

“Quality Of Life Among Prosthesis User In Bangladesh”



By

Md. Iftikharul Hasan

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Bachelor of Science in Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
Faculty of Medicine
University of Dhaka

Project paper completed by:

Md. Iftikharul Hasan

4th year, B.Sc. in Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of the Paralysed (CRP)

Savar, Dhaka-1343

Signature

Supervisor's name, designation and signature:

Md. Mohsiur Rahman

Lecturer in Occupational Therapy,

Department of Occupational Therapy,

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of the Paralysed (CRP)

Savar, Dhaka-1343

Signature

Head of Departments name, designation and signature:

SK. Moniruzzaman

Assistant Professor & Head of the Department

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI)

Centre for the Rehabilitation of Paralysed (CRP)

Savar, Dhaka-1343

Signature

Board of Examiners

Md. Mohsiur Rahman

Lecturer in Occupational Therapy
Department of Occupational Therapy
Bangladesh Health Professions Institute
Savar, Dhaka-1343

Md. Julker Nayan

Associate Professor
Department of Occupational Therapy
Bangladesh Health Professions Institute
Savar, Dhaka-1343

Suman Kanti Chowdhury
Senior Research Investigator
icddr,b
Mohakhali, Dhaka-1212



Sk. Moniruzzaman

Assistant Professor & Head
Department of Occupational Therapy
Bangladesh Health Professions Institute
Savar, Dhaka-1343

Statement of Authorship

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The ethical issues of the study has been strictly considered and protected. In case of dissemination the finding of this project for future publication, research supervisor will highly concern and it will be duly acknowledged as undergraduate thesis.

Signature: _____

Date: _____

Md. Iftikharul Hasan
4th year, B.Sc. in Occupational Therapy

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Dedication

Dedicated to my honorable & beloved parents, my respected all teachers of Bangladesh Health Professions Institute (BHPI).

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List of Abbreviation

BHPI	Bangladesh Health Professions Institute
SPSS	Statistical Package For Social Science
WHO	World Health Organization
QOL	Quality Of Life
WHOQOL	The World Health Organization Quality Of Life
P&O	Prosthetics and Orthotics
SD	Standard Deviation

Abstract

Background: Limb is very vital part of human body. Losses of limb or amputation are increasing day by day. Patient with amputation face many difficulties use of prosthesis is helps to overcome those difficulties and improve person Quality of life (QOL). This study was focused on to find out the QOL among prosthesis user in Bangladesh.

Objectives of the study: The objectives of this paper were to find out the level of quality of life by physical, psychological, social-relationship & environmental domain. And find out the overall quality of life and satisfaction level of health.

Methodology: This cross sectional study was conducted on 40 participants within 18-55 age limits. The participants were selected from CRP savar Prosthetics and Orthotics unite. The data was collected by using World health Organization Quality of Life (WHOQOL) with combination of telephone and face-to-face interview. The data was analyzed by using SPSS.20 (Statistical Package of Social Science).

Result and Discussion: The results of the study about quality of life of prosthesis user in Bangladesh estimated that patient who use prosthesis device are more satisfied in social relationship skill then orderly psychologically , environmentally and last psychically. And most of them reported their quality of life & satisfaction about health was medium level.

Conclusion: Life changing disability like person with amputation face many challenge in their daily life. It hampers their physical, psychological, social-relationship and environment health. That's also hamper persons quality of life.

Key words: Prosthesis; Quality of life; WHOQOL; Bangladesh.

1.1: Introduction

Limbs are very vital part of human body. But unfortunately because of illness or trauma loss of this limb or partial limb is called Amputation. Amputation leads to a permanent disability and brings many difficulties and limitation people's everyday life. It hampers persons Quality Of Life (QOL). It is found that persons with amputation who use prosthesis device for functional or cosmetic purpose were more satisfied in psychologically than physical (Sinha, van den Heuvel, & Arokiasamy, 2011).

The Amputee Coalition of America estimates that there are 185,000 new lower extremity amputations occurs each year just within the United States and also reported that there are nearly 2 million people living with limb loss in the United States (LLC,2012). The ratio of upper limb to lower limb amputation is 1:4. Around 30% of USA amputee patient have lower limb loss and 10% upper limb loss patient (ISHN, 2014). African-Americans are up to four times more likely to have an amputation than white Americans. The combination of India & Bangladesh population almost 1.4 billion and more than 9 million persons with mobility related disabilities who need for prosthetics and orthotics services (Cochrane, 2015). In 1986 national sample survey in India found that among 40% of locomotors disability and there are 8% amputation that's means the prevalence of amputees in India are 0.62 per 1000 population (Mohan, 1986).

According to World Bank Group, the prevalence of the person with disability of Bangladesh is about 10%. Other survey shows that between 9%-16% people are living with disability in Bangladesh (Desibility, 2012). The World Health Organization (WHO) has estimated that in low-income countries like Bangladesh, about 0.5% of the population is in need of Prosthetic and Orthotic (P&O) mobility device (CRP, 2014-15). Another source reported that about 0.7 percent of total population in any low income countries needs orthotics and prosthesis services per year. That means in Bangladesh more than 1 million people need prosthesis and Orthosis services per year (Revive Bangladesh, 2016). Now a day's accident rate road or work station is increase rapidly. According to Road accident and casualties

statistics 2009-16 in year 2014-15 there 4421 accident occur & 3493 were injured. It is the one of the main causes of amputation in Bangladesh (Bangladesh open data).

Because of amputation persons faces difficulties in activity of daily life such as self-care, productivity and leisure. Mobility is one of the biggest limitations for person with amputation. Without mobility activities like education, social participation and livelihood activities are more difficult. They become jobless that's why they have no income (Jarnhammer, et al., 2017) and hampered their quality of life. In 2011 CDD estimated that persons with disabilities are experience higher unemployment and have lower earnings than people without disabilities. To improve QOL rehabilitation is essential but the opportunity of rehabilitation is very little. One study estimated that only 7.3% of amputee patient received rehabilitation services (Jang et al., 2011).

1.2: Significance & Justification:

Person with amputation experience many difficulties to maintain their daily life. The QOL is depended on some domain such as- physical, psychological, environmental & social relationship (WHOQOL). So the researcher explains the level of QOL in different domain.

This study will help to understand the difficulties that prosthesis user's face in physical, psychological, social & environmentally in their QOL. This study is also helpful for health professionals who work for the rehabilitation program such as physical therapist, social workers, psychologist to provide service effectively against difficulties that face prosthesis user. Now a day's accident rate road or work station is increase rapidly. Huge number of people lost their limbs & lost their job. It impact their daily life so in this study try to find out the impact of using prosthesis device for their quality of life.

There is no study has been found with sufficient information that explains the quality of life for person with amputation using prosthesis device in Bangladesh. It can be hoped that a resources will developed about prosthesis device user by completing this study. The researcher is very interested in this area.

The result of this study also inspire Occupational therapy (OT) to provide their service as member of rehabilitation of prosthesis user team by environmental modification, work simplification, psychological support for better QOL of prosthesis user.

1.3: Operational definition

Prosthesis device: The replacement of missing body parts after amputation in broader terms called 'prosthesis' Prosthesis also called a prosthetic limb, artificial limb.

Orhotics: Orthotics is the device that deals with the support of weak or ineffective joints or muscles using supportive braces and splints.

Quality of life: The WHO defines QOL as “an individual’s perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns” (WHO, 2017).

2.1 Amputation

Amputation could be described as the removal of a body extremity by surgery or trauma. It may be done to treat injury, disease, or infection. It can be easily define as amputation is loss of all or part of a limb or extremity such as an arm, leg, foot, hand, toe, or finger (WebMD, 2017). Loss of limbs always creates of limitation to perform daily living activities makes the person dependent. Artificial limbs may make the person independent especially in mobility and help the person back to work (Revive Bangladesh, 2016). Person with amputation always treat as burden for individuals even families, and society. A Nepalian study said that amputee patient face difficult to finding employment and vocational training that's why they become depended upon others. This limited ability creates negative self-image (Jarnhammer et al., 2017). A study on Malaysian people with amputee about their Quality of life reported that patient who use prosthesis device are more satisfied in psychologically than orderly social, environmental and last physically (Razak et al., 2016).

2.2: Reason of amputation

The most common causes of disability are chronic diseases (Diabetes, cardiovascular disease and cancer). Injuries (traffic accident, fall, violence, work place accident).(CDD,2011). The accident rate of the Bangladesh is increasing day by day. In recent year several numbers of tragedies happen and huge number of people died (Rana plaza, Tazreen fashion's) & many people lose limbs. According to Bangladesh road transport authority (BRTA) In year 2013-14 there 4421 accident occur and injured patient are 3493 and almost 2430 are death (reported accident only). The World Health Organization reported that Bangladesh has chaotic traffic & poor safety.

There also has reason/ causes of amputation that's are: (webMD, 2017)

- Peripheral arterial disease (poor circulation of blood). In USA 54% amputation happens for this. (Amputee coalition, 2011)

- Severe injury (road traffic accident, burn). 45% amputation happen in USA
- Cancerous tumor in the bone or muscle of the limb
- Diabetes: About 26 million Americans have diabetes, and an estimated 65,000 had a lower limb amputation in 2006, (Narton, 2011).
- Serious infection that does not cure with antibiotics or any other treatment.
- Congenital defect: congenital limb deficiency in 1996 was 25.64 per 100,000 live births in USA (ISHN, 2014).

2.3: Types of amputation (according to Serious Law, 2017)

There are two main categories of amputation

- Traumatic amputation
- Surgical amputation (serious)

Traumatic amputation: It refers to the way in which the amputation has occurred. Ex: violent, road traffic accident, explosions or blast injuries, Electric Shocks.

This traumatic amputation is an incredibly dangerous and often life-threatening situation.

Surgical amputation: A vital practice in medicine for thousands of years though the frequency of this type of amputee has been diminished as medicine has advanced. Ex. Complications of blood vessels.

The medical team try to save as much of the injured limb as possible from further damage.

Beside this the level of amputation is usually named by the joints to the major bones through which the amputation has been made.

2.4: Prosthesis:

Though natural limbs are irreplaceable, artificially made device are substitute of natural limb (Woodford, 2018). Prosthesis also called a prosthetic limb, artificial limb, or limb-replacement. The replacement of missing body parts after amputation in broader terms called 'prosthesis'. Prosthesis is made artificially that used to restore body functions. Annual report of CRP 15-16 reported that CRP successfully delivered 211 lower limb prostheses and 14 upper limb prostheses device. Person with disabilities in low-income countries have the right to personal mobility and available affordable assistive technology, such as prosthetic and orthotic services, according to the Convention of Rights of Persons with Disabilities (CRPD). (Magnusson, & Ahlstrom, 2017). The historical record shows that the use of prosthetic device was in the time of Greek and Roman. One Roman general lost his right hand in second Punic War at about 218-210 B.C. He used a prosthesis hand. Other records has a prosthesis foot that was 3000 years old that found in a Egyptian Mommy.(Clements, 2017). After middle of 1500 and then the prosthesis become develop and still developing day by day. (Norton, 2007).

