Rehabilitation Status among Lower Limb Amputee at Community Level:

Earthquake Survivors, Nepal, 2015.

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Supervisor's Statement

As supervisors of Binaya K C, MSc Thesis work, we certify that we consider his thesis "**Rehabilitation Status among Lower Limb Amputee at Community Level: Earthquake Survivors, Nepal, 2015"** to be suitable for examination.

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We the undersigned certify that we have carefully read and recommended to the Faculty of Medicine, University of Dhaka, for the acceptance of this thesis entitled, **"Rehabilitation Status among Lower Limb Amputee at Community Level: Earthquake Survivors, Nepal, 2015."**

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(BINAYA KC)

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ABBREVIATION

ADL’s	Activities of Daily Livings
BHPI	Bangladesh Health Professions Institute
CBR	Community Based Rehabilitation
LLA	Lower Limb Amputation
NHRC	Nepal Health Research Council
NSC	National Seismological Centre
SPSS	Statistical Package for the Social Sciences
UNDP	United Nations Development Programme
WHO	World Health Organisation

ABSTRACT

Purpose: The main purpose of the study was to determine rehabilitation status among earthquake survivors with lower limb amputation at community level.

Objectives: Specific objectives of the study were to determine functional, psycho-social status and their participation and economical reintegration of amputee patients at the community level.

Methodology: A cross sectional study was conducted among 14 earthquake survivors with lower limb amputee at their community.

Result: Majority of the participants were compromised with their physical (mobility), psychological health (depression) and social (participation in community activity) well-being. Majority of the participants was compromised or have access to rehabilitation services at community level. 85.5% of the participants need more focus on identified area.

Conclusion:

The rehabilitation status among the survivors with lower limb amputee wasnot satisfactorily rehabilitated dueto participant's limited functional mobility,limited accessibility towards rehabilitation services and underlying psychological status (depression) resulting poor involvement at community level. The factors affecting their outcome should be addressed in order to ensure holistic reintegration and participation, and to enable them to regain or maintain quality of life at community level.

Key words: Earthquake, Amputation, Community Integration, Quality of life

CHAPTER I

INTRODUCTION

1.1.Background

Nepal is a landlocked country surrounded by India and China. Geographically, it can be divided into three distinct belts - the mountains, the hills and the plain of the terrain. Due to geographically variance and dominant mountain area, development of transport and communications is extremely difficult. Even today essential goods and information cannot reach remote areas in a timely manner. The most remote and poorest districts have an additional burden. The costs of medicines and other basic necessities are often beyond the means of the poor in remote regions (Ministry of Health and Population).

Nepal is the 11th most earthquake-prone country in the world (UNDP, 2009) as result recently Nepal was hit by 7.6 magnitude earthquake on 25 April 2015 as recorded by Nepal's National Seismological Centre (NSC), struck Barpak in the historic district of Gorkha , about 76 km northwest of Kathmandu followed by 7.3, 18 km southeast of Kodari on 12th May 2015 and more than 300 aftershocks greater than 4.0 as of 7th June 2015 resulting over 8,790 death and 22, 300 injuries, affecting 8 million people, about one third of the total population of Nepal. 31 out of 75 districts were affected, out of which 14 were declared 'crisis hit' (Government of Nepal, 2015).

Access to health services has been affected in several areas. The ability of health facilities to respond to health care needs and rehabilitation has been affected and service delivery is disorganized. Consequently, vulnerable populations, including disaster victims, were

further disadvantaged in accessing health services in remote areas (Government of Nepal, 2015).

According to the injury and rehabilitation sub cluster, Handicap International, 2015 mention around 1500 patient required long term care or rehabilitation out of which 40 were amputation among them 32 people are with lower limb amputation, along with the deaths over 8,790 persons (45 percent male and 55 percent female) and injuries to 22,300 individuals.

Several areas were affected by the 2015 earthquake which limited the access to health centers under normal circumstances. Destruction of critical infrastructure has worsened this problem as a result many injuries were remained untreated in initial date following injuries and post treatment lack of rehabilitation center causes delayed rehabilitation services to the survivors. The existing infra-structure and human resources for the rehabilitation services are not adequately placed. As a result, many crucial issues on rehabilitation status are unknown. Moreover, as per a study in Eastern Nepal in 2008, it shows that 4.87% people were disabled although other articles reported the prevalence of disability in Nepal ranges from 3 to 10% (Karkee, et al., 2008). Physical disability was predominant characteristics there. Already the country was shaky to deal quite high percentage of disability. Furthermore, recent disaster made the country vulnerable with respect to the needs of the disabled people, this study will be very important in terms of exploring rehabilitation status, issue and their impacts especially in community level.

“Rehabilitation of lower limb amputees encompasses the pre-amputation, postoperative, pre-prosthetic and prosthetic rehabilitation stage, within which an amputee is provided

with a prosthetic aiding device. Throughout the course of this complex process, an amputee whose amputation arose as a consequence of an injury or a disease gets the chance to adapt to the prosthesis that supplements the lost limb part and to achieve the restitution of ambulation and other locomotive abilities with the aid of prosthesis. Rehabilitation should by all means be accompanied by an adequate psychological and social rehabilitation in line with the bio-psychosocial model, so as to attain the ultimate goal of each and every rehabilitation, that is to say, a successful reintegration of an amputee into an everyday life that resembles the style and quality of the pre-amputation daily living as much as possible. Rehabilitation strives to achieve the maximal possible physical, emotional, social, vocational and financial independency of an amputee and his/ her maximal efficiency in all aspects of life".

1.2.Justification of the Study

Rehabilitation services are typically first provided during humanitarian responses; however, given the rehabilitation sector is not usually at the top of policy-makers' agendas in subsequent reconstruction and development phases, this poses a challenge to the full development and sustainability of this system of services to respond to the needs of the population.

In Nepal, the rehabilitation sector is mainly formed by civil society organizations, including local organizations and disabled people organizations. Government institutions are mainly involved with social schemes for people with disabilities and, while community based programs and comprehensive policies on services are still missing.

The existing infra-structure and human resources for the rehabilitation services are not adequately placed. As a result, many crucial issues on rehabilitation status are unknown. Already the country was shaky to deal quite high percentage of disability. Furthermore, recent disaster made the country vulnerable with respect to the needs of the disabled people, this study will be very important in terms of exploring rehabilitation status, issue and their impacts especially at community level.

By knowing the amputation rehabilitation status in community level , we should be able to improve the clinical curative effect of earthquake victims, shorten treatment times, prevent complications (and better treat those that do arise), prevent disuse syndrome in bedridden patients, prevent and better control disabilities, improve or restore injured body structures and functions, enhance or restore ability to engage in physical activities,

implement secondary and tertiary prevention of disabilities, improve the degree of independence, empowerment, livelihood and quality of life for those who are impaired, and thus allow the amputee survivors to return earlier to society and to recover harmony.

1.3.Research Question

What is the current rehabilitation status of person with the lower limb amputee in the community?

1.4.Operational definition

1.4.1. Lower Limb Amputation

Lower Limb amputation is a complete loss/ablation of any part of the lower limb, for any reason, in the following anatomical planes: in the transverse plane proximal to, and including, the subtalar joint and in the frontal anatomical plane distal to the subtalar joint. An amputation can be "major" or "minor". A major amputation is that through, or proximal to the tarsometatarsal joint and a minor amputation is one distal to this joint (The Global Lower Extremity Amputation (LEA) Study Group, 2000)

1.4.2. Rehabilitation

Rehabilitation of people with disabilities is a process aimed at enabling them to reach and maintain their optimal physical, sensory, intellectual, psychological and social functional levels. Rehabilitation provides disabled people with the tools they need to attain independence and self-determination.

1.4.3. Rehabilitation of Lower Limb Amputee

"Rehabilitation of lower limb amputees encompasses the pre-amputation, postoperative, pre-prosthetic and prosthetic rehabilitation stage, within which an amputee is provided with a prosthetic aiding device. Throughout the course of this complex process, an amputee whose amputation arose as a consequence of an injury or a disease gets the

chance to adapt to the prosthesis that supplements the lost limb part and to achieve the restitution of ambulation and other locomotive abilities with the aid of prosthesis. Medical rehabilitation should by all means be accompanied by an adequate psychological and social rehabilitation in line with the bio-psychosocial model, so as to attain the ultimate goal of each and every rehabilitation, that is to say, a successful reintegration of an amputee into an everyday life that resembles the style and quality of the pre-amputation daily living as much as possible. Rehabilitation strives to achieve the maximal possible physical, emotional, social, vocational and financial independency of an amputee and his/ her maximal efficiency in all aspects of life".

1.4.4. Community-based rehabilitation

Community-based rehabilitation (CBR) focuses on enhancing the quality of life for people with disabilities and their families; meeting basic needs; and ensuring inclusion and participation. It is a multi-sectorial strategy that empowers persons with disabilities to access and benefit from education, employment, health and social services. CBR is implemented through the combined efforts of people with disabilities, their families and communities, and relevant government and non-government health, education, vocational, social and other services.

CHAPTER II

LITERATURE REVIEW

Lower Limb Amputation (LLA) due to trauma can be of different reason ranging from musculoskeletal to neurovascular (Spichler et al., 2001; Wong, 2005). LLA in both developed and developing has been found to change in their quality of life after amputation (Perkins et al., 2012). Major factors affects the Quality of life after amputation, Quality of life and people reintegration in the community depends upon coordination of services from immediate life saving measure to long term rehabilitation focus to minimize the factors related to poor physical, social, psychological function and Quality of life (Chu K et al., 2011; Marie et al., 2010).

Lower limb amputation as a result of earthquake is not just loss of limb as mention by Spinchler et al in 2001; it is associated with significant morbidity, mortality and disability. The loss of limb also results in poor quality of life in terms of physical, psychological, jobs and social participation (Spinchler et al., as in Godlwana, 2008). Post-earthquake effects include physical and psychological trauma and many populations are displaced and depressed as a result of trauma (Roy et al., 2015). Alipour et al., (2014) found on their study that disasters are always associated with disrupted community daily life, which depends on severity of damage and socioeconomic status and categorized these finding for social vulnerability, lack of comprehensive rehabilitation plan, ignorance of local social capital, waste of assets, and psychological problems. Social vulnerability as three main categories: 1) Lack of awareness among public 2) Government and non-governmental inefficiency of social problem and 3) Existing problem in the community prior to earthquake. They also found that frustration in the

process of helping people to get back into normal life after disaster. During and after disasters findings revealed four subcategories of: 1) lack of comprehensive data and information 2) negligence of vulnerable groups 3) Concentration on reconstruction and overlooking of rehabilitation and 4) improper distribution of resources over people. Rehabilitation is the way to help people with disabilities to become part of the society with access to participate in the society and have all the access and opportunities. It is the responsibility of the government to ensure people who are survivors with limb amputation get proper rehabilitation services.

Gupta et al., (2011) found large differences across countries and regions between assessed need for services requiring health workers associated to physical and rehabilitation medicine against estimated supply of health personnel skilled in rehabilitation services. Transportation is major issue in remote area in normal circumstances, earthquake and consequences from earthquake such as landslides and several aftershocks made difficulties to access health and rehabilitation center in urban and rural areas (World Food Programme, 2015).

Sheppard and Landry (2015) found during recent earthquake in Nepal that rehabilitation professionals involvement in acute phase providing essential support and supply of rehabilitation aid which enhances the services. They also recommended the need of rehabilitation services is huge and resources are minimal for the long term rehabilitation. They concluded on their paper that rehabilitation serves an important role in post disaster management from acute stage to later stage.

Most vulnerable affected area is rural and remote area of Nepal where disaster preparedness is weakest (Neupane, 2015). This is where the role of comprehensive rehabilitation is important to address this issue which includes all the support including medical, rehabilitation, psychological, humanitarian, vocational, education and livelihood issue among affected people. The injured people will require medical, rehabilitative, psychological, social, and financial support to start a new life (Landry et al., 2015). Multidisciplinary team approach is best management strategy to come over physical and psychological improvement in person with lower limb amputation. Physical activity or functional mobility is primary goal in amputation rehabilitation followed by prosthetic care, psychological support, and ambulation with minimal energy expenditure and long term follow up to assess complication and minimize the complication for better CGof life (Atherton and Robertson, 2006).

Several factors affect the Rehabilitation Status and Quality of life after amputation: pain, changes in functional abilities, psychosocial adjustment, and impact on jobs and occupation and likely to struggle and become burden to their families and society (Hettiaratchy and Stiles, 1996). People with LLA compromising these feature tends to have inability to live independently in their community (Taylor et al., 2005). However, some people tend to perform their physical activity independently despite of those problem and infrequent use of their prostheses (Nehler et al., 2003; Mac Neill et al., 2008). Pre-status of the people with LLA also determine the rehabilitation status such as non-ambulatory status (bed ridden), psychological disorder, and people with age over 60 and having other disease (Taylor et al., 2005).

Amputees experience many problem when integrated to community, often caused by improper discharge planning, lack of information regarding care of their stumps, improper or no Physical exercise, Poor positioning of the limb resulting in contracture and poor fitting of prostheses and improper gait training (Kubheka&Uys, 1995).

Pain secondary to limb amputation is common (Ephraim et al. 2005). Multiple factors may contribute to the presence and persistence of pain before and after lower limb amputation. Patients may experience immediate postoperative pain or may experience post-amputation pain including residual limb pain or phantom limb pain.Residual limb pain occurs in the part of the limb left after the amputation. This pain can be due to mechanical factors such as poor prosthetic fit, bruising of the limb, chafing, or rubbing of the skin. Pain in the residual limb can also be caused by ischemia, heterotopic ossification, or post amputation neuromas. Phantom pain occurs in the missing or amputated part of the limb(s) or some part of it. Phantom pain was experienced by one third of their respondents (Desmond and Maclachlan 2010). Phantom sensations, such as tingling, warmth, cold, cramping, or constriction in the missing portion of the limb, are likely to be experienced by most amputees and may be present throughout their entire life. Phantom sensation should be considered normal and treated only if it becomes disruptive to functional activities. Physical problems associated with amputation include phantom sensations and phantom pain (Mosaku et al, 2009). According to Resnick et al. 2004, pain is common perception following lower limb amputation. However, people are more focus on mobility as their prime concern despite having great discomfort such as stump pain, phantom pain and impact to their sleep and other activities. However

Bosmans et al., (2007), reported people with lower limb amputation have higher rate of wellbeing despite of their phantom pain.

Another significant aspect of amputee health is that of psychological well-being. People with lower limb amputation experience anxiety and depression following amputation of the lower extremity (Mosaku et al., 2009). People with traumatic lower limb amputations have no psycho-social preparation for lower limb amputations as they are amputated on the day of admission (Kubheka, 1993 as cited in Godlwana, 2008). This may have been due to the fact that a person may be coming into the hospital for an emergency amputation following an injury, and therefore does not have the opportunity for counseling**.** Lower limb amputation can be a devastating experience for a person. Psychological support is critical to successful rehabilitation (Wegner et al, 2009; Bosmans et al, 2007). Immobility due to amputation results in distress with psychological well-being especially in life satisfaction. Female are more distress than male in overall life satisfaction (Misajon et al., 2006).

The people with low socio economic status and with low or no formal education makes them difficult to either return to work if they had a physical job or find it difficult to get employment (Burger &Marincek, 2007).

Physical rehabilitation is an important aspect in order to be able to meet the activities of daily life. The amputees need to be trained in order to be able to perform certain activities of daily living, such as self-care, mobility, transfer, balance and exercises performing their task independently. If the patient is planned for amputation exercise plays important role in healing of stump, mobility after amputation with wheelchair, walking with crutch,

muscle strengthening of lower extremity of both lower extremity to make them enable to perform their activities of daily livings independently. The person is educated about general hygiene such as bathing, dressing, transfer, mobility, balance and exercise (Jones, 1997).

Rehabilitation Status in the community depends on the physical activity and their level of independency in the community. Successful rehabilitation following amputation is complex and requires multiple medical, surgical, and rehabilitation specialties. Rehabilitation is important for enhancing the mobility of affected individuals and improving their health and vocational prospects (Pezzin, et al., 2000).Care of the stumps is an important aspect in the rehabilitation process of amputation for functional mobility. It involves washing or proper dressing to control infection, stump massage too promote blood circulation, exercise to prevent joint stiffness and contracture, bandaging for proper shape for fitting prosthesis. Failure to care for the stump may result in contracture, prostheses loosening and pain (Footner, 1987:58 as cited in Siyothulav &Kubheka, 2002:71).

People with bilateral lower limb amputee and people with other co-morbidities and older age use wheelchair for mobility before they go for prosthetic fitting. They will be educated about the use of wheelchair and taught exercise specially to strengthen the muscle to propel wheelchair. Those people who can balance on single leg or with of support are taught with crutches and proper placement and adjustment are made to fit individual and safety measure will be taught regarding slipping of the ground and no pressure or good arm padding of the crutches to prevent tissue and nerve injury (Farrel, 1986).

Prior fitting of the prostheses through examination should perform on their level of physical functioning and independency. Based on the examination and evaluation training is set for the individual to meet maximum independence with the prostheses. The prostheses measure and fit according to the limb amputated then taught how to put it and remove it. The care for the underlying skin and prosthetic shocks is also taught. Training is more focus on walking with prostheses for lower limb amputee. With all proper management prosthesis enable person to walk independently without being notice (Kubheka and Uys, 1995).

According to Trombly (1995) community assessment is not done well for all amputees, as a result of which some amputees adapt poorly to the environment or community after discharge. Rehabilitation is just not about dealing with physical and psychological well-being. People who already has lost their limb and are vulnerable to access the daily needs and health care facility at the community.

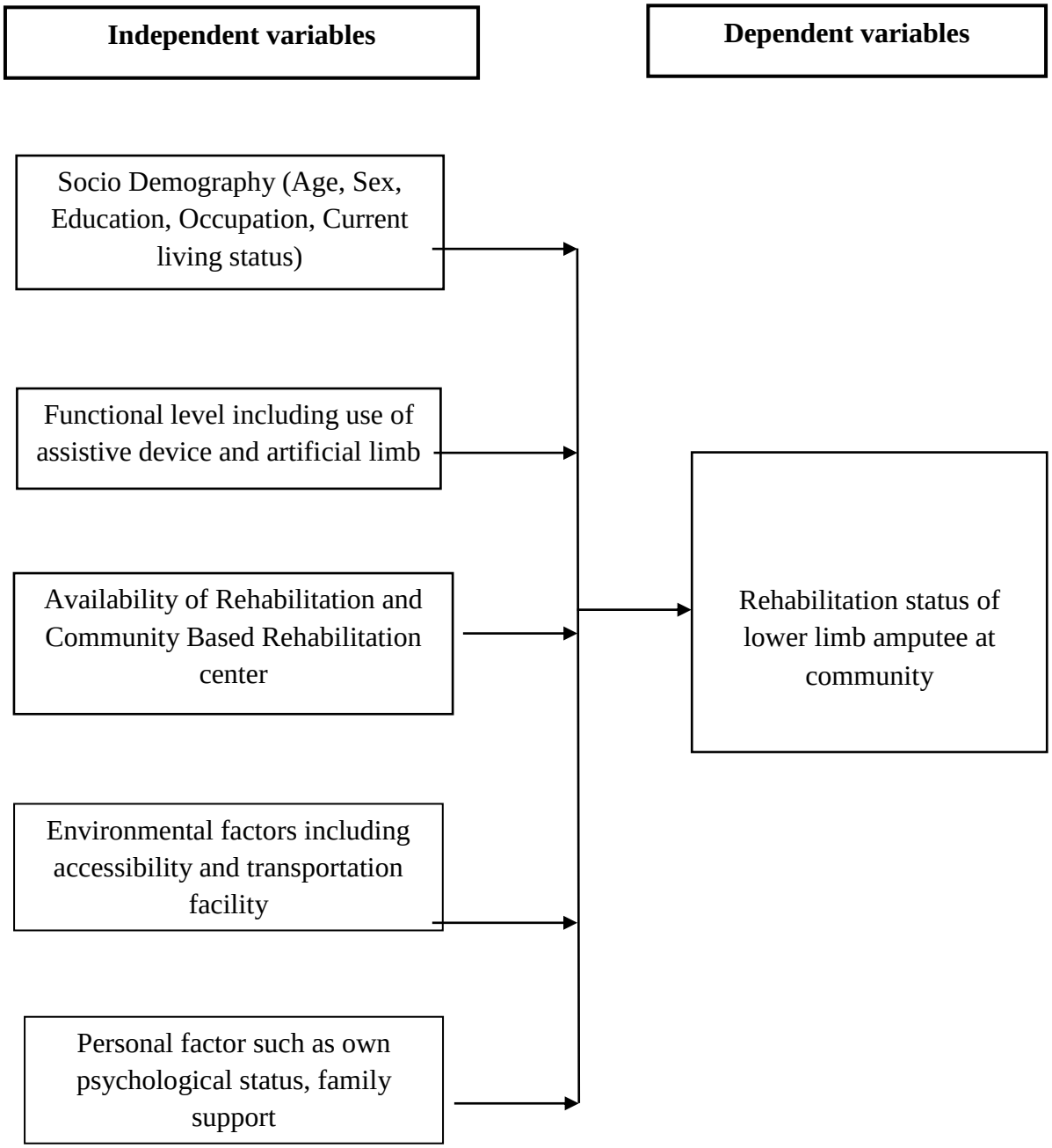
Earthquake has destroyed the living area furthermore disability due to limb loss made more complexity for the people to return into the community. Prior integrating to the community proper assessment and modification of the home environment and information of the community is important to keep mobile and functional for those with the lower limb amputee. This information is very important for the rehabilitation team to assess a successful amputee's rehabilitation on the community level. This also depends on good discharge preparation, and an accessing home, community and workplace (Trombly, 1995). Availability of medical, rehabilitation centers and community based rehabilitation centers or worker is also important as these people need long term rehabilitation and follow up. People living in the urban area have not much difficulty as

transport is available and the medical and rehabilitation services are approachable. However, people living in rural area have difficulty getting medical services and there is lack of rehabilitation services and people have to compromise a lot to get those services. Access to medical and rehabilitation services plays important role not only the quality of life but also helps to minimize their financial expenses for travelling far get those services (United Nations, 2006).

