 100) Congenital Talipes Equinus Varus (CTEV), followed by Cerebral Palsy (CP) i.e. 29.4% and very minimal i.e. only 11.8% of the study participants with the disability related to neuromuscular.

**Table – 2: Cross Tabulation of Disability type and Age group**

Type of Disability	Age group		Total
	Below 18 years	19-60 years	
PBC	1	2	3
Neuromuscular	1	1	2
CTEV	6	1	7
CP	5	0	5
Total	13	4	17

The above cross tabulation showed that out of 17 beneficiaries with disabilities, 13 children and only 4 were adult.

**Figure - 2: Source of Information regarding ESAR Mobile Camp**



The beneficiary satisfaction study showed that out of 100 study participants, local people were the major source of information for ESAR camps i.e. 33 percent. Thirty two percent (32) of the beneficiaries received information from HRDC CBR workers and very minimal i.e. only 3 percent of the beneficiaries responded that media was the source of information for ESAR mobile camp in their territory.

**Table -3: Beneficiaries' Perception of Staffs Behavior**

Behavior of Staffs		Frequency	Percent
At camp (n = 100)	Helpful	100	100
At Referral Hospital (n = 81)	Helpful	77	95.1
	Not helpful	4	4.9
At Home visit (n = 65)	Helpful	65	100

Hundred percent of study participants responded that the behavior of the staffs at camps and during home visits were helpful to them, however 4 (out of 100 study participants) of them suggested for improvement of staff's behavior at referral hospital (i.e. B&B Hospital and HRDC) was not helpful.

**Table – 4: Perceived Quality of Services Provided at ESAR Mobile Camps**

Services Provided at ESAR Mobile Camps		Frequency	Percent
Registration	Very Good	45	45.0
	Good	55	55.0
Doctor Check up	Very Good	48	48.0
	Good	51	51.0
	Don't Know	1	1.0
Medicine Counseling and Distribution	Very Good	33	33.0
	Good	62	62.0
	Don't Know	5	5.0
Dressing	Very Good	39	39.0
	Good	39	39.0
	Don't Know	22	22.0
MCH Services	Very Good	21	21.0
	Good	44	44.0
	Don't Know	35	35.0
Physiotherapy	Very Good	33	33.0
	Good	45	45.0
	Poor	1	1.0
	Don't Know	21	21.0
Referral and Counseling	Very Good	34	34.0
	Good	63	63.0
	Poor	1	1.0
	Don't Know	2	2.0

Regarding the perceived quality of services provided at ESAR camps, everybody i.e. 100% participants appreciated the registration system, however for the doctor's check up and medicine counseling 1 and 5 participants respectively respond that they don't know whether the services was good or bad. One out of 100 study participant raised issue on quality of physiotherapy service. Out of 100 study participants, around 44 percent appreciated the MCH service, 60 percent praised the referral and counseling services.

**Table - 5: Beneficiaries' Perception of Facilitator Behavior**

Behavior of Facilitator	Frequency	Percent
Helpful	79	97.5
Not helpful	2	2.5
Total		100

Out of 100 study population, 81 were referred to other centres (i.e. B & B Hospital and HRDC) for further treatment. Out of the 81 referred participants, 79 i.e. 97.5 % responded that the behavior of the facilitators were helpful.

**Conclusion:**

The study concluded that out of 100 study participants, more than 50% i.e. 52 of them belonged to the age group of 19-60 years, only 17 had some types of disabilities in which CTEV was 41.2 percent. Local people were the major source (i.e. more than 30 percent) of information for ESAR camps. Hundred percent of study participants responded that the behavior of the staffs at camps and during home visits were helpful to them, however 4 (out of 100 study participants) of them suggested for improvement of staff's behavior at referral hospital (i.e. B & B Hospital and HRDC). Regarding the perceived quality of services provided at ESAR camps, everybody i.e. 100% participants appreciated the registration system, however for the doctor's check up and medicine counseling 1 and 5 participants respectively respond that they don't know whether the services was good or bad. Only one out of 100 study participant raised issue on quality of physiotherapy service. Out of the 81 referred participants, 79 i.e. 97.5 % responded that the behavior of the facilitators at referred centers were helpful to them.

## **RECOMMENDATIONS**

Based on the finding of the study, following recommendations are made which could act as a counteractive measure to increase the satisfaction level of beneficiaries:

- Disaster preparedness trainings/orientations on regular basis should be available for those who are or will be involved in the camps/rehabilitation process.
- Post earthquake rehabilitation and follow up services required for those already intervened.
- There should be strict policy from the government level for the rehabilitation (i.e. both the medical and social rehabilitation) of the people affected from earthquake

Annexure:

**Providing dressing service during camp**



**Providing Physiotherapy service during camp**



## Medicine distribution during camp



## Maternal and Child Health Services during camp