Types of prosthesis device: (comprehensive prosthetics & Orthotics, 2017)

Prosthetics can be classified into three major categories that are: cosmetic prosthesis, body-powered prosthesis, and myoelectric externally powered prosthesis. (LeTourneau, 2009)

Cosmetic prosthesis:

This type of prosthesis is designed to be purely cosmetic purpose and has little or no function. Ex. Artificial hands often fall into this category. This type of prosthetic is designed for people who want to use their other limbs (natural limbs) for most major functions. (Woodford, 2018).

Body-powered (Mechanical) Prosthesis:

Body-powered devices are operated using cable and harness systems that require the patient to use body movements (moving the shoulders or the arm,) to pull the cable and move the terminal device (a hand, hook or prehensor) open or close much in the way a bicycle handbrake system works (CPOUSA, 2017). Patient use the body powered device because it take lower cost. It is lighter, easier to repair, offer better tension feedback to the body. But it is difficult to use.

Myoelectric (externally powered) Prosthesis:

The myoelectric externally powered prosthesis picks up the electrical action potential in the residual muscles in the amputated limb. This type of prosthesis get power by rechargeable battery and give the electric signals to activate the motor to response the action. However this device is heavier and more expensive than the other two types. But this is the most advanced and effective prosthesis available for upper limb.

Type of prosthesis limb:

Types of prosthesis limb are generally named by amputee level or the part of the body that they are need to replace. (Woodford, 2016).

- Partial foot prosthesis
- Below the knee (BK, transtibial)
- Above the knee (AK, transfemoral)
- Partial hand prosthesis
- Below the elbow (BE, transradial)
- Above the elbow (AE. transhumeral)

Purpose of use prosthesis device:

Advanced technologies, environmental, social, and economic factors have led to considerable improvements in prostheses device. The prime objective for any prosthesis is to provide function in a comfortable manner. Prosthesis device helps the person with amputation to return his ability to move, do something independently and

make the person functional. Prosthesis device also decrease the negative self-image that results for the amputee.

Orthotics:

Orthotics is the device that gives support of weak joints or muscles using braces and splints. The needed of orthosis to reduce pain or to provide support to an extremity that has lost function due to damage to bones, ligaments, nerves or muscle. (CRP, 2014). Ex: upper-limb orthoses, forearm-wrist orthoses, hand orthoses (hand splint). Foot orthoses (FO), ankle-foot orthosis (KFO) etc. In 2015-16 year CRP team provided 1348 orthoses device.

2.5: Quality of life:

Quality of life is a global measure, broader than health status, inherently subjective and relates to all aspects of life (Megari, 2013). Individual and societies general wellbeing is known as QOL. It is consists of some component like wealth and employment, healthy environment, physical and mental health, education, recreation, leisure time and social relationships (Summers et al., 2012).

Physical Health:

“Physical health as a state of physical well-being in which an individual is mechanically fit to perform their daily activities and duties without any problem” (Koshuta, 2017).

Psychological health:

“Mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (WHO, 2014).

Environmental health:

Environmental health comprises those aspects of human health, including QOL, that are determined by physical, chemical, biological, social and psychosocial factors in

the environment. It also refers to the theory and practice of assessing, correcting, controlling and preventing those factors in the environment that can potentially affect adversely the health of present and future generations (WHO, 2014).

Social relationship:

In social science, a social relation or social interaction is any relationship between two or more individuals. Social relations derived from individual agency form the basis of social structure and the basic object for analysis by social scientists (Alleydog, 2017).

2.6: WHOQOL:

The World Health Organization Quality of Life (WHOQOL) assessments developed by the WHOQOL group with more than 30 Language are available. This WHOQOL-BREF has 26 questionnaires with effective cross-cultural assessment of QOL with good to excellent psychometric properties of reliability and validity. (WHOQOL-BREF, 1996). The WHOQOL has 4 domain Physical Health, Psychological, Social Relationships, and Environment that represent each aspect of the life and how problematic or satisfactory. The **Physical Health domain** includes questions pertaining to sleep, energy, and mobility. The **Psychological domain** focuses on the ability to concentrate, self-esteem, body image, spirituality. the frequency of positive or negative feelings. The **Social Relationships domain** includes questions pertaining to satisfaction with personal relationships, social support systems and sexual satisfaction. & the **Environment domain** includes questions related to safety and security, home and physical environment satisfaction, finance, health/social care availability, information and leisure activity accessibility, transportation satisfaction (Skevington et al., 2004). These questions include five point response categories for QOL: “very poor”, “poor”, “neither poor nor good”, “good” and “very good” and for Satisfaction with Health: “very dissatisfied”, “dissatisfied”, “neither satisfied nor dissatisfied”, “satisfied” and “very satisfied”.

The time taken to complete the WHOQOL-100 will depend on several factors: whether it is self-administered or interviewer-administered, the motivation of the respondent, the language version of the WHOQOL-100 used, and familiarity with questionnaires in the cultural setting. Literate respondents would be expected to complete the self-administered version in approximately 30 minutes. Working with

semi-literate or illiterate respondents, the interview administered form of the WHOQOL-100 would be expected to take between 40 and 90 minutes. (the WHOQOL group, 1996). On the other hand a study in Taiwan in 2003 shows that In the case of self-administered takes 10.6 minutes (three items in a minute) and interviewer-administered takes 15.3 minutes (two items). The interviewer-administered was apply for the case of illiterate and old people. (Hwang, 2003).

2.7: Orthosis and prosthesis service in Bangladesh

A small number of workshops and technicians are graduate of various international programs are believed prosthesis service in Bangladesh. Local experts indicated that most services are delivered through non-governmental organizations it's also a factor that prosthetics & orthotics services do not appear to be any regulatory bodies governing either education or service delivery for P&O. Through Bangladesh have no known lists of service providers exist. There not seem to be prosthetic and orthotic services available in government run hospitals and no national referral centers were providing prosthetic and orthotic services at the time of the study (Cochrane et al., 2015). According to the Centre for the Rehabilitation of the Paralyzed (CRP), only 25 people in the country have international certification to produce artificial limbs, braces, and splints (Mahmud, 2016)

Prosthetic and orthotic services are limited in low-income countries. A Study found that only three departments offering prosthetic and orthotic service in Bangladesh (Cochrane et al., 2015) that's are:

1. Center for the Rehabilitation of the Paralyzed (CRP), Savar Dhaka
2. Center for Disability in Development(CDD), Dhaka
3. BRAC (formerly Bangladesh Rural Advancement Committee), Dhaka

CRP introduction: CRP's journey began in 1979 in order to meet the desperate needs of People with Disabilities. (CRP, 2015-16). CRP provides medical treatment, rehabilitation and support services focusing on physical, emotional, social, psychological and economic aspects. It promotes the development of skilled in health care and rehabilitation in the country. CRP has developed centers in different parts of

the country to expand the services for disabled people in collaboration with other organizations. It promotes empowerment of disabled people through community based services, advocacy and networking on disability issues and empowerment of disabled girls and women. CRP also raises awareness on disability issues nationally, regionally and internationally. The P&O department of CRP is providing service since 2003. In 2013-16 CRP provide nearly 700 prosthesis devices.

Center for Disability in Development(CDD): CDD works in partnership with a network of over 350 organizations both nationally and internationally. The Centre for Disability in Development (CDD) is a not for profit organization established in 1996 to develop a more inclusive society for persons with a disability. CDD produces and supplies thousands of different assistive devices to help persons with disabilities to become more mobile and independent, such as wheelchairs, artificial limbs, hand splints and visual and hearing aids.

BRAC (formerly Bangladesh Rural Advancement Committee): BRAC creating opportunities for people living in poverty to realize their potential. They pilot, perfect and scale innovation to impact the lives of millions. The approach is comprehensive, from operating the largest secular private education system in the world to the largest NGO-led legal aid programme in the world. The BRAC are almost completely self-sustainable in Bangladesh through our own network to development programmers, At the BRAC Limb and Brace Fitting Centre successfully provide 2,836 artificial limbs since 2008. In Rana plaza Tragedy BRAC provide 12 prosthetic limb to the survivors (BRAC annual report 2013)

Other:

National Institute of Traumatology and Orthopaedic Rehabilitation (NITOR): Pongu Hospital In Sher-E-Bangla Nagar. 2013 Frokash Bhandari leading the camp 500 articial limbs. (The independent, 2016)

Others some organization they provide prosthesis device but small amount:

- Easy Life (Dhaka)
- Revive Bangladesh(Dhaka)
- Impact foundation Bangladesh(Dhaka).

This chapter presents the methods and material used in the study. The methodology of the study was discussed about the following parts: study design, setting, sampling, variables, data collection method and tools, data analysis plan and ethical consideration.

3.1: Research Question

How is the Quality of life of prosthesis user in Bangladesh?

3.2: Study aim and specific objective

Aim:

- ✓ The purpose of this study is to know the quality of life among the person with amputation who use prosthesis device.

Specific Objectives:

- ✓ To explore the socio-demographic characteristics of the study population.
- ✓ To find out the patterns of QOL of prosthesis device on four domains (physical health, psychological health, social-relationship & environmental health).

3.3: Study design:

Study design guides in planning and implementing the process of study in a scientific way to achieve a desire objective. The study is a cross sectional study which was conduct over a short period of time to identify the quality of life among person with amputation who are using prosthesis device in Bangladesh. Cross sectional studies are used to determine prevalence and multiple outcomes. This type of study is relatively quick, cheap and easy to conduct. Cross sectional study allow to collected data by an interview with multiple outcomes from every individual at one point of time and then

analysis the outcome (Mann, 2003). Cross-sectional studies provide a ‘snapshot’ of the characteristics associated with subjects, at a specific point in time and only one group can be used (Alexander et al, 2014 & Dental secrets, 2015). So the researcher used Cross sectional study for conducting this study.

3.4: Study population

40 participants were selected 30 male and 10 female.

3.5 Study setting

Data was collected form 7 (seven) division of Bangladesh by phone interview and face to face interview. The patient list was collected form the Center for the Rehabilitation of the Paralysed (CRP), Savar Dhaka. P&O service in Bangladesh is not so available. There are only few organization provide prosthesis device all over Bangladesh CRP is one of them. From 2003 CRP provide P&O service & the person with amputation come here for prosthesis device from all over the Bangladesh.

3.6: Study period

The study was conducted from December 17 to April 18.

3.7: Sample size

As there was no data has been found about prevalence of prosthesis user in Bangladesh. The researcher used p= 50% prevalence (0.5) & if 95% confidence interval z= 1.96 (confidence level), q= (1-0.5) = 0.5 & d=0.05%.

According to this formula: $n = \frac{z_{\alpha}^2 pq}{d^2} = 384$ participants

Here, n = required sample size. z= confidence level. p = prevalence of prosthesis user in Bangladesh. q= (1-p) and d= margin of error.

If researcher will use this standard measurement to find out the sample size, it would be 384. Though it is an academic research, data collection period was 2 months. Within two months 384 participant’s data collection was practically not possible. For

this reason research was collected data from 40 participant including both male (30) and female (10) from CRP savor 2015-17 patient list who were separated all Bangladesh

3.8: Inclusion and exclusion criteria

Inclusion criteria:

- ✓ Person with amputation who used prosthesis device minimum 4 months
- ✓ Person with amputation age above 18 to 60 according to questionnaire requirement.
- ✓ In case of emergency, if a patient is unable to give the data then we will collect data from their primary care-giver with permission of the patient.