CHAPTER III

RESEARCH METHODOLOGY

3.1. Conceptual Framework



3.2. Study Objectives

3.2.1. General Objectives

To find out rehabilitation status among lower limb amputation integrated at community; earthquake survivors, 2015, Nepal

3.2.2. Specific Objectives

- To find out functional level among lower limb amputee at community level.
- To find out psycho-social status of the people with lower limb amputee at the community.
- To find out their participation at the community.
- To find out economical reintegration at the community

3.3. Study design

A cross-sectional study was conducted. The research was mainly focus on identifying the rehabilitation status among lower limb amputee at the community level: earthquake survivors 2015, Nepal.

3.4. Study population

32

3.5. Study area/site

Participants integrated back to their own community. Participants were from Kathmandu, Bhaktapur, Lalitpur,Sindhuplachowk and Arghakhanchi district of Nepal.

3.6.Study period

The study was conducted from October 2015 to March 2016.

3.7. Sample size

14 participants who were integrated back to community.

3.8. Inclusion and Exclusion Criteria

3.8.1. Inclusion Criteria

- Person with lower limb amputation.
- Person with all level of lower limb amputation.
- Person with unilateral or bilateral amputation.
- Person integrated in the community.

3.8.2. Exclusion Criteria

- People away from their native hometown or community
- Amputation prior earthquake or not a victim of an earthquake.
- Unconscious patient.
- Person not willing to participate in the research.
- Those people who are unable to response due to underlying psychological disease.

3.9.Sampling scheme

14 participants who were integrated back to their own community with lower limb amputation 2015 earthquake survivors from Nepal were studied.

3.10. Data collection tools/materials

Well-Structured Questionnaires was used to assess the rehabilitation status among amputee patients. The questionnaire is designed to meet the objectives of the research.

3.11. Data management and analysis

Statistical Package for the Social Sciences (**SPSS**) version 22 was used to manage and analysis of data.

3.12. Ethical consideration

Date will be collected anonymously. Only voluntary participants will be included in the study. The research already has got permission from the ethical review board of Bangladesh Health Professions Institute (BHPI). Furthermore, necessary permission obtained from Nepal Health Research Council (NHRC), national regulatory authority. World Health Organization (WHO) ethical principles will be followed in every step of the study.

3.13. Quality control and assurance

To ensure and improve the quality of the study, first of all questionnaire will be translated in the national language that is Nepalese language and then pilot study will be conducted for the questionnaire to ensure the face validity of the questionnaire. Then the questionnaire filled will be kept safely. The data collected will be review, recoded and enter into the SPSS program in to reduce the human errors that are likely to occur while entering and analysis of the data collected. Analysis of the data will be done by the computer to reduce human error.

3.14. Informed consent

Participant will be informed regarding the purpose of the study and only voluntary participation is advocated for the study.

CHAPTER IV

RESULTS

4.1. Socio-Demographics

Age of the participants

Among the 14 participation age of the participation ranging from 14 to 70 years with a mean of 41.29, 50% (n=7) participation were adults (range lower through 34 years of age) and 50% (n=7) participants were senior citizens (range higher through 35 year of age).

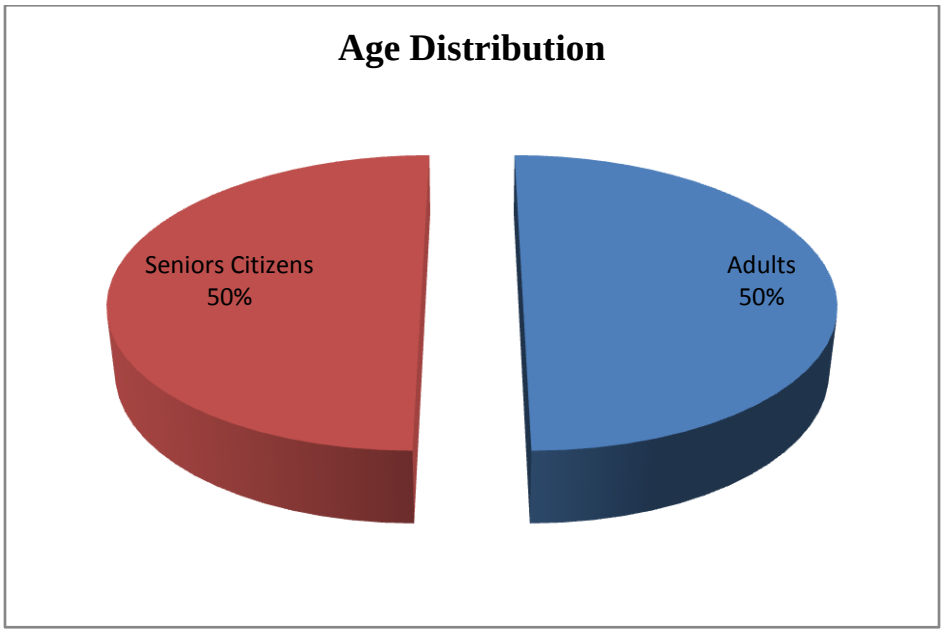


Figure 1: Age Distribution among participants.

Sex of the participants

Among 14 participants 8 were female and 6 were male. Female participation was more with 57.1% female and 42.9% male participants.

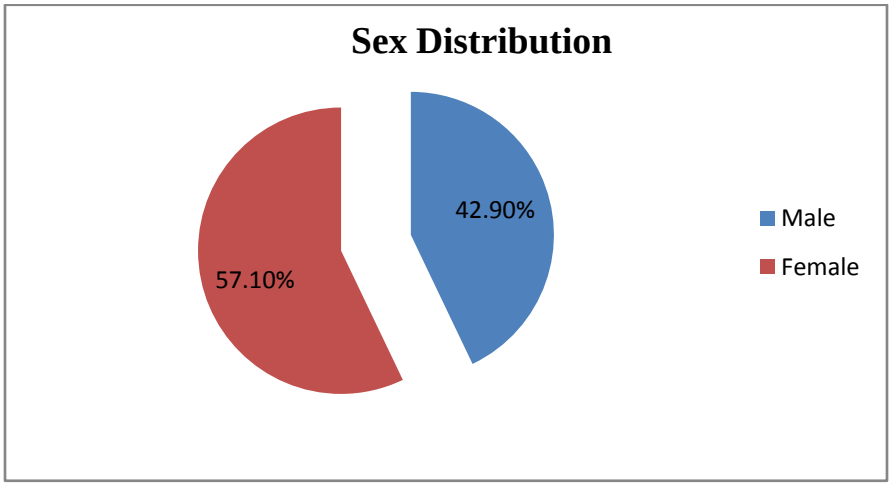


Figure 2: Sex Distribution among participants

Marital Status

11 participants were married at the time of interview while 2 were under 18 and 1 is unmarried. In percentage 78.6% were married and 21.4% were unmarried.

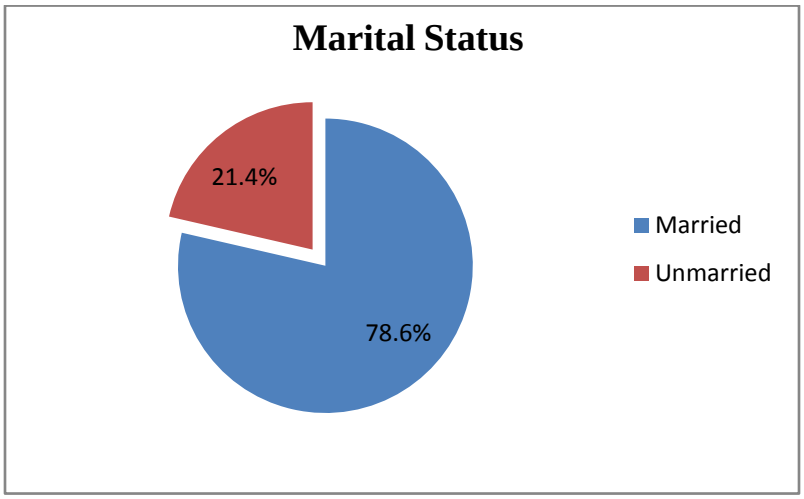


Figure 3: Marital Status of the participation

Education

4 participants have no educational background whereas 10 participants were literate ranging from primary to higher level of university degree (primary=1; secondary=5; higher secondary and above=4). In percentage 28.6% of participants were illiterate while 71.4% of the participants were literate to read and write.

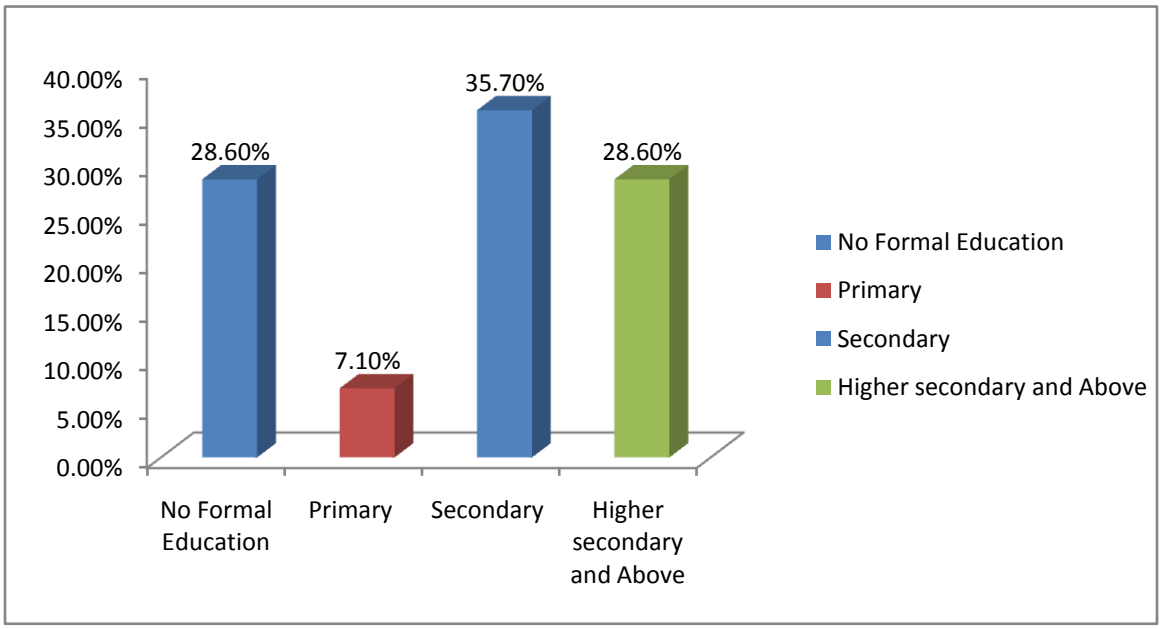


Figure 4: Educational Background of the participants

Job and Occupation

Among 14 participants 2 people were student, 6 people were involved in manual worker with 4 people having no jobs and 2 were self-employed. In percentage them only 14.3% have jobs without manual work whereas 42.9% of were employed in manual work, 28.6% of people were unemployed and 14.2% are student. Recoded into 57.1% (n=8) employed and 42.9% (n=6) unemployed.

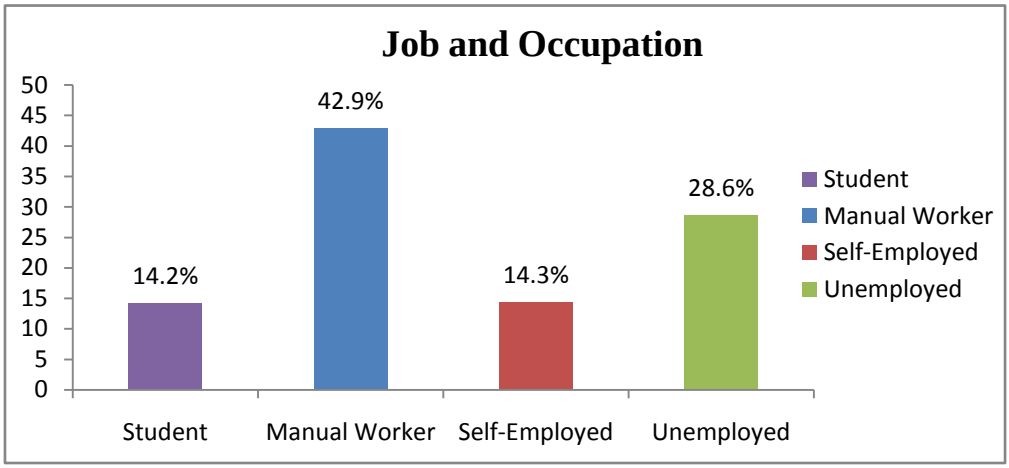


Figure 5: Job and Occupation of the participants

Living Environment

Living Area: Among 14 participants, 11 Participants were mostly from urban area (78.6%) while 3 participants (21.4%) were from rural area of the country.

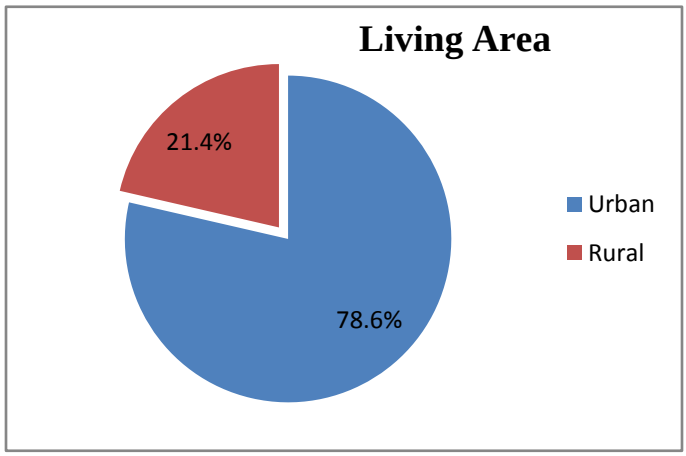


Figure 6: Living Area Distribution of the participants

Living House: Among those 8 participants were still living in the temporary house and 6 participants were living in their own house/ permanent house at the time of interview. In percentage 57.1% of participants are still living in temporary or rented house while 42.9% of the participants were living in their own house or permanent house.

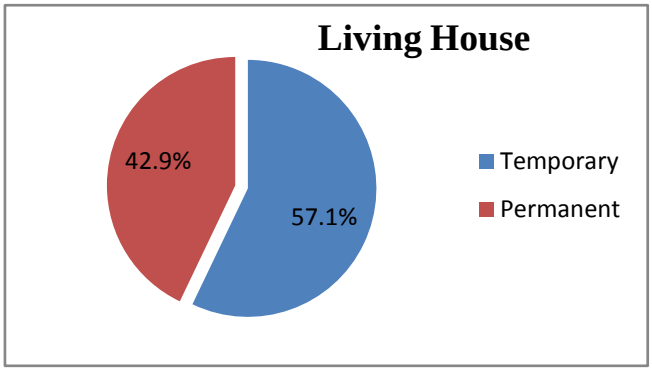


Figure 7: Living House of the participants at the time of interview

Living With: 92.9% of the participations were staying with their family member at the time of interview while only 1 participant (7.1%) living single.

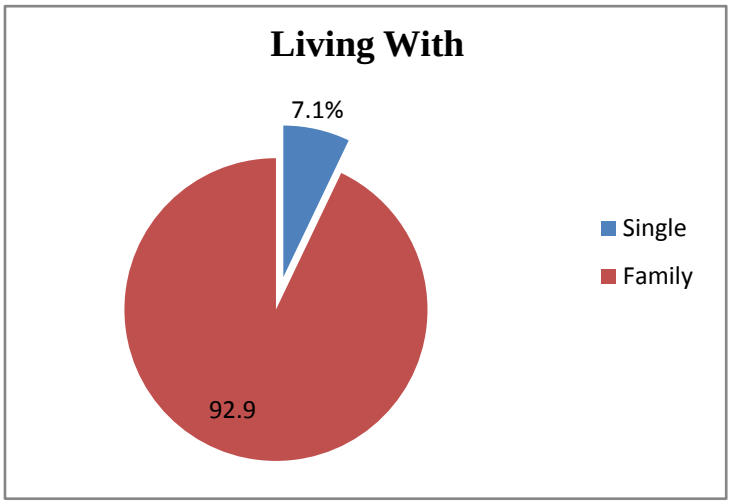


Figure 8: participants living with at the time of interview

Living Floor: 7 participants (50%) are living in ground floor and 7 (50%) were above it.

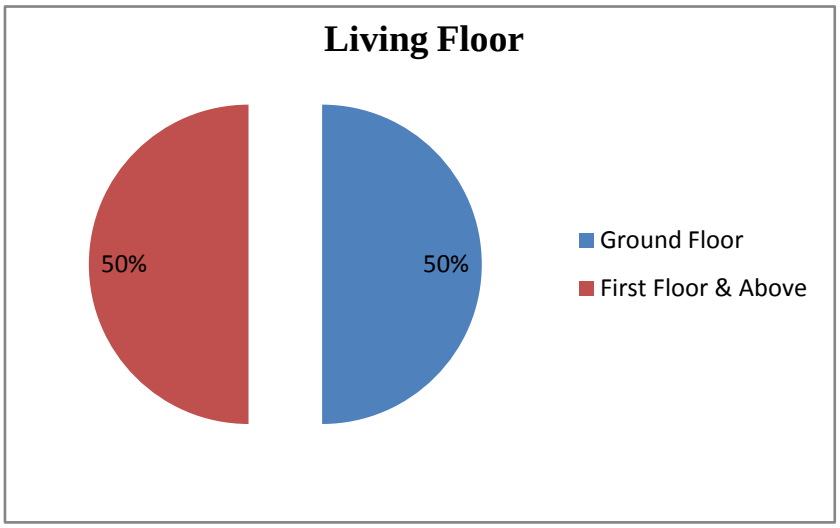


Figure 9: Living Floor of the participants at the time of interview

Medical History

Level of Amputation: 7 participant (50%) were below knee and 7 (50%) were above knee amputation.

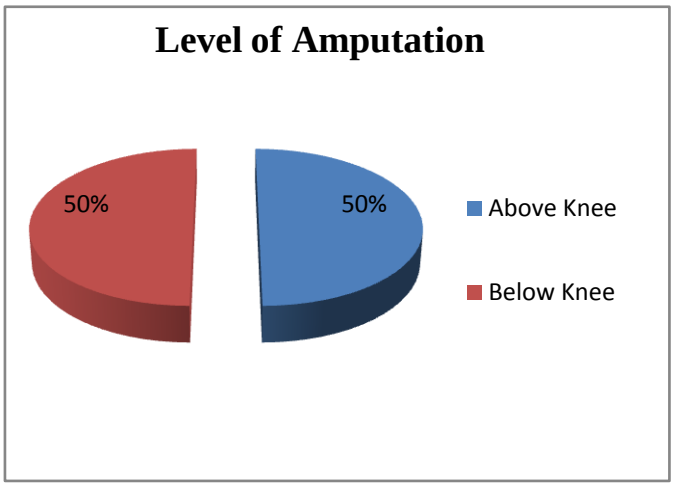


Figure 10: Level of Amputation of the participants

Side of Amputation: Maximum participant i.e. 10 out of 14 participants has left side amputation where 3 participants has right side amputation and 1 has bilateral amputation.in percentage 71.4% were left side amputated, 21.4% were right side and 7.1% of the participants has bilateral amputation.