Exclusion criteria:

- ✓ Patients with any type of mental or neurological conditions.
- ✓ Patient who have more than one amputation or use other orthosis device.
- ✓ Communication likes speech and language disorder, they may not be able to provide information appropriately.

3.9: Sampling techniques

Total list of 211 people who take prosthesis device from CRP savor in all 2015-16 was initial participants. Among them 115 as selected through initial screening. From those 115 prosthesis user 40 were selected as participant. Phone number found not valid of 27 people. 42 were not matched with inclusion criteria and six were not interested to participant in the study.

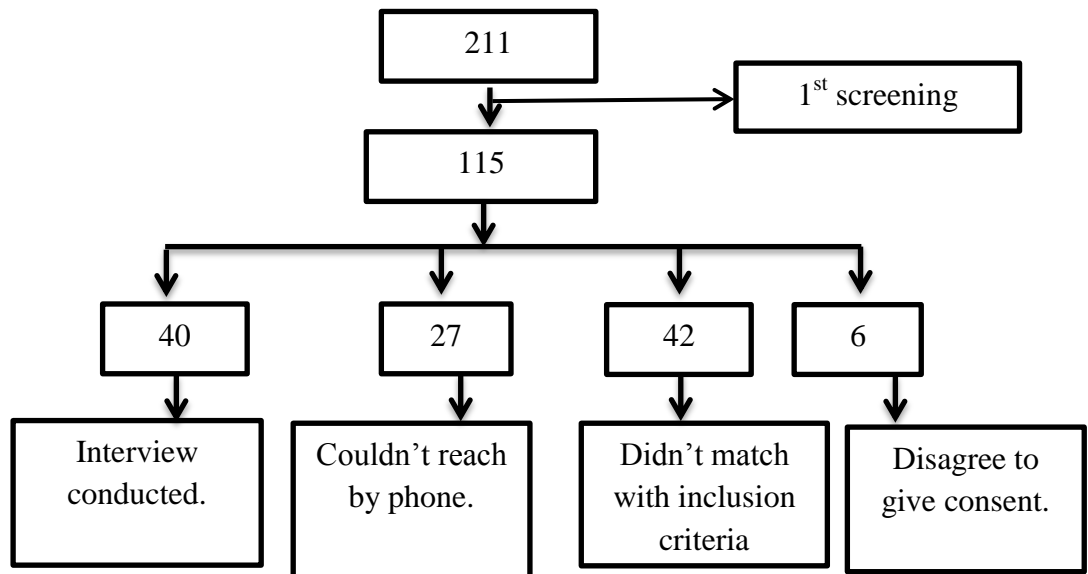


Fig 1: Study Sample selection flow chart

3.10: Data collection Tools / Materials

- Consent form
- Self-prepared socio demographic questionnaire
- World Health Organization Quality of Life Questionnaire (WHOQOL-BREF).
- Phone with recorder.

3.11: Data collection method:

Telephone interview: A telephone survey is a systematic collection of data from a sample of population using a standardized questionnaire where the researcher readout the Questionnaires and the answer. Symptoms of PTST, violence & Quality of life can be assessed by self-reported questionnaires at intake (Rosen et al., 2013). Telephone surveys have traditionally been conducted by landline telephone. However nowadays cell phone reached most of the persons hand. In Bangladesh there 43 million people use cellphone (BTRC, 2017). Telephone interviews are suitable the participant resides in a geographically distant location (Rohde, Lewinsohn, Seeley., 1997). The first mobile telephone survey at the national level was conducted in 2003 by Georgia state university as part of a mode compression study after that 2004 &

2006 the process of telephone survey will updated and changed to become slanted data collection tools for not only telephone but also mobile phone. (Lepkowski, 2007)

Time duration of telephone interview: Lack of information that describe the accurate duration of telephone survey. Different source estimated different source. Few source estimated that it will be not more than 15 minutes other said 15-30 minutes. A study on telephone monitoring and support after discharge from residential PTSD treatment state that their average call length was 16.4 ± 10.8 minutes (Rosen et al., 2013). The actual time of telephone interview is 20-25 minutes (5 minute to explaining about researcher, 5-10 minute for explain questions from, 10-15 minutes for Questioning). For this study telephone interview takes 13-18 minutes.

Consent process of telephone interview: Before collecting data permission was taken from the In-charge of Orthotic and prosthesis department and collected the patient details who took prosthesis device. For conducting telephone interviewers researcher first introduces himself & explain the aim of this study and the process of the questionnaires. Researcher follows fixed script to explain the study purpose. Researcher also asked specific set of questionnaire and the option of that. Total time of the conversation had been recording by same software. Researcher also ensures that participants should not be harmed and data would be keep confidence.

Time taken to complete the WHOQOL: This study participant need 13-18 minute (interviewer-administered) to complete the WHOQOL questionnaires in telephone interview and need 15-22 minute to in face to face interview (self-administered).

Data collection process: In both face to face interview & telephone interview the researcher explained the study aim and purposes to the participants before collecting data. They had the opportunity to ask questions related to the study and if they are interested to participate in the study. Verbal, recorded or written consent of the participant were taken as evidence. For the participants who were unable to read researcher was helped them. Once consent was received the researcher collected data through close structured questionnaires. The telephone interview was conducted for the participant from very remote areas (CFR, 2016).

3.12: Data analysis process

SPSS is suitable for analysis the Quantitative data. Nominal, Ordinal, & Scale data can be input in SPSS and able to analysis those data in different way. Researcher input the data in statistical package for social science (SPSS) software 20.0 versions. The researcher used statistical analysis to prosthesis user's physical, psychological, social and environmental effects to their quality of life. So researcher used this SPSS to fulfill the objectives.

3.13: Quality control and quality assurance

The WHOQOL-BREF is a reliable and valid questionnaire. It is good at find out quality of life in long lasting diseases or disability that effect on person's everyday life. On the other hand, WHOQOL-BREF questionnaire was not translated manually, the authority has shared readymade translated Bangla version & previously this Bangla version used successfully.

Accuracy:

The researcher was conducted study in a rigorous manner or trustworthiness. All of the steps in the research process supervised by an experienced supervisor. During the interview and analysis of data, researcher was not try to influence the process by his biases, values or own perspectives. During the interview the researcher didn't interrupted the participants during answering questions. Data were collected carefully & the researcher would accept answers of the participants whether they will deliver. In the result section, the researcher did not influence the outcome by showing any personal interpretation.

3.14: Ethical consideration

Ethical considerations were implemented to avoid ethical problem. The researcher took permission from Institutional Review Board (IBR), research supervisor and head of the department of Occupational Therapy of BHPI, and the Prosthetics and Orthotics department. All permission documents were attached as appendix. A written consent in case of face to face interview and verbal voice recorded consent for telephone interview

was taken from each participant who was interested to participate in the study. The researcher was ensured them that confidentiality of personal information would be strictly maintained. The researcher also ensured the participant had the right to leave the study when he/she wants.

This section provides statistical analysis in a systematic way and interpretation of analyzed findings with the aim and objectives of the study. The aim of the study was to find out the quality of life among prosthesis user in Bangladesh by domain of physical health, psychological health, social relationship and environmental health. Findings of the study are presented by table and bar chart.

4.1: Socio-demographic characteristics of the prosthesis users

Distribution of the respondents by age (n=40):

The age of the participant between 18 to 60 years but above 57 there was no participant found. Among those 40 participants about 40% (n=16) were 18 to 27 age group, 35% (n=14) respondents were 28 to 37 age group, 20% (n=8) were between 38 to 47 age group, 5% (n=2) respondents were 48 to 57 age group.

Distribution of the respondents by sex (n=40):

Among 40 participants maximum were male 75% (n=30) and 25% (n=10) participants were female.

Distribution of the respondents by home district: n=40

Participants were selected from 7 (seven) division of Bangladesh. Among 40 participants 25% (n=10) lives in Dhaka, 12.5% (n=5) lives in Khulna, 15% (n=6) lives in Rajshahi, 12.5% (n=5) lives in Barisal, 15% (n=6) lives in Chittagong, 12.5% (n=5) lives in Rangpur and 7.5% (n=3) lives in Sylhet.

Distribution of the respondents by Educational level: n=40

Among 40 participants 10% (n=4) are illiterate, 40% (n=16) were up to primary completed, 25% (n=10) were up to secondary completed, 25% (n=10) were above secondary.

Distribution of the respondents by Occupation: n=40

Among 40 participants 5% (n=2) were housewife, 7.5% (n=3) were student, 37.5% (n=15) were service holder, 27.5% (n=11) were business, 17.5% (n=7) were unemployed and other occupation were 5% (n=2).

Distribution of the respondents by marital status: n=40

Among 40 participant 70% (n=28) were married and 30% (n=12) were unmarried.

Distribution of participant by monthly income:

Among 40 participant one participant refused to talk about his monthly income. So total 97.5% of responds participant 30% (n=12) participant has no income at all, 52.5% (21) has little income. 10% (n=4) income above 10000 & only 5% (n=2) has above 20000 income.

Distribution of participant by Interview Type:

Among 40 participant 62.5%(n=25) were conduct in telephone interview and 37.5% (n=15) were conduct in face to face interview. For those interview researcher called 115 number and response rate was 34.8%.

Distribution of the respondents by use of prosthesis: n=40

Among 40 participant 92.5% (n=37) has lower limb prosthesis and 7.5% (n=3) has upper limb prosthesis.

Table: **Demographic characteristics of prosthesis user at a glance.**

		Frequency (n)	Percent
Age	18-27 years	16	40.0%
	28-37 years	14	35.0%
	38-47 years	8	20.0%
	48-57 years	2	5.0%
	Total	40	100.0%

		Frequency	Percent
Sex	Male	30	75.0%
	Female	10	25.0%
	Total	40	100.0%
		Frequency	Percent
Home	Dhaka	10	25.0%
	Khulna	5	12.50%
	Rajshahi	6	15.0%
	Barishal	5	12.50%
	Chittagong	6	15.0%
	Rongpur	5	12.50%
	Sylhet	3	7.0%
	Total	40	100.0%
		Frequency	Percent
Occupation	Housewife	2	5.0%
	Student	3	7.50%
	Service holder	15	37.50%
	Business	11	27.50%
	Unemployed	7	17.50%
	Other	2	5.0%
	Total	40	100.0%
		Frequency	Percent
Educational Background	Illiterate	4	10.0%
	Up to primary completed	16	40.0%
	Up to secondary completed	10	25.0%
	Above secondary	10	25.0%
	Total	40	100.0%
		Frequency	Percent
Marital Status	Unmarried	12	30.0%
	Married	28	70.0%
	Total	40	100.0%
		Frequency	Percent
Prosthesis	Upperlmb Prosthesis	3	7.50%
	Lower limb Prosthesis	37	92.50%
	Total	40	100.0%
		Frequency	Percent
Interview type	Telephone interview	25	62.50%
	Face to face interview	15	37.50%
	Total	40	100.0%

		Frequency	Percent
Monthly Income	No income	12	30.0%
	1000-10000	21	52.50%
	11000-20000	4	10.0%
	21000-50000	2	5.0%
	Total	39	97.50%
Missing	System	1	2.50%
Total		40	100.0%

Table 1: Demographic Characteristics of the participant

4.2: Rate of Quality of life: (participant reported)

In case of overall quality of life among prosthesis users of Bangladesh (n=40), only 2.50% (n=1) participant had very good QOL and 7.50% (n=3) had good quality of life whether most of the participant 72.50% (n=29) reported neither poor or good QOL. 12.50% (n=5) participant reported poor QOL and 5% (n=2) participant reported very poor QOL. However majority of the participant had a very poor and poor QOL (Figure 2).