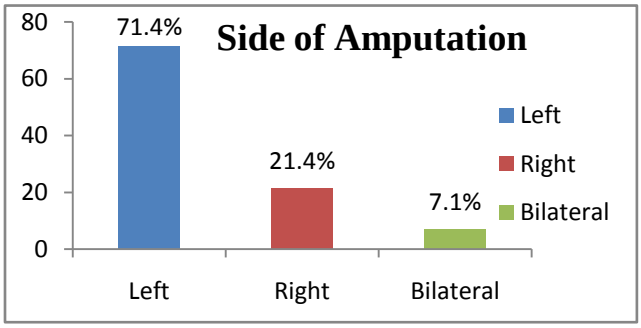


Figure 11: Side of the Amputation

Reason for Amputation

The participants were amputated either traumatic or due to underlying pathologies such as neurovascular, wound infection, crush injury. Some participants do not know the reason for their limb amputation. Among all 9 participants (64.3%) know the reason for amputation among which Neurovascular counts for 28.6% followed by 21.4% reason was wound infection and 7.1% were traumatic and 7.1% were traumatic. 5 Participants (35.7%) has no idea what was the reason for the amputation as it was suggested by the health professionals they went for the amputation of the Participants.

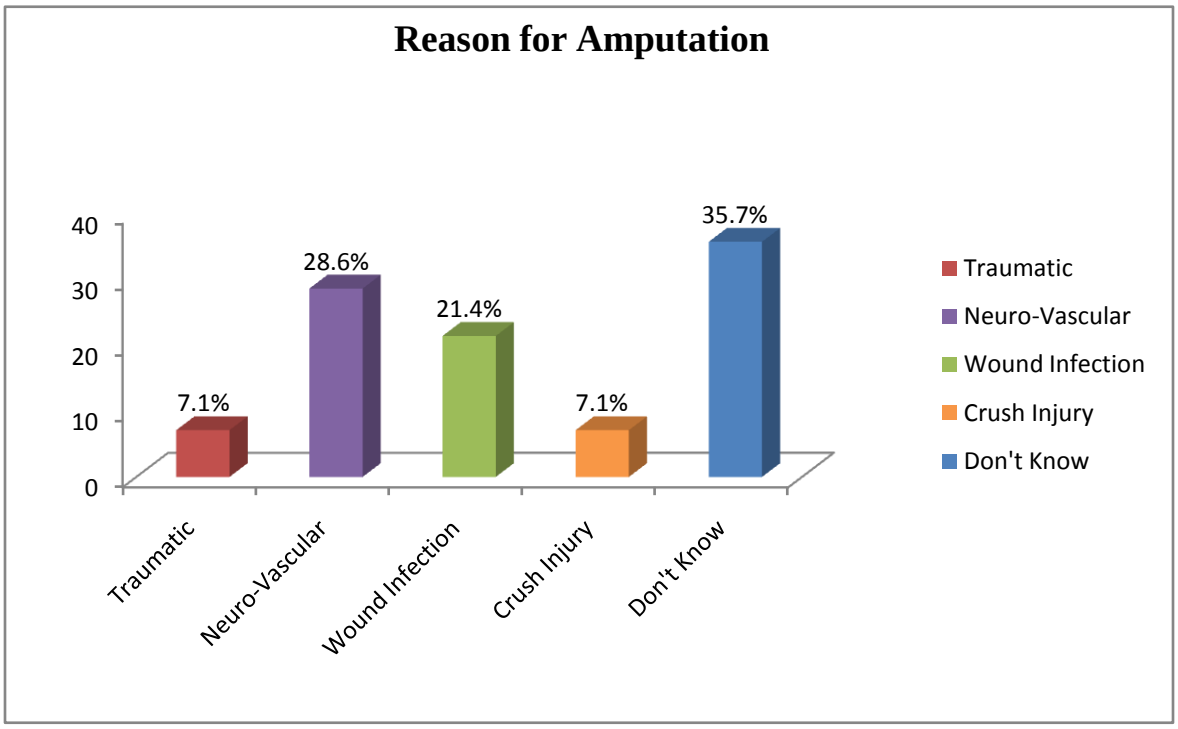


Figure 12: Reason for the amputation among participants

Pain

General pain among 7 participants (50%) has mild pain, 6 participants (42.9%) have moderate and 1 (7.1%) participants has severe pain on Visual Analog Scale (VAS).

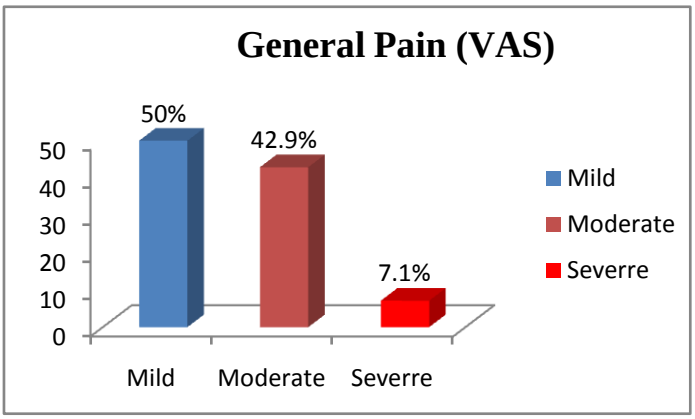


Figure 13: General Pain on Visual Analog Scale (VAS) of the participants

4.2. Results: Frequency Distribution among Variables

Physical Activity

Physical activity of the participants was sub categories into four different categories self-care, mobility, transfer and balance and categories on the performance level whether the participants are able to perform the those task independently or Need some assistance or total dependent on other people or family member.

According to Table I, Self-care comprises of activity such as bathing, dressing and toileting. The 21.3% (n=3) participants were totally dependent or impossible for them to take bath while 35.7% participants (n=5) need assistance to take bath and 42.9% participants (n=6) were able to perform bathing independently. 14.2% (n=2) of the participants are unable to dress themselves while 85.7% (n=12) are independently dressing their body. 71.4% (n=10) of the participants are independent to go for toileting, 21.3 (n=3) need assistance and 7.1% (n=1) impossible to do independently.

Mobility of the participants as described in Table I, 92.9% (n=13) participants are independent to crawl while 7.1% (n=1) need assistance in crawling. Walking is impossible for 7.1% (n=1), 21.3% (n=3) participants needs assistance and majority 71.4% of participants walk independently without support of other people. Climbing up and coming down from the stairs among 21.3 (n=3) participants was impossible, 28.6 (n=4) needed assistance to climb while 50% (n=7) were independent to climb up and down through stairs. Running is impossible for 100% (n=14) participants.

Transfer (Table I) of the participants from lying down to sitting is possible for all participants without being dependent to anyone or anything, while only 7.1% need

assistance for both sit to stand and stand too floor rest 92.9% were independent to transfer from bed to floor.

Balance (Table I), standing with support is possible for 100% participants while 71.4% (n=10) independent to stand without support and 28.4% (n=4) need assistance to make balance.

Table I: Physical Activity Limitation and Participation Restriction

	Need Assistance Impossible		**Need Assistance**		**Independent Independent**	
Self-Care	Frequency (n)	Percentage (100)	Frequency (n).	Percentage (100)	Frequency (n)	Percentage (100)
Bathing	3	21.4	5	35.7	6	42.9
Dressing	2	14.2	-	-	12	85.7
Toileting	1	7.1	3	21.3	10	71.4
Mobility						
Crawling	-	-	1	7.1	13	92.9
Walking	1	7.1	3	21.3	10	71.4
Stairs	3	21.4	4	28.6	7	50
Running	14	100	-	-	-	-
Transfer						
Lie to sit	-	-	-	-	14	100
Sit to stand	-	-	1	7.1	13	92.9
Stand to floor	-	-	1	7.1	13	92.9
Balance						
Standing with Support	-	-	-	-	14	100
Standing Without Support	-	-	4	28.6	10	71.4

Exercise

Participants are performing their exercise as prescribed by only 50% (n=7) regularly while 7.1% (n=1) is not performing given exercise, while 42.9% (n=6) are irregular with their exercise performance. Participants who never able to perform those given exercise were 7.1% (n=1) only while majority 57.1% (n=8) were performing their prescribed exercise independently and rest 35.7% (n=5) need some assistance while performing their exercise. Feeling of laziness while performing exercise among the participants, most participants 64.3% (n=9) felt laziness some of the time while 14.3% (n=2) never felt any laziness during exercise period and 21.3% (n=3) felt laziness most of the time performing exercise.

Table II: Frequency distribution of Exercise performance among participants

	No		**Yes**			
	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Exercise performance as prescribed	1	7.1	6	42.9	7	50
Able to Exercise without Assistance	1	7.1	5	35.7	8	57.1
Laziness while performing exercise	2	14.3	9	64.3	3	21.4

Stump Pain

Most of the participants have their phantom pain during normal activities of daily living. Table III described the frequency of the stump pain during different activities and their impact. According to Table III stump pain during daily activities is felt most of the times by 28.6% (n=4), 57.1% (n=8) felt some of the times while 14.2% (n=2) do not have

stump pain in daily activity.64.3% (n=9) participants never had stump pain rest while 7.1% (n=1) had most of the times and 28.6% (n=4) have pain sometimes at rest. 78.6 (n=11) had no problem due to stump pain on sleeping while 7.1% (n=1) had frequent sleep disturbance due to stump pain and 14.2% (n=2) has their sleep disturbance sometimes. Work interference among these participants have majority of participants 71.4% (n=11) never had a problem with their work performance, 21.4% (n=3) have work interference sometimes due to stump pain and only 7.1% (n=1) faces work interference as a result of stump pain.

Table III: Frequency distribution of stump pain among participants

	No		**Yes**			
Stump Pain	**Never**		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
During Daily Activity	2	14.2	8	57.1	4	28.6
Pain at Rest	9	64.3	4	28.6	1	7.1
Sleep Disturbance due to stump pain	11	78.6	2	14.2	1	7.1
Work Interference due to stump pain	10	71.4	3	21.4	1	7.1

Phantom Pain

64.3% (n=9) participation among 14 has phantom pain sometimes during daily activity, 57.1% (n=8) have pain during rest, 42.9% (n=6) have sleep disturbance and 14.3% (n=2) have work interference sometimes due to phantom pain. 71.4% (n=10) never had a work interference, 57.1% (n=8) participants has never sleep disturbance, 21.3% (n=3) never had rest pain and 14.3% (n=2) never had phantom pain during daily activities. 21.3%

(n=3) participants have both pain at rest and pain during activity most of the times and 14.3% (n=2) had work interference most of the times due to phantom pain (Table IV).

Table IV: Frequency distribution of phantom pain among participants

	No		**Yes**			
Phantom pain	**Never**		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
During Daily Activity	2	14.3	9	64.3	3	21.3
Pain at Rest	3	21.3	8	57.1	3	21.3
Sleep Disturbance due to phantom pain	8	57.1	6	42.9	-	-
Work Interference due to phantom pain	10	71.4	2	14.3	2	14.3

Use of the Appliances

Table V: Frequency distribution of Use of Appliance among participants

	No		**Yes**			
	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Do you need any assistive device?						
During Daily Activity	1	7.1	5	35.7	8	57.1
Walking on plane surfaces	6	42.9	3	21.4	5	35.7
Walking on slope	3	21.4	3	21.4	8	57.1
Walking on uneven surfaces	3	21.4	4	28.6	7	50

Use of the Appliances or any assistive device such as crutches, walker or wheelchair among participants were independent to activity such as daily activity 7.1% (n=1), 42.9% (n=6) participants while walking on plane surface and 21.4% (n=3) in both walking in

slope and uneven surfaces. However, majority of the participants needs assistive device among them 57.1% (n=8) needs during daily activity and walking on slope, walking on plane surface 35.7% (n=5) and 50% (n=7) needs while walking on uneven surfaces.

Use of appliances when using Prosthesis

Use of appliances or assistive device of the participants has been described in Table VI. The 50% (n=7) of the participants do not use any appliances while walking with prosthesis n daily activities while 35.7% (n=5) needs appliances most of the times only 14.3% (n=2) of the participants need appliances sometimes or to perform some of the task of daily activities. Performing activities outside of house such as walking in a plane surface 35.7% (n=5) need the assistive device most of the time and majority 57.1% (n=8) never use devices for walking on plane surface and 14.3% (n=2) use some of the times while walking on plane surface. Walking on an uneven surface seems to be troublesome as 42.9% (n=6) participants need assistive devices, 35.7% (n=5) need it sometimes and only 21.4% (n=3) do not need assistive device while walking n uneven surface.

Table VI: Frequency distribution of use of appliance or assistive device while using prosthesis

	No		**Yes**			
	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Appliances while using prosthesis	7	50	2	14.3	5	35.7
Walking on plane surface	8	57.1	1	7.1	5	35.7
Walking on slope	3	21.4	5	35.7	6	42.9
Walking on uneven surface	3	21.4	5	35.7	6	42.9

Prosthetic limitation/ complication

Performing task such as household activities, field work, social work or participation and sports activity is shown in the Table VII. According to Table VII, 42.9% (n=6) have limitation to perform household activities with 21.4% (n=3) faces limitation sometimes and 35.7% (n=5) had no problem performing household activities such as cleaning, arranging things, cooking etc. with prosthesis on. Field activities such as gardening, shopping etc. with prosthesis is limited most of the participants (50%), 28.6% (n=4) have no problem at all and 21.4% (n=3) have it sometimes only. Similar results were found on performing social activities or participating in social function. 92.9% (n=13) participants either did not participated in the sports activity or have maximum limitation performing sports activities.

Table VII: Prosthetic limitation/ complication

	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Does your prosthesis limit your activity?						
Household Activities	5	35.7	3	21.4	6	42.9
Field Activities	4	28.6	3	21.4	7	50
Social Activities	4	28.6	3	21.4	7	50
Sports Activities	1	7.1	-	-	13	92.9

Prosthetic Care

Majority of the participation are aware about washing their stumps almost all participants are washing their stumps however only 42.9% (n=6) are washing regularly. Similarly 42.9% are aware about use of compression shocks and using most of the times while not

wearing prosthesis but 28.6% (n=4) are unaware and never prevent from over hanging of stumps while 50% (n=7) prevent over hanging of the stumps most of the times while not wearing prosthesis. 42.9% (n=6) were unaware regarding broken skin and their care and only 35.7% (n=5) care most of the times for broken area.

Table VIII: Prosthetic Care

	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Washing Stumps	-		8	57.1	6	42.9
Watching for Broken Area	6	42.9	3	21.4	5	35.7
Use of compression Shocks	1	7.1	7	50	6	42.9
Prevent Over Hanging	4	28.6	7	50	3	21.4

Psychological status

Most of the people suffer from some sort of psychological condition due to their health condition. The psychological status of the lower limp amputate among 14 participants have been described in Table IX. According to Table IX majority of the participants are worried either sometimes or most of the times. 64.3% (n=9) person worried about their health and other conditions while 35.7% (n=5) are not worried. 21.4% of the participants were never been sad or despite due to their health condition while 78.6% (n=11) are depressed or sad because of their underlying health condition. 71.4% (n=10) people are unhappy and 28.6% (n=4) were never been unhappy. Despite of underlying psychological condition 35.7 (n=5) never reduces the amount of work, 21.4% (n=3) achieve the same amount of work as expected and 28.6% (n=4) could concentrate on their work as before. However, 64.3% (n=9) reduces the amount of work some or most of the times, 78.6% could not achieve the amount of work done previously.

Table IX: Psychological status

	No Never		**Yes Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Worried Person	5	35.7	3	21.4	6	42.9
Depressed or Sad	3	21.4	5	35.7	6	42.9
Unhappy	4	28.6	4	28.6	6	42.9
Reduce amount of work	5	35.7	6	42.9	3	21.4
Could not achieve amount of work	3	21.4	7	50	4	28.6
Could not concentrate	4	28.6	7	50	3	21.4

Medical Accessibility

Medical services such as medical or health care professions consultation, wound care, medication are basic necessity when there is complication associated with injury or limb loss. However, majority participants are living in urban area and still they have lack of medical services in their community. 28.6% (n=4) participants have no medical services in their community and 57.1% (n=8) faces difficulties despite having medical services at community (Table X). Participants are able and independent to bear the cost of medical expenses.

Table X: Medical Accessibility

	No Never		**Yes Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Availability of Medical services	4	28.6	3	21.4	7	50
Reaching to Medical Centre without any difficulty	8	57.1	1	7.1	5	35.7
Bearing Medical Expenses	-	0	8	57.1	6	42.9
Independent to cover Medical expenses	-	0	8	57.1	6	42.9

Rehabilitation Service Accessibility

71.4% (n=10) have no access to rehabilitation Centre at their community level, 64.3% (n=9) participants have difficulties reaching rehabilitation Centre, 21.4% (n=3) reach rehabilitation Centre most of the times without facing much difficulties and 14.3% (n=2) are comfortable sometimes only. 21.4% (n=3) are unable to bear cost related to rehabilitation facilities and 21.4% (n=3) dependent to bear those expenses. 50% (n=7) are able to bear their rehabilitation cost sometimes only while 28.6% (n=4) can bear the cost most of the times. 35.7% (n=5) are independent to cover rehabilitation related cost most of the times while 42.9% (n=6) can bear sometimes the cost of rehabilitation services.

Table XI: Rehabilitation Service Accessibility

	No		**Yes**			
	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Availability of Rehabilitation services	10	71.4	-		4	28.6
Reaching to without difficulty to Rehabilitation Centre	9	64.3	2	14.3	3	21.4
Bearing Rehabilitation Expenses	3	21.4	7	50	4	28.6
Independent to cover Rehabilitation expenses	3	21.4	6	42.9	5	35.7

Education

Only 14.3% (n=2) participants are school going, among them both are attending school besides one having informal education at home. It is difficult to reach school for both of them (Table XII).

Table XII: Education

	No		**Yes**			
	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Attendance in school	-	-	1	7.1	1	7.1
Receiving informal education at home	1	7.1	2		-	
Comfortable Reaching to School	2	7.1	-	-	-	

Work

Among 14 participants only 21.4% (n=3) are attending their work or jobs with some degree of difficulties and able to meet the expenses of daily needs (Table XIII).

Table XIII: Frequency distribution of Work

	No		**Yes**			
	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Attendance in Work	9	78.6	1	7.1	2	14.3
Comfortable Reaching to Work	9	78.6	2	14.3	1	7.1
Income to cover daily needs	9	78.6	1	7.1	2	14.3

Vocational/Training Skills

92.9% (n=13) of the participants are not involved in any vocational or training skills, only 7.1 (n=1) is involved in the vocational training and regular attending without much difficulty and applying her skills in daily life (Table XIV).

Table XIV: Vocational Skills/Training

	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Attendance in Training	13	92.9	-	-	1	7.1
Comfortable Reaching to Training Centre	13	92.9	-	-	1	7.1
Independence to cover Training expenses	13	92.9	-	-	1	7.1
Application of Skills learned	13	92.9	-	-	1	7.1

Social Status

50% (n=7) of the participants are comfortable talking about their health condition while 35.7% (n=5) are uncomfortable most of the times. 50% (n=7) of participants felt difficulties taking care of other people or family member most of the times and 21.3% (n=3) felt sometimes. Only 28.6% (n=4) of participants have no difficulties taking care of their family members. 14.3% (n=2) of participants were comfortable attending all social activities and participating on those activities while 85.7% (n=12) of participants felt uncomfortable visiting relatives or friends house and participating in community activities such as religious function, volunteer work etc. (Table XV).

Table XV: Social Status

	No		**Yes**			
	Never		**Sometimes**		**Most of the times**	
	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)	Frequency (n)	Percentage (100)
Uncomfortable talking about health condition	7	50	2	14.3	5	35.7
Difficulty taking care of others people or family member	4	28.6	3	21.4	7	50
Difficulty visiting relative or friend places	2	14.3	4	28.6	8	57.1
Difficulty participating in society	3	21.4	3	21.4	8	57.1

4.3. Results: Relationship among variables

4.3.1. Overall Physical activity limitation and participation restriction (Table XVI)

Age

Age distribution among 14 participants 50% (n=7) were adults and 50% (n=7) were older in distribution. The relationship among this age group with physical activity level dependency and independent has been shown in Table XVI. Here the 28.6% (n=2) adult participants were dependent to perform physical their physical function of activities of daily livings (ADL's) and 71.4% (n=5) adults were independent to perform physical function of activities of daily livings (ADL's). In older participants 57.1% (n=4) were dependent and 42.9% (n=3) are independent too perform physical function of activities of ADL's. The relationship among age and overall physical function was p-value 0.296 which is non-significant on fisher's exact test (p-value < 0.05).

Sex

Sex distribution among male and female was 57.1% (n=8) female and 42.9% (n=6). Among male participants 57.1% (n=4) were dependent to physical function in overall comparing 42.9% (n=3) were independent. Female participants on other hand 33.3% (n=2) were dependent and 67.7% (n=4) were independent to perform physical function of ADL's. The relationship among physical function overall and sex was non-significant of p-value 0.627(Table XVI).