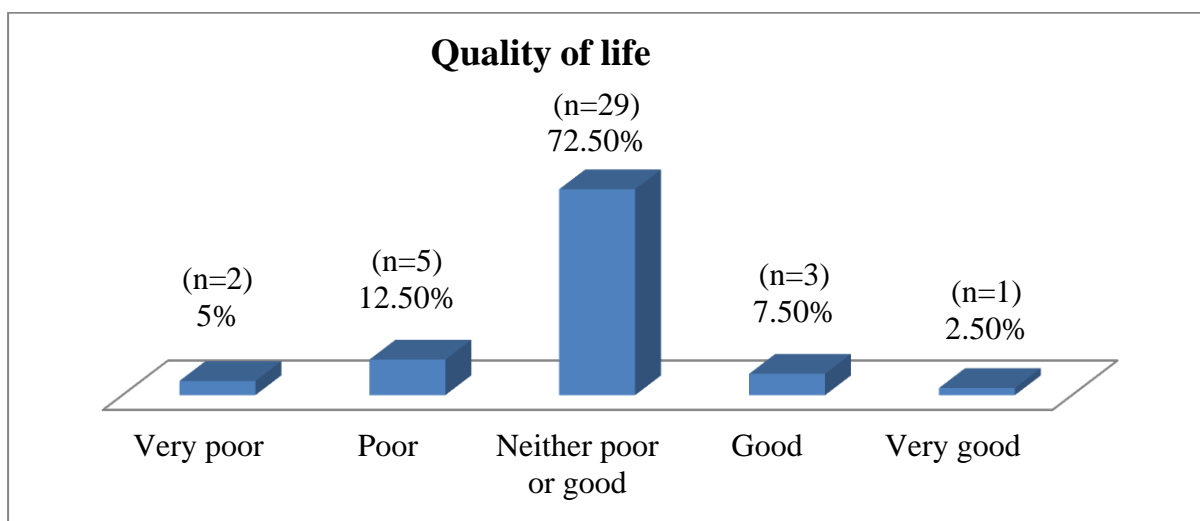


Fig: 2: Rate of participant's Quality of life

Table: Overall Quality of life for person who use prosthesis device.

			Rate of participant's QOL				
			Very poor	Poor	Neither poor nor good	Good	Very good
Age	18-27 years	Count (n)	0	3	10	2	1
		Percent	0.0%	18.8%	62.5%	12.5%	6.2%
	28-37 years	Count (n)	1	1	11	1	0
		Percent	7.1%	7.1%	78.6%	7.1%	0.0%
	38-47 years	Count (n)	1	1	6	0	0
		Percent	12.5%	12.5%	75.0%	0.0%	0.0%
	48-57 years	Count (n)	0	0	2	0	0
		Percent	0.0%	0.0%	100.0%	0.0%	0.0%
Total	Count (n)	2	5	29	3	1	
	Percent	5.0%	12.5%	72.5%	7.5%	2.5%	
Sex	Male	Count (n)	0	4	22	3	1
		Percent	0.0%	13.3%	73.3%	10.0%	3.3%
	Female	Count (n)	2	1	7	0	0
		Percent	20.0%	10.0%	70.0%	0.0%	0.0%
Total	Count (n)	2	5	29	3	1	
	Percent	5.0%	12.5%	72.5%	7.5%	2.5%	
Home	Dhaka	Count (n)	0	1	9	0	0
		Percent	0.0%	10.0%	90.0%	0.0%	0.0%
	Khulna	Count (n)	0	0	5	0	0
		Percent	0.0%	0.0%	100.0%	0.0%	0.0%
	Rajshahi	Count (n)	0	2	4	0	0
		Percent	0.0%	33.3%	66.7%	0.0%	0.0%
	Barisal	Count (n)	1	0	3	1	0
		Percent	20.0%	0.0%	60.0%	20.0%	0.0%
	Chittagong	Count (n)	0	1	3	1	1
		Percent	0.0%	16.7%	50.0%	16.7%	16.7%
	Rangpur	Count (n)	1	1	2	1	0
		Percent	20.0%	20.0%	40.0%	20.0%	0.0%
	Sylhet	Count (n)	0	0	3	0	0
		Percent	0.0%	0.0%	100.0%	0.0%	0.0%
Total	Count (n)	2	5	29	3	1	
	Percent	5.0%	12.5%	72.5%	7.5%	2.5%	
Occupation	Housewife	Count (n)	1	0	1	0	0
		Percent	50.0%	0.0%	50.0%	0.0%	0.0%
	Student	Count (n)	0	1	1	1	0
		Percent	0.0%	33.3%	33.3%	33.3%	0.0%
	Service	Count (n)	0	2	12	1	0
		Percent	0.0%	33.3%	100.0%	33.3%	0.0%

	holder	Percent	0.0%	13.3%	80.0%	6.7%	0.0%
	Business	Count (n)	0	1	10	0	0
		Percent	0.0%	9.1%	90.9%	0.0%	0.0%
	Unemployed	Count (n)	1	0	4	1	1
		Percent	14.3%	0.0%	57.1%	14.3%	14.3%
	Other	Count (n)	0	1	1	0	0
Percent		0.0%	50.0%	50.0%	0.0%	0.0%	
Total	Count (n)	2	5	29	3	1	
	Percent	5.0%	12.5%	72.5%	7.5%	2.5%	
Educational level	Illiterate	Count (n)	0	1	3	0	0
		Percent	0.0%	25.0%	75.0%	0.0%	0.0%
	Up to primary completed	Count (n)	0	3	10	2	1
		Percent	0.0%	18.8%	62.5%	12.5%	6.2%
	Up to secondary completed	Count (n)	0	0	9	1	0
		Percent	0.0%	0.0%	90.0%	10.0%	0.0%
	Above secondary	Count (n)	2	1	7	0	0
		Percent	20.0%	10.0%	70.0%	0.0%	0.0%
Total	Count (n)	2	5	29	3	1	
	Percent	5.0%	12.5%	72.5%	7.5%	2.5%	
Marital Status	Unmarried	Count (n)	0	2	7	2	1
		Percent	0.0%	16.7%	58.3%	16.7%	8.3%
	Married	Count (n)	2	3	22	1	0
		Percent	7.1%	10.7%	78.6%	3.6%	0.0%
Total	Count (n)	2	5	29	3	1	
	Percent	5.0%	12.5%	72.5%	7.5%	2.5%	
Monthly Income	No income	Count (n)	2	2	6	1	1
		Percent	16.7%	16.7%	50.0%	8.3%	8.3%
	1000-10000	Count (n)	0	3	16	2	0
		Percent	0.0%	14.3%	76.2%	9.5%	0.0%
	11000-20000	Count (n)	0	0	4	0	0
		Percent	0.0%	0.0%	100.0%	0.0%	0.0%
21000-50000	Count (n)	0	0	2	0	0	
	Percent	0.0%	0.0%	100.0%	0.0%	0.0%	
Total	Count (n)	2	5	28	3	1	
	Percent	5.1%	12.8%	71.8%	7.7%	2.6%	

Prosthesis	Upper limb Prosthesis	Count (n)	0	0	3	0	0
		Percent	0.0%	0.0%	100.0%	0.0%	0.0%
	Lower limb Prosthesis	Count (n)	2	5	26	3	1
		Percent	5.4%	13.5%	70.3%	8.1%	2.7%
Total		Count (n)	2	5	29	3	1
		Percent	5.0%	12.5%	72.5%	7.5%	2.5%
Interview type	Telephone interview	Count (n)	2	1	20	2	0
		Percent	8.0%	4.0%	80.0%	8.0%	0.0%
	Face to face interview	Count (n)	0	4	9	1	1
		Percent	0.0%	26.7%	60.0%	6.7%	6.7%
Total		Count (n)	2	5	29	3	1
		Percent	5.0%	12.5%	72.5%	7.5%	2.5%

Table 2: Overall Quality of life of prosthesis user

4.3: Level of Satisfaction about health (participant reported)

This figure shows the degree of patient's satisfaction about their health after using prosthesis device among participant (n=40), 5% (n=2) participant was very satisfied, two participant each 2.50% (n=1) reported dissatisfied and very dissatisfied about their health. However most of the participant 55% (n=22) participant was neither satisfied nor dissatisfied and 35% (n=14) participant reported they were satisfied about their health, show in (Figure 3).

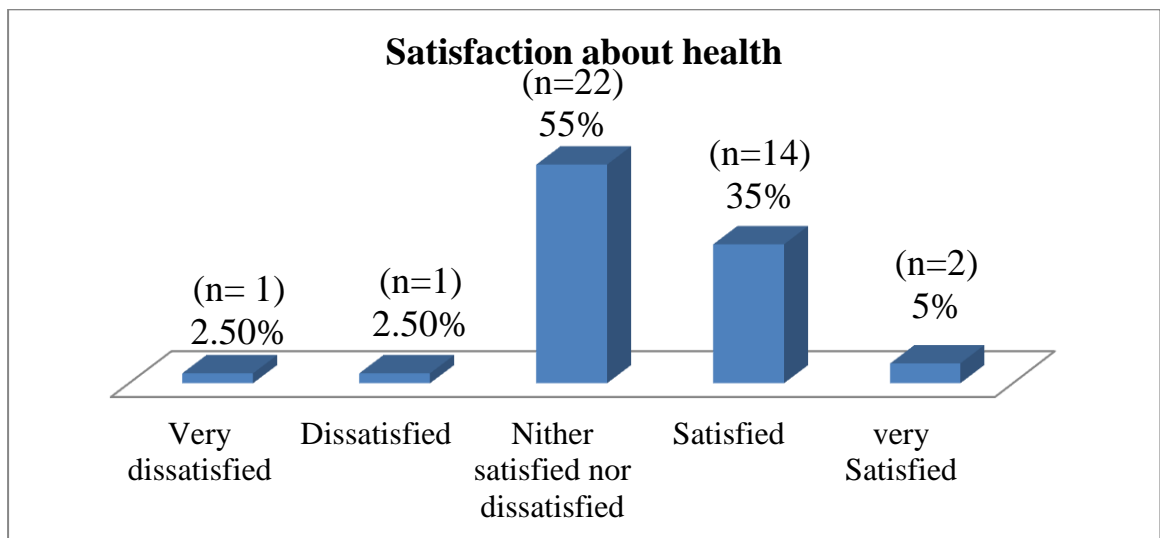


Fig: 3: Satisfaction about health

Table: Level of health satisfaction among prosthesis user.

			How satisfied are you with your health				
			Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Age	18-27 years	Count (n)	0	1	7	7	1
		Percent	0.0%	6.2%	43.8%	43.8%	6.2%
	28-37 years	Count (n)	0	0	8	5	1
		Percent	0.0%	0.0%	57.1%	35.7%	7.1%
	38-47 years	Count (n)	1	0	5	2	0
		Percent	12.5%	0.0%	62.5%	25.0%	0.0%
	48-57years	Count (n)	0	0	2	0	0
		Percent	0.0%	0.0%	100.0%	0.0%	0.0%
Total	Count (n)	1	1	22	14	2	
	Percent	2.5%	2.5%	55.0%	35.0%	5.0%	
Sex	Male	Count (n)	0	0	16	12	2
		Percent	0.0%	0.0%	53.3%	40.0%	6.7%
	Female	Count (n)	1	1	6	2	0
		Percent	10.0%	10.0%	60.0%	20.0%	0.0%
Total	Count (n)	1	1	22	14	2	
	Percent	2.5%	2.5%	55.0%	35.0%	5.0%	
Home	Dhaka	Count (n)	0	0	6	3	1
		Percent	0.0%	0.0%	60.0%	30.0%	10.0%
	Khulna	Count (n)	0	0	4	0	1
		Percent	0.0%	0.0%	80.0%	0.0%	20.0%
	Rajshahi	Count (n)	0	0	1	5	0
		Percent	0.0%	0.0%	16.7%	83.3%	0.0%
	Barisal	Count (n)	1	1	2	1	0
		Percent	20.0%	20.0%	40.0%	20.0%	0.0%
	Chittagong	Count (n)	0	0	2	4	0
		Percent	0.0%	0.0%	33.3%	66.7%	0.0%
	Rangpur	Count (n)	0	0	4	1	0
		Percent	0.0%	0.0%	80.0%	20.0%	0.0%
	Sylhet	Count (n)	0	0	3	0	0
		Percent	0.0%	0.0%	100.0%	0.0%	0.0%
Total	Count (n)	1	1	22	14	2	
	Percent	2.5%	2.5%	55.0%	35.0%	5.0%	

Occupation	Housewife	Count (n)	1	0	1	0	0
		Percent	50.0%	0.0%	50.0%	0.0%	0.0%
	Student	Count (n)	0	0	2	1	0
		Percent	0.0%	0.0%	66.7%	33.3%	0.0%
	Service holder	Count (n)	0	1	9	5	0
		Percent	0.0%	6.7%	60.0%	33.3%	0.0%
	Business	Count (n)	0	0	5	4	2
		Percent	0.0%	0.0%	45.5%	36.4%	18.2%
	Unemployed	Count (n)	0	0	4	3	0
		Percent	0.0%	0.0%	57.1%	42.9%	0.0%
Other	Count (n)	0	0	1	1	0	
	Percent	0.0%	0.0%	50.0%	50.0%	0.0%	
Total		Count (n)	1	1	22	14	2
		Percent	2.5%	2.5%	55.0%	35.0%	5.0%
Educational level	Illiterate	Count (n)	0	0	3	1	0
		Percent	0.0%	0.0%	75.0%	25.0%	0.0%
	Up to primary completed	Count (n)	0	0	7	8	1
		Percent	0.0%	0.0%	43.8%	50.0%	6.2%
	Up to secondary completed	Count (n)	0	1	6	2	1
		Percent	0.0%	10.0%	60.0%	20.0%	10.0%
	Above secondary	Count (n)	1	0	6	3	0
		Percent	10.0%	0.0%	60.0%	30.0%	0.0%
Total		Count (n)	1	1	22	14	2
		Percent	2.5%	2.5%	55.0%	35.0%	5.0%
Marital Status	Unmarried	Count (n)	0	0	6	6	0
		Percent	0.0%	0.0%	50.0%	50.0%	0.0%
	Married	Count (n)	1	1	16	8	2
		Percent	3.6%	3.6%	57.1%	28.6%	7.1%
Total		Count (n)	1	1	22	14	2
		Percent	2.5%	2.5%	55.0%	35.0%	5.0%
Monthly income	No income	Count (n)	1	0	6	5	0
		Percent	8.3%	0.0%	50.0%	41.7%	0.0%
	1000-10000	Count (n)	0	1	12	6	2
		Percent	0.0%	4.8%	57.1%	28.6%	9.5%
	11000-20000	Count (n)	0	0	3	1	0
		Percent	0.0%	0.0%	75.0%	25.0%	0.0%
	21000-50000	Count (n)	0	0	1	1	0
		Percent	0.0%	0.0%	50.0%	50.0%	0.0%
Total		Count (n)	1	1	22	13	2
		Percent	2.6%	2.6%	56.4%	33.3%	5.1%

Prosthesis	Upper limb Prosthesis	Count (n)	0	0	2	1	0
		Percent	0.0%	0.0%	66.7%	33.3%	0.0%
	Lower limb Prosthesis	Count (n)	1	1	20	13	2
		Percent	2.7%	2.7%	54.1%	35.1%	5.4%
Total		Count (n)	1	1	22	14	2
		Percent	2.5%	2.5%	55.0%	35.0%	5.0%
Interview type	Telephone interview	Count (n)	1	1	16	5	2
		Percent	4.0%	4.0%	64.0%	20.0%	8.0%
	Face to face interview	Count (n)	0	0	6	9	0
		Percent	0.0%	0.0%	40.0%	60.0%	0.0%
Total		Count (n)	1	1	22	14	2
		Percent	2.5%	2.5%	55.0%	35.0%	5.0%

Table 3: Level of health satisfaction among prosthesis user

4.4: Quality of life (according to WHOQOL domain) :

Results indicate that the qualities of life of prosthesis users are decreased in all four domains of life. Quality of life with domain 3 (social relationship) obtaining the highest which score is 4.83 ± 1.17 . Domain 1 (physical health) acquired the least score among all the domains which is 3.57 ± 0.54 . The psychological health obtains 3.85 ± 0.64 & the Environmental domain score are 3.68 ± 0.67 , show in (Table 4).

The overall findings of the study about quality of life of prosthesis user in Bangladesh estimated that patient who use prosthesis device are more satisfied in social relationship skill then orderly psychologically , environmentally and last psychically.

Statistics				
	Physical health domain	Psychological health domain	Social relationship domain	Environmental domain
N	40	40	40	40
Mean	3.57	3.85	4.83	3.68
Std. Deviation	0.54	0.64	1.17	0.67

Table 4: Quality of Life (WHOQOL-BREF domain)

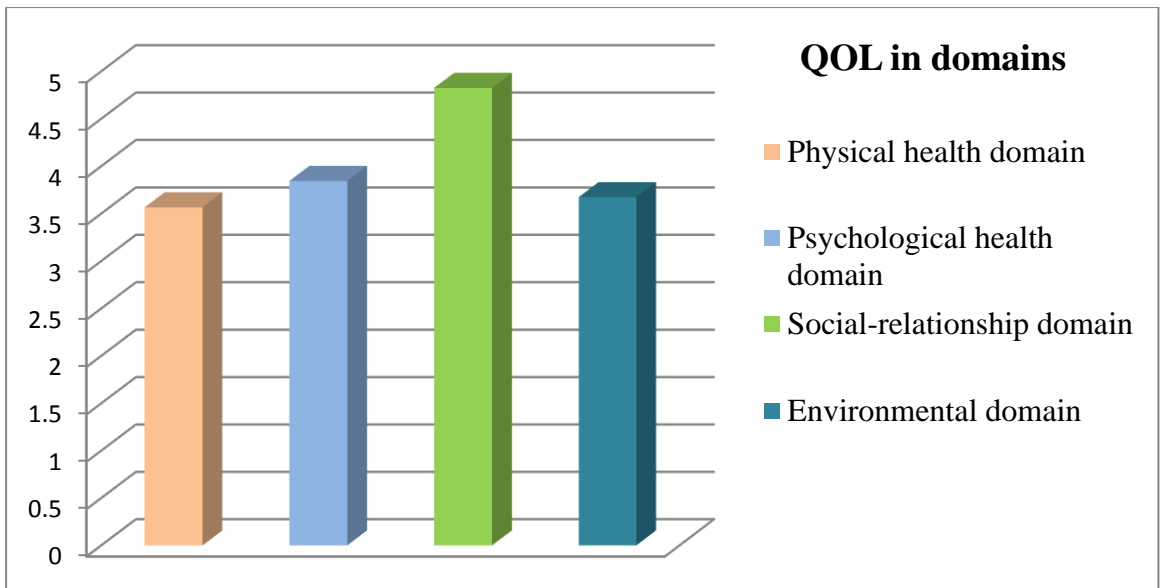


Fig 4: Quality of Life (WHOQOL-BREF domain)

5.1: Discussion

Amputation is rapidly increasing problem in present society. Patient who had amputation is very much dependent of stick or such kind of orthosis devices if don't use of prosthesis device and without prosthesis device life are very much miserable. The prosthesis device helps to maintain hygiene, performing household duties, traveling and participation in social life. Prosthesis device increase the level of independent of limb loss patient. For better quality of life use of prosthesis device is essential. (Jarnhammer, Andersson, Wagle, & Magnusson, 2017). According to WHO health is a broad term include physical, mental and social, environment and quality of life also a holistic term which also related to the health so measuring of those domains is essential for find out the quality of life. Person with disability (both physical and mental) are considered as neglected part of society and they also experience various barriers due to restriction of participation. Activities like transfer, mobility, and social participation showed greater impact of physical disability. Their satisfaction or experience of life against those barriers is effect on QOL. Satisfaction is the term that varies person to person. Same treatment and same facility can't give the same satisfaction level. It depends of some factor such physical, emotional, environmental & social and together that factor is quality of life. (Poljak-Guberina et al., 2005).

In this study male participant was 75% and female participant was 25%. The causes of more male participant may culture & religion. Males patient are more interest to use prosthesis use because of the environmental or cultural need. Malaysian people also show the same response of male and female participant ratio is not equal because of their culture and religion (Razak, Tauhid, Yasin, & Hanapiah, 2016). Previous study on Bangladeshi person with disability stated that the females were 1.47 times more likely to suffer from negative attitudes than their male counterparts (Hosain, Atkinson, & Underwood, 2002). Egyptian people show the similar response more than half of the sample (59%) was male and nearly two-fifths of the sample was female (41%). The study also reported that Male participants QOL is better than female patient. (Mohammed & Shebl, 2014)

The study found that primary school complete participant are more rather than others. There were about 30% participants is primary school pass. And participant were 10% of both illiterate and less than primary completed. Once a person got amputee they lost interest to attend school or continue their education. Study on person with disability in Bangladesh in 2002 found that 71.9% of participant reported difficulty in attending school. (Hosain et al., 2002).

The results of the study shows that 30% of total participant has no income at all and about 52.5% of participant has little income and only 27% has own business, 37.5% has service holder, 17.5% has no job at all. Lack of work opportunity, loss of skill, is the cause of jobless or little income. 69 % of Korean patient reported they become unemployed or change job & 39.7% amputees reported that they can not work any longer because they can't performing as well as before, insufficient function of prosthetic limb, lack of social awareness, continuous pain. (Jang et al., 2011). Previous study in Bangladesh found that around (79.7%) reported that disability had some negative consequence on their employment. people (26.0%) were forced to change their employment either voluntarily or other. (Hosain et al., 2002). For better employment and income 21.6% of Korean patient thinks that for better QOL rehabilitation training is essential but only 7.3% amputees received rehabilitation service. (Jang et al., 2011).