Marital status

Majority of the participants were married counting 78.6 % (n=11) of overall participants of 14 while only 21.4% (n=3) were unmarried. The relationship among marital status and physical function overall is shown in Table XVI. 100% of unmarried participant were

independent to perform physical function. Among married participants 54.5% (n=6) were dependent or need assistance while 45.5% (n=5) were independent to perform their physical function of ADL's. The relationship among marital status of the participants and overall physical functional level was 0.209 (p value <0.005) which is not a significant result statistically (Table XVI).

Education

The education of the participant among 14 participants were mostly literate, about 71.4% (n=10) participants were literate and only 28.6% (n=4) were illiterate. The physical dependency among illiterate participant was 75% (n=3) dependent and only 25% (n=1) are independent. The literate participant had 30% (n=3) dependency and 70% (n=7) independency while performing physical activities of daily livings.

The relationship among these variable was p-value 0.245 which is not significant statistically (Table XVI).

Job Status

Table XVI described the relationship among job status and physical dependency. 42.9% (n=6) participants were unemployed at the time of interview while 57.1% (n=8) participants were employed. Among unemployed participants physical function were 50 - 50% (n=3) whereas 62.5% (n=5) employed participants were independent to perform physical function and 37.5% (n=3) participants need assistance to perform some of the physical function. The relationship among job status and physical function was p-value 1.00 which is not significant statistically (Table XVI).

Living Area

The participants living on urban area was 78.5% (n=11). Among the participants living on urban area 63.6% (n=7) were independent and 36.4% (n=4) were dependent or need assistance. The participants living on rural area counts 21.4% (n=3) to the total participants. The physical function of the participants living on the rural area are mostly dependent i.e. 66.7% (n=2) and 33.3% (n=1) were independent to perform in overall physical function score. The relationship among these two variables was found to be non-significant of p-value 0.538 at the time of study (Table XVI).

Stump Pain

66.7% (n=2) participants having stump pain were dependent on physical function while 33.3% (n=1) were independent to perform physical function despite of stump pain. 36.4% (n=4) people still were dependent though not having pain and 63.3% (n=7) were free from stump pain and independent at physical function. The test of statistic among stump pain and physical function were non-significant p-value 0.538 (Table XVI).

Phantom pain

57.1% (n=8) participants among all participant experience phantom pain in some or all the times. However, the participants having phantom pain were 62.5% (n=5) were independent in physical function overall and only 37.5% (n=3) were dependent to perform physical function with phantom pain. 42.9% (n=6) participants experience no or minimal phantom pain. Despite of no or minimal phantom pain score the participant have equal 50-50% (n=3) dependency and independent to perform physical functions (Table XVI). The statistic test result was 1.000 (p-value) which is statistically not significant (Table XVI).

Table XVI. Physical Function Overall

		Physical Function Overall		**P-value***	**Remarks**
Variables		Dependent	Independent		
Age	Adults	28.6% (n=2)	71.4% (n=5)	0.296	Non-significant
	Older	57.1% (n=4)	42.9% (n=3)		
Sex	Male	33.3% (n=2)	67.7% (n=4)	0.627	Non-significant
	Female	50% (n=4)	50% (n=4)		
Marital Status	Unmarried	0%	100% (n=3)	0.209	Non-significant
	Married	54.5% (n=6)	45.5% (n=5)		
Education	Illiterate	75% (n=3)	25% (n=1)	0.245	Non-significant
	Literate	30% (n=3)	70% (n=7)		
Job Status	Unemployed	50% (n=3)	50% (n=3)	1.00	Non-significant
	Employed	37.5% (n=3)	62.5 (n=5)		
Living Area	Rural	66.7%(2)	33.3% (n=1)	0.538	Non-significant
	Urban	36.4% (n=4)	63.6% (n=7)		
Stump pain and limitation	Yes	66.7% (n=2)	33.3% (n=1)	0.538	Non-significant
	No	36.4% (n=4)	63.6% (n=7)		
Phantom Pain and limitation	Yes	37.5% (n=3)	62.5% (n=5)	1.000	Non-significant
	No	50% (n=3)	50% (n=3)		
Exercise Performance	Irregular	100% (4)	0%	0.015	**Significant**
	Regular	20% (n=2)	80% (n=8)		
Use of Appliances	Maximum	40% (n=2)	60% (n=3)	0.103	Non-significant
	Minimal	44.4% (n=4)	55.6(n=5)		
Prosthesis	Minimum	85.7% (n=6)	14.3 (n=1)	0.005	**Significant**
	Maximal	0%	100% (n=7)		
Psychological Status	Weak	57.1% (n=4)	42.9% (n=3)	0.592	Non-significant
	Strong	28.6% (n=2)	71.4% (n=5)		
Social Status	Compromised	54.5% (n=6)	45.5% (n=5)	0.209	Non-significant
	Friendly	0%	100% (n=3)		
Overall Rehabilitation Status	Poor	50% (n=6)	50% (n=6)	0.308	Non-significant
	Satisfactory	0%	100%(n=2)		

*Fisher Exact Test significant at p-value <0.05

Exercise performance

71.4% (n=10) participant were regular with their exercise routine, among them 80% (n=8) participant are independent to perform physical functions. 28.6% (n=4) participants were irregular with their exercise routine and were 100% (n=4) dependent to perform physical function of activities of daily livings. The test result shows 0.015 (p-value<0.005), which is statistically significant (Table XVI).

Use of Appliance

35.7% (n=5) participants among all participant were using appliance maximum of time while 64.3% (n=9) were using minimally using the appliances on day to day. Among the maximal users 60% (n=3) were independent and 40% (n=2) were dependent on physical function while among minimal appliance user 44.4% (n=4) dependent and 55.6% (n=5) were independent on physical activity overall. The test result was 0.103 which is statistically non-significant (Table XVI).

Prosthesis

The participant using prosthesis were in equal amount 50% (n=7) participants were minimal users and complication related 50% participants were maximal users. The participants using prosthesis minimal had higher level of dependency i.e. 85.7% (n=6) and 14.3% (n=1) were independent to perform physical activity. The participant using prosthesis maximum time have 100% (n=7) independent on functional level. The test result among prosthesis use and physical activity performance was 0.005 (p-value<0.05) which is statistically significant (Table XVI).

Psychological status

50% (n=7) of the participant were psychologically weak and 50% (n=7) were psychologically strong. Among psychologically weak participants 57.1% (n=4) are

dependent to perform physical activity while 42.9% (n=3) were independent. The participants having strong psychological status 71.4% (n=5) were independent and 28.6% (n=2) were dependent to perform physical activity or overall physical function. The test result was 0.592, statistically non-Significant (Table XVI).

Social status

78.6% (n=11) of the total participants were socially compromised. However 54.5% (n=6) participants were dependent and 45.5% (n=5) were independent to perform physical activity. 21.4% (n=3) were social friendly and 100% (n=3) of the participants were independent to perform physical activity. The test result was p-value 0.209 which is not significant statistically (Table XVI).

Overall Rehabilitation status

85.7% (n=12) participants of total participants were not satisfactory on overall rehabilitation status. However, 50% (n=6) among unsatisfactory rehabilitated participants were dependent and 50% (n=6) were independent to perform physical activity. The statistic test was p-value 0.308 which is not significant statistically (TableXVI).

4.3.2. Psychological Status (Table XVII)

Age

Age distribution among 14 participants 50% (n=7) were adults and 50% (n=7) were older in distribution. The relationship among this age group with psychological status is shown in Table XVII. Here the 28.6% (n=2) adult participants were psychologically weak and 71.4% (n=5) adults were psychologically strong. In older participants 71.4% (n=7) were weak and 28.6% (n=2) were psychologically strong. The relationship among age and Psychological status was p-value 0.286 (Table XVII) which is non-significant on fisher's exact test (p-value < 0.05).

Sex

Sex distribution among male and female was 57.1% (n=8) female and 42.9% (n=6). Among male participants 33.3% (n=2) were psychologically weak comparing 66.7% (n=4) were psychologically strong. Female participants on other hand 62.5% (n=5) were psychologically weak and 37.5% (n=3) were psychologically strong (Table XVII). The relationship among sex and psychologically status was non-significant of p-value 0.627(Table XVII).

Marital status

Majority of the participants were married counting 78.6 % (n=11) of overall participants of 14 while only 21.4% (n=3) were unmarried. The relationship among marital status and psychologically status is shown in Table XVII. 100% of unmarried participant were psychologically strong. Among married participants 63.6% (n=7) were psychologically strong while 36.4% (n=4) were psychologically strong (Table XVII). The relationship

among marital status of the participants and psychologically status was 0.192 (p value <0.005) which is not a significant result statistically (Table XVII).

Education

The education of the participant among 14 participants were mostly literate, about 71.4% (n=10) participants were literate and only 28.6% (n=4) were illiterate. The psychologically status among illiterate participant was 100% (n=4) were psychologically weak. The literate participant had 30% (n=3) weak and 70% (n=7) strong psychologically status. The relationship among these variable was p-value 0.462 which is not significant statistically (Table XVII).

Job Status

Table XVII described the relationship among job status and psychologically. 42.9% (n=6) participants were unemployed at the time of interview while 57.1% (n=8) participants were employed. Among unemployed participants psychologically status of 33.3% (n=2) were weak and 66.7% (n=4) had strong psychologically status whereas 62.5% (n=5) employed participants were psychologically weak and 37.5% (n=3) participants were psychologically strong. The relationship among job status psychologically status (Table XVII) was not significant statistically (p-value 0.592).

Living Area

The participants living on urban area was 78.5% (n=11). Among the participants living on urban area 63.6% (n=7) were psychologically strong and 36.4% (n=4) were had weak psychologically status. The participants living on rural area counts 21.4% (n=3) to the total participants. The psychologically status of the participants living on the rural area

were 100% (n=2). The relationship among these two variables was found to be non-significant of p-value 0.192 at the time of study (Table XVII).

Stump Pain

100% (n=3) participants having stump pain were psychologically weak while participant among not having stump pain 36.4% (n=4) participants were psychologically weak and 63.3% (n=7) were free psychologically strong (Table XVII). The test of statistic among stump pain and psychological status were non-significant which was of p-value 0.192 (Table XVII).

Phantom pain

57.1% (n=8) participants among all participant experience phantom pain in some or all the times. However, the participants having phantom pain 50% (n=4) were psychologically weak and 50% (n=4) were psychologically strong. 42.9% (n=6) participants experience no or minimal phantom pain. Despite of no or minimal phantom pain score the participant have equal 50-50% (n=3) weak and strong psychological status among these participants. The statistic finding for phantom pain and psychological status was 1.000 (p-value) which is statistically not significant at p-value <0.005 (Table XVII).

Exercise performance

28.6% (n=4) participant were irregular with their exercise routine, among them 50% (n=2) participant were psychologically weak and 50% (n=2) were psychologically strong 71.4% (n=10) participant were regular with exercise among them 70% (n=7) participants were psychologically weak and 30% (n=3) were psychologically strong (Table XVII). The test result shows 0.070 which is statistically non-significant (Table XVII).

Table XVII. Psychological status

		Psychological Status		P-value*	Remarks
Variables		**Weak**	**Strong**		
Age	Adults	28.6%(n=2)	71.4% (n-5)	.286	Non-significant
	Older	71.4% (n-5)	28.6% (n=2)		
Sex	Male	33.3% (n=2)	66.7 (n=4)	0.592	Non-significant
	Female	62.5% (n-5)	37.5% (n=3)		
Marital Status	Unmarried	0%	100% (n=3)	0.192	Non-significant
	Married	63.6%(n=7)	36.4 (n=4)		
Education	Illiterate	100% (n=4)	0%	0.462	Non-significant
	Literate	30% (n=3)	70% (n=7)		
Job Status	Unemployed	33.3% (n=2)	66.7% (n=4)	0.592	Non-significant
	Employed	62.5% (n=5)	37.5% (n=3)		
Living Area	Rural	100% (n=3)	0%	0.192	Non-significant
	Urban	36.4% (n=4)	63.6%(n=7)		
Stump Pain	Yes	100% (n=3)	0	0.192	Non-significant
	No	36.4% (n=4)	63.6% (n=7)		
Phantom pain	Yes	50% (n=4)	50% (n=4)	1.000	Non-significant
		50% (n=3)	50% (n=3)		
Exercise Performance	Irregular	50% (n=2)	50% (n=2)	0.070	Non-significant
	Regular	70% (n=7)	30% (n=3)		
Use of Appliances	Maximum	57.1% (n=4)	42.9% (n=3)	1.000	Non-significant
	Minimal	42.9% (n=3)	57.1% (n=4)		
Prosthesis (use, limitation, care) Overall	Minimum	71.4% (n=5)	28.6% (n=2)	.286	Non-significant
	Maximal	28.6% (n=2)	71.4% (n=5)		
Social Status	Compromised	63.6% (n=7)	36.4% (n=4)	0.192	Non-significant
	Friendly	0%	100% (n=3)		
Work Accessibility	Uncomfortable	77.8% (n=7)	22.2% (n=2)	0.045	**Significant**
	Comfortable	0%	100% (n=3)		
Overall Rehabilitation Status	Poor	58.3% (n=7)	41.7(n=5)	0.462	Non-significant
	Satisfactory	0%	100% (n=2)		

*Fisher Exact Test significant at p-value <0.05

Use of Appliance

50% (n=7) participants among all participant were using appliance maximum time and 50% (n=7) were using minimum time. The participant using appliances maximally, among them 57.1% (n=4) were psychologically weak and 42.9% (n=3) were psychologically strong. The participants using appliances minimal, among them 42.9% (n=3) participation were weak psychologically while 57.1% (n=4) participation were strong psychologically. The relationship among use of appliances and psychological status is not statistically significant i.e. p-vale was 1.000 (Table XVII).

Prosthesis

The participant using prosthesis were in equal amount 50% (n=7) participants were minimal users and complication related 50% participants were maximal users. The participants using prosthesis minimum had weak psychological status i.e. 71.4% (n=5) and only 28.6% (n=2) were psychologically strong. The participant using prosthesis 71.4% (n=5) maximum had weak psychological status than less users i.e. 28.6% (n=2). The test result among prosthesis use and psychological status was 0.286 which is statistically non-significant (Table XVII).

Social status

63 % (n=7) participants with weak or compromised social status have weak psychological status whereas 36.4 (n=4) are still strong psychological status.

Work Accessibility

75% (n=9 of 12) of the working-group participants found uncomfortable accessibility to work environment, among them 77.8% (n=7) had weak psychological status and only

22.2% (n=2) had strong psychological status. Participants comfortable with work environment have 100% (n=3) strong psychological status. The relationship among accessibility towards work environment and psychological status was found (p-value i.e. 0.045 <0.05) statistically significant (Table XVII).

Overall Rehabilitation status

85.7% (n=12) participants are not satisfactorily rehabilitated. However, among these participants 41.7% (n=5) have strong psychological status while 58.3% (n=7) had weak psychological status as shown in Table XVII. The relationship among psychological status and overall rehabilitation status was 0.462. The result is statistically non-significant (Table XVII).

4.3.3. Social Status (Table XVIII)

Age

Age distribution among 14 participants 50% (n=7) were adults and 50% (n=7) were older in distribution. The relationship among this age group with social status is shown in Table XVIII. Here the 71.4% (n=5) adult participants were socially weak/compromised and 28.6% (n=2) adults were socially strong/friendly. In older participants 85.7% (n=6) were weak/compromised and 14.3% (n=1) were socially strong/friendly. The relationship among age and Social status was p-value 1.000 which is non-significant on fisher's exact test (p-value < 0.05).

Sex

Sex distribution among male and female was 57.1% (n=8) female and 42.9% (n=6). Among male participants 67.7% (n=24) were socially weak/compromised comparing 33.3% (n=2) were socially strong/friendly. Female participants on other hand 87.5% (n=7) were socially weak/compromised and 12.5% (n=1) were socially strong or friendly. The relationship among sex and social status was non-significant of p-value 0.538 (Table XVIII).

Marital status

Majority of the participants were married counting 78.6 % (n=11) of overall participants (n=14) while only 21.4% (n=3) were unmarried. The relationship among marital status and social status is shown in Table XVIII. 33.3% (n=1) of unmarried participant were socially weak or compromised while 66.7% (n=2) participants were socially strong or friendly. Among married participants 90.9% (n=10) were socially weak or compromised while only 9.1% (n=1) were socially strong or friendly. The relationship among marital

status of the participants and social status was 0.093. the result was statistically non-significant (Table XVIII).

Education

The education of the participant among 14 participants were mostly literate, about 71.4% (n=10) participants were literate and only 28.6% (n=4) were illiterate. The social status among illiterate participant were 100% (n=4) socially weak or compromised. The literate participant had 30% (n=3) strong and 70% (n=7) weak socially. The relationship among these variable was p-value 0.505 which is not significant statistically (Table XVIII).

Job Status

Table XVIII described the relationship among job status and social status of the participants. 42.9% (n=6) participants were unemployed at the time of interview while 57.1% (n=8) participants were employed. Among unemployed participants social status of 83.3% (n=5) were weak or compromised and only 16.7% (n=1) had strong social status whereas 75% (n=5) employed participants were social weak or compromised and 25% (n=3) participants were socially strong or friendly. The relationship among job status and social status was p-value 0.592. The test result was statistically non-significant (Table XVIII).

Living Area

The participants living on urban area was 78.5% (n=11). Among the participants living on urban area 72.7% (n=8) were socially weak or compromised and 27.3% (n=3) were social friendly. The participants living on rural area counts 21.4% (n=3) to the total participants. The socially status of the participants living on the rural area were 100%

(n=3) weak or compromised. The relationship among these two variables was p-value 1.000. The test result was statistically non-significant (Table XVIII).

Table XVIII. Social Status

		Social Status		P-value*	Remarks
Variables		Compromised	Friendly		
Age	Active Adults	71.4% (n=5)	28.6% (n=2)	1.000	Non-significant
	Older	85.7% (n=6)	14.3% (n=1)		
Sex	Male	66.7% (n=4)	33.3% (n=2)	0.538	Non-significant
	Female	87.5% (n=7)	12.5 (n=1)		
Marital Status	Unmarried	33.3% (n=1)	66.7% (n=2)	0.093	Non-significant
	Married	90.9% (n=10)	9.1% (n=1)		
Education	Illiterate	100% (n=4)	0%	0.505	Non-significant
	Literate	70% (n=7)	30% (n=3)		
Job Status	Unemployed	83.3% (n=5)	16.7% (n=1)	1.000	Non-significant
	Employed	75% (n=6)	25% (n=2)		
Living Area	Rural	100% (n=3)	0%	1.000	Non-significant
	Urban	72.7% (n=8)	27.3% (n=3)		
Stump pain	Yes	100% (n=3)	0%	1.000	Non-significant
	No	72.7 (n=8)	27.3% (n=3)		
Phantom pain	Yes	87.5% (n=7)	12.5% (n=1)	0.538	Non-significant
	No				
Use of Appliances	Maximum	100% (n=7)	0%	0.192	Non-significant
	Minimal	57.1% (n=$)	42.9% (n=3)		
Prosthesis limitation	Yes	100% (n=11)	0%	0.003	**Significant**
	No	0%	100% (n=3)		
Work Accessibility	Uncomfortable	100% (n=9)	0%	0.045	**Significant**
	Comfortable	33.1% (n=1)	66.7% (n=2)		
Overall Rehabilitation Status	Poor	91.7% (n=11)	8.3% (n=1)	0.033	**Significant**
	Satisfactory	0%	100% (n=2)		

*Fisher Exact Test significant at p-value <0.05

Stump Pain

100% (n=3) participants having stump pain were socially weak while participant among not having stump pain 72.7% (n=8) participants were socially weak and 27.3% (n=3) were socially strong or friendly. The test of statistic among stump pain and social status were non-significant which was of p-value of 1.000 (Table XVIII).

Phantom pain

57.1% (n=8) participants among all participant experience phantom pain in some or all the times. However, the participants having phantom pain 87.5% (n=7) were socially weak and only 12.5% (n=1) were socially strong or friendly. 42.9% (n=6) participants experience no or minimal phantom pain. Among minimal phantom pain score the participant have 66.7% (n=4) weak and 33.3% (n=2) of the participants had strong social status. The statistic finding for phantom pain and social status was 0.538 (p-value). The test result was statistically non-significant (Table XVIII).

Exercise performance

28.6% (n=4) participant were irregular with their exercise routine, among them 50% (n=2) participant were socially weak and 50% (n=2) were socially strong 71.4% (n=10) participant were regular with exercise among them 70% (n=7) participants were socially weak and 30% (n=3) were socially strong (Table XVIII). The test result shows 0.070 which is statistically non-significant (Table XVIII).