This study found that overall QOL is better in upper limb prosthesis user than lower limb prosthesis user. Because in upper limb amputation none of them reported their QOL is poor or very poor. 80.2% of Korean upper limb prosthesis user use cosmetic hands. (Jang et al., 2011). People with lower limb amputation had worse QOL as compared to the general population on the other hand Mohammed & Shebl, 2014 were suggested that upper limb amputees (compared to lower limb amputees) had higher rates of depression and posttraumatic stress syndrome.

The study shows that most of the participant reported medium level of satisfaction about their health. In 2005 Poljak-Guberina et al, estimated that some factor that effect of satisfaction of heath such as Safety, emotional conflict, individual ideas & social participation age, sex, social participation, pain etc. That's why participant reported medium level of satisfaction. The overall findings of this study about quality

of life of prosthesis user in Bangladesh is that patient who use prosthesis device are more satisfied in social relationship health domain than orderly psychological health domain , environmental health domain and last physical health domain. Male participants quality of life is better than female. The male and female ratio is 3:1.

Malaysian person with lower limb amputation has more satisfied in psychologically than followed by social relationship domain, environmental domain and last physical domain. Loss of natural functional limb and presence of pain is the cause of the less score of physical domain. (Razak et al., 2016). In 2011 Sinha, Heuvel, & Arokiasamy estimated that the lowest score of physical domain which also similar to this study. The causes of low score in physical health because 72% of patient reported phantom limb pain, most of the patient has diabetics problem and vasculer problem. In 2003 Demet et al, also found the similar result that patient with amputation's who are in between 30.71 ± 7.50 age physical health are more severely affected than mental component.

This study found psychological health domain has second highest score but lower than social-relationship domain. The study (kuvalekar et al., 2015) found the cause of the lower score psychological health domain is of negative feelings, bodily image appearance, spirituality, self-esteem, and depression. But Pakistani people with below knee amputation were more satisfied in psychological domain than other physiological, social, environmental domain. (Yaqoob, khalill, fayyaz & khan).

5.2: Limitation

The study was conducted on small size of participant. The researcher took prosthesis users list only from CRP savar.

Most of the people were not interested to give actual information beside they wants researcher will help them to answer those question that was very challenging to the investigator to collect data.

This was an undergraduate study data collection from different district of Bangladesh is very difficult.

Lack of resources and hard to get the information required for this study. It was difficult to discuss the finding in the context of Bangladesh. However researcher found literatures form different international primary sources.

5.3: Conclusion

QOL is a vast aspect for every human being. It is subjective and indefinable. This concept depends on some factor such as physical and psychological, social, environmental and activities of daily life, productivity, leisure, and personal factor.

Person who had lost limbs and became amputee were affected badly as they have lost the ability to mobilize and be independent. Use of prosthesis device helps the person to regain that ability. There are a few numbers of services available to amputees to get prosthesis devices and the adjustments required at their homes, transport and community. The study found that the quality of life of prosthesis user in Bangladesh is good at social relationship & poor in physical health. And they are medium level of satisfied about their general health and overall quality of life.

Although those issues related to patient satisfaction and independence, use of appropriate prosthesis device and engagement/ returning in Occupation is essential for get better score in their QOL. The researcher hopes that if all professionals concentrate on all domains of QOL and provide holistic treatment focusing on it, this will help to improve QOL for prosthesis user.

5.4: Recommendation

This study was covered small number of participant additional larger studies are needed. More studies are needed to compare the QOL of prosthesis user.

More research is required on people using prosthesis but not visiting the rehabilitation centers for vocational training that might show different results.

This study hold on above 18 years people and most of them are lower limb amputation further study can be done to find out the QOL of below 18 and the upper limb prosthesis user.

Further studies can be done to identify the possible causes of amputation and the factor that affects the persons QOL by doing Quantities research. An experimental study could be done to see the effectiveness of OT involvement in their rehabilitation program to improve QOL.

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Appendix 1

Approval letter of Institutional Review Board (IRB).



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

Ref.

CRP-BHPI/IRB/11/17/140

Date: 17/11/2017

To
Md. Iftikharul Hasan
B.Sc. in Occupational Therapy
Session: 2013-2014, Student ID: 122130111
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: "Quality of Life among Prosthesis User in Bangladesh"

Dear Md. Iftikharul Hasan,

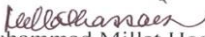
The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application on 02/10/2017 to conduct the above mentioned dissertation with yourself, as the Principal investigator. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Dissertation Proposal
2	Questionnaire (English and Bengali version)
3	Information sheet & consent form.

Since the study involves "Life about Prosthesis Users" and "WHOQOL-BREF" questionnaire that takes 10 to 15 minutes and have no likelihood of any harm to the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 9:00 AM on October 08, 2017 at BHPI.

The institutional Ethics committee 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. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,


Muhammad Millat Hossain
Assistant Professor, Dept. of Rehabilitation Science
Member Secretary, Institutional Review Board (IRB)
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ, ফোন : ৯৭৪৫৪৬৪-৫, ৯৭৪১৪০৪ ফ্যাক্স : ৯৭৪৫০৬৯

CRP-Chapain, Savar, Dhaka-1343, Tel : 7745464-5, 7741404, Fax : 7745069, E-mail : contact@crp-bangladesh.org, www.crp-bangladesh.org

Appendix 2

Permission later for conducting study

Permission Letter

05 November 2017
The Head of the Department,
Department of Occupational Therapy
Bangladesh Health Professions Institute (BHPI)
CRP-Chapain, Saver, Dhaka-1343.
Through: Dissertation Supervisor

Subject: Prayer for seeking permission to conduct the research project.

Sir,



I'm Md. Iftikharul Hasan, 4th year student of B.Sc in Occupational Therapy at Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralyzed (CRP). For the requirement of my Bachelor Science Degree of Occupational Therapy course under the medical faculty of Dhaka University, I will have to conduct a research project in this academic year which is a part of my academic curriculum. My research title is **"Quality of Life among Prosthesis User in Bangladesh"**. And I will try to know the quality of life among people with amputee who use prosthesis device also find out the associate between demographic factor and the quality of life of the participant. And I also can make sure that the study will not be cause of any harm to the participant. For this purpose, I need permission from you to continue my research project.

So, I therefore pray and hope that you would be kind enough you give me the permission to continue the research project for my study.

Sincerely yours,


.....

Md. Iftikharul Hasan
4th year B. Sc in Occupational Therapy
BHPI, CRP-Chapain, Savar, Dhaka- 1343, Bangladesh.

Approved by:	Signature:
Supervisor Md. Mohsiur Rahman Lecturer, Occupational Therapy Department of Occupational Therapy BHPI, CRP-Chapain, Savar, Dhaka-1343	We may allow him to conduct this study according to prepared methodology. 
Head of the Department Sk. Moniruzzaman Department of Occupational Therapy BHPI, CRP-Chapain, Savar, Dhaka-1343	

Appendix 3
Permission letter for data collection



বাংলাদেশ হেল্থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
BANGLADESH HEALTH PROFESSIONS INSTITUTE (BHPI)
(The Academic Institute of CRP)

CRP-Chapain, Savar, Dhaka, Tel: 7745464-5, 7741404, Fax: 7745069
BHPI-Mirpur Campus, Plot-A/5, Block-A, Section-14, Mirpur, Dhaka-1206. Tel: 8020178, 8053662-3, Fax: 8053661

তারিখ : ০৬.১২.২০১৭

প্রতি
ইনচার্জ
প্রস্টেটিক্স এন্ড অর্থোটিক্স বিভাগ
সিআরপি, সাভার, ঢাকা।

বিষয় : রিসার্চ প্রজেক্ট (dissertation) প্রসঙ্গে।

জনাব,

বিএইচপিআই'র ৪র্থ বর্ষ বিএসসি ইন অকুপেশনাল থেরাপি কোর্সের ছাত্র মোঃ ইফতেখারুল হাসানকে তার রিসার্চ সংক্রান্ত কাজের জন্য আগামী ০৬.১২.২০১৭ তারিখ থেকে ২৮.১২.২০১৮ তারিখ পর্যন্ত সময়ে আপনার নিকট প্রেরণ করা হলো।

তাই তাকে সার্বিক সহযোগীতা প্রদানের জন্য অনুরোধ করছি।

ধন্যবাদান্তে

Su. MR
05/12/2017

শেখ মনিরুজ্জামান
সহকারী অধ্যাপক ও বিভাগীয় প্রধান
অকুপেশনাল থেরাপি বিভাগ
বিএইচপিআই।



It may allow to collect the data according to CRP policy. Refer to Research dept.

Shohul. 912

As per agreement dated 1/2/17. He allow to do his research in pro dept. Shohul 912

SHOHANOL NEAZ IMRAN
Acting In-charge
Prosthetics & Orthotics Department
CRP, Savar, Dhaka.

Appendix 4 Permission to Use WHOQOL-BREF Bangla

User Agreement for "WHOQOL-100" and/or WHOQOL-BREF and related materials

This agreement is between the World Health Organization ("WHO") and Md. Iftikharul Hasan. WHO hereby grants the User a nonexclusive, royalty-free license to use the World Health Organization Quality of Life Questionnaire and/or related materials (hereafter referred to as "WHOQOL-100" or "WHOQOL-BREF") in User's study outlined below. The term of this User Agreement shall be for a period of 1 year, commencing on (date) 09.11.2017 or 09 November 2017

The approved study for this User Agreement is:

Study Title	<i>Quality of life among Prosthetis User in Bangladesh.</i>
Principal Investigator	<i>Md. Iftikharul Hasan.</i>
Sample characteristics	<i>Person with amputee who use prosthetis device.</i>
Sample size	<i>35-70</i>
Treatment Intervention	<i>Not applicable</i>
Total number of assessments	<i>1 times</i>
Assessment time points	<i>10-15 minutes.</i>
"WHOQOL-100" or WHOQOL-BREF version – Please specify language version(s) you would like to receive.	<i>Bangla</i>
Other measures	<i>Not applicable</i>

This User Agreement is based upon the following conditions:

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3. User agrees to provide WHO with an annual update regarding activities related to the WHOQOL-100 or BREF.

4. User agrees to provide WHO with a complete copy of User's raw data and data code books, including the WHOQOL-100 or BREF and any other instruments used in the study. This data set must be forwarded to WHO upon the conclusion of User's work. While User remains the owner of the data collected in User's studies, these data may be used in WHO analyses for further examining the psychometric properties of the WHOQOL-100 or BREF. WHO asserts the right to present and publish these results, with due credit to the User as the primary investigator, as part of the overall WHOQOL-100 or BREF development strategy.

5. WHO shall be responsible for preparing and publishing the overall WHOQOL-100 or BREF results under WHO copyright, including:

- a. the overall strategy, administrative set-up and design of the study including the instruments employed;
- b. common methods used by two or more Users;
- c. the data reported from two or more Users ;
- d. the comparisons made between the data reported from the Users;
- e. the overall findings and conclusions.