Use of Appliance

50% (n=7) participants among all participant were using appliance maximum time and 50% (n=7) were using minimum time. The participant using appliances maximally 100%% (n=7) were socially weak or compromised. The participants using appliances for

minimum time were 57.1% (n=4) weak or compromised and 42.9% (n=3) participation were socially strong or friendly. The relationship among use of appliances and social status was 0.192 (p-vale). The test result was statistically non-significant (Table XVIII).

Prosthesis limitation

78.6% (n=11) participants had limitation with the prosthesis. Among the participants having limitation of prosthesis were 100% (n=11) socially weak or compromised. 21.4% (n=3) of the participants did not have limitation with prosthesis and were 100% (n=3) socially strong or friendly. . The relationship among use of prosthesis limitation and social status was 0.003 (p-vale). The test result was statistically significant at p value <0.05 (Table XVIII).

Work Accessibility

75% (n=9 of 12) of the working-group participants found uncomfortable accessibility to work environment, among them 100% (n=9) had weak or compromised social status. Participants comfortable with work environment have 33.1% (n=1) weak or compromised social status while 66.7% (n=2) comfortable towards work environment had strong or social friendly. The relationship among accessibility towards work environment and social status was 0.045 (p-value). The test result was statistically significant at p value <0.05 (Table XVIII).

Overall Rehabilitation status

85.7% (n=12) participants are not satisfactorily rehabilitated and only 14.3% (n=2) participants were rehabilitated satisfactorily. Among participants with poor rehabilitation status 91.7% (n=11) were socially compromised while only 8.3% (n=1) were social friendly. Participants having satisfactory rehabilitation status were also socially friendly.

100% (n=2) participants were socially strong or friendly. The relationship among social status and overall rehabilitation status was 0.033 (p-value). The test result was statistically significant at p value <0.05 (Table XVIII).

4.3.4. Overall Rehabilitation Status (Table XIX)

Age

Age distribution among 14 participants 50% (n=7) were adults and 50% (n=7) were older in distribution. The relationship among this age group with rehabilitation status is shown in Table XIX. Here the 85.7% (n=6) adult participants were poorly rehabilitated and 14.3% (n=1) adults were rehabilitated satisfactorily. In older participants 85.7% (n=6) were poorly rehabilitated and 14.3% (n=1) were rehabilitated satisfactorily. The relationship among age and Rehabilitation status was p-value 1.000 which is non-significant on fisher's exact test significant at p-value < 0.05.

Sex

Sex distribution among male and female was 57.1% (n=8) female and 42.9% (n=6). Among male participants 67.7% (n=24) were poorly rehabilitated comparing 33.3% (n=2) were rehabilitated satisfactorily. Female participants on other hand 100% (n=8) were poorly rehabilitated. The relationship among sex and rehabilitation status was p-value 0.165 (Table XIX). The test result was statistically non-significant (Table XIX).

Marital status

Majority of the participants were married counting 78.6 % (n=11) of overall participants (n=14) while only 21.4% (n=3) were unmarried. The relationship among marital status and rehabilitation status is shown in Table XIX. 66.7% (n=2) of unmarried participant were poorly rehabilitated and only 33.3% (n=1) were rehabilitated satisfactorily. Among married participants 90.9% (n=10) were poorly rehabilitated while only 9.1% (n=1) were rehabilitated satisfactorily. The relationship among marital status of the participants and rehabilitation status was 0.093. The result was statistically non-significant (Table XIX).

Education

The education of the participant among 14 participants were mostly literate, about 71.4% (n=10) participants were literate and only 28.6% (n=4) were illiterate. The rehabilitation status among illiterate participant were 100% (n=4) poorly rehabilitated. The literate participant had 80% (n=8) poor and 20% (n=2) were satisfactorily rehabilitated. The relationship among these variable was p-value 1.000. The test result was statistically non-significant (Table XIX).

Job Status

Table XIX described the relationship among job status and rehabilitation status of the participants. 42.9% (n=6) participants were unemployed at the time of interview while 57.1% (n=8) participants were employed. Among unemployed participants rehabilitation status of 100% (n=6) poorly whereas 75% (n=6) employed participants were poorly rehabilitation and 25% (n=2) participants were rehabilitated satisfactorily. The relationship among job status and rehabilitation status was p-value 0.473. The test result was statistically non-significant (Table XIX).

Living Area

The participants living on urban area was 78.5% (n=11). Among the participants living on urban area 81.8% (n=9) were poorly rehabilitated while only 18.2% (n=2) were rehabilitates satisfactorily. The participants living on rural area counts 21.4% (n=3) to the total participants. The rehabilitation status of the participants living on the rural were 100% (n=3) poor. The relationship among these two variables was p-value 1.000. The test result was statistically non-significant (Table XIX).

Stump Pain

100% (n=3) participants having stump pain were poorly rehabilitated while participant among not having stump pain 81.8% (n=9) participants were poorly rehabilitated and 18.2% (n=2) were rehabilitated satisfactorily. The test of statistic among stump pain and rehabilitation status was p-value of 1.000. The test result was statistically non-significant (Table XIX).

Phantom pain

57.1% (n=8) participants among all participant experience phantom pain in some or all the times. However, 100% (n=7) participants having phantom pain were poorly rehabilitated. 42.9% (n=6) participants experience no or minimal phantom pain. Among minimal phantom pain score 66.7% (n=4) of the participants were poorly rehabilitated and only 33.3% (n=2) were rehabilitated satisfactorily. The statistic finding for phantom pain and rehabilitation status was 0.165 (p-value). The test result was statistically non-significant (Table XIX).

Use of Appliance

50% (n=7) participants among all participant were using appliance maximum time and 50% (n=7) were using minimum time. The participant using appliances maximally 100%% (n=7) were rehabilitated poorly. 71.5% (n=5) participants using appliances for minimum time were poorly rehabilitated while 28.6% (n=2) participation were rehabilitated satisfactorily. The relationship among use of appliances and rehabilitation status was 0.462 (p-vale). The test result was statistically non-significant (Table XIX).

Prosthesis limitation

78.6% (n=11) participants had limitation with the prosthesis. Among the participants having limitation of prosthesis were 100% (n=11) rehabilitated poorly. 21.4% (n=3) of the participants did not have limitation with prosthesis and were 33.3% (n=1) poorly rehabilitated and 66.7 (n=2) were rehabilitated satisfactorily. The relationship among use of prosthesis limitation and rehabilitation status was 0.003 (p-vale). The test result was statistically significant at p value <0.05 (Table XIX).

Work Accessibility

75% (n=9 of 12) of the working-group participants found uncomfortable accessibility to work environment, among them 100% (n=9) had poor rehabilitation status. Participants comfortable with work environment have 33.1% (n=1) poor rehabilitation status while 66.7% (n=2) comfortable towards work environment had satisfactory rehabilitation status. The relationship among accessibility towards work environment and rehabilitation status was 0.045 (p-value). The test result was statistically significant at p value <0.05 (Table XIX).

Medical Accessibility

100% (n=8) Participants who has no access to medical services at their community has poor rehabilitates status. 66.7% (n=4) had accessibility to medial service has poor rehabilitation status where 43.3% (n=2) has satisfactory rehabilitation outcome.

Rehabilitation Accessibility

100% (n=11) Participants who has no access to medical services at their community has poor rehabilitates status. 33.3% (n=1) had accessibility to rehabilitation service has poor rehabilitation status where 66.7% (n=2) has satisfactory rehabilitation outcome.

Table XIX. Overall Rehabilitation Status

Variables		Overall Rehabilitation Status		P-value*	Remarks
		Poor	Satisfactory		
Age	Adults	85.7% (n=6)	14.3% (n=1)	1.000	Non-significant
	Older	85.7% (n=6)	14.3% (n=1)		
Sex	Male	66.7% (n=4)	33.3 (n=2)	0.165	Non-significant
	Female	100% (N=8)	0%		
Marital Status	Unmarried	66.7% (n=2)	33.3% (2)	.396	Non-significant
	Married	90.9% (n=10)	9.1% (n=1)		
Education	Illiterate	100% (n=4)	0%	1.000	Non-significant
	Literate	80% (n=8)	20% (n=2)		
Job Status	Unemployed	100% (6)	0%	.473	Non-significant
	Employed	75% (n=6)	25% (n=2)		
Living Area	Rural	100% (n=3)	0%	1.000	Non-significant
	Urban	81.8% (n=9)	18.2% (n=2)		
Stump pain	Yes	100% (n=3)	0%	1.000	Non-significant
	No	81.8% (n=9)	18.2% (n=2)		
Phantom pain	Yes	100% (n=8)	0%	0.165	Non-significant
	No	66.4% (n=4)	33.3 (n=2)		
Use of Appliances	Maximum	100% (n=7)	0%	0.462	Non-significant
	Minimal	71.4% (n=5)	28.6% (n=2)		
Prosthesis (use, limitation, care) Overall	Minimum	100% (n=7)	0%	0.462	Non-significant
	Maximal	71.4% (n=5)	28.6% (n=2)		
Prosthesis limitation	Yes	100% (11)	0%	0.033	**Significant**
	No	33.3% (n=1)	66.7% (n=2)		
Work Accessibility	Uncomfortable	100% (n=9)	0%	0.045	**Significant**
	Comfortable	33.3% (n=1)	66.7% (n=2)		
Medical Accessibility	Not accessible	100% (n=8)	0%	0.165	Non-significant
	Accessible	66.7 (n=4)	44.% (n=2)		
Rehabilitation Accessibility	Not accessible	100% (n=11)	0%	0.033	**Significant**
	Accessible	33.3% (n=1)	66.7% (n=2)		

*Fisher Exact Test significant at p-value <0.05

CHAPTER V

DISCUSSION

The purpose of this study was to find out the status of the people who lost their lower limb due to earthquake struck in Nepal on April and May 2015. Study found that among 14 participants were integrated back to community.Study found that among 14 participants 50% were below 35 years of age and 50% were above 35 years of age with a mean age of 41.29 ranging from 14 to 70 years of age. However, the risk of injuries among the older population is higher than the young and active population in disaster (Davey and Neale, 2013). Study also found that majority of the participants was female (57.1%) this might be because female participants are vulnerable to the risk in disaster. The risk of injuries is higher among women, children and girls in disaster in both developed and developing countries (UNDP). Study found that among all the participants 78.6% participants were married and 78.6% participants were from urban areas. 57.1% participants were living on temporary house as a result of earthquake either their house were destroyed or renovation process is going on. Earthquake resulted in loss of infrastructure and disadvantages in humanitarian responses (Government of Nepal).

Study found 57.1% of the participants were physically independent while 42.9% were need assistance to perform one or others factors related to physical function in day to day life. The participants were maximum independent despite maximum use of assistive device and infrequent use of prosthesis. Physical independence achieved during rehabilitation phase has impact on health status among lower limb amputee. Grades of physical function can be measure using functional Independence measure (FIM).

However, for this study questionnaire were designed based on physical function independence measure. The total score were graded into two grades grade 1 (Need Assistances) and grade 2 (Independent).Rehabilitation of an individual depends on time, place and types of rehabilitation services (kurichi et al., 2010). The risk of poor rehabilitation increases as time passes (Stineman et al., 2009). Study found that 71.1% participants are independent to walk. Mobility of the participants reflects the outcome of the precipitants level of physical activity. However, Burger et al., (1997) found that mobility after amputation may often lead to increase level of dependence.

Study found that majority of the participants (78.6%) had no stump pain while majority of participant (57.1%) experienced phantom pain. 78.6% participant experienced phantom pain mostly during rest, 42.9% had sleep loss and 14.3% had work interference due to phantom pain. However,Bosmans et al., (2007), reported people with lower limb amputation have higher rate of wellbeing despite of their phantom pain.Satisfaction of rehabilitation status among lower limb amputee also depends on the pain experiences by the individuals (Zidarov et al., 2009). Pain after limb amputation is common (Empharin et al., 2005). Pain after traumatic amputation might be due to musculoskeletal pain (Devan et al., 2014) as a result of trauma, residual limb pain post-surgery, phantom pain (Bosmans et al., 2007), mechanical factors (Sherk et al., 2010) related to poor prosthetic fit, uneven posture (Devan et al., 2014) and poor skin hygiene (kuruchi, 2010).

It was also found that 71.4% of participants has difficulty performing physical activities with prosthesis while 92.9% participants could not either participate or had difficulty performing sports activity.

Study found prosthesis limitsthe functional activity of an individual. A significant p-value of <0.05 was found between them. Similarly, a significant p-value<0.005 was found between social barrier and prosthesis limitation. These factors contributed and found that prosthesis limitation and overall rehabilitation status was p-value also significant p-value <0.05. The rehabilitation status depends on optimal prosthesis device (Kuruchi et al., 2010) and proper prosthesis fitting and functional activity training with prosthesis. Improper prosthesis is associated with complication such as mechanical pain which may contribute to low functional outcome thus reflecting the overall status of well-being (Sherk et al., 2010; Devan et al., 2014). Majority of the problem with prosthesis is associated with loose socket, stump and phantom pain, compensatory body adjustment adopting walking. Studies show that discomfort on their residual limb, inability to walk limit the use of prosthesis (Sherman, 1999; burger, 1997; Dillingham et al., 2001). On other hand, study showed that despite of limitation with the prosthesis majority of the people with lower limb amputation were satisfied in overall performance (Pezzin et al., 2004).

All participants were strongly affected psychologically however; the study showed that 50% of the participants were psychologically convinced or strong psychological status. Depression or sadness contribute significant factor in overall poor rehabilitation status. 78.1% participants were depressed or sad; it was found relationship among depression and overall rehabilitation status. The test result of these two variables were 0.033 significant at p-value <0.005 (Relationship significant on Fisher's Exact Test significant at 0.05). Person with lower limb amputation faces numerous challenges. Loss of body

needs psychological adjustment along with functional adjustment. The psychological adjustment is more difficult than functional adjustment (Randolpph et al., 2014).

The study found that majority of the participants had difficulties with medical and rehabilitation accessibility. 78% of the participants were in accessible for the rehabilitation services where as 57.1% were unreachable for basic medical services. The majority of the participants had difficulty with the accessibility. Due to geographically variance and earthquake added vulnerability towards the accessibility for the persons with lower limb amputation.

Study found that 78.6% of the participating involved in work were failed to return to work at the time of study. Return to functional activities and return to work is optimal goal after amputation. 62.5 % of the employed participants were not attending their job or occupation at the time of study. Studies found that return to work after amputation is 8% (Kegel et al., 1978 as cited in Burger and Marincek, 2007) and 3.5 % (Narang et al., 1984 as cited in Burger and Marincek, 2007). One fourth of the amputee experienced unemployment lasting more than 6 months (Burger and Marincek, 2007).

Study found that among 14 participants 85.7% (n=12) participants were poorly rehabilitated. Rehabilitation includes several factors such as physical function and limitation, psychological and social well-being, return to work and regain their harmony (kovac, 2015). Rehabilitation of the participant includes functional, psychological and social restoration. Multidisciplinary team approach had been found effective improving in the physical function and psycho-social well-being for the person with amputation and other disability in developed countries (Atherton, 2006; Perkins, 2012). However, in

developing countries multidisciplinary team approach is not in regular practice which contributes to poor rehabilitation outcome for the person with disability. Person with amputation and disaster is associated with multiple problems of physical function, psychological problem and social problem. To adjust multiple issues related to health and social being multidisciplinary team approach is the best way to overcome barriers related to their quality of life. Integration to the community should be ultimate goal of any rehabilitation program (Burger and Marinicek, 2007) in addition to independence in self-care activities, support in education or employment, community support, residential support are mandatory. People with disabilities will not be able to benefit fully from improvements in one domain if the others remain inaccessible individuals must be able to direct in their physical environment to improve the quality of their lives through work and social interaction. Successful rehabilitation following amputation is complex and requires multiple medical, surgical, and rehabilitation specialties. Rehabilitation is important for enhancing the mobility of affected individuals and improving their health and vocational prospects (Pezzin, et al., 2000).

Early rehabilitation result in good recovery and avoids complication. Rehabilitation for the amputation can be start from the preoperative phase if elective cases or from the day 1 of post-operative phase. Discharge guidelines and late rehabilitation protocol plays a vital role for overall status of well-being (kurichi et al., 2010, kovac, 2015).

CHAPTER VI

LIMITATION

- Small sample size: the study was done in small size. The total population of the study was 32 out of which only 14 participants were back to community. All the participants returned to their community were interviewed still the result found in the study cannot be generalized because of its small sample size.
- Lack of time and resource: Documentation of data was not proper and it's hard to get the information required for this study.
- Lack of prior research with similar topic: More researches were focused on individual factors contributing in the outcome of the people with lower limb amputation. No study was found with the similar topic.
- Measure used to collect data: Quantitative measures were used to collect data as the number of participants was too small. Both qualitative and mixed method of data could have been collected which might enhance the quality of research.

CHAPTER VII

RECOMMENDATION

- Further studies are recommended to study perception of people with amputee over time and to assess its elements.
- Future studies are imagined to understand the underlying factors determining the extent of daily use of prosthesis and the reasons for the use of assistive devices by the amputees.
- Rehabilitation efforts should best be targeted depending on patients' needs.

CHAPTER VIII

CONCLUSION

According to the research objectives it was determined that most participants were compromised with their physical function, psychological and social well-being. Rehabilitation status among participants was not satisfactory. Limb amputations are frequently performed as a result of natural disaster. During the 2015 earthquake in Nepal, coordinating care of these patients in serious settings was complex. A multidisciplinary team is needed for management of these patients during acute and long term. A proper plan work towards care of these people in low-income is important. Life may be initially saved with surgery and medical care, but lifelong disability is certain. Rehabilitation specialists must be involved early in treatment, ideally before amputation and throughout the recover and rehabilitation phase.Proper assessment and measure are important to overcome related issues. Proper prosthetic fitting and training with prosthetics and socio-psychological support for the people with lower limb amputee might facilitate immediate and long term adjustment. The factors affecting their outcome of the rehabilitation of the lower limb amputee should be addressed in order to ensure holistic reintegration and participation, and to enable the amputees to regain or maintain quality of life at community level.

REFERENCES

Atherton, R. and Robertson, N. (2006).Psychological adjustment to lower limb amputation amongst prosthesis users.*Disability and Rehabilitation*, 28(19), pp.1201-1209.

Bosmans, J., Suurmeijer, T., Hulsink, M., van der Schans, C., Geertzen, J. and Dijkstra, P. (2007). Amputation, phantom pain and subjective well-being: a qualitative study. *International Journal of Rehabilitation Research*, 30(1), pp.1-8.

Burger, H. and Marinček, Č. (2007). Return to work after lower limb amputation. *Disability and Rehabilitation*, 29(17), pp.1323-1329.

Burger, H., Marinček, Č. and Isakov, E. (1997).Mobility of persons after traumatic lower limb amputation.*Disability and Rehabilitation*, 19(7), pp.272-277.

Chu, K., Stokes, C., Trelles, M. and Ford, N. (2011).Improving Effective Surgical Delivery in Humanitarian Disasters: Lessons from Haiti.*PLoS Med*, 8(4), p.e1001025.

Davey, J.A and Neale, J. (2013).Earthquake Preparedness in an Ageing Society.Learning from the experience of the Canterbury Earthquakes. Report prepared for the Earthquake Commission, with funding from the EQC 2012 Biennial Grants Programme. Available at: http://www.eqc.govt.nz/sites/public_files/2341-earthquake-preparedness-ageing-society.pdf (Accessed: 10 June 2016).

Delauche, M.C., Blackwell, N., Le Perff, H., Khallaf, N., Müller, J., Callens, S. and AllafortDuverger, T. (2013) ‘A prospective study of the outcome of patients with limb

trauma following the Haitian earthquake in 2010 at One- and Two- year (the SuTra2 study)', *PLoS Currents*.

Desmond, D. and MacLachlan, M. (2006).Coping strategies as predictors of psychosocial adaptation in a sample of elderly veterans with acquired lower limb amputations.*Social Science & Medicine*, 62(1), pp.208-216.

Dillingham, T., Pezzin, L., MacKenzie, E. and Burgess, A. (2001). Use and Satisfaction with Prosthetic Devices Among Persons with Trauma-Related Amputations. *American Journal of Physical Medicine & Rehabilitation*, 80(8), pp.563-571.

Ephraim, P., Wegener, S., MacKenzie, E., Dillingham, T. and Pezzin, L. (2005). Phantom Pain, Residual Limb Pain, and Back Pain in Amputees: Results of a National Survey. *Archives of Physical Medicine and Rehabilitation*, 86(10), pp.1910-1919.

Godlwana, L., Nadasan, T. and Puckree T, 2008: Global trends in incidence of lower limb amputation: A review of the literature. *South African Journal of Physiotherapy*,64 (1),pp.8-11.

Government of Nepal, National planning commission Kathmandu (2015). Nepal earthquake 2015 Disaster Needs Assessment

Gupta, N., Castillo-Laborde, C. and Landry, M. (2011). Health-related rehabilitation services: assessing the global supply of and need for human resources. BMC Health Services Research, 11(1), pp.276.

Hettiaratchy, S. and Stiles, P. (1996). Rehabilitation of lower limb traumatic amputees: the Sandy Gall Afghanistan Appeal's experience. Injury, 27(7), pp.499-501.

Jenny Neale, J. (2013). Earthquake Preparedness in an Ageing Society.Learning from the experience of the Canterbury Earthquakes. [online] Victoria University of Wellington New Zealand: Learning from the experience of the Canterbury Earthquakes. Report prepared for the Earthquake Commission, with funding from the EQC 2012 Biennial Grants Programme. Available at: http://www.eqc.govt.nz/sites/public_files/2341-earthquake-preparedness-ageing-society.pdf [Accessed 16 Jun. 2016].

Jone, R. (1997). Discharge Planning and Rehabilitation HST Update.13,pp.17-30.

Karkee, R., Yadav, B., Chakravartty, A. and Shrestha, D. (2008) 'The prevalence and characteristics of disability in eastern Nepal', Kathmandu University medical journal (KUMJ)., 6(1), pp. 94–7.

Kovač, I., Kauzlarić, N., Živković, O., Mužić, V., Abramović, M., Vuletić, Z., Vukić T., Ištvanović, N. and Livaković, B. (2015).Rehabilitation of lower limb amputees *PeriodicumBiologorum*, 117(1), pp.147–159.

Kubheka, B. and Uys, L. (1995).Amputation history and rehabilitation of black men living in the greater Durban area who have had traumatic amputations of the lower limb.curationis, Curations, l8,(1),pp.44-48.

Kurichi, J., Bates, B. and Stineman, M.G. (2010).Amputation. In: JH Stone, M Blouin, editors. *International Encyclopedia of Rehabilitation*. Available online: http://cirrie.buffalo.edu/encyclopedia/en/article/251.

Landry, M. D. (2015). Disability as an Emerging Public Health Crisis in Post-earthquake Nepal. Editorials American Journal of Public Health, August, 105(8),pp.1515-1517.

Landry, M.D., Raman, S.R. and Kohrt, B.A. (2015) 'Disability as an emerging public health crisis in Postearthquake Nepal', American Journal of Public Health, 105(8), pp. 1515–1517.

Li, S. and He, C. (2013). Early rehabilitation prevents disability after earthquake: A letter to international rehabilitation colleagues. J Rehabil Med, 45(6), pp.603-603.

MacKenzie, E., Bosse, M., Castillo, R., Smith, D., Webb, L., Kellam, J., Burgess, A., Swiontkowski, M., Sanders, R., Jones, A., McAndrew, M., Patterson, B., Travison, T., McCarthy, M. (2004).Functional outcomes following trauma-related lower-extremity amputation.*Journal of Bone and Joint Surgery Am*erican, 86-A(8),pp.1636-1645.

Ministry of Health and Population, Nepal <available at http://www.mohp.gov.np/>

Misajon R, Manderson L, Pallant JF, Omar Z, Bennet E, Rahim RBA, 2006 Impact, distress and HRQoL among Malaysian men and women with a mobility impairment, Health and quality of life outcomes, BioMed Central.

Mosaku, K., Akinyoola, A., Fatoye, F. and Adegbehingbe, O. (2009).Psychological reactions to amputation in a sample of Nigerian amputees.General Hospital Psychiatry, 31(1), pp.20-24.

National Seismological Centre, Nepal.<Available at http://www.seismonepal.gov.np/>

Nehler, M., Coll, J., Hiatt, W., Regensteiner, J., Schnickel, G., Klenke, W., Strecker, P., Anderson, M., Jones, D., Whitehill, T., Moskowitz, S. and Krupski, W. (2003).Functional outcome in a contemporary series of major lower extremity amputations.Journal of Vascular Surgery, 38(1), pp.7-14.

Nepal Health Profile World Health Organisation data (2010). http://www.who.int/countries/npl/en/

Neupane, S. (2015). Immediate lessons from the Nepal earthquake. The Lancet, 385(9982), pp.2041-2042.

Perkins, Z., De'Ath, H., Sharp, G. and Tai, N. (2011).Factors affecting outcome after traumatic limb amputation.British Journal of Surgery, 99(S1), pp.75-86.

Pezzin LE, Dillingham TR, MacKenzie E.J. 2000. Rehabilitation and the long-term outcomes of persons with trauma-related amputations. Archives of Physical Medicine and Rehabilitation 81(3),pp.292-300.

Pezzin, L., Dillingham, T. and MacKenzie, E. (2000).Rehabilitation and the long-term outcomes of persons with trauma-related amputations.Archives of Physical Medicine and Rehabilitation, 81(3), pp.292-300.

Pezzin, L.E., Dillingham, T.R., MacKenzie, E.J., Ephraim, P. and Rossbach, P. (2004) 'Use and satisfaction with prosthetic limb devices and related services', *Archives of Physical Medicine and Rehabilitation*, 85(5), pp. 723–729.

Resnick, H.E., Carter, E.A., Lindsay, R., Henly, S.J.,Ness, F.K., Welty, T.K., Lee, E.T., Howard, B.V., (2004). Relations of all lower-extremity amputation to all-cause and cardiovascular disease mortality in American Indians, *Diabetes Care*, 27 (6): 1286-1293.

Roy, B., Sathian B. and Banerjee I. Nepal earthquake 2015 – an overview (2015).*Journal of Biomedical Science*, 2(1), pp.20-2.

Sheppard, P. and Landry, M. (2015). Lessons from the 2015 earthquake(s) in Nepal: implication for rehabilitation. Disability and Rehabilitation, 38(9), pp.910-913.

Sheppard, P.S and Landry, M.D. (2015). Lesson from 2015 earthquake(s) in Nepal: implication of rehabilitation, Disability and Rehabilitation, 14, pp. 1-4.

Sherman, R. (1999). Utilization of prostheses among US veterans with traumatic amputation: A pilot survey. *Journal of Rehabilitation Research and Development*, 36(2),pp.100 -108.

Siyothula, N. &Kubheka, B. (2002). An Evaluation Of Community Based Rehabilitative Care Given To Paraplegic Clients/Patients Living In The Durban Area, Region In The Kwazulu-Nata Province (Unpublished Masters Dissertation) University Of Zululand: KZN. Available at: http://uzspace.uzulu.ac.za/bitstream/handle/10530/1036/An%20evaluation%20of%20community%20based%20rehab.%20N.C.%20Shangase.pdf?sequence=1 (Accessed: 10 June 2016).

Spichler, E., Spichler, D., Lessa, I., Forti, A., Franco, L. and LaPorte, R. (2001). Capture-recapture method to estimate lower extremity amputation rates in Rio de Janeiro, Brazil. Rev PanamSaludPublica, 10(5).

Stineman, M. (2009). Survival Analysis in Amputees Based on Physical Independence Grade Achievement. *Archives of Surgery*, 144(6), pp.543.

Taylor, S., Kalbaugh, C., Blackhurst, D., Hamontree, S., Cull, D., Messich, H., Robertson, R., Langan, E., York, J., Carsten, C., Snyder, B., Jackson, M. and Youkey, J. (2005). Preoperative clinical factors predict postoperative functional outcomes after major lower limb amputation: An analysis of 553 consecutive patients. *Journal of Vascular Surgery*, 42(2), pp.227-234.

Trombly, C.A. (1995). Occupational Therapy for Physical Dysfunction.4th Edition.William & Wilkin's, Baltimore.

UNDP Bureau for Crisis Prevention and Recovery Gender and Disasters http://www.undp.org/content/dam/undp/library/crisis%20prevention/disaster/7Disaster%20Risk%20Reduction%20-%20Gender.pdf (Accessed: 10 May 2016).

United Nations (2006).Convention on the rights of persons with disabilities. Available at: http://www.un.org/disabilities/convention/conventionfull.shtml (Accessed: 5 April 2016).

Wegner, S.T., Mackenzie, E.J., Ephraim, P., Ehde, D., Williams, R., (2009). Self-management improves outcomes in persons with limb loss. *Archives of Physical Medicine and Rehabilitation*, 90, pp.373-381.

Wong MWN, 2005 Lower extremity amputation in Hong Kong, Hong Kong *Medical Journal*, 11(3),pp.147-152

World Health Organisation (2005).Disasters, disability and rehabilitation. Available at: http://WorldHealth Organisation (2005). Disasters, disability and rehabilitation.www.who.int/violence_injury.../disaster_disability2.pdf (Accessed: 9 June 2016).

World Health Organisation. Country Profile Available at http://www.who.int/countries/usa/en/ (Accessed 5 April 2016).

World Health Organization.Definition of Rehabilitation. Available at http://www.who.int/topics/rehabilitation/en/ (Accessed 5 April 2016)

Zidarov, D., Swaine, B. and Gauthier-Gagnon, C. (2009). Quality of Life of Persons With Lower-Limb Amputation During Rehabilitation and at 3-Month Follow-Up. *Archives of Physical Medicine and Rehabilitation*, 90(4), pp.634-645.

APPENDIX

QUESTIONNAIRE

ON

Rehabilitation Status among Lower Limb Amputee Patient in Community Level: earthquake survivors, Nepal, 2015.

Namaste! My name is Binaya K C; I am a student of M.Sc. in Rehabilitation Sciences under University of Dhaka, Bangladesh. As a part of my curriculum I need to conduct thesis and the title for my thesis is "Rehabilitation Status among Lower Limb Amputee Patient in Community Level: earthquake survivors, Nepal, 2015." for this I am conducting a survey on rehabilitation status among lower limb amputee patients living in mostly earthquake affected areas. This research/thesis is mainly about rehabilitation status of the lower limb amputee patients in community. In order to get information I need to ask these questionnaires so that I can figure out actual rehabilitation status of the lower limb amputee patient in the community.

Your help will be appreciated; I would request you to provide true information. If you have any queries please feel free to ask and also further information regarding your condition can be obtained during this process. The interview will take about ……. minutes. You can withdraw or chose not to answer the question.

S. NO. …….

Date of interview……

Name/ID No. Age Sex
Male
Female

Address Contact no.

Height: Weight:

A. Personal Information

1. **Personal Information**					
1.1. Marital status	1. Unmarried	2. Married	3. Divorce	4.Widow	5. Separated
	6. Others please specify….				
1.2. Job and occupation	1. Student	2. Farmers	3. Office workers	4. Technician	5. Labor
	6. .Self-employed	7. Volunteer	8. Unemployed	9. Others, Please specify……	
1.3. Education level	1. Primary	2. Secondary	3. Higher secondary	4. Graduation and above	5. Write only
	6. Read only	7. No formal education	8. Others, Please specify……		

1.4. Living situation at time of interview				
1.4.1. Where do you live at current (past one month) situation?	1. Tent/ Temporary house	2. Rented	3. Relatives	4. Own house
1.4.2. With whom are you living with at this moment?	1. Single	2.Friends	3. Relatives	4.Family
1.4.3. Living environment 1.4.4. Home	1. Ground floor	2. First floor	3. Second floor	4. Third floor and above
1.4.5. Area	1. Rural		2. Urban	

B. Medical History

2. **Medical history**					
2.1. Level of amputation	1. Hip Disarticulation	2. Above knee	3. Knee Disarticulation	4. Below knee	5. Ankle Disarticulation
	6. Partial foot	7. Others please specify……..			
2.2. Causes of amputation	1. Traumatic (At accident)	2.Neurovascular	3. Wound Infection	4.Crush Injury	5. Don't know
2.3. Side of amputation	6. fracture	7. Others please specify …….			
	1. Right	2. Left	3. Bilateral (Both)		

C. Physical Examination

3. Physical Examination

3.1.Pain (Visual Analog scale)

When asked about how much pain you feel (how much you hurt), please rate the pain on a scale which starts at 0 (no pain) and continues up to 10 (so much pain you could not bear it for one more second). The higher the number, the greater the pain……

0 1 2 3 4 5 6 7 8 9 10

No pain **Extreme pain**

3.3.Range of motion of lower limb

Range of motion of the patient will be measured using standard goniometer at the time of interview by the interviewer/investigator.

HIP	Normal	Right	Left		Normal	Right	Left
				KNEE			
Flexion	120			Flexion	135		
Extension	30			Extension	0		
HIP				ANKLE-FOOT			
	Normal	Right	Left		Normal	Right	Left
Abduction	45			Dorsi Flexion	30		
Adduction	30			Planter Flexion	45		
Lateral Rotation	60			Inversion	35		
Medial Rotation	30			Eversion	15		

3.4.Muscle strength

QUOTATION FOR MUSCLE TESTING according to Manual Muscle Testing Oxford Scale
0: No contraction present
1: Contraction visible without movement
2: Movement possible without gravity or incomplete against gravity
3: Movement possible against gravity into the fullest available range
4: Movement resistance possible against gravity and an added moderate
5: Muscle functions normally

HIP	Right	Left	KNEE	Right	Left
Flexion			Flexion		
Extension			Extension		
Abduction			ANKLE-FOOT	Right	Left
Adduction			Dorsi Flexion		
Lateral Rotation			Planter Flexion		
Medial Rotation			Inversion		
			Eversion		

D. Physical Activity limitation and participation restriction

2: Independent- you can do the activity without help.
1: Need assistance- you need somebody to help or assist you in some part of the activity. For example, for bathing somebody has to take you to the bathrooms or bring water but you can take bath yourself.
0: Impossible – you cannot perform the activity someone else has to do the activity for you.

Do you need help in doing any of the following Activities? Please tick the box which is appropriate for you.			
4. Do you need help in doing any of the following Activities?	Independent	Need assistance	Impossible
4.1. Self-care			
4.1.1. Bathing			
4.1.2. Dressing lower body			
4.1.3. Toileting			
4.2. Mobility			
4.2.1. Crawling			
4.2.2. Walking			
4.2.3. Stairs			
4.2.4. Running			
4.3. Transfer:			
4.3.1. Lie to sit (& opposite)			
4.3.2. Sit to stand (& opposite)			
4.3.3. Stand to floor (& opposite)			
4.4. Balance			
4.4.1. Standing with support			
4.4.2. Standing without support			

E. Exercise

5. Do you have any prescribed home exercise program? If No please move to next question If Yes please answer the question below	No	Yes	
5.1. Are you performing your exercise as prescribed?	Never	Sometimes	Most of the times
5.2. Do you need assistance to perform your prescribed exercise?			
5.3. Do you feel lazy or tired or giving up while doing exercise?			

F. Pain

Marking guidelines for pain and score
2: Never: Patent does not feel any discomfort or pain.
1: Sometimes: Patient feels pain sometimes and is tolerable and manages to work with it or with some rest.
0: Most of the time: Intolerable, pain disturbs your activity

6. Pain

6.1. Stump pain

The following questions are about STUMP PAIN. Please reply only about pain you feel in the remaining portion of the amputated limb(s).

Do not include pain in your phantom or elsewhere in your body. Everybody feels at least some pain in their stump just after their amputation. It usually quiets down some by about six months after the amputation.

6.1. Do you have stump pain? If No please skip this section and move to next question If Yes please answer below question	No	Yes	
	Never	Sometimes	Most of the time
6.1.1. Do you feel pain during your normal daily activities?			
6.1.2. Do you feel pain at rest?			
6.1.3. Do you ever loss your sleep due to stump pain?			
6.1.4. During last 1 month, does it interfere with your normal work (including both at household and professional)			

6.2.Phantom pain

Almost everybody has non-painful sensations which seem to come from their phantoms. Most people at least occasionally feel painful sensations which seem to come from their phantoms which are called "phantom pains."

The following questions are about PHANTOM PAIN. Please reply only about pain you feel in the portion of the limb(s) which was amputated.

Do not include pain in your stump or elsewhere in your body and do not include normal non-painful sensations from the phantom.

6.2. Do you have phantom pain? If No please skip this section and move to next question If Yes please answer below question	No	Yes	
	Never	Sometimes	Most of the time
6.2.1. Do you feel pain during your normal daily activities?			
6.2.2. Do you feel pain at rest?			
6.2.3. Do you ever loss your sleep due to phantom pain?			
6.2.4. During last 1 month, does it interfere with your normal work (including both at household and professional)			

G. Appliances

7. Do you need any assistive device to be functional or mobile? If No please move forward to next question If Yes, please answer the question below	No	Yes	
	Never	Sometimes	Most of the time
7.1. Do you need any assistive device for daily activities?			
7.2. When walking with your assistive device outside, do you feel unstable or uncomfortable?			
7.2.1. when walking on plane surface			
7.2.2. When walking on slope			
7.2.3. Walking on uneven surface			

H. Prosthetic use, care and complication

The following section will ask you question regarding prosthetic care and use during your daily activities.

Prosthetic related			
8.1. Do you have/got the prosthesis (artificial limb)? If No please move forward to next question If Yes, please answer the question below	No	Yes	
	Never	Sometimes	Most of the time
8.1.2. Do you need any additional aid (walking stick, crutch, walking frame etc.) while walking with your prosthesis?			
8.1.3. When walking with your prosthesis outside, do you feel unstable or uncomfortable? 8.1.3.1. when walking on plane surface			
8.1.3.2. When walking on slope			
8.1.3.3. Walking on uneven surface			

The following question is about complication faced due to your prosthesis performing activities of daily living			
8.2. Does your prosthesis limit your activities? If No please move forward to next question If Yes, please answer the question below If yes Do you have difficulties performing	No	Yes	
8.2.1. Household activities such as cleaning, arranging things, cooking etc.	Never	Sometimes	Most of the time
8.2.2. Performing outside/field activities such as gardening, shopping etc.			
8.2.3. Do you have difficulties performing Social activities such as attending functions			
8.2.4. Do you have difficulties performing Sports activities			

The following question is regarding care of your stumps

8.3. Do you care for your residual limb/stumps? If No please move forward to next question If Yes, please answer the question below	No	Yes	
8.3.1. Do you wash your stump regularly with soap or warm water?	Never	Sometimes	Most of the times
8.3.2. Do you clean your prosthetic shocks daily?			
8.3.3. Do you watch your skin for any broken area?			
8.3.4. Do you use your compression socks while not wearing prosthesis/artificial limp?			
8.3.5. Do you prevent over hanging to prevent swelling or joint contracture?			

I. Psychological status

The following question is about your psychological health. Most of the people suffer some sort of psychological condition due to the health condition. Please answer the question without feeling any hesitation.

9. Do you feel bad psychological status such as excitement, boring, crying; If No please move to next question If Yes please answer the question below	No	Yes	
	Never	Sometimes	Most of the time
9.1. Have you been a very worried person?			
9.2. Have you felt calm and peaceful?			
9.3. Have you felt depressed and sad?			
9.4. Were you a happy person?			
9.5. Do you feel so unhappy that nothing could cheer you up?			
9.6. Result of that during your job or other activities do you faced below condition.			
9.6.1. Have you reduce amount of your time in job or other activities?			
9.6.2. Could not achieve amount of work I expected			
9.6.3. Unable to concentrate properly same as before			

J. Medical Accessibility

These questions will ask you about accessibility towards Medical services such as Medical Consultation, Wound Care, and Medication.

10. Do you have access to Medical Centre at your community? If No please move to next question If Yes please answer the question below	No	Yes	
10.1. Do you find all the services that you seeking for?	Never	Sometimes	Most of the times
10.2. Do you find any sort of difficulties reaching to medical Centre?			
10.3. Can you bear your medical expenses (consultation charge, medicine)?			
10.4. Do you have to seek help to cover your medical expenses?			

K. Rehabilitation Accessibility

These questions will ask you about accessibility towards Rehabilitation services such as Physiotherapy (PT), Occupational Therapy (OT), Prosthetic and Orthotic (P&O), Social and Psychological support.

11. Do you have access to Rehabilitation Centre at your community? If No please move to next question If Yes please answer the question below	No	Yes	
11.1. Do you find all the services that you seeking for?	Never	Sometimes	Most of the times
11.2. Do you find any sort of difficulties reaching to Rehabilitation Centre?			
11.3. Can you bear your Rehabilitation service expenses (PT, OT, P&O and Social and Psychological support)?			
11.4. Do you have to seek help to cover your rehabilitation expenses?			

L. Work/Income

12. Do you have any kind job or work at present? If No please move to next question If Yes please answer the question below	No	Yes	
12.1. How often do you attend your job or work?	Never	Sometimes	Most of the times
12.2. Do you face any sort of difficulties going to your work place?			
12.3. Do you get regular income to meet your daily needs (food, shelter, health and education)?			

M. Vocational/Skill Training

13. Are you involved in any skill training or interested in? If No please move to next question If Yes please answer the question below	No	Yes	
13.1. How often do you attend your training program?	Never	Sometimes	Most of the times
13.2. Do you find any sort of difficulties reaching to Training Centre?			
13.3. Do you have to seek help to cover training expenses?			
13.4. Do you apply your skill training in work or daily life?			