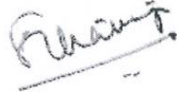
6. User shall be responsible for publications concerning information developed exclusively by User and methods employed only by User. Publications describing results obtained by User will be published in User's name and shall include an acknowledgement of WHO. User agrees to send to WHO a copy of each such paper prior to its submission for publication.

7. WHO may terminate this User Agreement at any time, in any event. Should WHO terminate this User Agreement, User shall immediately cease all use of the WHOQOL100 or BREF and destroy or return all copies of the WHOQOL-100 or BREF. In the event of such termination, all other collateral materials shall be destroyed and no copy thereof shall be retained by User. Notwithstanding the return or destruction of the WHOQOL-100 or BREF and its collateral materials, User will continue to be bound by the terms of this User Agreement.

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Please confirm your agreement with the foregoing by signing and returning one copy of this letter to WHO, whereupon this letter agreement shall become a binding agreement between User and WHO.

WHO:



Dr. Somnath Chatterji
Health Statistics and Health Information Systems (HSI)
World Health Organization
Avenue Appia
Geneva 27
CH 1211 Switzerland

Date:

USER: Md. Iftikharul Hasan

By: Md. Iftikharul Hasan

Title: B.Sc. in Occupational Therapy, 4th year.

Institution: Bangladesh Health Professions Institute (BHPI)

Address: Centre for the Rehabilitation of the paralysed (CRP),
CRP-Chapain, Savar, Dhaka, Bangladesh-1343

Date:

09/11/2017.

Appendix 5 Permission of telephone interview process.

whoqol <whoqol@who.int> 10/24/17

to me

Dear Iftikharul Hasan,

Thank you for your interest in the WHOQOL-BREF. Please fill in the attached user-agreement form and return a signed copy to me by email; I will then send you the [Bangla version questionnaire, free of charge](#).

[We ourselves have no experience with telephone interviews but the questionnaire has been used in this way before.](#)

Best regards,

Sibel Volkan (Mrs)
WHOQOL
Information, Evidence and Research (IER) Department
The World Health Organization
20 Avenue Appia
CH-1211 Geneva 27
Switzerland

Appendix 6 Permission to use SPSS

Ready To Use - IBM SPSS Statistics Subscription Trial

IBM SPSS spssadmn@us.ibm.com via smtp.admin.ibmcloud.com 9/27/17

to me

Hi IFTIKHARUL,

Thank you for signing up for a subscription to **IBM SPSS Statistics Subscription Trial** using the following organization account: STUDENT. This no-cost trial is designed to provide you with the opportunity to try the full services, as a proof of concept before your purchase.

Trial Subscription Duration (14 days)
Activated: Sep 27, 2017 | Expires: Oct 11, 2017

This service is governed by the following [Terms and Conditions](#).

Use these links to get started:
[Launch Service](#) | [Get Support](#) | [Learn About](#)

Regards,
IBM SPSS Team

Appendix: 7(A)

Information Sheet (English)

Information Sheet

The name of the researcher is Md. Iftikharul Hasan. He is a student of 4th year B.Sc. in Occupational Therapy in Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralysed (CRP). As a part of his academic issues, he has to conduct a research project in this academic year. So researcher would like to invite you to participate in this study. The title of the study is “**Quality of Life among Prosthesis User in Bangladesh**”

Your participation is voluntary in the study. You can withdraw your participation in anytime. There is not the facility to get any pay by this participation. The study will never be any harm to you but it will help the service user to know your experience, which is very important for the service provider to plan for their future activities.

Confidentiality of all records will be highly maintained. The gathered information from you will not be disclosed anywhere except the researcher and supervisor. The study will never published the name of participant anywhere.

If you have any query regarding the study, please feel free to ask to the contact information stated below:

Md. Iftikharul Hasan

Student of 4th year

B.Sc. in Occupational Therapy

Department of Occupational Therapy

Bangladesh Health Professions Institute (BHPI),

Centre for the Rehabilitation of the Paralysed (CRP),

Chaplain, Savar, Dhaka-1343

Appendix 7(B)

Information Sheet (Bengali)

তথ্য পত্র

গবেষণাকারীর নাম মোঃ ইফতিখারুল হাসান । সে পক্ষাঘাত পুনর্বাসন কেন্দ্র (সি আর পি) এর অধিনস্থ বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউটের অকুপেশনাল থেরাপি বিভাগ এর ৪র্থ বর্ষের ছাত্র । তার প্রাতিষ্ঠানিক কার্যের অংশ হিসেবে চলন্তশিক্ষাবর্ষে তাকে একটি গবেষনামূলক কাজ করতে হবে । গবেষণাটির শিরোনাম “বাংলাদেশের কৃত্রিম অঙ্গ ব্যবহারকারীদের জীবন-যাপনের মান” ।

গবেষণায় আপনার অংশগ্রহন সম্পূর্ণ রূপে স্বেচ্ছায় । আপনি যে কোন সময় গবেষণা থেকে আপনার অংশগ্রহন প্রত্যাহার করতে পারবেন । এই গবেষণায় অংশগ্রহনে গবেষক আপনাকে কোন ভাবে আর্থিক সাহায্য প্রদান করবেন না । এই অংশগ্রহন কখনোই আপনার জন্য ক্ষতির কারণ হয়ে দাঁড়াবে না কিন্তু এই গবেষণার মাধ্যমে সেবাপ্রদানকারী সদস্যগণ আপনার অভিজ্ঞতার কথা জানতে পারবেন এবং প্রাপ্ত তথ্য সমূহ সেবার মান উন্নয়নে সাহায্য করবে ।

আপনার কাছ থেকে প্রাপ্ত তথ্যসমূহের সর্বোচ্চ গোপনীয়তা রক্ষা করা হবে । গবেষক এবং গবেষণার সমন্বয়কারী ব্যতীত এই তথ্যগুলো অন্য কোথাও প্রকাশিত হবে না এবং গবেষণার কোথাও অংশগ্রহনকারীর নাম প্রকাশ হবে না ।

গবেষণা সম্পর্কিত যেকোন ধরনের প্রশ্নের জন্য নিম্নলিখিত ব্যক্তির সাথে যোগাযোগ করার জন্য অনুরোধ করা যাচ্ছে ।

মোঃ ইফতিখারুল হাসান

বিএসসি ইন অকুপেশনাল থেরাপি (৪র্থ বর্ষ)

অকুপেশনাল থেরাপি বিভাগ

বাংলাদেশ হেলথপ্রফেশন্স ইনস্টিটিউট

পক্ষাঘাতগ্রস্তদের পুনর্বাসন কেন্দ্র (সিআরপি)

চাপাইন, সাভার, ঢাকা-১৩৪৩

Appendix 8(A)

Consent Form (English)

Consent Form

This research is part of Occupational Therapy course and the name of the researcher is Md. Iftikharul Hasan. He is a student of 4th year B.Sc. in Occupational Therapy in Bangladesh Health Professions Institute (BHPI), the academic institute of Centre for the Rehabilitation of the Paralyzed (CRP). The study was entitled as **“Quality of Life among Prosthesis User in Bangladesh”**. The purpose of the study is to know the quality of life among people with amputee who use prosthesis device.

In this study I am a participant and I have been clearly informed about the purpose and aim of the study. I will have the right to refuse in taking part any time at any stage of the study. I will not be bound to answer to anybody. This study has no connection with me and there will be no impact on my treatment at present and in future.

I am also informed that, all the information collected from the interview will be only used for study purpose and would be kept safety and confidentiality will be maintained. My name and address will not be published anywhere. Only the researcher and supervisor will be eligible to access in the information for his publication of the research result. I have been informed about the above-mentioned information and I am willing to participate in the study with giving consent.

Signature/Finger print of the Participant:	Date:
Signature of the Researcher:	Date:
Signature/Finger print of the witness:	Date:

Appendix 8(B)

Consent Form (Bengali)

সম্মতিপত্র

এই গবেষণাটি অকুপেশনাল থেরাপির কোর্সের একটি অংশ এবং গবেষণাকারীর নাম মোঃ ইফতিখারুল হাসান। সে পক্ষাঘাত পুনর্বাসন কেন্দ্র (সি আর পি) এর অধিনস্থ বাংলাদেশ হেলথ প্রফেশন্স ইনস্টিটিউটের অকুপেশনাল থেরাপি বিভাগ এর ৪র্থ বর্ষের ছাত্র। এই গবেষণাটির শিরোনাম “বাংলাদেশের কৃত্রিম অঙ্গ ব্যবহারকারীদের জীবন-যাপনের মান”। এই গবেষণার উদ্দেশ্য হল, অঙ্গহীন ব্যক্তিদের কৃত্রিম অঙ্গ ব্যবহারের ফলে তাদের জীবন-যাপনের মান সম্পর্কে জানা।

এই গবেষণাতে আমিএকজন অংশগ্রহনকারী এবং পরিষ্কারভাবে এই গবেষণার উদ্দেশ্য সম্পর্কে অবগত। আমার যে কোন সময়ে এই গবেষণা থেকে নিজেকে প্রত্যাহার করার অধিকার আছে। এজন্য আমি প্রশ্নের উত্তর প্রদান করার জন্য করো কাছে দায়বদ্ধ না। এই গবেষণাটির সাথে আমার কোন সম্পৃক্ততা নেই। এই গবেষণাটি বর্তমানে এবং ভবিষ্যতে আমার চিকিৎসার ক্ষেত্রে কোন রকম প্রভাব ফেলবে না।

আমি আরও অবগত আছি যে, এই কথোপকথন থেকে নেওয়া সমস্ত তথ্যাবলি নিরাপদে এবং গোপনীয়তার সাথে শুধু মাত্র গবেষণার কাজেই ব্যবহার করা হবে। আমার নাম এবং ঠিকানা কোথাও প্রকাশ হবে না। শুধু মাত্র গবেষণাকারীর এবং তার গবেষণার সমন্বয়কারীর সাথে এই গবেষণার পদ্ধতিসম্পর্কে অথবা যে কোন প্রশ্নের উত্তর জানার জন্য কথা বলতে পারবো।

আমি উপরোক্ত তথ্যগুলো ভালোভাবে জেনে নিজ ইচ্ছায় এই গবেষণায় অংশগ্রহন করছি।

অংশগ্রহনকারীর স্বাক্ষর/টিপসই	তারিখ:
গবেষণাকারীর স্বাক্ষর	তারিখ:
সাক্ষ্যপ্রধানকারীর স্বাক্ষর/ টিপসই	তারিখ:

Appendix 9(A)

Demographic Questionnaire (English)

1. Name:

2. Age:

- 1) 18-27 years 2) 28-37 years 3) 38-47 years 4) 48-57 years

3. Sex:

- 1) Male 2) Female

4. Home town:

- 1) Dhaka 2) Khulna 3) Rajshahi 4) Barisal 5) Chittagong
6) Rangpur 7) Sylhet

5. Occupation:

- 1) Housewife 2) Student 3) Service holder 4) Business
5) Unemployed 6) Others.....

6. Educational background:

- 1) Illiterate 2) Less than primary school 3) Primary school completed
4) Secondary school completed

7. Marital status:

- 1) Unmarried 2) Married 3) Separated 4) Divorced

8. Monthly income:

- 1) No income 2) 1000-10000 3) 11000-20000 4) 21000-50000
5) More than 50000.