N. Social status

14. Do you feel uncomfortable interacting or participating or visiting with other people? If No please move to next question If Yes please answer the question below	No	Yes	
	Never	Sometimes	Most of the times
14.1. Do you feel uncomfortable talking with people regarding your health condition?			
14.2. Had difficulty taking care of other people such as family members?			
14.3. Had difficulty visiting with relatives or friends?			
14.4. Had difficulty participating in community activities, such as religious services, social activities, or volunteer work?			
14.5. Had difficulty going to your school or training or workplace?			

प्रश्नावोली

समुदायस्तरमाखुट्टाअंगच्छेदभएकाबिरामीहरुकोपुनर्स्थापनास्थिति: भूकम्पमाबचेका, २०१५, नेपाल

नमस्ते! मेरो नाम बिनय के. सी हो; ढाका बिश्वबिधालय, बंगलादेश अन्तर्गत पुनर्स्थापना विज्ञान (Rehabilitation Science) मा एम. एससी. अध्ययनरत क्लिनिकल फिसियोथेरापिस्ट हुँ। पाठ्यक्रम मोड्युल अन्तर्गत अनुसन्धान अध्ययन पूरा गर्न अनिवार्य छ र मेरो अनुसन्धान अध्ययन शीर्षक "समुदाय स्तरमा खुट्टा अंगच्छेद भएका बिरामीहरुको पुनर्स्थापना स्थिति: भूकम्पमाबचेका, २०१५, नेपाल" रहेको छ।पुनर्स्थापना स्थिति सर्वेक्षण सञ्चालन ज्यादातर भूकम्प प्रभावित क्षेत्रमा बस्ने खुट्टा अंगच्छेद (lower limb amputee) भएका विरामीहरुमा गरिने छ। यो अनुसन्धान मुख्य रूपमा समुदायमा बसेका खुट्टा अंगच्छेद भएका विरामीहरु को पुनर्स्थापना स्थितिको बारेमा जानकारी लिन मदद्त पुराउछ जसको निम्ति यी प्रस्नावाली सोध्न अत्यन्त जरुरी छ।

तपाईंको सहायता सराहना गरिनेछ; म तपाईंलाई साँचो जानकारी प्रदान गर्न अनुरोध गर्दछु। तपाईंका कुनै पनि प्रश्नहरु छन् भने कृपया सोध्न स्वतन्त्र महसुस गर्नुहोस। आफ्नो स्वास्थ्य परिस्थितिको सन्दर्भमा यस प्रक्रियामा थप जानकारी गर्न सकिन्छ। साक्षात्कार अन्दाजी ..... मिनेट लाग्ने अनुमान गरिएको छ। तपाईं अध्यन बाट फिर्ता वा कुनै प्रश्नको जवाफ नदिन सक्नुहुन्छ।

क्रमसंख्या.....

साक्षात्कारकोमिति .....

नाम/ परिचयन.

उमेर

लिङ्ग

पुरुष

महिला

ठेगाना

सम्पर्कन.

उचाई:

तौल:

१. व्यक्तिगतसूचना

१. व्यक्तिगतसूचना					
१.१. वैवाहिकस्थिति	१. अविवाहित	२. विवाहित	३. छोडपत्र	४. विधुवा	५. विभाजन
	६. अन्य,.निर्दिष्टगर्नुहोस् ...।				
१.२. कामरपेशा	१. विद्यार्थी	2. किसान	3. कार्यालयकार्यकर्ता	4. टेक्नीसियन	5. श्रम
	6. स्वयं-कार्यरत	7. स्वयंसेवी	8. बेरोजगार	9. अन्य,	
१.३. शिक्षास्तर	१. प्राथमिक	२. माध्यमिक	३. उच्च माध्यमिक	४. स्नातकरमाथि	५. लेख्नमात्र
	६. पढ्नमात्र	७. कुनैऔपचारिकशिक्षान भएको	८. अन्य, कृपयानिर्दिष्ट……		
१.४. साक्षात्कारकोसमयमाबसोवासकोस्थिति					
१.४.१.तपाईंअहिले (वर्तमानमा) कहाँबसोवासगर्दैहुनुहुन्छ?	१. पाल / अस्थायीघर	२. भाडाकोघरमा	३. नातेदार	४. आफ्नैघरमा	
१.४.२. तपाईंयसक्षणमाकोसँगसाथबसिरहनुभएकोछ?	१. एकल	२.साथीसंग	३.नातेदार	४.परिवारसंग	
१.३. बस्नेबातावरण-घर	१. भुइतल्लामा	२. एक्तालामा	३. दुइतालामा	४. तिनतल्लवामाथि	
१.४. बस्नेबातावरण-क्षेत्र	१. ग्रामीण	२. सहर			

२. मेडिकलइतिहास

मेडिकलइतिहास					
२.१. अंगच्छेदकोस्तर	1. हिपजोर्नेबाटअंगच्छेद	2. घुंडामाथिबाटअंगच्छेद	3.घुंडाकोजोर्नीबाट अंगच्छेद	4.घुंडाभन्दामुनिबाटअंगच्छेद	5.एंकलजोर्नीअंगच्छेद
२.२. अंगच्छेदकोकारण	6.आंशिकखुट्टा	७. अन्य,कृपयानिर्दिष्ट……			
	१. अभिघातजन्य (दुर्घटनामा)	२. न्युरोभास्कुलर	३.घाउसंक्रमण	4. चोटनाश	५. थाहाछैन
	६.भाचिएको(fracture)	७. अन्य,कृपयानिर्दिष्ट……			
२.३. अंगच्छेदकोसाइड	१. दाहिने	२. देब्रे	३. दुवै		

३. शारीरिकपरिक्षण

३.१. दुखाई **(**भिजुअलएनालगस्केल)

तपाईंलाईदुखाईकोबारेमासोध्दाकृपयाआफुलेमहसुसगरेकोपीडा0 (कुनैपीडानभएको) देखि१० (असहनीयपीडा) सम्ममादिनुहोलानम्बरजतिमाथिदुखाईतेतीनैधेरैभन्नेबुझिन्छ

० १ २ ३ ४ ५ ६ ७ ८ ९ १०

दुखाईछैन असहनीयदुखाई

३.२. Range of motion of lower limb

जोर्नीकोकोRange of motion, Goniometerप्रयोगगरेरमापनगरिनेछ।

HIP (हिप)	सामान्य	दायाँ	बायाँ		सामान्य	दायाँ	बायाँ
				KNEE (घुँडा)			
Flexion (खुम्चाई)	१२०			Flexion (खुम्चाई)	१३५		
Extension (तन्काई)	३०			Extension (तन्काई)	०		
				ANKLE-FOOT (अय्नकल-फूट)			
HIP (हिप)	सामान्य	दायाँ	बायाँ		सामान्य	दायाँ	बायाँ
Abduction (बाहिरीतर्फ)	४५			Dorsi Flexion (तललैजाने)	३०		
Adduction (भितिरीतर्फ)	३०			Planter Flexion (माथितान्ने)	४५		
Lateral Rotation (बाहिरीघुमाई)	६०			Inversion (भित्रफर्काउने)	३५		
Medial Rotation (भित्रीघुमाई)	३०			Eversion (बाहिरफर्काउने)	१५		

३.३. मांसपेशीबल(Muscle strength)

HIP	Right	Left	KNEE	Right	Left
Flexors			Flexion		
Extensors			Extension		
Abductors			ANKLE-FOOT	Right	Left
Adductors			Dorsi Flexors		
Lateral Rotators			Planter Flexors		
Medial Rotators			Invertors		
			Evertors		

४. शारीरिकगतिविधिसीमारसहभागिताप्रतिबन्ध

तलकोउपयुक्तबिकल्पमाटिकलगाउनुहोला।

४. तलउल्येखितकार्यगर्नतपाइलाईकुनैकिसिमकोसहयोगचाहिन्छ?			
	आत्मनिर्भर	केहिसहयोग	निर्भर
४.१. स्व-हेरविचार			
४.१.१स्नान			
४.१.२. तल्लोशरीरमालुगालाउने			
४.१.३. दिशा-पिशाब			
४.२. गतिशीलता (मोबिलिटी)			
४.२.१. घस्रिन (Crawling)			
४.२.२. हिड्डुलगर्न			
४.२.३. भर्याङचढ्नझर्न			
४.२..४. दौडिन			
४.३. ट्रान्सफर			
४.३.१. सुताईबाटबस्न (रबिपरित)			
४.३.२. बसेकोबाटउभिन (रबिपरित)			
४.३.३. उभिनुदेखिजमिनमाहिंड्नु(रबिपरित)			
४.४. सन्तुलन (ब्यालेन्स)			
४.४.१. सहारालिएरउभिन			
४.४.२. बिनासहाराउभिन			

५. ब्यायाम

तपाईंलाईकुनैनिर्धारितघरव्यायामकार्यक्रमदिएकोछ? छैनभनेअर्कोप्रश्नमाजानुहोस छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	छ	छैन	
५.१. तपाईंआफ्नोव्यायामकत्तिकोनिर्धारितरुपमागर्नुहुन्छ?	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
५.२. तपाईंलाईआफ्नोनिर्धारितव्यायामगर्नकत्तिकोसहयोगचाहिन्छ?			
५.३. तपाईंलाईव्यायामगर्दैगर्दाकत्तिकोअल्छीवाथकितकोमहसुसहुन्छ?			

६. दुखाई/पिडा

दुखाइको स्कोरनिर्देशन

2: कहिल्यै: एकाधिकारकुनै पनिअसुविधावापीडामहसुसगर्दैन।

1: कहिलेकाहीं: रोगीकहिलेकाहींपीडामहसुस हुन्छ जुन सहन सकिन्छ र यसले केहीबाँकीकाम गर्नप्रबन्धन लगाउंदैन।

0: अधिकांश समय: असहनीय,पीडाआफ्नोगतिविधिकाम गर्नप्रबन्धन हुन्छ।

६. दुखाई/पिडा

६.१. Stump pain (स्टंपदुखाई)

निम्नप्रश्नहरूकोस्टंपदुखाईकाहुन्।कृपयातपाईंलाईamputated limb (हरू)
कोबाँकीभागमामहसुसभएकोदुखाइबारेमामात्रजवाफदिनुहुनअनुरोधगरिन्छ।आफ्नोअन्यत्रशरीरकोदुखाइसमावेशनगरिदिनुहुनसमेतआग्रहगरिन्छ।
सबैलाईआफ्नोअंगच्छेदपछिआफ्नोस्टंपमाकेहीपीडामहसुसहुन्छ।योसामान्यतयाछमहिनापछिकमभएरजान्छ।

६.१. केतपाईलाईstump मादुखाईछ? छैनभनेअर्कोप्रश्नमाजानुहोस छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	छैन कहिल्यै	छ कहिलेकाहीं	 अधिकांशसमय
६.१.१. केतपाईलाईदैनिकक्रियाकलपगर्दापिडा/दुखाईहुन्छ?			
६.१.२. तपाईलाईआरामकोसमयमापिडा/दुखाईहुन्छ?			
६.१.३. पिडा/दुखाईकोकारणलेतपाइकोनिन्द्रामाअसरपरेकोछ?			
६.१.४. पछिल्लो१महिनामापिडा/दुखाईकोकारणलेततपाईकोदैनिककार्यमाअसरपुर्याएकोछ?(घरएसीतथापेसागतकार्य)			

६.२. Phantom pain (फ्यान्टमदुखाई)

लगभगसबैलाईआफ्नोphantoms देखीगैर-पीडादायीsensations आउंछ।प्रायजसोतेसैबाटकसैकसैलाईपिडासमेतहुन्छतेसैपीडालाई phantom pain भनिन्छ।

निम्नप्रश्नहरूको phantom दुखाईकाहुन्।कृपयातपाईंलाई phantom दुखाईकोबाँबारेमामात्रजवाफदिनुहुनअनुरोधगरिन्छ।आफ्नोअन्यत्रशरीरकोदुखाइवास्टम्पदुखाईसमावेशनगरिदिनुहुन समेतआग्रहगरिन्छ।

६.२. तपाईलाईphantom painछ? छैनभनेअर्कोप्रश्नमाजानुहोस छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	छैन	छ	
	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
६.२.१. केतपाईलाईदैनिकक्रियाकलपगर्दापिडा/दुखाईहुन्छ?			
६.२.१. तपाईलाईआरामकोसमयमापिडा/दुखाईहुन्छ?			
६.२.३. पिडा/दुखाईकोकारणलेतपाइकोनिन्द्रामाअसरपरेकोछ?			
६.२.३ . पछिल्लो१महिनामापिडा/दुखाईकोकारणलेतपाईकोदैनिककार्यमाअसरपुर्याएकोछ?(घरएसीतथापेसागतकार्य)			

७. उपकरण (Appliances)

तपाईलाईशारीरिकगतिविधिगर्नकुनैसहयोगीउपकरणकोआवश्यकपर्छ पर्दैनभनेअर्कोप्रश्नमाजानुहोस पर्छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	पर्छ	पर्दैन	
	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
७.१. तपाईलाईदैनिककार्यकालपगर्नकुनैसहयोगीउपकरणकोआवस्यककत्तिकोपर्छ?			
७.२. सहयोगीउपकरणकोसाथबाहिरहिंड्दा, तपाईलाईकुनैकिसिमकोअफ्ट्यारोमहुन्छ?			
७.२.१. समथलसतहमा			
७.२.२. उकालोओरालो			
७.२.३. असमानसतहमा			

८. कृतिमअंगप्रयोग, हेरबिचाह, रजटिलता

कृतिमअंगप्रयोग

कृतिमअंगसम्बन्धी			
८.१. तपाईसंगकृतिमअंगछ?? छैनभनेअर्कोप्रश्नमाजानुहोस छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	छैन कहिल्यै	छ कहिलेकाहीं	अधिकांशसमय
८.१.१. तपाईलाईकृतिमअंगलगऊँदाअरुसहयोगीउपकरणकोआवस्यकताकत्तिकोपर्छ?			
८.२. कृतिमअंगकोसाथबाहिरहिंड्दा, तपाईलाईकुनैकिसिमकोअफ्ट्यारोमहुन्छ? ८.२.१.समथलसतहमा			
८.२.२. उकालोओरालो			
८.२.३. असमानसतहमा			

जटिलता

८.२. तपाईलाईआफ्नोकार्यगर्नकृतिमअंगलेबाधा/अफ्ट्यारोगर्छ गर्दैनभनेअर्कोप्रश्नमाजानुहोस गर्छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	गर्दैन	गर्छ	
८.२.१. घरायसीकार्यजस्तैसरसफाई, खानपकाउनेइत्यादी	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
८.२.२. बाहिरीकमजस्तैगोडमेल, किनमेल			
८.२.३. सामाजिककार्यजस्तैपार्टी,भोज			
८.२.४. खेल्खुदक्रियाकलप			

हेरबिचाह

८.३. तपाईआफ्नोस्टम्पकोहेरचाहगर्नुहुन्छ? गर्नुहुन्नभनेअर्कोप्रश्नमाजानुहोस गर्नुहुन्छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	**गर्दिन** कहिल्यै	**गर्छु** कहिलेकाहीं	अधिकांशसमय
८.३.१. तपाईकत्तिकोनियमितरुपमाआफ्नोस्टम्पसाबुनवामनतातोपानीलेधुनुहुन्छ?			
८.३.२. तपाईकत्तिकोनियमितरुपमाआफ्नोप्रोस्थेटिक (prosthetic)मोजासफागर्नुहुन्छ?			
८.३.३. तपाईआफ्नोस्टम्पवरपरकाछालाकोहेरचाहकत्तिकोगर्नुहुन्छहेर्नगर्छन्?			
८.३.४. तपाईकृत्रिमअंग / कृत्रिमलिम्पनलगाएकोबेलासड्कुचनमोजा (compression socks) प्रयोगकत्तिकोगर्नुहुन्छ?			
८.३.५.तपाईखुट्टासुनिनतथाखुट्टाcontractureरोक्नखुट्टालाईधेरैलामोसमयझुन्डिनबाटकत्तिकोबचाउनुहुन्छ?			

९. मनोवैज्ञानिकस्थिति

तपाईंआफुकहिलेखराबमनोवैज्ञानिकस्थितिजस्तैउत्तेजना, बोरिंग, रुंरुंयस्तोमहसुसगर्नुहुन्छ; गर्नुहुन्नभनेअर्कोप्रश्नमाजानुहोस गर्नुहुन्छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	**गर्दिन**	**गर्छु**	
	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
९.१. तपाईंकत्तिकोचिन्तितव्यक्तिभएकोमहसुसगर्नुहुन्छ?			
९.२. तपाईंकत्तिकोशान्तरशान्तिपूर्णमहसुसगर्नुहुन्छ?			
९.३. तपाईंकत्तिकोनिराशरदु:खीमहसुसगर्नुहुन्छ?			
९.४. तपाईंकत्तिकोआनन्दितव्यक्तिहुनुहुन्छ?			
९.५. कुनैकुरालेमज्जादिननसकेकोमातपाईकत्तिकोदुखीहुनुहुन्छ?			
९.६. यसकोपरिणामस्वोरूप, आफ्नोकामवाअन्यगतिविधिहरुकुनैकिसिमअसर			
९.६.१. तपाईंकोकामवाअन्यगतिविधिहरुआफ्नोसमयकोमात्राकत्तिकमछ?			
९.६.२.अपेक्षितकामगर्ननसक्ने			
९.६.३. पहिलाकोजस्तैध्यानगर्नअसमर्थ			

१०. चिकित्सापहुँच (Medical Accessibility)

यीप्रश्नहरूचिकित्सापहुँचजस्तैचिकित्सापरामर्श, चिकित्सासेवा, घाउहेरविचाररदबाइकाबारेमारहेकाछन्।

तपाईंकोआफ्नोसमुदायमामेडिकलसेन्टरछ? छैनभनेअर्कोप्रश्नमाजानुहोस छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	**छैन**	**छ**	
	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
१०.१. केतपाईंलेखोज्नुभएकासम्पूर्णसेवाचिकित्साकेन्द्रमाउपलब्धहुन्छ?			
१०.२. तपाईंलाईचिकित्साकेन्द्रलेपुग्नकत्तिकोकठिनाइहुन्छ?			
१०.३. तपाईंआफ्नोचिकित्साखर्च (परामर्शशुल्क, औषधी) कत्तिकोबेहोर्नसक्नुहुन्छ?			
१०.४. तपाईंआफ्नोचिकित्साखर्चकोलागिअरुसंगकत्तिकोमद्दतलिनुहुन्छ?			

११. पुनर्स्थापनापहुँच (Rehabilitation Accessibility)

यीप्रश्नहरूपुनर्स्थापनापहुँचजस्तैजवाफतपाईंयस्तोभौतिकचिकित्सा (PT), व्यावसायिकचिकित्सा (OT), Prosthetic रOrthotic (P & O), सामाजिकरमनोवैज्ञानिकसमर्थनकाबिषयमारहेकाछन्।

तपाईंकोआफ्नोसमुदायमापुनर्स्थापनाकेन्द्रछ? छैनभनेअर्कोप्रश्नमाजानुहोस छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	छैन	छ	
	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
११.१. केतपाईंलेखोज्नुभएकासम्पूर्णसेवाकेन्द्रमाउपलब्धहुन्छ?			
११.२. तपाईंलाईकेन्द्रलेपुग्नकत्तिकोकठिनाइकोहुन्छ?			
११.४. तपाईंआफ्नोपुनर्स्थापनामालाग्नेखर्च (PT, OT, P&O and Social and Psychological support) बेहोर्नकत्तिकोसमर्थकहुनुहुन्छ?			
११.५. तपाईंआफ्नोपुनर्स्थापनामालाग्नेखर्चकोलागिअरुसंगकत्तिकोमद्दतलिनुहुन्छ ?			

१२. शिक्षा (Education)

केतपाईंस्कुलजानुहुन्छ? जानुहुन्नभनेअर्कोप्रश्नमाजानुहोस जानुहुन्छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	जादिन	जान्छु	
	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
१२.१.आफ्नोस्कुलमाकत्तिकोउपस्थितजनाउनुहुन्छ?			
१२.२.घरवासमुदायमाअनौपचारिकशिक्षाकत्तिकोलिनुहुन्छ?			
१२.३. तपाईंआफ्नोस्कुलजानकुनैपनिप्रकारकोकठिनाइकत्तिकोसामनागर्नुहुन्छ?			

१३. कार्य / आय (Work/Income)

वर्तमानमाकुनैप्रकारकोकामछ? छैनभनेअर्कोप्रश्नमाजानुहोस छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	छैन	छ	
	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
१३.१. आफ्नोकाममातपाईंकत्तिकोउपस्थितजनाउनुहुन्छ?			
१३.२. तपाईंआफ्नोकामगर्नेठाउँमाजानकुनैपनिप्रकारकोकठिनाइकत्तिकोसामनागर्नुहुन्छ?			
१३.३. तपाईंकोनियमितआयलेआफ्नोदैनिकआवश्यकता (खाना, आश्रय, स्वास्थ्यरशिक्षा) पूरागर्नकत्तिकोमद्दतगर्दछ?			