9. Prosthesis:

- 1) Upper limb prosthesis 2) Lower limb prosthesis.

Appendix 9(B)

Demographic Questionnaire (বাংলা)

১। নামঃ

২। বয়সঃ

১) ১৮-২৭ বছর ২) ২৮-৩৭ বছর ৩) ৩৮-৪৭ বছর ৪) ৪৮-৫৭ বছর

৩। সেক্স/লিঙ্গঃ

১) পুরুষ ২) মহিলা

৪। স্থায়ী বাড়ি (বিভাগ) :

১) ঢাকা ২) খুলনা ৩) রাজশাহী ৪) বরিশাল ৫) চট্টগ্রাম ৬) রংপুর ৭) সিলেট

৫। পেশাঃ

১) গৃহিনী ২) শিক্ষার্থী ৩) চাকুরিজীবী ৪) ব্যবসায়ী

৫) বেকার ৬) অন্যান্য.....

৬। শিক্ষাগত যোগ্যতাঃ

১) নিরক্ষর ২) প্রাইমারি স্কুল পর্যন্ত ৩) উচ্চ মাধ্যমিক পর্যন্ত ৪) উচ্চ মাধ্যমিকের বেশি

৭। বৈবাহিক অবস্থাঃ

১) অবিবাহিত ২) বিবাহিত ৩) আলাদা ৪) বিবাহ বিচ্ছেদ

৮। মাসিক আয়ঃ

১) কোন আয় নাই ২) ১০০০-১০০০০ ৩) ১১০০০-২০০০০ ৪) ২১০০০-৫০০০০ ৫) ৫০০০০ এর বেশি

৯। কৃত্রিম অঙ্গঃ

১) হাত ২) পা

Appendix 10(A)

WHOQOL-BREF (English)

MSA/MMH/PSF/97 . 6
Page 17

Please read each question, assess your feelings, and circle the number on the scale for each question that gives the best answer for you.

		Very poor	Poor	Neither poor nor good	Good	Very good
1(G1)	How would you rate your quality of life?	1	2	3	4	5

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2(G4)	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about **how much** you have experienced certain things in the last two weeks.

		Not at all	A little	A moderate amount	Very much	An extreme amount
3(F1.4)	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4(F11.3)	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5(F4.1)	How much do you enjoy life?	1	2	3	4	5
6(F24.2)	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	A little	A moderate amount	Very much	Extremely
7(F5.3)	How well are you able to concentrate?	1	2	3	4	5
8(F16.1)	How safe do you feel in your daily life?	1	2	3	4	5
9(F22.1)	How healthy is your physical environment?	1	2	3	4	5

The following questions ask about **how completely** you experience or were able to do certain things in the last two weeks.

		Not at all	A little	Moderately	Mostly	Completely
10(F2.1)	Do you have enough energy for everyday life?	1	2	3	4	5
11(F7.1)	Are you able to accept your bodily appearance?	1	2	3	4	5
12(F18.1)	Have you enough money to meet your needs?	1	2	3	4	5
13(F20.1)	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14(F21.1)	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Very poor	Poor	Neither	Good	Very good
--	--	-----------	------	---------	------	-----------

				poor nor good		
15 (F9.1)	How well are you able to get around?	1	2	3	4	5

The following questions ask you to say how **good or satisfied** you have felt about various aspects of your life over the last two weeks.

		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
16 (F3.3)	How satisfied are you with your sleep?	1	2	3	4	5
17 (F10.3)	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18 (F12.4)	How satisfied are you with your capacity for work?	1	2	3	4	5
19 (F6.3)	How satisfied are you with yourself?	1	2	3	4	5
20 (F13.3)	How satisfied are you with your personal relationships?	1	2	3	4	5
21 (F15.3)	How satisfied are you with your sex life?	1	2	3	4	5
22 (F14.4)	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23 (F17.3)	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24 (F19.3)	How satisfied are you with your access to health services?	1	2	3	4	5
25 (F23.3)	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

		Never	Seldom	Quite often	Very often	Always
26 (F8.1)	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	1	2	3	4	5

Did someone help you to fill out this form?

How long did it take to fill this form out?

Do you have any comments about the assessment?

.....

.....

THANK YOU FOR YOUR HELP

Appendix 10(B)

WHOQOL-BREF (Bengali)

C. (WHOQOL-BREF) এ অংশের মূল্যায়ন, আপনি আপনার জীবন, স্বাস্থ্য ও জীবনের অন্যান্য দিক সম্পর্কে কি ভাবেন, সে সম্পর্কে দয়া করে সবগুলো প্রশ্নের উত্তর দিন। যদি কোন প্রশ্নের উত্তর কি হবে না বুঝেন তবে যেটিকে সবচেয়ে সঠিক মনে হবে সেই উত্তরটি দিন। এটা প্রায়ই প্রথম উত্তর হতে পারে।

আপনার মান, আশা, আনন্দ ও বিবেচ্য সমূহ স্মরণ রাখুন। আমরা আপনার জীবনের গত দুঃসংসারের কথা স্মরণ করতে বলবো।

সবগুলো প্রশ্ন পড়ুন, আপনার অনুভূতি যাচাই করুন এবং পাশের ছকে যে উত্তরটি সবচেয়ে সঠিক মনে হবে সে নম্বরটিতে বৃত্ত তৈরী করুন।

		খুব খারাপ	খারাপ	ভালও নয় খারাপও নয়	ভাল	খুব ভাল
1. (G1)	আপনার জীবন যাত্রার মান কেমন?	1	2	3	4	5

		খুব অসন্তুষ্ট	অসন্তুষ্ট	সন্তুষ্টও অসন্তুষ্টও নয়	সন্তুষ্ট	খুব সন্তুষ্ট
2. (G4)	আপনার স্বাস্থ্য নিয়ে কি আপনি সন্তুষ্ট?	1	2	3	4	5

নিচের প্রশ্নগুলো গত দুঃসংসারে নিম্নবর্ণিত অভিজ্ঞতাগুলো কি পরিমাণে হয়েছে সে সম্পর্কে।

		একদম না	কম	মোটামুটি	বেশী	খুব বেশী
3. (F1.4)	শারীরিক ব্যাধির জন্য আপনি কি পরিমাণে প্রয়োজনীয় কাজ থেকে বিরত ছিলেন?	1	2	3	4	5
4. (F11.3)	আপনার দৈনন্দিন কার্যক্রম ঠিক রাখতে চিকিৎসা কতটুকু প্রয়োজন?	1	2	3	4	5
5. (F4.1)	আপনি জীবনকে কতটুকু উপভোগ করেন?	1	2	3	4	5
6. (F24.2)	জীবনকে আপনার কতটুকু অর্থপূর্ণ মনে হয়?	1	2	3	4	5

		একদম না	কম	মোটামুটি	বেশী	খুব বেশী
7. (F5.3)	আপনি কাজে কতটুকু মনসংযোগ করতে পারেন?	1	2	3	4	5
8. (F16.1)	আপনি দৈনন্দিন জীবনে কতটুকু নিরাপত্তা অনুভব করেন?	1	2	3	4	5
9. (F22.1)	আপনার ভৌত পরিবেশ কতটুকু স্বাস্থ্যকর?	1	2	3	4	5

নিচের প্রশ্নগুলোতে জানতে চাওয়া হয়েছে - গত দুই সপ্তাহে আপনি কতটুকু সম্পূর্ণভাবে কোন কাজ করতে বা অভিজ্ঞতা লাভ করতে পেরেছেন।

		একদম না	কম	মেটামুটি	অধিকাংশ	পরিপূর্ণভাবে
10. (F2.1)	আপনার কি প্রতিদিন কাজ করার মত শক্তি আছে?	1	2	3	4	5
11. (F7.1)	আপনি কি আপনার শরীরের গড়ন নিয়ে সন্তুষ্ট?	1	2	3	4	5
12. (F18.1)	আপনার কি প্রয়োজন মেটাতে যথেষ্ট টাকা আছে?	1	2	3	4	5
13. (F20.1)	আপনি কি দৈনন্দিন জীবন-যাপনের জন্য প্রয়োজনীয় তথ্য পান?	1	2	3	4	5
14. (F21.1)	অবসর কাটানোর/বিনোদনের সুযোগ আপনার কতটুকু আছে?	1	2	3	4	5

		খুব খারাপ	খারাপ	ভালও না মন্দও না	ভাল	খুব ভাল
15. (F9.1)	আপনি কতটা ভালভাবে চলাফেরা করতে পারেন?	1	2	3	4	5

নিচের প্রশ্নে জানতে চাওয়া হয়েছে - গত দুসপ্তাহে আপনার জীবনের বিভিন্ন দিক নিয়ে আপনি কতটুকু সন্তুষ্ট?

		খুব অসন্তুষ্ট	অসন্তুষ্ট	সন্তুষ্টও নয় অসন্তুষ্টও নয়	সন্তুষ্ট	খুব সন্তুষ্ট
16. (F3.3)	আপনার ঘুম নিয়ে আপনি কতখানি সন্তুষ্ট?	1	2	3	4	5
17. (F10.3)	দৈনন্দিন কাজ করার ক্ষমতা নিয়ে আপনি কতটুকু সন্তুষ্ট?	1	2	3	4	5
18. (F12.4)	আপনার কাজ করার ক্ষমতা/দক্ষতা (কাপাসিটি) নিয়ে আপনি কতটুকু সন্তুষ্ট?	1	2	3	4	5
19. (F6.3)	নিজেকে নিয়ে আপনি কতটুকু সন্তুষ্ট?	1	2	3	4	5
20. (F13.3)	অন্যদের সাথে আপনার ব্যক্তিগত সম্পর্কসমূহ নিয়ে আপনি কতটুকু সন্তুষ্ট?	1	2	3	4	5
21. (F15.3)	আপনার যৌন জীবন নিয়ে আপনি কতটুকু সন্তুষ্ট?	1	2	3	4	5
22. (F14.4)	বন্ধুদের কাছ থেকে পাওয়া সাহায্যে আপনি কতটুকু সন্তুষ্ট?	1	2	3	4	5
23. (F17.3)	আপনি আপনার বাসস্থানের অবস্থা নিয়ে কতটুকু সন্তুষ্ট?	1	2	3	4	5
24. (F19.3)	আপনি যে স্বাস্থ্যসেবা পান তাতে কি সন্তুষ্ট?	1	2	3	4	5
25. (F23.3)	আপনি যাতায়াত ব্যবস্থা নিয়ে কতটুকু সন্তুষ্ট?	1	2	3	4	5

নিচের প্রশ্নগুলোতে জানতে চাওয়া হয়েছে - গত দুসপ্তাহে ঐ নির্দিষ্ট বিষয়সমূহ আপনি কতবেশী/ঘনঘন অনুভব করেছেন?

		কখনো না	কখনো কখনো	মাঝে মাঝে	প্রায়শঃই	সব সময়
26. (F8.1)	আপনার হতাশা, উদ্বেগ, অবসন্নতা এই সব নেতিবাচক অনুভূতি কত ঘন ঘন হয়?	1	2	3	4	5

(নিশ্চিত হোন যে সব প্রশ্নের উত্তর দেয়া হয়েছে।)