१४. व्यावसायिक / कौशलप्रशिक्षण (Vocational/Skill Training)

तपाईंकुनैकौशलप्रशिक्षणरुचिवासमावेशहुनुहुन्छ? छैनभनेअर्कोप्रश्नमाजानुहोस छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	छैन	छ	
	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
१४.१. आफ्नोप्रशिक्षणकार्यक्रममातपाईंकत्तिकोउपस्थितजनाउनुहुन्छ?			
१४.२. तपाईंआफ्नोप्रशिक्षणकेन्द्रजानकुनैपनिप्रकारकोकठिनाइकत्तिकोसामनागर्नुहुन्छ?			
१४.३. तपाईंआफ्नोलाग्नेप्रशिक्षणखर्चकोलागिअरुसंगकत्तिकोमद्दतलिनुहुन्छ?			
१४.४. तपाईंआफ्नोकामवादैनिकजीवनमाआफ्नोकौशलप्रशिक्षणप्रयोगकत्तिकोगर्नुहुन्छ?			

१५. सामाजिकस्थिति (Social status)

तपाईंअन्यव्यक्तिसँगगएरअन्तरक्रियावाभागलिनअसहजमहसुसगर्नुहुन्छ? गर्नुहुन्नभनेप्रश्नयहीसमाप्तहुन्छ गर्नुहुन्छभनेकृपयातलकोप्रश्नकोजवाफदिनुहोस	गर्दिन	गर्छु	
	कहिल्यै	कहिलेकाहीं	अधिकांशसमय
१५.१. तपाईंआफ्नोस्वास्थ्यअवस्थासन्दर्भमाअरुमान्छेसंगकुरागर्नकत्तिकोअसहजमहसुसगर्नुहुन्छ?			
१५.२. परिवारकासदस्यहरूलेवाअन्यमानिसहरूलाईहेरचाहगर्नकत्तिकोकठिनाईहुन्छ?			
१५.३. आफन्तवासाथीहरूकाजनाकत्तिकोअसहज / कठिनाईहुन्छ?			
१५.४. सामुदायिकगतिविधिहरूमासहभागीजस्तैधार्मिक, सामाजिकगतिविधिहरु, वास्वयंसेवककाममाजानकत्तिकोअसहज / कठिनाईहुन्छ?			
१५.५. आफ्नोस्कूलवाप्रशिक्षणवाकार्यस्थलकत्तिकोअसहज / कठिनाईमहसुसगर्नुहुन्छ?			

Information Sheet

I am **Binaya K C**, Clinical Physiotherapist studying M. Sc. in Rehabilitation Sciences under University of Dhaka, Bangladesh. Towards fulfillment of the course module it is obligatory to conduct a research study.

In this regard, I would like to invite you to take part in the research study, titled "**Rehabilitation status among Lower Limb amputee patients at community level: earthquake survivors, Nepal, 2015.**" The aim of the study is to identify current rehabilitation status of the lower limb amputee patients in the community level.

Your participation in this study is voluntary. If you do not agree to participate at all you can withdraw your support to the study anytime you want, despite consenting to take part earlier. You will be given questionnaire or asked question based on my study design and the information provided by you will be kept highly confidential and private. You will not be paid for your participation. Participation in this study might benefit directly regarding physiotherapy management and prevention of secondary complication. This study will not the cause any risk or harm to you.

Confidentiality of all documents will be highly maintained. Collected data will never be used in such a way that you could be identified in any presentation or publication without your permission.

If you have any further queries regarding purpose of this study please feel free to write or call to given address.

Binaya K C
Clinical Physiotherapist
B & B Hospital Pvt. Ltd.
binay.kc@gmail.com
Cell Phone: +9779841880686

INFORM CONSENT

I have read or have been explained to me the information sheet and I am informed about the topic of the research. I have got opportunity to ask any query and discuss about the study with the data collector, I got satisfactory answer. I have informed about the risk and benefit of the research. I have understood that I am free to withdraw from the study at any time, without having any reason and without affecting present and future medical care. I am informed that all my answer will remain highly confidential.
I agree to take part in this study voluntarily.

Participant's signature Date: ……..

Data collector's signature…….Date: ……..

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual was allowed to ask questions. I confirm that the individual has given consent freely.

Name of witness_____ Thumb print of participant

Relationship with participants_____

Signature of witness _____

Date _____

Parental permission

Your child has been invited to join a research titled "**Rehabilitation status among Lower Limb amputee patient in community level: earthquake survivors, Nepal, 2015.**" Please take whatever time you need to discuss the study with your family and friends, or anyone else you wish to. The decision to let you child join, or not to join, is up to you.

In this research study, we are looking for current rehabilitation status which includes some of the physical examination, activities and participation in the community.

Your child will be asked some questionnaire. I think this will take him/her _____ minutes. You will not be paid for your participation. Participation in this study might not benefit you directly; however information regarding your concern can be obtained during the process.

Participation in this study is voluntary. Your child has the right not to participate at all or to leave the study at any time. Deciding not to participate or choosing to leave the study will not result in any penalty or loss of benefits to which your child is entitled.

Your child's name will not be used when data from this study are published. Every effort will be made to keep clinical records, research records, and other personal information confidential.

If you have queries you can always contact me at +9779841880686 or email binay.kc@gmail.com.

As parent or legal guardian, I authorize _____ (child's name) to become a participant in the research study described in this form.

Child's Date of Birth

Parent or Legal Guardian's Signature Date

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual was allowed to ask questions. I confirm that the individual has given consent freely.

Name of witness_____ Thumb print of participant

Relationship with participants_____

Signature of witness _____

Date _____

Assents form

Information Sheet

I am **Binaya K C**, Clinical Physiotherapist studying M. Sc. in Rehabilitation Sciences under University of Dhaka, Bangladesh. Towards fulfillment of the course module it is obligatory to conduct a research study.

In this regard, I would like to seek your permission to take part in the research study, titled "**Rehabilitation status among Lower Limb amputee patients at community level: earthquake survivors, Nepal, 2015.**" I have discussed it with your parents/guardian and they know about it. If you wish to participate in my research, your parents also have to agree. But if you are not interested in my research, you do not have to despite your parents/guardian approval.

You may discuss anything in this form with your parents or friends or anyone else you feel comfortable talking to. You can decide whether to participate or not after you have talked it over. You do not have to decide immediately.

There may be some words you don't understand or things that you want me to explain more about because you are interested or concerned. Please ask me to stop at any time and I will take time to explain.

Participant's signature Date: ……..

Data collector's signature…….Date: ……..

If illiterate

I have witnessed the accurate reading of the consent form to the potential participant, and the individual was allowed to ask questions. I confirm that the individual has given consent freely.

Name of witness_____ Thumb print of participant

Relationship with participants_____

Signature of witness _____Date _____

सूचना पाना

म बिनय के. सी., ढाका बिश्वबिधालय, बंगलादेश अन्तर्गत पुनर्स्थापना विज्ञान (Rehabilitation Science) मा एम. एससी. अध्ययनरत क्लिनिकल फिसियो- थेरापिस्ट हुँ। पाठ्यक्रम मोड्युल अन्तर्गत अनुसन्धान अध्ययन पूरा गर्न अनिवार्य छ ।

यस सन्दर्भमा, म तपाईलाई यस अनुसन्धान अध्ययन बिषय " समुदाय स्तरमा खुट्टा अंगच्छेद भएका बिरामीहरुको पुनर्स्थापना स्थिति: भूकम्पमाबचेका, २०१५, नेपाल" मा भाग लिन आमन्त्रण गर्न चाहन्छु। यस अध्ययन को उदेश्य भनेको भुकम्पमा परि आफ्नो खुट्टा/ खुट्टाका कुनै पनि पनि अंग गुमाएका बिरामीहरुको समुदाय स्तरमा वर्तमान पुनर्स्थापनाको स्थिति पहिचान गर्नु हो।

यो अध्ययनमा आफ्नो सहभागिता स्वैच्छिक रहने छ। तपाईंले अध्ययनको लागि भाग लिन पहिले मन्जुरी भए तापनि, तपाईंले चाहेको खण्डमा अध्ययन कुनै पनि समयमा छोड्न सक्नु हुने छ। मेरो अध्ययनको डिजाइनमा रही तपाईंलाई प्रश्नावली दिइने वा सोधेपुछ गरिने छ। सोधपुछ पश्च्यात प्राप्त जानकारी उच्च गोपनीय र निजी राखिनेछ। तपाईंलाई सहभागिताको लागि कुनै भुक्तानी गरिने छैन । योअध्ययनमा सहभागिता भए भौतिक चिकित्सा (फिसोयो-थेरापी) व्यवस्थापनर पछि हुन सक्ने उलझनकोरोकथामका सन्दर्भमाप्रत्यक्षलाभ उठाउनसकिन्छ।

सबै कागजातहरूको गोपनीयता अत्यधिक कायम गरिनेछ। संकलित डाटा कहिल्यै पनि तपाईंको आफ्नो अनुमति बिना पहिचान खुल्ने गरि कुनै पनि प्रस्तुतीकरण वा प्रकाशनमा प्रयोग गरिने छैन।

तपाईंलाई यस अध्ययनको उद्देश्य सन्दर्भमा कुनै पनि थप प्रश्नहरु वा जिज्ञासा भए निसंकोच कृपया तल दिइएको ठेगानामा सम्पर्क गर्नुहोला।

बिनय के.सी

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Assents फारम

सूचना पाना

म बिनय के. सी., ढाका बिश्वबिधालय, बंगलादेश अन्तर्गत पुनर्स्थापना विज्ञान (Rehabilitation Science)मा एम. एससी. अध्ययनरत क्लिनिकल फिसियो- थेरापिस्ट हुँ। पाठ्यक्रम मोड्युल अनुसन्धान अध्ययन सञ्चालन पूरा गर्न अनिवार्य छ ।

यस सन्दर्भमा, म तपाई लाई यस अनुसन्धान अध्ययन बिषय "समुदाय स्तर मा तल्लो अंग अनुच्छेद (lower Limb amputation) रोगी बीचमा स्थिति: बचे भूकम्प नेपाल, 2015" मा भाग लिन आमन्त्रण गर्न चाहन्छु। यस बिषयमा तपाइको बुवा आमा / अभिभावक लाई जानकारी छ। तपाई मेरो अनुसन्धानमा भाग लिन चाहनुहुन्छ भने तपाइको आमाबुवा / अभिभावक अनुमति पनि आवश्यक छ तर तपाईलाई मेरो अनुसन्धान मा रुची छैन भने तपाईको आमाबुवा / अभिभावक को सहमति रहेता पनि तपाई यस अध्यनमा भाग नलिन सक्नुहुनेछ.

यो फारममा रहेका कुनै पनि कुरा आफ्नो आमाबुवा वा साथी वा अरु कसैसंग छलफल गर्न सक्नुहुन्छ. तपाईलाई आफ्नो निर्णय तुरुन्त दिनु पर्दैन सोच-विचार गरेर यस अनुसन्धानमा भाग लिने नलिने निर्णय गर्न सक्नुहुन्छ.

यदी तपाईलाई कुनै कुरा बुझ्न गाह्रो वा जिज्ञासा वा शोधपुछ भएमा कुनै पनि बेला मलाई बिचैमा रोकेर सोध्न सक्नुहुनेछ.

सहभागीको हस्ताक्षर ..... मिति : ....

डाटा कलेक्टरको हस्ताक्ष..... मिति: ....

यदि अनपढ भएमा

तथ्यांक (डाटा) संकलकले सम्भाबित सहभागीलाई सबै कुरा बुझाएको म साक्षि छु । सम्भाबित सहभागीले प्रश्न गर्न समेत अनुमति दिईएको छ।

सहभागीले अनुमति दिएको छ भनेर पुष्टी गर्छु

साक्षिको नाम..... सहभागी को औला छाप

सहभागीसंगको सम्बन्ध .....

साक्षि हस्ताक्षर मिति

अभिभावकको अनुमति

तपाई लाई आफ्नो बच्चा एक अनुसन्धान शीर्षक **"समुदाय स्तरमा खुट्टा अंगच्छेद भएका बिरामीहरुको पुनर्स्थापना स्थिति: भूकम्पमाबचेका, २०१५, नेपाल"** मा सहभागी हुन निमन्त्रणा गरिएको छ. कृपया तपाईले आफ्नो परिवार, साथीहरू वा अरू कसै संग यस अध्ययन बारेमा छलफल गर्न आवश्यक भय समय लिन सक्नुहुनेछ. बच्चा शामेल गराउने वा नगराउने निर्णय तपाई को हुनेछ।

यस अनुसन्धान अध्ययनमा , हामीले सहभागीहरुको वर्तमान पुनर्स्थापना स्थितिको जानकारी लिनका लागि समुदायमा शारीरिक परीक्षा, क्रियाकलाप र सहभागिता केही समावेश जो खोजिरहेका छन्।

तपाईको बच्चालाई केही प्रश्नावली दिइने छ। यो उहाँको हुनेछ / उनलाई _____ मिनेट लग्न सक्छ। तपाईलाई आफ्नो सहभागिताका लागि भुक्तानी गरिनेछ। योअध्ययनमा सहभागिता भए भौतिक चिकित्सा (फिसोयो-थेरापी) व्यवस्थापनर पछि हुन सक्ने उलझनकोरोकथामका सन्दर्भमाप्रत्यक्षलाभ उठाउनसकिन्छ।

यो अध्ययनमा आफ्नो सहभागिता स्वैच्छिक रहने छ। तपाईको बच्चाले कुनै पनि समयमा यो अध्यन स्वोतन्त्र छोड्न सक्नेछ। अध्यन छोड्ने निर्णय गरेमा कुनै पनि दण्ड वा जरीवान वा पाइरहेको सेवामा असर हुनेछैन।सोधपुछ पश्च्यात प्राप्त जानकारी उच्च गोपनीय र निजी राखिनेछ।

सबै कागजातहरूको गोपनीयता अत्यधिक कायम गरिनेछ। संकलित डाटा कहिल्यै पनि तपाईंकोअनुमति बिना पहिचान खुल्ने गरि कुनै पनि प्रस्तुतीकरण वा प्रकाशनमा प्रयोग गरिने छैन।

अभिभावक अथवा कानूनी संरक्षकको रूपमा, म _____(बच्चाको नाम) लाई यस अनुसन्धान अध्ययनमा सहभागी बन्ने अनुमति दिन्छु।

तपाईंलाई यस अध्ययनको उदेश्य सन्दर्भमा कुनै पनि थप प्रश्नहरु वा जिज्ञासा भए निसंकोच कृपया तल दिइएको ठेगानामा सम्पर्क गर्नुहोला।

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बालक/बालिका को जन्म मिति.....
अभिभावक वा कानूनी संरक्षकका हस्ताक्षर.....मिति.....
तथ्यांक (डाटा) संकलक हस्ताक्षर ..... मिति.....
यदि अनपढ भएमा

तथ्यांक (डाटा) संकलकले सम्भाबित सहभागीको अभिभावक अथवा कानूनी संरक्षकलाई सबै कुरा बुझाएको म साक्षि छु । सम्भाबित सहभागीको अभिभावक अथवा कानूनी संरक्षकले प्रश्न गर्न समेत अनुमति दिईएको छ। म सहभागीको अभिभावक अथवा कानूनी संरक्षकले अनुमति दिएको छ भनेर पुष्टी गर्दछु।

साक्षिको नाम.....
सहभागी संगको सम्बन्ध .....
साक्षि हस्ताक्षर
मिति.....

सहभागी को औला छाप

तथ्यांक (डाटा) संकलक हस्ताक्षर ..... मिति.....

सहमति सूचित

मैले सुचना पाना पढेको छु / मलाई सुचना पानाको बारेमा बताईएको छ र मलाई अनुसन्धानको बिषय बारे जानकारी गरिएकोमा छ। मैले डाटा संकलक संग अनुसन्धानको बारेमा छलफल गर्ने मौका पाएँ र मलाई सन्तोषजनक जवाफ पनि मिल्यो। म अनुसन्धानको जोखिम र लाभका बारेमा सुचित छु। म कुनै पनि समयमा अध्ययनबाट बिना कारण फिर्ता हुन स्वतन्त्र छु र वर्तमान र भबिस्यमा यसले मेरो कुनै पनि चिकित्सा सेवामा प्रभावित नहुने भन्ने कुरा समेत बुझेको छु। मलाई मेरो सबै जवाफ गोप्य राखिने जानकारी गराइएको छ।

म आफ्नो स्वेच्छाले यो अध्ययनमा भाग लिन सहमत छु।

सहभागीको हस्ताक्षर ..... मिति .....

तथ्यांक (डाटा) संकलक हस्ताक्षर ..... मिति.....

यदि अनपढ भएमा

तथ्यांक (डाटा) संकलकले सम्भाबित सहभागीलाई सबै कुरा बुझाएको म साक्षि छु । सम्भाबित सहभागीले प्रश्न गर्न समेत अनुमति दिईएको छ।

सहभागीले अनुमति दिएको छ भनेर पुष्टी गर्छु

साक्षिको नाम.....

सहभागी संग सम्बन्ध .....

साक्षि हस्ताक्षर

मितिः .....

सहभागी को औला छाप

BANGLADESH HEALTH PROFESSIONS INSTITUTE

বাংলাদেশ হেল্‌থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)

Ref. CRP-BHPI/IRB/02/16/048 *Date:* 27.02.2016

To
Binaya K C
Part – II, M.Sc. in Rehabilitation Science
Session: 2014-2015, DU Reg. No.: 265
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal – **"Rehabilitation status among lower limb amputee at community level: earthquake survivors, Nepal, 2015"** by IRB of BHPI.

Dear Binaya K C,
Congratulation!
The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application on January 21, 2016 to conduct the above mentioned thesis, with yourself, as the Principal investigator. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Thesis Proposal
2	Questionnaire
3	Information sheet & consent form

Since the study involves collecting retrospective information's 10 to 12 minutes, have no likelihood of any harm to the participants and have possibility of benefit patient with **lower limb amputee** from the information of rehabilitation status at community level of earthquake survivors in Nepal, 2015, IRB has approved the study to be conducted in the presented form at the meeting held at 08:30 AM on February 25, 2016 at BHPI.

IRB expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. IRB of BHPI is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,

S.M. Ferdous Alam
Assistant Professor
Dept. of M.Sc. in Rehabilitation Science
Member Secretary, Institutional Review Board (IRB), BHPI

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ, ফোন ঃ ৭৭৪৫৪৬৪-৫, ৭৭৪১৪০৪ ফ্যাক্স ঃ ৭৭৪৫০৬৯
CRP-Chapain, Savar, Dhaka-1343, Tel : 7745464-5, 7741404, Fax : 7745069, E-mail : contact@crp-bangladesh.org, www.crp-bangladesh.org

Government of Nepal

Nepal Health Research Council (NHRC)

Estd. 1991

Ref. No.: 1554

31 March 2016

Mr. Binaya KC
Principal Investigator
Bangladesh Health Professions Institute
Bangladesh

Ref: **Approval of Research Proposal** entitled **Rehabilitation status among lower limb amputee patients at community level: earthquake survivors, Nepal 2015**

Dear Mr. KC,

It is my pleasure to inform you that the above-mentioned proposal submitted on 17 February 2016 (**Reg.no. 51/2016** please use this Reg. No. during further correspondence) has been approved by NHRC Ethical Review Board on 30 March 2016.

As per NHRC rules and regulations, the investigator has to strictly follow the protocol stipulated in the proposal. Any change in objective(s), problem statement, research question or hypothesis, methodology, implementation procedure, data management and budget that may be necessary in course of the implementation of the research proposal can only be made so and implemented after prior approval from this council. Thus, it is compulsory to submit the detail of such changes intended or desired with justification prior to actual change in the protocol.

If the researcher requires transfer of the bio samples to other countries, the investigator should apply to the NHRC for the permission. The researchers will not be allowed to ship any raw/crude human biomaterial outside the country; only extracted and amplified samples can be taken to labs outside of Nepal for further study, as per the protocol submitted and approved by the NHRC. The remaining samples of the lab should be destroyed as per standard operating procedure, the process documented, and the NHRC informed.

Further, the researchers are directed to strictly abide by the National Ethical Guidelines published by NHRC during the implementation of their research proposal and submit progress report and full or summary report upon completion.

As per your research proposal, the total research amount is **Self-funded** and accordingly the processing fee amount to **NRs. 10,975.00.** It is acknowledged that the above-mentioned processing fee has been received at NHRC.

If you have any questions, please contact the Ethical Review M & E section of NHRC.

Thanking you,

.....
Dr. Khem Bahadur Karki
Member-Secretary

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Website: http://www.nhrc.org.np, E-mail: nhrc@nhrc.org.np